PHASE II ENVIRONMENTAL SITE ASSESSMENT
204 4TH AVENUE
(BLOCK 434, LOT 35)
BROOKLYN, NEW YORK 11217

PHASE II ENVIRONMENTAL SITE ASSESSMENT

(ASTM 1903-11)

PREPARED FOR:

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1.0 INTRODUCTION

204 4th Avenue, LLC. (Client) retained P.W. Grosser Consulting, Inc. (PWGC) to prepare a Phase II Environmental Site Assessment (ESA) for the property located at 204 4th Avenue, Brooklyn, New York. The purpose of the Phase II ESA was to further evaluate recognized environmental conditions (RECs) identified in the January 2019 Phase I ESA prepared by PWGC to obtain sound, scientifically valid data concerning actual property conditions.

Work was conducted in accordance with the American Society for Testing and Materials (ASTM) Standard E 1903-11 (Standard Practices for Environmental Site Assessment: Phase II Environmental Site Assessment Process) and in substantial conformance with the New York State Department of Environmental Conservation's (NYSDEC's) Division of Environmental Remediation's (DER's) Technical Guidance for Site Investigation and Remediation, May 2010 (DER-10).

2.0 BACKGROUND

2.1 Site Description and Features

The subject property (site) consists of one parcel located at 204 4th Avenue, Brooklyn, New York. The site is located in the City of New York and Kings County. The property is identified as Block 434, Lot 35 in the New York City Tax Map. A Site Location Map is included as **Figure 1**.

The subject property measures 19,000 square-feet and is bounded by Sackett Street to the north, commercial properties to the west, 4th avenue to the east, and Union Street to the south. Currently, the Site is an active gasoline station and is improved with a 360-square foot at-grade storage building, a cashier's kiosk, and a canopy covering the pump islands.

2.2 Physical Setting

The topography of the site and surrounding area was reviewed from the USGS 7.5-minute series topographic map for the Brooklyn, New York quadrangle. The property elevation is approximately 25 feet above the National Geodetic Vertical Datum (NGVD). Groundwater at the subject property is approximately 13 to 15 feet below grade and is estimated to generally flow to the north based on previous environmental investigations conducted at the site.

2.3 Site History and Land Use

The site was first developed in approximately 1906 and has been used as a fueling station since approximately 1965. According to the New York State Department of Environmental Conservation (NYSDEC) spills database, impacted soils were encountered during an underground storage tank upgrade project in August 1996 when the property was owned by Merit Oil. An October 1998 Site Assessment Report Prepared by Groundwater & Environmental Services, Inc. (GES) on behalf of Merit Oil reported the removal of four 4,000-gallon, two 2,000-gallon, thirty-six 550-gallon steel gasoline USTs, one 550-gallon waste water UST, and the onsite abandonment of one 2,000-gallon fuel-oil UST with concrete slurry. At this time the UST system was replaced with four 4,000-gallon gasoline USTs, two 2,000-gallon diesel USTs and one 550-gallon waste water UST. NYSDEC Spill number 96-05719 was subsequently opened following the discovery of impacted media. Remedial efforts following the discovery of the spill included the removal of approximately 855 tons of petroleum impacted soil and the installation of eight groundwater monitoring wells onsite. The New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) database continues to indicate that the thirty-six 550-gallon gasoline USTs are abandoned-in-place onsite. In December 2009 the 550-gallon waste water UST located adjacent to the five active gasoline/diesel USTs was removed.

The current property owner, Speedway LLC. (Speedway), has been performing quarterly groundwater sampling at the site as part of routine spill monitoring obligations enforced by NYSDEC. The most recent monitoring report made available to PWGC was prepared by Envirotrac, LTD (Envirotrac) on behalf of Speedway, in July 2018. According to the July 2018 report, groundwater flow was calculated to be generally towards the north. During this sampling event, six out of the eight monitoring wells onsite contained benzene, toluene, ethylbenzene, and xylene (BTEX) at detectible concentrations. Analytical results ranged between non-detect

at MW-8 and CW-9 as well as minimal detections at MW-3 and CW-8 (central and northern portions of the site) to 2,605 ug/L at MW-2 located in the central-southern portion of the site downgradient from the active UST area were six USTs were removed from the site in August 1996. Methyl tertiary-butyl ether (MBTE) was detected at concentrations exceeding the NYSDEC Ambient Water Quality Standard (AWQS) at one location, MW-2.

A site plan including illustrations of known underground utilities onsite, existing and former tank locations and underground anomalies are included as **Figure 2**.

2.4 Surrounding Property Land Use

The area has been developed since approximately 1888 and is primarily used for commercial and residential purposes.

2.5 Tentatively Planned Future Redevelopment

Based on correspondence between PWGC, 204 4th Avenue, LLC., Envirotrac, and Speedway, it is understood that the property is to be closed and the five-active gasoline/diesel/ USTs, and the abandoned in-place 2,000-gallon fuel oil UST are to be removed from the site. Future site redevelopment plans include the construction of a mixed-use building and will involve excavation of impacted material.

3.0 WORK PERFORMED AND RATIONALE

3.1 Scope of Assessment

The work performed in this Phase II ESA was based on the February 2019 Phase II ESA Work Plan prepared by PWGC and the February 2019 Phase I ESA Prepared by PWGC, which included the following recognized environmental conditions (RECs).

- The subject property has currently and historically been used as a gasoline station. The use and storage of hazardous materials and/or petroleum products (e.g., USTs, drum storage) has been documented at the site. Multiple releases of these substances have been documented at the site. Based on this information, PWGC believes the current and historical usage of the site as a gasoline station represented a REC.
- The subject property is listed in the EDR database as a LTANKS site and a NYSPILLS site. Although there are five spill numbers associated with this site, the only spill currently active and has resulted in impact to the subsurface is Spill #96-05719. The subject spill was opened on August 2, 1996 after gasoline impact was observed in the soil and groundwater during a UST upgrade event. Several monitoring wells were subsequently installed to monitor the extent of the spill. The most recent sampling data available for PWGC to review (July 2018) indicated non-detect to low concentrations for groundwater samples collected from monitoring wells MW-3, MW-7, MW-8, FW-7, FW-8, FW-9, CW-8, CW-9, and SVE-1 while MW-2 yielded elevated levels of BTEX and MBTE. Prior monitoring events from 2017 indicated elevated levels of BTEX at SVE-1 and FW-7 as well. The spill remains open as quarterly groundwater sampling continues. Due to the open status of the spill and documented presence of petroleum impact, this represented a REC.
- There are five active USTs currently present on site; four 4,000-gallon gasoline USTs, and one 4,000-gallon diesel UST. Recent tightness tests for the active USTs were not provided to PWGC. A multitude of tanks have been reportedly removed/abandoned-in-place at the subject property in the past. Historical reports discuss the removal of four 4,000-gallon, two 2,000-gallon, thirty-six 550-gallon steel gasoline USTs, two 550-gallon waste water USTs, and the onsite abandonment of one 2,000-gallon fuel-oil UST with concrete slurry. However, details regarding the tank removal/closure activities (e.g., closure reports and/or sampling data) have not been provided to PWGC and the NYSDEC database continues to identify the thirty-six 550-gallon steel gasoline USTs, and one 550-gallon waste water UST as abandoned in place. Based on the conflicting documentation regarding the status of USTs at the site and the lack of UST closure documentation, there may potentially be unknown/out of service USTs present at the site. Unmaintained/out of service USTs represent a potential release of a hazardous substance and/or petroleum product to the environment. Based on this information, the current/past presence of USTs at the site represented a REC.
- The subject property is included in the VEC report. The historical and current usage as a gas station along with a documented onsite petroleum release that remains open represents a potential VEC.
- Approximately six catch basins were identified at the subject property. Such structures represent a pathway for improper discharges of hazardous substances and/or petroleum products to the subsurface. The presence of onsite storm drains represented a REC.
- A VCP site, 243 & 245 4th Avenue/566 Carroll Street is located up gradient of the subject property. Based on information available in the database report, this VCP site contained concentrations of

chlorinated solvents in the soil vapor that warranted mitigation. The source of the contamination was not identified in the database report. Due to the properties upgradient location in conjunction with documented chlorinate solvent impact, potential soil vapor encroachment from the VCP is a REC.

The scope for this investigation included the following tasks:

- A geophysical survey to investigate the location of the five active onsite USTs, the location of a 2,000-gallon fuel-oil tank which was reportedly abandoned-in-place, and the potential presence of undocumented or out of service USTs within the central portion of the property. The geophysical survey documented the locations of underground plumbing lines, electrical lines, gas lines, gasoline dispenser lines, and drainage pipes to safeguard these utilities from drilling activities. The geophysical survey was also used to trace piping associated with the six onsite catch basins to determine the discharge point.
- A soil quality evaluation to investigate the extent of the petroleum spill onsite, as well as investigating for contamination commonly associated with regions with an extensive history of commercial and industrial use. The analytical scope was expanded beyond what's required for petroleum analysis to account for compounds typically associated with historic fill.
- A groundwater quality evaluation to further investigate the impact of the documented petroleum spill, as well as investigating for contamination commonly associated with regions with an extensive history of commercial and industrial use.
- A soil vapor investigation to investigate the potential for vapor encroachment of volatile organic compounds associated with the documented petroleum spill onsite and upgradient sites of concern documented in the Phase I ESA to determine if vapor mitigation is warranted. Moreover, the investigation focused on the potential presence of chlorinated solvents which are regulated by New York State Department of Health and could additionally warrant mitigation.

The nature and extent of the petroleum impact onsite related to the active gasoline spill has been documented in previous environmental investigations and reports. This investigation focuses on potential impacts associated with the presence of historic fill in addition to petroleum impact.

3.2 Geophysical Survey

On January 30, 2019, PWGC and Delta Geophysics, Inc. of Catasaqua, Pennsylvania (Delta) mobilized to the subject property to perform a geophysical survey. The purpose of the geophysical survey was to determine the absence/presence of subsurface anomalies, underground utilities, and storm water catch-basin piping at the subject property. Descriptions of the geophysical methods are described below.

3.2.1 Electromagnetic Survey

Delta utilized a Radiodetection RD7000 and Fisher M-scope TW-6 electromagnetic (EM) instruments. The RD7000 and TW-6 uses the principle of EM induction to measure the variability of electrical conductivity of subsurface materials and the presence of buried metal objects. Significant contrasts in the electrical properties between non-indigenous materials and surrounding soil enable accurate delineation of buried waste materials, fill, and geologic features. The large EM response to metal makes this technique particularly well suited to identifying buried metal objects such as underground storage tanks (USTs), metallic wastes, buried drums,

pipelines, reinforced building foundations, and other metal components of buried structures. It is, however, equally sensitive to metal objects on the ground surface.

3.2.2 Ground Penetrating Radar Survey

Following the electromagnetic survey, Delta utilized an SIR-3000 GPR equipped with a 400 MHz antenna to further investigate the findings of the EM survey. 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 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 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, such as 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, or other highly conductive materials significantly reduces GPR depth of penetration.

3.2.3 Survey Findings

The findings of the geophysical survey are as follows:

- Delta identified three anomalies onsite and one area of reinforced concrete. The identified anomalies are as follows:
    - Anomaly #1: Located adjacent to the southeast corner of the storage building and approximately measured 6 feet by 5 feet. According to Delta, the anomaly is potentially indicative of an out of service UST.
    - Anomaly #2: Located to the south of Anomaly #1 and measured 6 feet by 5 feet. According to delta, the anomaly is potentially indicative of a UST.
    - Anomaly #3: Located adjacent to the east side of the five active 4,000-gallon gasoline/diesel USTs and measured 8 feet by 5 feet. The anomaly is likely the location of the former 550-gallon waste water UST.

According to Delta, there is the possibility that undocumented and out of service USTs exist onsite in the locations of Anomaly #1 and #2, which are adjacent to one another near the storage building. According to the site plan included with the July 2018 Monitoring Report prepared by Envirotrac, a 2,000-gallon fuel-oil UST is present to the north of the storage building onsite. However, the presence of a UST at this location could not be confirmed during the geophysical survey. Delta did not find evidence of USTs located in the central portion of the property where thirty-six 550-gallon gasoline UTS were reportedly removed from the site. A copy the July 2018 Monitoring Report prepared by Envirotrac is included as **Appendix D**.

Delta could not identify the discharge location of the catch basins onsite. Evidence of onsite leaching structures were not identified during the survey. Speedway provided a November 1996 site plan with utilities. s The plan identifies the onsite catch basins connected to the municipal sewer system.

The Geophysical Survey Report, including further detail regarding the methodology and findings, is included in **Appendix A**. Identified anomalies are illustrated on **Figure 2**.

3.3 Soil Quality Evaluation

To characterize soil quality, soil borings were installed throughout the subject property. Boring locations were focused in areas of potential concern as identified by the Phase I ESA and geophysical survey, however several locations on the site were off-limits for drilling activity at the request of Speedway due to safety concerns. Drilling activity was not permitted in the following areas onsite:

- The area underneath the pump canopy in the central portion of the site due to traffic and the presence of utilities.
- Within a 15-foot radius of the five active USTs on the southern portion of the site to avoid causing damage to the tanks and the associated piping.
- Within 5 feet of any marked-out subgrade utility.
- Areas directly in front of entranceways onto the site.

3.3.1 MTA Coordination and Approval

Due to the site's location adjacent to a Metropolitan Transportation Authority (MTA) subway tunnel, PWGC was required to obtain drawings of the subway tunnels adjacent to the property. PWGC used these drawings to produce proposed drilling cross section diagrams and illustrate proposed boring locations. MTA reviewed the drawings prepared by PWGC to determine if onsite drilling activities would risk causing structural damage to the subway tunnels. PWGCs scope of drilling activity was approved by MTA on February 5, 2019 upon receipt of a "Letter of no Impact".

3.3.2 Soil Boring Protocol

PAL Environmental Services (PAL) of Long Island City, New York provided environmental drilling services during the investigation. A Geoprobe 7822DT drill-rig was utilized to install the environmental soil borings. Prior to performing each soil boring, 10-mil polyethylene sheeting, sufficiently large to hold the anticipated number of soil cores was laid on the ground in the area where each soil boring was performed.

Soils were collected continuously from ground surface to an approximate depth of 21 feet below surface grade. Additional samples were collected at intervals below 21 feet during the geotechnical investigation which involved advancing a two-foot long, two-inch diameter split spoon sampling tool to collect subsurface material.

The soil cores were placed on the 10-mil polyethylene sheeting in the order they came out of the ground. The acetate liners were cut open and the soil core was screened for the presence of volatile organic vapors, which are commonly associated with petroleum products and industrial solvents, utilizing a photo-ionization detector (PID). Each soil core was classified by a hydrogeologist using the Unified Soil Classification System (USCS). A soil boring log was developed for each location and includes the characterization and screening data; soil boring

logs are included as **Appendix B**. Soil boring locations and sampling depths were primarily chosen to characterize historical fill onsite as well as potential petroleum impact. The reasoning for each boring location along with a brief description of field observations is as follows:

- SB001: Representative of the northern portion of the property and downgradient from the former UST area in the central portion of the site. The following intervals were collected:
    - (2-4'): Collected to characterize shallow fill material at this location.
    - (6-8'): Collected to characterize mid-level fill material at this location.
    - (13-15'): Collected to characterize fill material encountered at the groundwater table smear-zone. Petroleum impact and a PID reading of 320 ppm was observed at this interval.
- SB002: Representative of the western portion of the site and adjacent to Anomaly #1 and #2. The following intervals were collected:
    - (4-6'): Collected to characterize the shallow fill material.
    - (8-10'): Collected to characterize the material above the groundwater table where petroleum impact was observed and adjacent to Anomaly #1 and #2.
    - (19-21'): Collected to characterize native material at this location and to investigate the petroleum impact observed which yielded a PID reading of 26.2 ppm.
- SB003: Representative of the central portion of the property downgradient from the active UST system and within the southern extent of the former UST area. The following intervals were collected:
    - (0-2'): Collected to characterize the shallow fill material.
    - (12-14'): Collected to characterize fill material encountered at the groundwater table smear-zone. Petroleum impact and a PID reading of 1,326 ppm was observed at this interval.
    - (19'21'): Collected to characterize deep fill material at this location and to investigate the vertical extent of petroleum impact.
- SB004: Representative of the upgradient southwest portion of the property. The following intervals were collected:
    - (0-2'): Collected to characterize the shallow fill material.
    - (12-14'): Collected to characterize the mid-level fill material.
    - (14-16'): Collected to characterize native material and to determine if potentially impacted overlaying fill material is impacting the native material.
- SB005: Representative of the upgradient southeastern portion of the property. The following intervals were collected:
    - (0-2'): Collected to characterize shallow fill material at this location.
    - (8-10'): Collected to characterize mid-level fill material at this location.
    - (12-14'): Collected to characterize deep fill material at the water table smear-zone.
- SB006: Representative of the eastern upgradient portion of the property. The following intervals were collected:
    - (2-4'): Collected to characterize shallow fill material at this location.
    - (10-12): Collected to characterize mid-level fill material at this location.
    - (19-21'): Collected to characterize deep fill material at this location.
- SB007: Representative of the northeastern portion of the site. Brick and concrete debris were encountered at this location from 0 to 6 feet below grade. The following intervals were collected:
    - (6-8'): Collected to characterize the shallow material beneath the debris layer.
    - (12-14'): Collected to characterize mid-level fill material at the water table-smear zone.

- (15-17'): Collected to characterize native material at this location.
- SB008: Representative of the northwestern portion of the site, adjacent to the location of a suspected abandoned fuel-oil UST, and down gradient of Anomaly #1 and #2. The following intervals were collected:
  - (4-6'): Collected to characterize the shallow fill material.
  - (13-15'): Collected to characterize mid-level fill material at the water table-smear zone.
  - (19-21'): Collected to characterize deep fill material at this location.
- GT001: Geotechnical boring located adjacent to SB002
  - (25-27'): Collected to investigate the presence of metals beneath the historical fill layer.
  - (30-32'): Collected to investigate the presence of metals within the deeper native material onsite.
- GT002: Geotechnical boring located on the western side of the property.
  - (25-27'): Collected to investigate the presence of metals beneath the historical fill layer.
  - (30-32'): Collected to investigate the presence of metals within the deeper native material onsite.

Soils at the subject property generally consisted of urban fill material to an maximum depth of 21 feet below grade. This material is characterized by the presence of concrete, brick, glass, and large cobbles within a matrix of unconsolidated, loosely compacted dark brown sand, gravel, and fines. At SB004, SB005, SB006, and SB007, native material, which consisted of light brown medium to fine sands with silt, was encountered at 11 to 14 feet below grade beneath a layer of historic fill. Areas of brick and concrete debris, with minimal sand or gravel, were observed at SB001 and SB007 within the fill layer. Material observed from 25 to 32 feet below grade at GT001 and GT002 consisted of sandy gray clay laced with organic material such as roots and wood fragments. Across the site, groundwater was typically encountered at 12 to 14 feet below grade. Based on visual and olfactory inspection of the soils, as well as PID screening results, impact from a previous petroleum spill remains in the subsurface onsite. Evidence of petroleum impact was observed to be most evident on the central-western and northern portions of the property at SB001, SB002, SB003, SB006, and SB008 in the region near and down gradient of the former UST area in the central portion of the site, as well as the location near Anomalies #1 and #2. The majority of petroleum impact at these locations was observed at the water table smear-zone. Visual and olfactory evidence of petroleum contamination was not observed at soil borings installed on the southern and southeastern sides of the site at SB004, SB005, and SB007, which were located upgradient and/or cross-gradient of the former UST area.

3.3.3 Sample Collection Protocol

Samples were analyzed for the following chemical analyses to investigate observed petroleum impact associated with the open spill or potential additional spills, impact that may be associated with the commercial and industrial nature of the area, as well as to characterize historic fill onsite:

- Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260 – Part 375 List.
- Semi-Volatile Organic Compounds (SVOCs) by USEPA Method 8270 – Part 375 List
- Silvex by USEPA Method 8151 – Part 375 List

- Organochlorine Pesticides and Polychlorinated Biphenyls (PCBs) by USEPA Methods 8081/8082 – Part 375 List
- Metals by USEPA Methods 6010 and Hexavalent/Trivalent Chromium – Part 375 List

Samples collected for volatile organic analysis were collected directly from the acetate liners utilizing terra-core sampling devices. The remaining sample volumes were transferred to a stainless-steel bowl and homogenized. Once homogenized, samples were transferred to laboratory supplied glassware and packed in a cooler with ice and shipped under proper chain-of-custody procedures to Alpha Analytical, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory following NYSDEC Analytical Services Protocol (ASP)-Category A Deliverables.

3.3.4 Soil Analytical Results

Soil analytical results were compared to the NYSDEC's Title 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 and Final Commissioner Policy, CP-51 Soil Cleanup Objectives (SCOs) for Unrestricted Use, Restricted-Residential Use, and Commercial Use. Soil boring locations with compound exceedances above various use criteria are included on **Figure 3**.

PCBs were either not detected or detected at concentrations less than Unrestricted Use criteria at each of the twenty-four soil sampling locations.

Pesticides (4-4'-DDD, 4-4'-DDE, 4-4'-DDT, and dieldrin) were detected at concentrations in exceedance of Unrestricted Use criteria in the shallow (0-6') sampling locations across the site, as well as the 19-21' interval in SB008. However, these concentrations were below their respective Restricted-Residential Use standards.

VOCs indicative of gasoline impact were detected at concentrations exceeding restricted-residential use criteria at SB002 (19-21') located on the central eastern portion of the property adjacent to the anomalies identified in geophysical survey and at SB003 (12-14') and (19-21') located on the southern-central portion of the property where petroleum impact was identified in the field at the groundwater table/smear-zone and below. Both SB002 and SB003 are also located downgradient of the former UST areas in the central portion of the site. An elevated concentration of total xylene in exceedance of unrestricted use criteria was identified at SB008 (19-21') were evidence of petroleum impact was identified in the field at the groundwater table and below. SB008 is located on the northwest corner of the property and downgradient the former UST areas in the central portion of the site.

Acetone was detected at concentrations slightly exceeding unrestricted use criteria at five of the twenty-four sampling locations. Acetone is a common laboratory reagent used for disinfecting and cleaning. The slight exceedances are likely a result of laboratory interference rather than existing in the subsurface onsite.

SVOCs detected at elevated concentrations at the site generally consisted of the class of SVOCs known as Polycyclic Aromatic Hydrocarbons (PAHs). PAHs are SVOCs commonly associated with petroleum products, as well as other types of oils and are also commonly associated with historic fill. PAH compounds were detected at concentrations exceeding commercial use criteria at multiple depths across the site ranging from 0-2 feet at

SB003 and SB005 to 19-21 feet at SB002 and SB008. The highest concentrations of SVOCs were detected at SB002 (19-21') located on the central-eastern portion of the property adjacent to the two anomalies identified in geophysical survey. Each sample collected from 0-8 feet beneath the site yielded concentrations of SVOCs above commercial use criteria. Generally, elevated concentrations of PAHs were detected under the site at locations where evidence of petroleum impact was observed.

Multiple metals were detected at concentrations exceeding unrestricted use criteria at twenty of the twenty-six soil samples collected from the site. Metals (barium, lead, and/or mercury) were detected at concentrations exceeding restricted-residential use criteria at eleven of the twenty-four sampling locations. The highest concentrations of total lead and mercury which were detected at concentrations above or near commercial use criteria were reported at SB002 (4-6'), SB002 (19-21'), SB003 (12-14'), SB003 (19-21'), SB005 (0-2'), and SB008 (13-15'). The highest concentrations of Barium were detected at concentrations above commercial-use criteria were reported at SB002 (4-6'), SB003 19-21'), SB004 (2-4'), and SB005 (0-2'). Two metals (arsenic and copper) were detected at concentrations above commercial use criteria at SB003 (19-21'). Analytical results from GT001 (25-27') and GT002 (25-27') showed concentrations of metals below-restricted residential criteria. Additionally, concentrations of metals in exceedance of restricted-residential criteria were not detected in samples collected from native material observed beneath the site.

Toxicity Characteristics Leaching Procedure (TCLP) analysis for arsenic, barium, lead, and mercury were performed on samples from SB002 (4-6'), SB002 (19-21'), SB003 (12-14'), SB003 (19-21'), SB005 (0-2'), and SB008 (13-15'). TCLP results at SB002 (19-21'), SB003 (12-14'), SB003 (19-21'), and SB008 (13-15') contained concentrations of lead above TCLP regulatory levels, classifying the material at these locations as hazardous. TCLP concentrations for arsenic, barium, and mercury were below TCLP regulatory levels.

For Quality Control/Quality Assurance (QA/QC), blind duplicate samples were collected at SB006 (19-21') and SB007 (15-17'). Similar concentrations were detected in each duplicate sample as their corresponding original samples.

Complete Analytical results are detailed in **Tables 1 through 4** and the complete laboratory analytical report is included in **Appendix E**

3.4 Groundwater Quality Evaluation

To characterize groundwater quality onsite, groundwater samples were collected at the subject property. Groundwater sampling locations were spread across the site to gain an overall understanding of groundwater quality. A total of eight groundwater samples were collected during the investigation including four from existing monitoring wells and four samples collected from temporary well points installed at soil boring locations. Monitoring well elevations were provided by the current property owner based on a previous survey. These elevations were incorporated into the monitoring well sampling logs included in **Appendix C**. The groundwater flow direction is calculated to be generally towards the north. The northerly groundwater flow direction is consistent with what was calculated in the July 2018 groundwater monitoring status report prepared by Envirotrac. Groundwater sampling locations are illustrated on **Figure 4**.

3.4.1 Sampling Collection Protocol

Following the completion of the soil borings at SB004, SB005, SB007, and SB008, PAL installed a stainless-steel sampling screen in each borehole. The sampling screen was decontaminated with Alconox solution and a tap water rinse between each sampling location. Groundwater was encountered at approximately 13 feet below grade at each discrete groundwater sampling location. The screen was set from 12-14 feet BGS in each borehole in order to appropriately straddle the water table. Disposable polyethylene tubing was inserted into the water bearing zone of the screen point sampler. The end of the tubing was connected to a peristaltic pump with dedicated silicone tubing. Approximately four casing volumes of water (approximately 1 gallon) were purged from the temporary sampling points prior to the collection of samples. Discrete groundwater samples collected at soil boring locations are denoted 'GW' after the soil boring ID.

Samples from existing monitoring wells MW-2, MW-3, MW-7, and MW-8 were collected utilizing low-flow purging and sampling procedures outlined in the United States Environmental Protection Agency (USEPA) standard operating procedure EQASOP-GW4. According to Envirotrac, the monitoring wells are screened at the water table. Monitoring wells were purged using a decontaminated submersible pump fitted with disposal polyethylene tubing. Non-disposable sampling equipment was decontaminated with Alconox solution and a tap water rinse between each sampling location. During purging, the groundwater parameters pH, temperature, conductivity, oxygen reduction potential (ORP), turbidity, and dissolved oxygen were monitored every three minutes with a Horiba U52 water quality instrument. When measurements stabilized in accordance with USEPA standard operating procedure EQASOP-GW4, purging was completed, and the Horiba was disconnected. Monitoring well samples are denoted as 'MW.'

Samples were collected in pre-cleaned laboratory supplied glassware and stored on ice in a cooler for transport to Alpha for analysis.

Sampling analyses were chosen to characterize the site with respect to the existing petroleum spill, impact that may be associated with the commercial and industrial nature of the area, as well as to determine if the groundwater has been impacted by historic fill. Groundwater samples were analyzed for the following:

- VOCs by USEPA Method 8260 – Part 375 List.
- SVOCs by USEPA Method 8270 – Part 375 List
- Silvex by USEPA Method 8151 – Part 375 List
- Organochlorine Pesticides and PCBs by USEPA Methods 8081/8082 – Part 375 List
- Metals by USEPA Methods 6010 and Hexavalent/Trivalent Chromium – Part 375 List (Total and Dissolved).

Dissolved metals were also analyzed to more accurately reflect metal concentrations that are dissolved and potentially mobile in groundwater. Given that total metals have an affinity to adhere to soil and colloidal particles, elevated metals can be seen in turbid groundwater samples typically obtained during the sampling process. The comparison of total to dissolved analysis demonstrate which metals truly exist dissolved into the groundwater rather than what has adhered to the soils.

3.4.2 Groundwater Analytical Results

Groundwater analytical results were compared to NYSDEC ambient groundwater quality standards (AWQS) specified in 6 NYCRR Part 703. Groundwater sampling locations with compound exceedances above AWQS are included on **Figure 4**.

Each groundwater and monitoring well sample contained VOCs, SVOCs, and/or Metals (total and dissolved) at concentrations greater than AWQS. PCBs were reported in one sample above AWQS. Pesticides and silvex were non-detect in the groundwater samples.

VOCs commonly associated with petroleum impact, were detected at MW-7 at concentrations in exceedance of their respective AWQS. Additionally, MBTE was detected at 21 ug/L at MW-3 in excess of its AWQS. MW-3 and MW-7 are located down gradient of the former UST areas located in the central portion of the site.

SVOCs were detected at elevated concentrations in exceedance of AWQS at each groundwater sampling location. Acenaphthene was detected at a concentration of 64 ug/L at MW-7, located on the western portion of the property, down gradient of the former UST area. Acenaphthene was not detected at a concentration above AWQS at the other seven groundwater sampling locations.

Analytical results for total and dissolved metals yielded elevated concentrations of iron, magnesium, manganese, and sodium at each sampling location other than MW-8. Iron, magnesium, manganese, and sodium are naturally occurring metals typically identified in groundwater samples on Long Island and are not likely associated with any known spills or sources of impact at the site.

At SB004-GW, total antimony was detected at a concentration less than AWQS at 2.36 ug/L and dissolved antimony was detected at a concentration slightly exceeding AWQS at 3.01 ug/L. The concentration of dissolved antimony is somewhat anomalous compared to soil and groundwater data from the remainder of the site. It is not believed that the presence of antimony presents a significant concern.

Total arsenic, lead, mercury, barium, chromium, and selenium was detected at concentrations exceeding AWQS at MW-2, MW-3, MW-7, SB004-GW, SB005-GW, SB007-GW, and SB008-GW. However, dissolved concretions in the filtered samples were below AWQS at each sampling location, with the exception of arsenic at MW-7 (33.61 ug/L).

One groundwater sampling location, SB004-GW, yielded a concentration of Arcolor 1260, a PCB, above AWQS. SB004-GW is located on the upgradient southern portion of the property, indicating that the PCB presence may be migrating onto the property from offsite. PCBs were not detected at the other eight groundwater sampling locations indicating that the impact is not extensive across the site. Additionally, PCBs were not detected in soil samples collected at the site.

For QA/QC, a blind duplicate sample was collected at MW-8. Similar concentrations were detected in duplicate sample as the corresponding original sample with the exception of the SVOC Bis(2-ethylhexyl)phthalate which was detected in DUPE-2/14/2019 at a concentration of 14 ug/L versus non-detect in MW-8. Bis(2-ethylhexyl)phthalate is a common component in plastic materials, as well as fragrances, and detergents. Due

to the absence of this compound in the sample collected from MW-8, the presence of Bis(2-ethylhexyl)phthalate in the blind duplicate is likely due to inadvertent sample contamination during collection or laboratory interference, rather than existing in the subsurface onsite.

Analytical results are detailed in **Tables 5 through 8** and the complete laboratory analytical report is included in **Appendix E.**

3.5 Soil Vapor Investigation

To evaluate potential vapor intrusion at the subject property, a soil vapor investigation was performed consisting of six soil vapor samples and one outdoor ambient air sample. A figure illustrating the locations of the soil vapor samples along with the ambient outdoor air sample is included as **Figure 5.**

3.5.1 Sampling Protocol

Sampling was conducted in accordance with the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in New York State," (NYSDOH Guidance) October 2006. Soil vapor and outdoor air samples were collected into 2.7-liter Summa® vacuum canisters fitted with two-hour flow controllers. The samplers were batch certified clean by the laboratory. Proper quality assurance (QA) / quality control (QC) protocol was followed during the collection of soil gas samples to ensure that cross-contamination in the field did not occur. The samples were submitted to Alpha for analysis of VOCs by USEPA Method TO-15.

Temporary soil vapor probes were installed through the subsurface to a depth of 10 feet BGS using a Geoprobe drill rig. Soil vapor sampling locations were placed at 10 feet BGS due to the elevation of the water table at approximately 13 feet BGS. Stainless-steel sampling screens were installed into the boring and shrouded with #2 Morrie sand in accordance with procedures specified in the NYSDOH Guidance. Prior to sampling the integrity of the sampling port seals was tested using tracer gas analysis. The environment surrounding the seal was enriched with the tracer gas, helium, as readings were collected through the sampling probe with a portable helium detector. Tracer gas readings collected from each soil vapor probe were acceptable indicating the seals were intact and the sampling probes were acceptable for sample collection.

After the initial tracer gas test was performed, one to three volumes of the sample tubing were purged prior to collecting samples. Flow rates for both purging and collecting did not exceed 0.2 liters per minute to minimize potential ambient air infiltration during sampling.

The outdoor air sample was collected concurrently with the soil vapor samples. The sample was collected from a height of three feet above the ground.

3.5.2 Analytical Results

Analytical results for soil vapor were compared to the USEPA Vapor Intrusion Screening Levels (VISL) for Soil Vapor and New York State Department of Health (NYSDOH) Vapor Intrusion Decision Matrices Sub-Slab Vapor Concentrations.

Benzene was detected at a concentration above VISL at SV002 located at the center of the site in the area of the former USTs. Chloroform was detected at SV002 at a concentration exceeding VISL as well. Chloroform has

various uses including extraction solvent for fats, oils, greases, and other products; as a dry-cleaning spot remover; in fire extinguishers, as well as in rubber products. Chloroform was not detected in soil or groundwater samples collected from across the site.

NYSDOH has established matrices for evaluating soil vapor and indoor air results for tetrachloroethylene (PCE), 1,1,1-trichloroethane, methylene chloride, vinyl chloride, trichloroethene (TCE), cis-1,2-dichloroethene, carbon tetrachloride, and 1,1-dichloroethene. However, the collection of indoor air samples was not performed as part of this investigation. Based solely on the concentrations reported in the soil vapor samples, the soil vapor results would fall into the 'No Further Action' category on the NYSDOH Soil Vapor/Indoor Air Matrices as it pertains to eight aforementioned compounds at each sampling location.

Analytical results for the soil vapor and outdoor air samples are shown on **Table 9**. The laboratory data report is included as **Appendix E**.

4.0 FINDINGS

PWGC has performed a Phase II ESA in conformance with the scope and limitations of ASTM Practice E1903-11 for the subject property. The Phase II ESA consisted of the following tasks:

- Geophysical Survey and Catch Basin Investigation
- Soil Quality Evaluation.
- Groundwater Quality Evaluation.
- Soil Vapor Intrusion Investigation.

4.1 Summary

The findings of this Phase II ESA included the following:

- Based on the findings of geophysical survey, there is the possibility that undocumented and out of service USTs exist onsite. PWGC did not detect metallic anomalies located in the central portion of the site, where thirty-six 550-gallon gasoline USTs were once present.
- Based upon documents provided by Speedway and the geophysical survey, the piping associated with the six onsite catch basins appears to be connected to the municipal storm-water system and does not discharge onsite.
- Based on the soil sampling investigation, PWGC can conclude the following:
    - Based on soil boring observations, petroleum impact was observed in soils in the central, western and northern portion of the site downgradient form the former USTs area in the center of the property.
    - Elevated concentrations of SVOCs were detected under the site from 0 to 21 feet below grade.
    - Soil borings located in the central and northwestern portion of the site contained elevated concentrations of lead which were identified to be at hazardous concentrations based on TCLP results, including at 19-21 feet below grade in the central portion of the site.
    - Analytical results from samples collected at 25-27 feet below grade at GT001 and GT002 reported concentrations of metals below restricted-residential use criteria.
- Based on the groundwater sampling analytical results, PWGC can conclude the following:
    - VOCs detected at MW-3 and MW-7 are consistent with compounds associated with petroleum contamination. Evidence of petroleum impact was most pronounced on the central-western and north portions of the property down gradient from the former UST area in the center of the site.
    - Dissolved arsenic was detected at a concertation exceeding AWQS at MW-7 located on the western portion of the property.
    - One groundwater sampling location, SB004-GW, yielded a concentration of PCBs above AWQS. SB004-GW is located on the upgradient portion of the site and PCBs were not detected at significant concentrations at all other groundwater and soil sampling locations.
- Based on soil vapor sample results, VOCs likely emanating from the onsite petroleum impact were detected across the site.

5.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312. I have the specific qualifications based on education,

training and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

Ryan Morley, PG
Project Manager

Andrew Lockwood, PG
Senior Vice President

Report Completion Date: April 10, 2019

6.0 REFERENCES

6 NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6.

6 NYCRR Part 703 Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.

CP-51 / Soil Cleanup Guidance.

DER-10 / Technical Guidance for Site Investigation and Remediation.

Standard practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process, ASTM Standard E 1903-11.

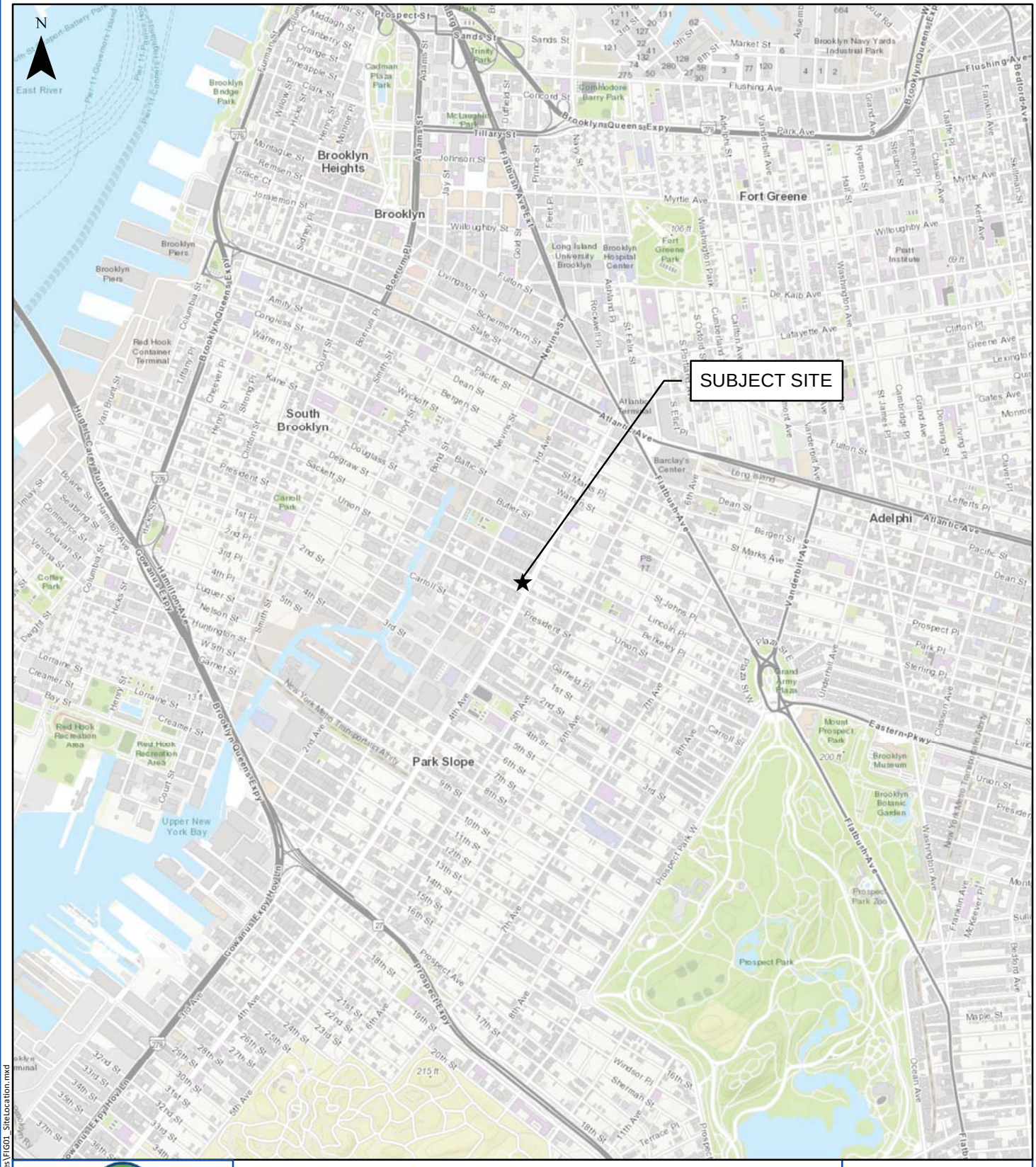
Low Stress Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells. EQASOP-GW4; Revised September 19, 2017.

7.0 LIMITATIONS

The conclusions presented in this report are professional opinions based on the data described in this report. These opinions have been arrived at in accordance with currently accepted engineering and hydrogeologic standards and practices applicable to this location, and are subject to the following inherent limitations:

1. The data presented in this report are from visual inspections and examination of records prepared by others. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration of the site, analysis of data, and re-evaluation of the findings, observations, and conclusions presented in this report.
2. The data reported, and the findings, observations, and conclusions expressed are limited by the scope of work. The scope of work was defined by the request of the client.
3. No warranty or guarantee, whether expressed or implied, is made with respect to the data reported, findings, observations, or conclusions. These are based solely upon site conditions in existence at the time of the investigation, and other information obtained and reviewed by PWGC.
4. The conclusions presented in this report are professional opinions based on data described in this report. They are intended only for the purpose, site location, and project indicated. This report is not a definitive study of contamination at the site and should not be interpreted as such.
5. This report is based, in part, on information supplied to PWGC by third-party sources. While efforts have been made to substantiate this third-party information, PWGC cannot attest to the completeness or accuracy of information provided by others.

FIGURES



SITE LOCATION

204 4th Avenue
Brooklyn, NY

Miles
0 ¼ ½ ¾ 1

Project:	AHI1903
Date:	1/25/2019
Designed by:	RM
Drawn by:	WY
Approved by:	RM
Figure No:	1

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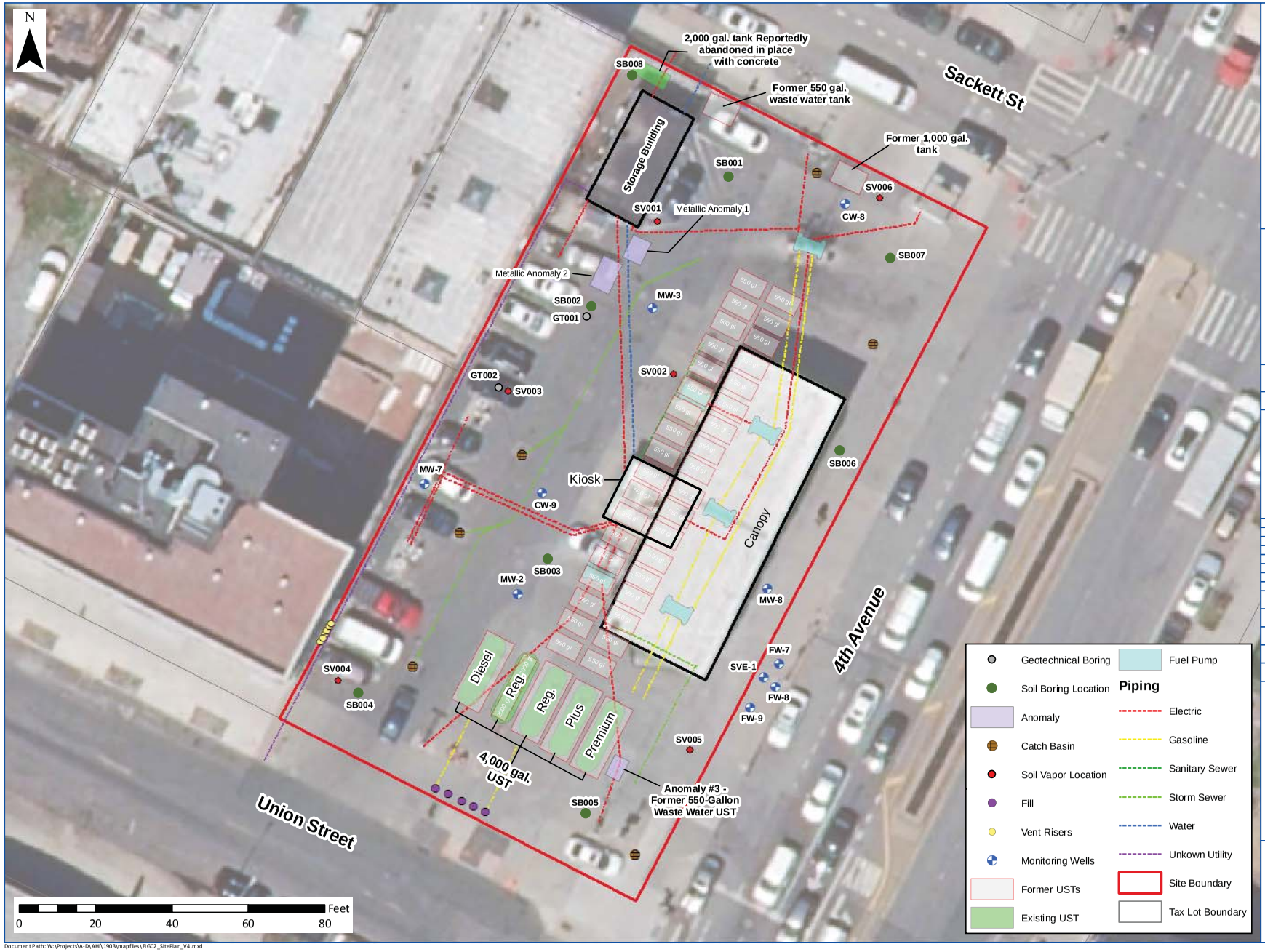

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DRAWING PREPARED FOR:

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

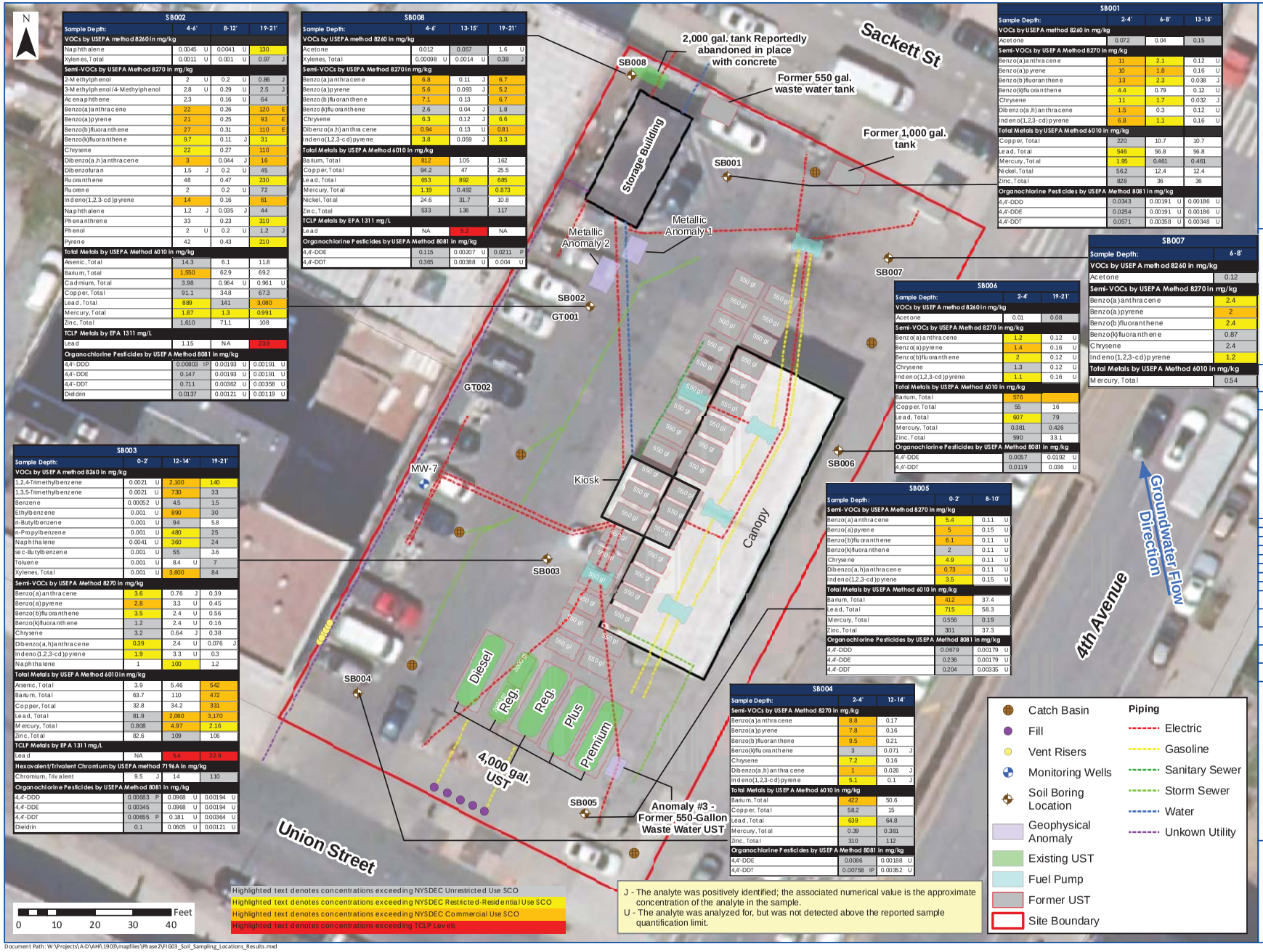
Project:	AHI1903	Designed by:	JL
Date:	3/19/2019	Drawn by:	PH
Scale:	AS SHOWN	Approved by:	JL

Soil Boring, Soil Vapor & Groundwater Sampling Locations

204 4th Avenue
Brooklyn, NY

FIGURE NO:

2



SB002

Sample Depth:	4-6'		8-12'		19-21'	
VOCs by USEPA method 8260 in mg/kg						
Naphthalene	0.0045	U	0.0041	U	130	
Xylenes, Total	0.0011	U	0.001	U	0.97	J
Semi-VOCs by USEPA Method 8270 in mg/kg						
2-Methylphenol	2	U	0.2	U	0.86	J
3-Methylphenol/4-Methylphenol	2.8	U	0.29	U	2.5	J
Acenaphthene	2.3		0.16	U	64	
Benzo(a)anthracene	22		0.26		120	E
Benzo(a)pyrene	21		0.25		93	E
Benzo(b)fluoranthene	27		0.31		110	E
Benzo(k)fluoranthene	9.7		0.11	J	31	
Chrysene	22		0.27		110	
Dibenzo(a,h)anthracene	3		0.044	J	16	
Dibenzofuran	1.5	J	0.2	U	45	
Fluoranthene	48		0.47		230	
Fluorene	2		0.2	U	72	
Indeno(1,2,3-cd)pyrene	14		0.16		61	
Naphthalene	1.2	J	0.035	J	44	
Phenanthrene	33		0.23		310	
Phenol	2	U	0.2	U	1.2	J
Pyrene	42		0.43		210	
Total Metals by USEPA Method 6010 in mg/kg						
Arsenic, Total	14.3		6.1		11.8	
Barium, Total	1,550		62.9		69.2	
Cadmium, Total	3.98		0.964	U	0.961	U
Copper, Total	91.1		34.8		67.3	
Lead, Total	889		141		3,080	
Mercury, Total	1.87		1.3		0.991	
Zinc, Total	1,610		71.1		108	
TCLP Metals by EPA 1311 mg/L						
Lead	1.15		NA		23.9	
Organochlorine Pesticides by USEPA Method 8081 in mg/kg						
4,4'-DDD	0.00803	IP	0.00193	U	0.00191	U
4,4'-DDE	0.147		0.00193	U	0.00191	U
4,4'-DDT	0.711		0.00362	U	0.00358	U
Dieldrin	0.0137		0.00121	U	0.00119	U

SB008

Sample Depth:	4-6'		13-15'		19-21'	
VOCs by USEPA method 8260 in mg/kg						
Acetone	0.012		0.057		1.6	U
Xylenes, Total	0.00098	U	0.0014	U	0.38	J
Semi-VOCs by USEPA Method 8270 in mg/kg						
Benzo(a)anthracene	6.8		0.11	J	6.7	
Benzo(a)pyrene	5.6		0.093	J	5.2	
Benzo(b)fluoranthene	7.1		0.13		6.7	
Benzo(k)fluoranthene	2.6		0.04	J	1.8	
Chrysene	6.3		0.12	J	6.6	
Dibenzo(a,h)anthracene	0.94		0.13	U	0.81	
Indeno(1,2,3-cd)pyrene	3.8		0.059	J	3.3	
Total Metals by USEPA Method 6010 in mg/kg						
Barium, Total	812		105		162	
Copper, Total	94.2		47		25.5	
Lead, Total	653		892		685	
Mercury, Total	1.19		0.492		0.873	
Nickel, Total	24.6		31.7		10.8	
Zinc, Total	533		136		117	
TCLP Metals by EPA 1311 mg/L						
Lead	NA		5.2		NA	
Organochlorine Pesticides by USEPA Method 8081 in mg/kg						
4,4'-DDE	0.115		0.00207	U	0.0211	P
4,4'-DDT	0.365		0.00388	U	0.004	U

SB001

Sample Depth:	2-4'	6-8'	13-15'	
VOCs by USEPA method 8260 in mg/kg				
Acetone	0.072	0.04	0.15	
Semi-VOCs by USEPA Method 8270 in mg/kg				
Benzo(a)anthracene	11	2.1	0.12	U
Benzo(a)pyrene	10	1.8	0.16	U
Benzo(b)fluoranthene	13	2.3	0.038	J
Benzo(k)fluoranthene	4.4	0.79	0.12	U
Chrysene	11	1.7	0.032	J
Dibenzo(a,h)anthracene	1.5	0.3	0.12	U
Indeno(1,2,3-cd)pyrene	6.8	1.1	0.16	U
Total Metals by USEPA Method 6010 in mg/kg				
Copper, Total	220	10.7	10.7	
Lead, Total	546	56.8	56.8	
Mercury, Total	1.95	0.461	0.461	
Nickel, Total	56.2	12.4	12.4	
Zinc, Total	828	36	36	
Organochlorine Pesticides by USEPA Method 8081 in mg/kg				
4,4'-DDD	0.0343	0.00191 U	0.00186	U
4,4'-DDE	0.0254	0.00191 U	0.00186	U
4,4'-DDT	0.0571	0.00358 U	0.00348	U

SB007

Sample Depth:	6-8'
VOCs by USEPA method 8260 in mg/kg	
Acetone	0.12
Semi-VOCs by USEPA Method 8270 in mg/kg	
Benzo(a)anthracene	2.4
Benzo(a)pyrene	2
Benzo(b)fluoranthene	2.4
Benzo(k)fluoranthene	0.87
Chrysene	2.4
Indeno(1,2,3-cd)pyrene	1.2
Total Metals by USEPA Method 6010 in mg/kg	
Mercury, Total	0.54

SB006

Sample Depth:	2-4'		19-21'	
VOCs by USEPA method 8260 in mg/kg				
Acetone	0.01		0.08	
Semi-VOCs by USEPA Method 8270 in mg/kg				
Benzo(a)anthracene	1.2		0.12	U
Benzo(a)pyrene	1.4		0.16	U
Benzo(b)fluoranthene	2		0.12	U
Chrysene	1.3		0.12	U
Indeno(1,2,3-cd)pyrene	1.1		0.16	U
Total Metals by USEPA Method 6010 in mg/kg				
Barium, Total	576			
Copper, Total	55		16	
Lead, Total	607		79	
Mercury, Total	0.381		0.426	
Zinc, Total	590		33.1	
Organochlorine Pesticides by USEPA Method 8081 in mg/kg				
4,4'-DDE	0.0057		0.0192	U
4,4'-DDT	0.0119		0.036	U

SB003

Sample Depth:	0-2'		12-14'		19-21'	
VOCs by USEPA method 8260 in mg/kg						
1,2,4-Trimethylbenzene	0.0021	U	2,100		140	
1,3,5-Trimethylbenzene	0.0021	U	730		33	
Benzene	0.00052	U	4.5		1.5	
Ethylbenzene	0.001	U	890		30	
n-Butylbenzene	0.001	U	94		5.8	
n-Propylbenzene	0.001	U	480		25	
Naphthalene	0.0041	U	360		24	
sec-Butylbenzene	0.001	U	55		3.6	
Toluene	0.001	U	8.4	U	7	
Xylenes, Total	0.001	U	3,600		84	
Semi-VOCs by USEPA Method 8270 in mg/kg						
Benzo(a)anthracene	3.6		0.76	J	0.39	
Benzo(a)pyrene	2.8		3.3	U	0.45	
Benzo(b)fluoranthene	3.5		2.4	U	0.56	
Benzo(k)fluoranthene	1.2		2.4	U	0.16	
Chrysene	3.2		0.64	J	0.38	
Dibenzo(a,h)anthracene	0.39		2.4	U	0.076	J
Indeno(1,2,3-cd)pyrene	1.9		3.3	U	0.3	
Naphthalene	1		100		1.2	
Total Metals by USEPA Method 6010 in mg/kg						
Arsenic, Total	3.9		5.46		542	
Barium, Total	63.7		110		472	
Copper, Total	32.8		34.2		331	
Lead, Total	81.9		2,060		3,170	
Mercury, Total	0.808		4.97		2.16	
Zinc, Total	82.6		109		106	
TCLP Metals by EPA 1311 mg/L						
Lead	NA		5.4		22.9	
Hexavalent/Trivalent Chromium by USEPA method 7196A in mg/kg						
Chromium, Trivalent	9.5	J	14		110	
Organochlorine Pesticides by USEPA Method 8081 in mg/kg						
4,4'-DDD	0.00683	P	0.0968	U	0.00194	U
4,4'-DDE	0.00345		0.0968	U	0.00194	U
4,4'-DDT	0.00655	P	0.181	U	0.00364	U
Dieldrin	0.1		0.0605	U	0.00121	U

SB005

Sample Depth:	0-2'		8-10'	
Semi-VOCs by USEPA Method 8270 in mg/kg				
Benzo(a)anthracene	5.4		0.11	U
Benzo(a)pyrene	5		0.15	U
Benzo(b)fluoranthene	6.1		0.11	U
Benzo(k)fluoranthene	2		0.11	U
Chrysene	4.9		0.11	U
Dibenzo(a,h)anthracene	0.73		0.11	U
Indeno(1,2,3-cd)pyrene	3.5		0.15	U
Total Metals by USEPA Method 6010 in mg/kg				
Barium, Total	412		37.4	
Lead, Total	715		58.3	
Mercury, Total	0.556		0.19	
Zinc, Total	301		37.3	
Organochlorine Pesticides by USEPA Method 8081 in mg/kg				
4,4'-DDD	0.0679		0.00179	U
4,4'-DDE	0.236		0.00179	U
4,4'-DDT	0.204		0.00335	U

SB004

Sample Depth:	2-4'		12-14'	
Semi-VOCs by USEPA Method 8270 in mg/kg				
Benzo(a)anthracene	8.8		0.17	
Benzo(a)pyrene	7.8		0.16	
Benzo(b)fluoranthene	9.5		0.21	
Benzo(k)fluoranthene	3		0.071	J
Chrysene	7.2		0.16	
Dibenzo(a,h)anthracene	1		0.026	J
Indeno(1,2,3-cd)pyrene	5.1		0.1	J
Total Metals by USEPA Method 6010 in mg/kg				
Barium, Total	422		50.6	
Copper, Total	58.2		15	
Lead, Total	639		64.8	
Mercury, Total	0.39		0.381	
Zinc, Total	310		1.12	
Organochlorine Pesticides by USEPA Method 8081 in mg/kg				
4,4'-DDE	0.0086		0.00188	U
4,4'-DDT	0.00758	IP	0.00352	U

Highlighted text denotes concentrations exceeding NYSDEC Unrestricted Use SCO
Highlighted text denotes concentrations exceeding NYSDEC Restricted-Residential Use SCO
Highlighted text denotes concentrations exceeding NYSDEC Commercial Use SCO
Highlighted text denotes concentrations exceeding TCLP Levels

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.

Catch Basin
Fill
Vent Risers
Monitoring Wells
Soil Boring Location
Geophysical Anomaly
Existing UST
Fuel Pump
Former UST
Site Boundary

Piping
Electric
Gasoline
Sanitary Sewer
Storm Sewer
Water
Unkown Utility

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DRAWING PREPARED FOR:

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

Project:	AHI1903	Designed by:	JL
Date:	4/10/2019	Drawn by:	TS
Scale:	AS SHOWN	Approved by:	JL

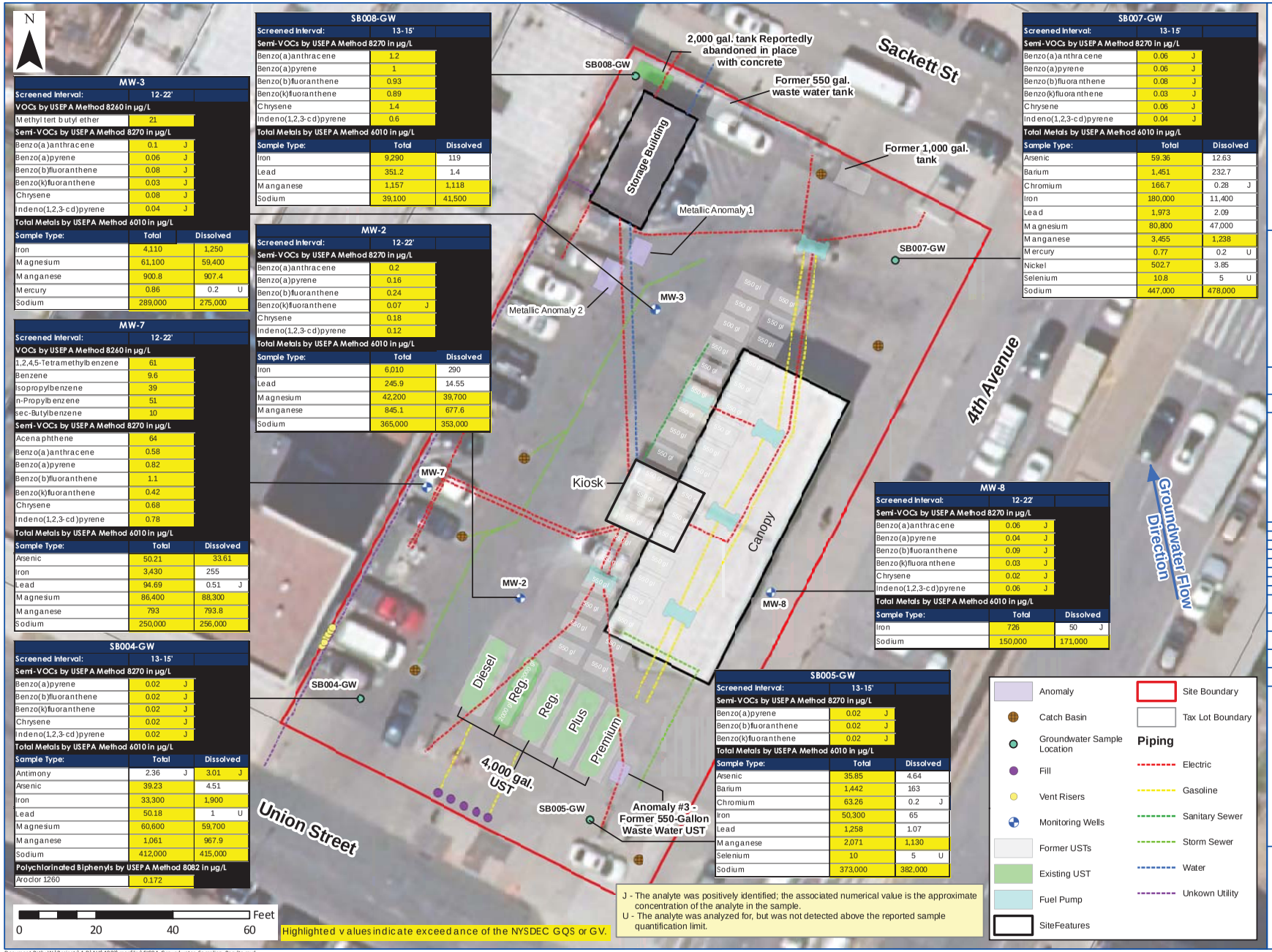
Proposed Boring Locations with March 2019 Phase II ESA Soil Analytical Data

204 4th Avenue
Brooklyn, NY

FIGURE NO:

3

Document Path: W:\Projects\A-D\AHI\1903\mapfiles\Phase2\FIG03_Soil_Sampling_Locations_Results.mxd



MW-3		
Screened Interval:	12-22'	
VOCs by USEPA Method 8260 in µg/L		
Methyl tert butyl ether	21	
Semi-VOCs by USEPA Method 8270 in µg/L		
Benzo(a)anthracene	0.1	J
Benzo(a)pyrene	0.06	J
Benzo(b)fluoranthene	0.08	J
Benzo(k)fluoranthene	0.03	J
Chrysene	0.08	J
Indeno(1,2,3-cd)pyrene	0.04	J
Total Metals by USEPA Method 6010 in µg/L		
Sample Type:	Total	Dissolved
Iron	4,110	1,250
Magnesium	61,100	59,400
Manganese	900.8	907.4
Mercury	0.86	0.2 U
Sodium	289,000	275,000

MW-7		
Screened Interval:	12-22'	
VOCs by USEPA Method 8260 in µg/L		
1,2,4,5-Tetramethylbenzene	61	
Benzene	9.6	
Isopropylbenzene	39	
n-Propylbenzene	51	
sec-Butylbenzene	10	
Semi-VOCs by USEPA Method 8270 in µg/L		
Acenaphthene	64	
Benzo(a)anthracene	0.58	
Benzo(a)pyrene	0.82	
Benzo(b)fluoranthene	1.1	
Benzo(k)fluoranthene	0.42	
Chrysene	0.68	
Indeno(1,2,3-cd)pyrene	0.78	
Total Metals by USEPA Method 6010 in µg/L		
Sample Type:	Total	Dissolved
Arsenic	50.21	33.61
Iron	3,430	255
Lead	94.69	0.51 J
Magnesium	86,400	88,300
Manganese	793	793.8
Sodium	250,000	256,000

SB004-GW		
Screened Interval:	13-15'	
Semi-VOCs by USEPA Method 8270 in µg/L		
Benzo(a)pyrene	0.02	J
Benzo(b)fluoranthene	0.02	J
Benzo(k)fluoranthene	0.02	J
Chrysene	0.02	J
Indeno(1,2,3-cd)pyrene	0.02	J
Total Metals by USEPA Method 6010 in µg/L		
Sample Type:	Total	Dissolved
Antimony	2.36 J	3.01 J
Arsenic	39.23	4.51
Iron	33,300	1,900
Lead	50.18	1 U
Magnesium	60,600	59,700
Manganese	1,061	967.9
Sodium	412,000	415,000
Polychlorinated Biphenyls by USEPA Method 8082 in µg/L		
Aroclor 1260	0.172	

SB008-GW		
Screened Interval:	13-15'	
Semi-VOCs by USEPA Method 8270 in µg/L		
Benzo(a)anthracene	1.2	
Benzo(a)pyrene	1	
Benzo(b)fluoranthene	0.93	
Benzo(k)fluoranthene	0.89	
Chrysene	1.4	
Indeno(1,2,3-cd)pyrene	0.6	
Total Metals by USEPA Method 6010 in µg/L		
Sample Type:	Total	Dissolved
Iron	9,290	119
Lead	351.2	1.4
Manganese	1,157	1,118
Sodium	39,100	41,500

MW-2		
Screened Interval:	12-22'	
Semi-VOCs by USEPA Method 8270 in µg/L		
Benzo(a)anthracene	0.2	
Benzo(a)pyrene	0.16	
Benzo(b)fluoranthene	0.24	
Benzo(k)fluoranthene	0.07	J
Chrysene	0.18	
Indeno(1,2,3-cd)pyrene	0.12	
Total Metals by USEPA Method 6010 in µg/L		
Sample Type:	Total	Dissolved
Iron	6,010	290
Lead	245.9	14.55
Magnesium	42,200	39,700
Manganese	845.1	677.6
Sodium	365,000	353,000

SB007-GW		
Screened Interval:	13-15'	
Semi-VOCs by USEPA Method 8270 in µg/L		
Benzo(a)anthracene	0.06	J
Benzo(a)pyrene	0.06	J
Benzo(b)fluoranthene	0.08	J
Benzo(k)fluoranthene	0.03	J
Chrysene	0.06	J
Indeno(1,2,3-cd)pyrene	0.04	J
Total Metals by USEPA Method 6010 in µg/L		
Sample Type:	Total	Dissolved
Arsenic	59.36	12.63
Barium	1,451	232.7
Chromium	166.7	0.28 J
Iron	180,000	11,400
Lead	1,973	2.09
Magnesium	80,800	47,000
Manganese	3,455	1,238
Mercury	0.77	0.2 U
Nickel	502.7	3.85
Selenium	10.8	5 U
Sodium	447,000	478,000

MW-8		
Screened Interval:	12-22'	
Semi-VOCs by USEPA Method 8270 in µg/L		
Benzo(a)anthracene	0.06	J
Benzo(a)pyrene	0.04	J
Benzo(b)fluoranthene	0.09	J
Benzo(k)fluoranthene	0.03	J
Chrysene	0.02	J
Indeno(1,2,3-cd)pyrene	0.06	J
Total Metals by USEPA Method 6010 in µg/L		
Sample Type:	Total	Dissolved
Iron	726	50 J
Sodium	150,000	171,000

SB005-GW		
Screened Interval:	13-15'	
Semi-VOCs by USEPA Method 8270 in µg/L		
Benzo(a)pyrene	0.02	J
Benzo(b)fluoranthene	0.02	J
Benzo(k)fluoranthene	0.02	J
Total Metals by USEPA Method 6010 in µg/L		
Sample Type:	Total	Dissolved
Arsenic	35.85	4.64
Barium	1,442	163
Chromium	63.26	0.2 J
Iron	50,300	65
Lead	1,258	1.07
Manganese	2,071	1,130
Selenium	10	5 U
Sodium	373,000	382,000

Highlighted values indicate exceedance of the NYSDEC GQS or GV.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.

Anomaly
Catch Basin
Groundwater Sample Location
Fill
Vent Risers
Monitoring Wells
Former USTs
Existing UST
Fuel Pump
SiteFeatures
Site Boundary
Tax Lot Boundary
Piping
Electric
Gasoline
Sanitary Sewer
Storm Sewer
Water
Unkown Utility

Document Path: W:\Projects\A-D\AHI\1903\mapfiles\FIG04_Groundwater_Sampling_Results.mxd

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DRAWING PREPARED FOR:

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

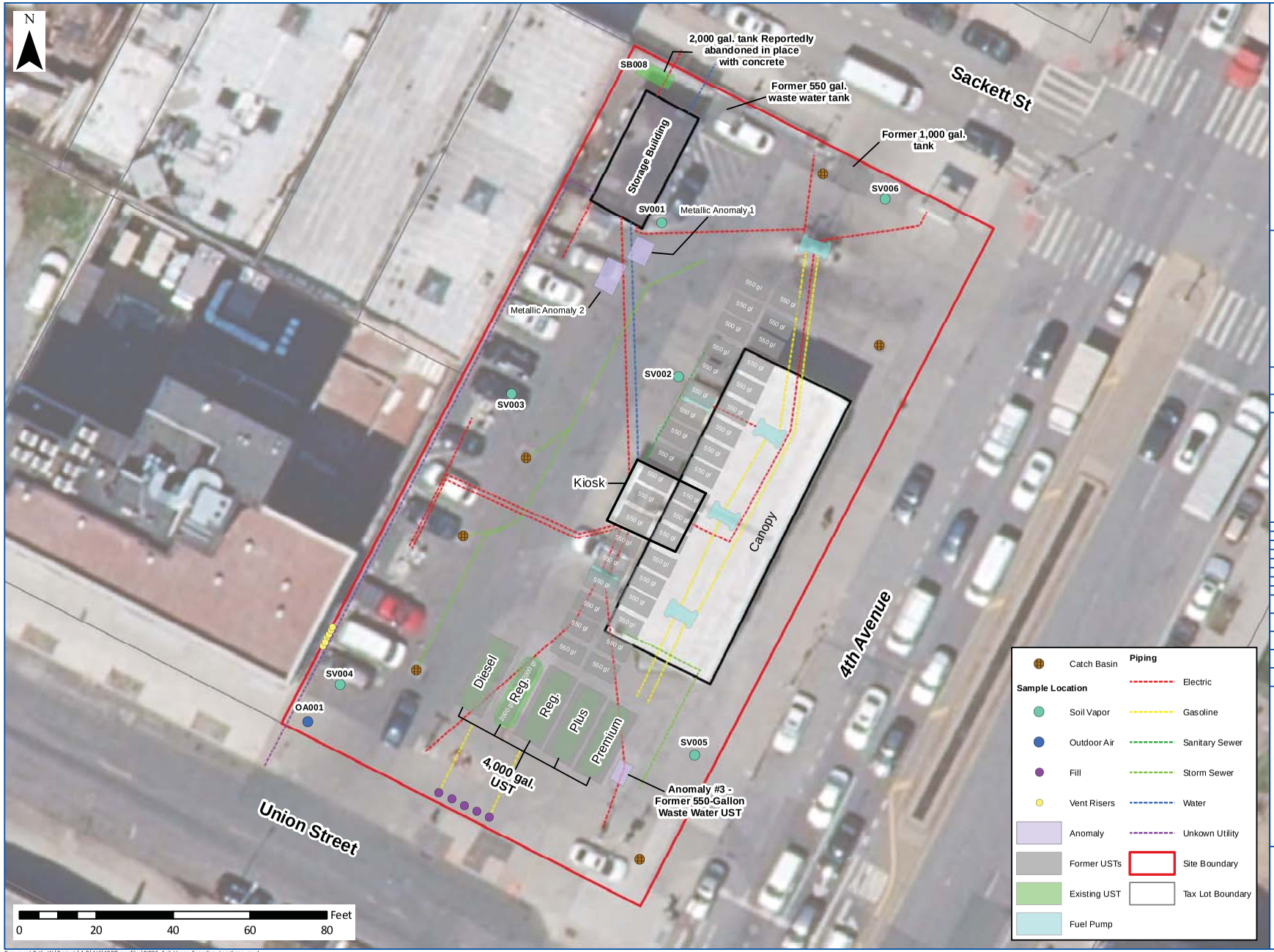
Project:	AHI1903	Designed by:	JL
Date:	3/19/2019	Drawn by:	TS
Scale:	AS SHOWN	Approved by:	JL

Groundwater Sampling Results with Exceedances

204 4th Avenue
Brooklyn, NY

FIGURE NO:

4



Document Path: W:\Projects\A-D\AHI\1903\mapfiles\FIG05_Soil_Vapor_Sampling_Locations_.mxd

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Project:	AHI1903	Designed by:	JL
Date:	4/10/2019	Drawn by:	PH
Scale:	AS SHOWN	Approved by:	JL

Soil Vapor Sampling Locations

203 4th Avenue
Brooklyn, NY

FIGURE NO:

5

TABLES

Table 1
Soil Sample Analytical Data Summary
Volatile Organic Compounds
204 4th Avenue, Brooklyn, NY

Client Sample ID:	NYSDEC Soil Cleanup Objectives Unrestricted Use [1]	NYSDEC Soil Cleanup Objectives Restricted-Residential Use [2]	NYSDEC Soil Cleanup Objectives Commercial Use [3]	SB001			SB002			SB003			SB004			SB005			SB006			SB007			SB008			DUPE-1	DUPE-2
Sample Depth:				2-4'	6-8'	13-15'	4-6'	8-10'	19-21'	0-2'	12-14'	19-21'	2-4'	12-14'	14-16'	0-2'	8-10'	12-14'	2-4'	10-12'	19-21'	6-8'	12-14'	15-17'	4-6'	13-15'	19-21'		
Laboratory ID:				L1905688-01	L1906299-05	L1906299-02	L1905688-02	L1906299-04	L1906299-06	L1906083-01	L1906393-04	L1906393-05	L1906083-02	L1906393-02	L1906393-01	L1906083-03	L1906393-08	L1906393-07	L1906393-09	L1906480-01	L1906480-02	L1906480-03	L1906480-04	L1906480-05	L1906299-07	L1906299-03	L1906299-01	L1906480-07	L1906480-08
Sampling Date:				2/12/2019	2/15/2019	2/15/2019	2/12/2019	2/15/2019	2/15/2019	2/13/2019	2/18/2019	2/18/2019	2/13/2019	2/18/2019	2/18/2019	2/13/2019	2/18/2019	2/18/2019	2/18/2019	2/19/2019	2/19/2019	2/19/2019	2/19/2019	2/19/2019	2/15/2019	2/15/2019	2/15/2019	2/19/2019	2/19/2019
Volatile Organic Compounds by USEPA method 8260 in mg/kg																													
1,1,1,2-Tetrachloroethane	NS	NS	NS	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
1,1,1-Trichloroethane	0.68	100	500	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00097	0.08 U	0.00049 U	0.00054 U
1,1,2-Trichloroethane	NS	NS	NS	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
1,1-Dichloroethane	0.27	26	240	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
1,1-Dichloroethene	0.33	100	500	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
1,1-Dichloropropene	NS	NS	NS	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
1,2,3-Trichloropropane	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
1,2,4,5-Tetramethylbenzene	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	0.42 J	0.0021 U	150	11	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.064 J	0.002 U	0.0022 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
1,2,4-Trimethylbenzene	3.6	52	190	0.0013 J	0.0028 U	0.0028 U	0.0022 U	0.002 U	1.1 J	0.0021 U	2,100	140	0.0012 J	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.00036 J	0.0004 J	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.25 J	0.002 U	0.0022 U
1,2-Dibromo-3-chloropropane	NS	NS	NS	0.0042 U	0.0042 U	0.0042 U	0.0034 U	0.0031 U	3 U	0.0031 U	25 U	2.4 U	0.0031 U	0.0028 U	0.003 U	0.0029 U	0.0046 U	0.0028 U	0.0027 U	0.0029 U	0.0039 U	0.0036 U	0.0042 U	0.0028 U	0.0029 U	0.0042 U	0.48 U	0.003 U	0.0033 U
1,2-Dibromoethane	NS	NS	NS	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
1,2-Dichlorobenzene	1.1	100.0	500	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
1,2-Dichloroethane	0.02	3.1	30	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
1,2-Dichloroethene, Total	NS	NS	NS	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
1,2-Dichloropropane	NS	NS	NS	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
1,3,5-Trimethylbenzene	8.4	52	190	0.00048 J	0.0028 U	0.0028 U	0.0022 U	0.002 U	0.55 J	0.0021 U	730	33	0.00052 J	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.13 J	0.002 U	0.0022 U
1,3-Dichlorobenzene	2.4	49.0	280	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
1,3-Dichloropropane	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
1,3-Dichloropropene, Total	NS	NS	NS	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
1,4-Dichlorobenzene	1.8	13.0	130	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
1,4-Dioxane	0.1	13	130	0.14 U	0.14 U	0.14 U	0.11 U	0.1 U	99 U	0.1 U	840 U	79 U	0.1 U	0.093 U	0.099 U	0.097 U	0.15 U	0.095 U	0.09 U	0.096 U	0.13 U	0.12 U	0.14 U	0.094 U	0.098 U	0.14 U	16 U	0.098 U	0.11 U
2,2-Dichloropropane	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
2-Butanone	0.12	100	500	0.0062 J	0.014 U	0.018	0.011 U	0.01 U	9.9 U	0.01 U	84 U	7.9 U	0.01 U	0.0049 J	0.0049 J	0.0097 U	0.015 U	0.0095 U	0.009 U	0.0096 U	0.0093 J	0.012 U	0.014 U	0.0081 J	0.0098 U	0.014 U	1.6 U	0.0072 J	0.011 U
2-Hexanone	NS	NS	NS	0.014 U	0.014 U	0.014 U	0.011 U	0.01 U	9.9 U	0.01 U	84 U	7.9 U	0.01 U	0.0093 U	0.0099 U	0.0097 U	0.015 U	0.0095 U	0.009 U	0.0096 U	0.013 U	0.012 U	0.014 U	0.0094 U	0.0098 U	0.014 U	1.6 U	0.0098 U	0.011 U
4-Methyl-2-pentanone	NS	NS	NS	0.014 U	0.014 U	0.014 U	0.011 U	0.01 U	9.9 U	0.01 U	84 U	7.9 U	0.01 U	0.0093 U	0.0099 U	0.0097 U	0.015 U	0.0095 U	0.009 U	0.0096 U	0.013 U	0.012 U	0.014 U	0.0094 U	0.0098 U	0.014 U	1.6 U	0.0098 U	0.011 U
Acetone	0.05	100	500	0.072	0.04	0.15	0.011	0.018	9.9 U	0.014	84 U	7.9 U	0.016	0.036	0.038	0.0078 J	0.016	0.01	0.01	0.0059 J	0.08	0.12	0.042	0.049	0.012	0.057	1.6 U	0.057	0.034
Acrylonitrile	NS	NS	NS	0.0056 U	0.0056 U	0.0055 U	0.0045 U	0.0041 U	4 U	0.0041 U	34 U	3.2 U	0.0041 U	0.0037 U	0.004 U	0.0039 U	0.0061 U	0.0038 U	0.0036 U	0.0038 U	0.0052 U	0.0048 U	0.0056 U	0.0037 U	0.0039 U	0.0056 U	0.64 U	0.0039 U	0.0044 U
Benzene	0.06	4.8	44	0.0007 U	0.00069 U	0.00036 J	0.00056 U	0.00069	0.49 U	0.00052 U	4.5	1.5	0.0005 J	0.00041 J	0.00054	0.00048 U	0.00077 U	0.00047 U	0.00025 J	0.00048 U	0.00036 J	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
Bromobenzene	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
Bromochloromethane	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
Bromodichloromethane	NS	NS	NS	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
Bromoform	NS	NS	NS	0.0056 U	0.0056 U	0.0055 U	0.0045 U	0.0041 U	4 U	0.0041 U	34 U	3.2 U	0.0041 U	0.0037 U	0.004 U	0.0039 U	0.0061 U	0.0038 U	0.0036 U	0.0038 U	0.0052 U	0.0048 U	0.0056 U	0.0037 U	0.0039 U	0.0056 U	0.64 U	0.0039 U	0.0044 U
Bromomethane	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
Carbon disulfide	NS	NS	NS	0.014 U	0.014 U	0.014 U	0.011 U	0.01 U	9.9 U	0.01 U	84 U	7.9 U	0.01 U	0.0093 U	0.0099 U	0.0097 U	0.015 U	0.0095 U	0.009 U	0.0096 U	0.013 U	0.012 U	0.014 U	0.0094 U	0.0098 U	0.014 U	1.6 U	0.0098 U	0.011 U
Carbon tetrachloride	0.76	2.4	22	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
Chlorobenzene	1.1	100.0	500	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
Chloroethane	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
Chloroform	0.37	49	350	0.00074 J	0.00033 J	0.0021 U	0.0017 U	0.0015 U	1.5 U	0.0015 U	13 U	1.2 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0023 U	0.0014 U	0.00013 J	0.0014 U	0.0019 U	0.001 J	0.00094 J	0.0014 U	0.0015 U	0.00057 J	0.24 U	0.0015 U	0.0016 U
Chloromethane	NS	NS	NS	0.0056 U	0.0056 U	0.0055 U	0.0045 U	0.0041 U	4 U	0.0041 U	34 U	3.2 U	0.0041 U	0.0037 U	0.004 U	0.0039 U	0.0061 U	0.0038 U	0.0036 U	0.0038 U	0.0052 U	0.0048 U	0.0056 U	0.0037 U	0.0039 U	0.0056 U	0.64 U	0.0039 U	0.0044 U
cis-1,2-Dichloroethene	0.25	100	500	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
cis-1,3-Dichloropropene	NS	NS	NS	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
Dibromochloromethane	NS	NS	NS	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
Dibromomethane	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
Dichlorodifluoromethane	NS	NS	NS	0.014 U	0.014 U	0.014 U	0.011 U	0.01 U	9.9 U	0.01 U	84 U	7.9 U	0.01 U	0.0093 U	0.0099 U	0.0097 U	0.015 U	0.0095 U	0.009 U	0.0096 U	0.013 U	0.012 U	0.014 U	0.0094 U	0.0098 U	0.014 U	1.6 U	0.0098 U	0.011 U
Ethyl ether	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
Ethylbenzene	1	41	390	0.0004 J	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.26 J	0.001 U	890	30	0.00024 J	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0027	0.00096 U	0.00026 J	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.15 J	0.00098 U	0.0011 U
Hexachlorobutadiene	NS	NS	NS	0.0056 U	0.0056 U	0.0055 U	0.0045 U	0.0041 U	4 U	0.0041 U	34 U	3.2 U	0.0041 U	0.0037 U	0.004 U	0.0039 U	0.0061 U	0.0038 U	0.0036 U	0.0038 U	0.0052 U	0.0048 U	0.0056 U	0.0037 U	0.0039 U	0.0056 U	0.64 U	0.0039 U	0.0044 U
Isopropylbenzene	NS	NS	NS	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.18 J	0.001 U	150	7.5	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.2	0.00098 U	0.0011 U
Methyl tert butyl ether	0.93	100	500	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.0017 J	0.00071 J	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.00031 J	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.032 J	0.00024 J	0.0022 U
Methylene chloride	0.05	100	500	0.007 U	0.0069 U	0.0069 U	0.0056 U	0.0051 U	4.9 U	0.0052 U	42 U	4 U	0.0051 U	0.0046 U	0.005 U	0.0048 U	0.0077 U	0.0047 U	0.0045 U	0.0048 U	0.0065 U	0.006 U	0.007 U	0.0047 U	0.0049 U	0.0069 U	0.8 U	0.0049 U	0.0054 U
n-Butylbenzene	12	100	500	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	94	5.8	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
n-Propylbenzene	3.9	100	500	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	480	25	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.00029 J	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.15 J	0.00098 U	0.0011 U
Naphthalene	12	100	500	0.0014 J	0.0056 U	0.0055 U	0.0045 U	0.0041 U	130	0.0041 U	360	24	0.0015 J	0.0037 U	0.004 U	0.0039 U	0.0061 U	0.0038 U	0.0036 U	0.0038 U	0.0052 U	0.0048 U	0.0056 U	0.0037 U	0.0039 U	0.0056 U	9.2	0.0039 U	0.00076 J
o-Chlorotoluene	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
o-Xylene	NS	NS	NS	0.0013 J	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.37 J	0.001 U	14	15	0.00036 J	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.11 J	0.00098 U	0.0011 U
p-Chlorotoluene	NS	NS	NS	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
p-Diethylbenzene	NS	NS	NS	0.00035 J	0.0028 U	0.0028 U	0.0022 U	0.002 U	0.85 J	0.0021 U	490	34	0.00066 J	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.00018 J	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.00025 J
p-Ethyltoluene	NS	NS	NS	0.001 J	0.0028 U	0.0028 U	0.0022 U	0.002 U	0.79 J	0.0021 U	2,400	84	0.00083 J	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.00094 J	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.067 J	0.002 U	0.0022 U
p-Isopropyltoluene	NS	NS	NS	0.0014 U	0.0014 U	0.00018 J	0.0011 U	0.001 U	0.12 J	0.001 U	24	1.8	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.71	0.00098 U	0.0011 U
p/m-Xylene	NS	NS	NS	0.0015 J	0.0028 U	0.0028 U	0.0022 U	0.002 U	0.6 J	0.0021 U	3,600	69	0.00073 J	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0064	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.27 J	0.002 U	0.0022 U
sec-Butylbenzene	11	100	500	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	55	3.6	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
Styrene	NS	NS	NS	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
tert-Butylbenzene	5.9	100	500	0.0028 U	0.0028 U	0.0028 U	0.0022 U	0.002 U	2 U	0.0021 U	17 U	1.6 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0031 U	0.0019 U	0.0018 U	0.0019 U	0.0026 U	0.0024 U	0.0028 U	0.0019 U	0.002 U	0.0028 U	0.32 U	0.002 U	0.0022 U
Tetrachloroethene	1.3	19.0	150	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
Toluene	0.7	100	500	0.00088 J	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	7	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0026	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
trans-1,2-Dichloroethene	0.19	100	500	0.0021 U	0.0021 U	0.0021 U	0.0017 U	0.0015 U	1.5 U	0.0015 U	13 U	1.2 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0023 U	0.0014 U	0.0014 U	0.0014 U	0.0019 U	0.0018 U	0.0021 U	0.0014 U	0.0015 U	0.0021 U	0.24 U	0.0015 U	0.0016 U
trans-1,3-Dichloropropene	NS	NS	NS	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
trans-1,4-Dichloro-2-butene	NS	NS	NS	0.007 U	0.0069 U	0.0069 U	0.0056 U	0.0051 U	4.9 U	0.0052 U	42 U	4 U	0.0051 U	0.0046 U	0.005 U	0.0048 U	0.0077 U	0.0047 U	0.0045 U	0.0048 U	0.0065 U	0.006 U	0.007 U	0.0047 U	0.0049 U	0.0069 U	0.8 U	0.0049 U	0.0054 U
Trichloroethene	0.47	21	200	0.0007 U	0.00069 U	0.00069 U	0.00056 U	0.00051 U	0.49 U	0.00052 U	4.2 U	0.4 U	0.00051 U	0.00046 U	0.0005 U	0.00048 U	0.00077 U	0.00047 U	0.00045 U	0.00048 U	0.00065 U	0.0006 U	0.0007 U	0.00047 U	0.00049 U	0.00069 U	0.08 U	0.00049 U	0.00054 U
Trichlorofluoromethane	NS	NS	NS	0.0056 U	0.0056 U	0.0055 U	0.0045 U	0.0041 U	4 U	0.0041 U	34 U	3.2 U	0.0041 U	0.0037 U	0.004 U	0.0039 U	0.0061 U	0.0038 U	0.0036 U	0.0038 U	0.0052 U	0.0048 U	0.0056 U	0.0037 U	0.0039 U	0.0056 U	0.64 U	0.0039 U	0.0044 U
Vinyl acetate	NS	NS	NS	0.014 U	0.014 U	0.014 U	0.011 U	0.01 U	9.9 U	0.01 U	84 U	7.9 U	0.01 U	0.0093 U	0.0099 U	0.0097 U	0.015 U	0.0095 U	0.009 U	0.0096 U	0.013 U	0.012 U	0.014 U	0.0094 U	0.0098 U	0.014 U	1.6 U	0.0098 U	0.011 U
Vinyl chloride	0.02	0.9	13	0.0014 U	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.99 U	0.001 U	8.4 U	0.79 U	0.001 U	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0009 U	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.16 U	0.00098 U	0.0011 U
Xylenes, Total	0.26	100	500	0.0028 J	0.0014 U	0.0014 U	0.0011 U	0.001 U	0.97 J	0.001 U	3,600	84	0.0011 J	0.00093 U	0.00099 U	0.00097 U	0.0015 U	0.00095 U	0.0064	0.00096 U	0.0013 U	0.0012 U	0.0014 U	0.00094 U	0.00098 U	0.0014 U	0.38 J	0.00098 U	0.0011 U

Notes:

(1) New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

(2) New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

(3) New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

DUPE-1 is a blind duplicate sampel of SB006 (19-21')

DUPE-2 is a blind duplicate sample of SB007 (15-17')

NS - No Standard

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.

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

P - The Relative Percent Difference between the results for the two columns exceeds the method-specified criteria.

I - The lower value for the two columns has been reported due to obvious interference.

Highlighted text denotes concentrations exceeding NYSDEC Unrestricted Use SCO

Highlighted text denotes concentrations exceeding NYSDEC Restricted-Residential Use SCO

Highlighted text denotes concentrations exceeding NYSDEC Commercial Use SCO

Table 2
Soil Sample Analytical Data Summary
Semi-Volatile Organic Compounds
204 4th Avenue, Brooklyn, NY

Client Sample ID:				SB001			SB002			SB003			SB004			SB005			SB006			SB007			SB008			DUPE-1	DUPE-2
Sample Depth:	NYSDEC Soil Cleanup Objectives Unrestricted Use [1]	NYSDEC Soil Cleanup Objectives Restricted-Residential Use [2]	NYSDEC Soil Cleanup Objectives Commercial Use [3]	2-4'	4-8'	13-15'	4-6'	8-10'	19-21'	0-2'	12-14'	19-21'	2-4'	12-14'	14-16'	0-2'	8-10'	12-14'	2-4'	10-12'	19-21'	4-8'	12-14'	15-17'	4-4'	13-15'	19-21'		
Laboratory ID:				L1905688-01	L1906299-05	L1906299-02	L1905688-02	L1906299-04	L1906299-06	L1906083-01	L1906393-04	L1906393-05	L1906083-02	L1906393-02	L1906393-01	L1906083-03	L1906393-08	L1906393-07	L1906393-09	L1906480-01	L1906480-02	L1906480-03	L1906480-04	L1906480-05	L1906299-07	L1906299-03	L1906299-01	L1906480-07	L1906480-08
Sampling Date:				2/12/2019	2/15/2019	2/15/2019	2/12/2019	2/15/2019	2/15/2019	2/13/2019	2/18/2019	2/18/2019	2/13/2019	2/18/2019	2/18/2019	2/13/2019	2/18/2019	2/18/2019	2/19/2019	2/19/2019	2/19/2019	2/19/2019	2/19/2019	2/19/2019	2/15/2019	2/15/2019	2/15/2019	2/19/2019	2/19/2019
Semi-Volatile Organic Compounds by USEPA Method 8270 in mg/kg																													
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
1,2-Dichlorobenzene	1.1	100	500	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
1,3-Dichlorobenzene	2.4	49	280	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
1,4-Dichlorobenzene	1.8	13	130	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
2,4,5-Trichlorophenol	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
2,4,6-Trichlorophenol	NS	NS	NS	0.56 U	0.12 U	0.12 U	1.2 U	0.12 U	1.2 U	0.11 U	2.4 U	0.12 U	0.55 U	0.12 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U	0.56 U	0.13 U	0.41 U	0.12 U	0.12 U
2,4-Dichlorophenol	NS	NS	NS	0.84 U	0.18 U	0.18 U	1.8 U	0.18 U	1.8 U	0.16 U	3.7 U	0.19 U	0.83 U	0.18 U	0.18 U	0.16 U	0.17 U	0.18 U	0.18 U	0.17 U	0.18 U	0.18 U	0.17 U	0.17 U	0.84 U	0.2 U	0.61 U	0.18 U	0.17 U
2,4-Dimethylphenol	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	1.6 J	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
2,4-Dinitrophenol	NS	NS	NS	4.4 U	0.96 U	0.97 U	9.4 U	0.98 U	9.6 U	0.86 U	20 U	1 U	4.4 U	0.94 U	0.96 U	0.88 U	0.9 U	0.94 U	0.96 U	0.93 U	0.97 U	0.98 U	0.89 U	0.92 U	4.5 U	1.1 U	3.3 U	0.96 U	0.92 U
2,4-Dinitrotoluene	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
2,6-Dinitrotoluene	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
2-Chloronaphthalene	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
2-Chlorophenol	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
2-Methylnaphthalene	NS	NS	NS	0.13 J	0.044 J	0.036 J	0.56 J	0.24 U	32	0.53	86	0.42	0.54 J	0.24 U	0.24 U	0.17 J	0.23 U	0.23 U	0.032 J	0.23 U	0.026 J	0.094 J	0.22 U	0.23 U	0.19 J	0.26 U	1.3	0.24 U	0.23 U
2-Methylphenol	0.33	100	500	0.93 U	0.2 U	0.2 U	2 U	0.2 U	0.86 J	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
2-Nitroaniline	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
2-Nitrophenol	NS	NS	NS	2 U	0.43 U	0.44 U	4.2 U	0.44 U	4.3 U	0.39 U	8.8 U	0.45 U	2 U	0.42 U	0.43 U	0.4 U	0.41 U	0.42 U	0.43 U	0.42 U	0.44 U	0.44 U	0.4 U	0.41 U	2 U	0.48 U	1.5 U	0.43 U	0.42 U
3,3'-Dichlorobenzidine	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
3-Methylphenol/4-Methylphenol	0.33	100	500	1.3 U	0.035 J	0.29 U	2.8 U	0.29 U	2.5 J	0.028 J	5.9 U	0.3 U	1.3 U	0.28 U	0.29 U	0.03 J	0.27 U	0.28 U	0.29 U	0.28 U	0.16 J	0.29 U	0.27 U	0.28 U	1.3 U	0.084 J	0.23 J	0.084 J	0.28 U
3-Nitroaniline	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
4,6-Dinitro-o-cresol	NS	NS	NS	2.4 U	0.52 U	0.52 U	5.1 U	0.53 U	5.2 U	0.47 U	11 U	0.54 U	2.4 U	0.51 U	0.52 U	0.48 U	0.49 U	0.51 U	0.52 U	0.5 U	0.52 U	0.53 U	0.48 U	0.5 U	2.4 U	0.58 U	1.8 U	0.52 U	0.5 U
4-Bromophenyl phenyl ether	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
4-Chloroaniline	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
4-Chlorophenyl phenyl ether	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
4-Nitroaniline	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
4-Nitrophenol	NS	NS	NS	1.3 U	0.28 U	0.28 U	2.7 U	0.29 U	2.8 U	0.25 U	5.7 U	0.29 U	1.3 U	0.28 U	0.28 U	0.26 U	0.26 U	0.27 U	0.28 U	0.27 U	0.28 U	0.28 U	0.26 U	0.27 U	1.3 U	0.31 U	0.96 U	0.28 U	0.27 U
Acenaphthene	20	100	500	0.96	0.032 J	0.36 U	2.3	0.16 U	64	1.2	0.71 J	0.46	3	0.022 J	0.16 U	0.8	0.15 U	0.16 U	0.088 J	0.16 U	0.16 U	0.39	0.15 U	0.15 U	0.84	0.18 U	3.9	0.16 U	0.15 U
Acenaphthylene	100	100	500	0.79	0.31	0.36 U	2.2	0.16 U	10	0.19	3.3 U	0.11 J	0.24 J	0.16 U	0.16 U	0.46	0.15 U	0.16 U	0.13 J	0.16 U	0.16 U	0.16	0.15 U	0.15 U	0.37 J	0.18 U	0.27 J	0.16 U	0.15 U
Acetophenone	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Anthracene	100	100	500	3.5	0.4	0.22 U	7.1	0.047 J	91 E	2.8	2.4 U	0.2	5.8	0.058 J	0.12 U	2	0.11 U	0.12 U	0.32	0.12 U	0.12 U	0.88	0.11 U	0.11 U	2.7	0.047 J	4.6	0.12 U	0.12 U
Benzo(a)anthracene	1	1	5.6	11	2.1	0.12 U	22	0.26	130 E	3.6	0.76 J	0.39	8.8	0.17	0.12 U	5.4	0.11 U	0.12 U	1.2	0.12 U	0.045 J	2.4	0.11 U	0.11 U	6.8	0.11 J	6.7	0.12 U	0.12 U
Benzo(a)pyrene	1	1	1	10	1.8	0.16 U	21	0.25	93 E	2.8	3.3 U	0.45	7.8	0.16	0.16 U	5	0.15 U	0.16 U	1.4	0.16 U	0.16 U	2	0.15 U	0.15 U	5.6	0.093 J	5.2	0.16 U	0.15 U
Benzo(b)fluoranthene	1	1	5.6	13	2.3	0.038 J	27	0.31	130 E	3.5	2.4 U	0.56	9.5	0.21	0.12 U	6.1	0.11 U	0.12 U	2	0.12 U	0.057 J	2.4	0.11 U	0.11 U	7.1	0.13	6.7	0.12 U	0.12 U
Benzo(ghi)perylene	100	100	500	6.5	0.84	0.16 U	14	0.15 J	56	1.7	0.71 J	0.27	4.9	0.092 J	0.16 U	3.4	0.15 U	0.16 U	1.1	0.16 U	0.035 J	1.2	0.15 U	0.15 U	3.5	0.057 J	3.1	0.16 U	0.15 U
Benzo(k)fluoranthene	0.8	3.9	56	4.4	0.79	0.12 U	9.7	0.11 J	31	1.2	2.4 U	0.16	3	0.071 J	0.12 U	2	0.11 U	0.12 U	0.56	0.12 U	0.12 U	0.87	0.11 U	0.11 U	2.6	0.04 J	1.8	0.12 U	0.12 U
Benzoic Acid	NS	NS	NS	3 U	0.65 U	0.65 U	6.4 U	0.66 U	6.5 U	0.58 U	13 U	0.67 U	3 U	0.64 U	0.64 U	0.59 U	0.61 U	0.63 U	0.65 U	0.63 U	0.65 U	0.66 U	0.6 U	0.62 U	3 U	0.72 U	2.2 U	0.65 U	0.62 U
Benzyl Alcohol	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Biphenyl	NS	NS	NS	2.1 U	0.46 U	0.46 U	4.5 U	0.47 U	7.4	0.16 J	1.2 J	0.12 J	2.1 U	0.45 U	0.45 U	0.062 J	0.43 U	0.44 U	0.46 U	0.44 U	0.46 U	0.46 U	0.42 U	0.44 U	2.1 U	0.5 U	0.34 J	0.46 U	0.44 U
Bis(2-chloroethoxy)methane	NS	NS	NS	1 U	0.22 U	0.22 U	2.1 U	0.22 U	2.2 U	0.19 U	4.4 U	0.22 U	0.99 U	0.21 U	0.22 U	0.2 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.22 U	0.2 U	0.21 U	1 U	0.24 U	0.74 U	0.22 U	0.21 U
Bis(2-chloroethyl)ether	NS	NS	NS	0.84 U	0.18 U	0.18 U	1.8 U	0.18 U	1.8 U	0.16 U	3.7 U	0.19 U	0.83 U	0.18 U	0.18 U	0.16 U	0.17 U	0.18 U	0.18 U	0.17 U	0.18 U	0.18 U	0.17 U	0.17 U	0.84 U	0.2 U	0.61 U	0.18 U	0.17 U
Bis(2-chloroisopropyl)ether	NS	NS	NS	1.1 U	0.24 U	0.24 U	2.4 U	0.24 U	2.4 U	0.22 U	4.9 U	0.25 U	1.1 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.24 U	0.22 U	0.23 U	1.1 U	0.26 U	0.82 U	0.24 U	0.23 U
Bis(2-ethylhexyl)phthalate	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.072 J	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	1.3	0.22 U	0.88 U	0.2 U	0.19 U
Butyl benzyl phthalate	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Carbazole	NS	NS	NS	1.1	0.05 J	0.2 U	3.7	0.2 U	37	1	0.49 J	0.04 J	1.7	0.2 U	0.2 U	0.71	0.19 U	0.2 U	0.13 J	0.19 U	0.2 U	0.38	0.18 U	0.19 U	1.4	0.22 U	1.8	0.2 U	0.19 U
Chrysene	1	3.9	56	11	1.7	0.032 J	22	0.27	130	3.2	0.64 J	0.38	7.2	0.16	0.12 U	4.9	0.11 U	0.12 U	1.3	0.12 U	0.041 J	2.4	0.11 U	0.11 U	6.3	0.12 J	6.6	0.12 U	0.12 U
Di-n-butylphthalate	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Di-n-octylphthalate	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Dibenzo(a,h)anthracene	0.33	0.33	0.56	1.5 U	0.3 U	0.12 U	3 U	0.044 J	16	0.39 J	2.4 U	0.076 J	1 U	0.026 J	0.12 U	0.73	0.11 U	0.12 U	0.23	0.12 U	0.12 U	0.29	0.11 U	0.11 U	0.84	0.13 U	0.81	0.12 U	0.12 U
Dibenzofuran	7	59	350	0.44 J	0.059 J	0.034 J	1.5 J	0.2 U	45	1	4.1 U	0.049 J	1.7	0.2 U	0.2 U	0.36	0.19 U	0.2 U	0.041 J	0.19 U	0.019 J	0.2	0.18 U	0.19 U	0.52 J	0.023 J	2.2	0.2 U	0.19 U
Diethyl phthalate	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Dimethyl phthalate	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Fluoranthene	100	100	500	24	2.7	0.093 J	48	0.47	230	10	1.2 J	0.7	20	0.36	0.12 U	10 E	0.11 U	0.12 U	2.4	0.12 U	0.083 J	5.1	0.11 U	0.11 U	12	0.25	14	0.034 J	0.12 U
Fluorene	30	100	500	0.91 J	0.076 J	0.02 J	2	0.2 U	72	1.1	0.33 J	0.19 J	2.6	0.025 J	0.2 U	0.64	0.19 U	0.2 U	0.77 J	0.19 U	0.2 U	0.36	0.18 U	0.19 U	0.77 J	0.031 J	3.2	0.2 U	0.19 U
Hexachlorobenzene	0.33	1.2	6	0.56 U	0.12 U	0.12 U	1.2 U	0.12 U	1.2 U	0.11 U	2.4 U	0.12 U	0.55 U	0.12 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U	0.56 U	0.13 U	0.41 U	0.12 U	0.12 U
Hexachlorobutadiene	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Hexachlorocyclopentadiene	NS	NS	NS	2.6 U	0.58 U	0.58 U	5.6 U	0.58 U	5.8 U	0.51 U	12 U	0.59 U	2.6 U	0.56 U	0.57 U	0.52 U	0.54 U	0.56 U	0.57 U	0.56 U	0.58 U	0.58 U	0.53 U	0.55 U	2.7 U	0.63 U	2 U	0.57 U	0.55 U
Hexachloroethane	NS	NS	NS	0.74 U	0.16 U	0.16 U	1.6 U	0.16 U	1.6 U	0.14 U	3.3 U	0.17 U	0.74 U	0.16 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.15 U	0.16 U	0.16 U	0.15 U	0.15 U	0.75 U	0.18 U	0.54 U	0.16 U	0.15 U
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	6.8	1.1	0.16 U	14	0.16 J	61	1.9	3.3 U	0.3	5.1	0.1 J	0.16 U	3.5	0.15 U	0.16 U	1.1	0.16 U	0.033 J	1.2	0.15 U	0.15 U	3.6	0.069 J	3.3	0.16 U	0.15 U
Isophorone	NS	NS	NS	0.84 U	0.18 U	0.18 U	1.8 U	0.18 U	1.8 U	0.16 U	3.7 U	0.19 U	0.83 U	0.18 U	0.18 U	0.16 U	0.17 U	0.18 U	0.18 U	0.17 U	0.18 U	0.18 U	0.17 U	0.17 U	0.84 U	0.2 U	0.61 U	0.18 U	0.17 U
n-Nitrosodi-n-propylamine	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Naphthalene	12	100	500	0.26 J	0.14 J	0.2 U	1.2 J	0.035 J	44	1	100	1.2	0.82 J	0.036 J	0.2 U	0.27	0.19 U	0.2 U	0.068 J	0.19 U	0.093 J	0.16 J	0.18 U	0.19 U	0.4 J	0.059 J	4.9	0.2 U	0.19 U
NDPA/DPA	NS	NS	NS	0.74 U	0.16 U	0.16 U	1.6 U	0.16 U	1.6 U	0.14 U	3.3 U	0.17 U	0.74 U	0.16 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.15 U	0.16 U	0.16 U	0.15 U	0.15 U	0.75 U	0.18 U	0.54 U	0.16 U	0.15 U
Nitrobenzene	NS	NS	NS	0.84 U	0.18 U	0.18 U	1.8 U	0.18 U	1.8 U	0.16 U	3.7 U	0.19 U	0.83 U	0.18 U	0.18 U	0.16 U	0.17 U	0.18 U	0.18 U	0.17 U	0.18 U	0.18 U	0.17 U	0.17 U	0.84 U	0.2 U	0.61 U	0.18 U	0.17 U
p-Chloro-m-cresol	NS	NS	NS	0.93 U	0.2 U	0.2 U	2 U	0.2 U	2 U	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Pentachlorophenol	0.8	6.7	6.7	0.74 U	0.16 U	0.16 U	1.6 U	0.16 U	1.6 U	0.14 U	3.3 U	0.17 U	0.74 U	0.16 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.15 U	0.16 U	0.16 U	0.15 U	0.15 U	0.75 U	0.18 U	0.54 U	0.16 U	0.15 U
Phenanthrene	100	100	500	16	0.86	0.046 J	33	0.23	310	12	2.1 J	0.62	20	0.21	0.12 U	8.4 E	0.11 U	0.12 U	1.2	0.12 U	0.097 J	4.4	0.11 U	0.11 U	10	0.16	18	0.03 J	0.12 U
Phenol	0.33	100	500	0.93 U	0.2 U	0.2 U	2 U	0.2 U	1.2 J	0.18 U	4.1 U	0.21 U	0.92 U	0.2 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.18 U	0.19 U	0.93 U	0.22 U	0.88 U	0.2 U	0.19 U
Pyrene	100	100	500	22	2.6	0.08 J	42	0.43	230	8.6	1.2 J	0.7	18	0.3	0.12 U	9.8 E	0.11 U	0.12 U	2.2	0.12 U	0.064 J	4.4	0.11 U	0.11 U	10	0.21	13	0.031 J	0.12 U

Notes:

(1) New York NYCRR Part 375 New York Unrestricted use Criteria. Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

(2) New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

(3) New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

DUPE-1 is a blind duplicate sampel of SB006 (19-21')

DUPE-2 is a blind duplicate sample of SB007 (15-17')

NS - No Standard

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.

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

P - The Relative Percent Difference between the results for the two columns exceeds the method-specified criteria.

I - The lower value for the two columns has been reported due to obvious interference.

Highlighted text denotes concentrations exceeding NYSDEC Unrestricted Use SCO

Highlighted text denotes concentrations exceeding NYSDEC Restricted-Residential Use SCO

Highlighted text denotes concentrations exceeding NYSDEC Commercial Use SCO

Table 3
Soil Sample Analytical Data Summary
Total Metals
2044th Avenue, Brooklyn, NY

Client Sample ID:	NYSDEC Soil Cleanup Objectives Unrestricted Use [1]	NYSDEC Soil Cleanup Objectives Restricted-Residential Use [2]	NYSDEC Soil Cleanup Objectives Commercial Use [3]	Toxicity Characteristic Regulatory Levels (TCLP) (4)	SB001			SB002			SB003			SB004		
Sample Depth:					2-4'	6-8'	13-15'	4-6'	8-10'	19-21'	0-2'	12-14'	19-21'	2-4'	12-14'	14-16'
Laboratory ID:					L1905688-01	L1906299-05	L1906299-02	L1905688-02	L1906299-04	L1906299-06	L1906083-01	L1906393-04	L1906393-05	L1906083-02	L1906393-02	L1906393-01
Sampling Date:					2/12/2019	2/15/2019	2/15/2019	2/12/2019	2/15/2019	2/15/2019	2/13/2019	2/18/2019	2/18/2019	2/13/2019	2/18/2019	2/18/2019
Total Metals by USEPA Method 6010 in mg/kg																
Aluminum, Total	NS	NS	NS	NS	7,370	8430	8,430	4,870	5,810	2,480	4,220	6,210	3,280	3,440	7,050	6,620
Antimony, Total	NS	NS	NS	NS	2.35 J	0.466 J	0.466 J	4.87	0.82 J	7.96	1.69 J	0.865 J	1.77 J	3.2 J	0.924 J	0.849 J
Arsenic, Total	13	16	16	NS	6.73	3	3	14.3	6.1	11.8	3.9	5.46	542	5.86	3.41	3.03
Barium, Total	350	400	400	NS	342	54.2	54.2	1,550	62.9	69.2	63.7	110	472	422	50.6	32.9
Beryllium, Total	7.2	72	590	NS	0.933	0.372 J	0.372 J	0.252 J	0.366 J	0.106 J	0.174 J	0.346 J	0.263 J	0.151 J	0.384 J	0.391 J
Cadmium, Total	2.5	4.3	9.3	NS	1.21	0.931 U	0.931 U	3.98	0.964 U	0.961 U	0.827 U	0.423 J	0.292 J	0.16 J	0.311 J	0.257 J
Calcium, Total	NS	NS	NS	NS	38,600	2700	2,700	57,000	3,180	2,820	19,200	4,870	7,490	26,700	2,950	942
Chromium, Total[4]	NS	NS	NS	NS	25.7	13.4	13.4	25.9	19.9	16.1	9.72	14	110	9.3	12.3	12.3
Cobalt, Total	NS	NS	NS	NS	8.72	6.96	6.96	5.69	7.67	8.15	3.26	5.35	3.78	4.67	5.09	5.66
Copper, Total	50	270	270	NS	220	10.7	10.7	91.1	34.8	67.3	32.8	34.2	331	58.2	15	11.2
Iron, Total	NS	NS	NS	NS	14,100	15600	15,600	16,400	14,400	21,300	7,070	13,800	7,900	19,200	11,600	10,600
Lead, Total	63	400	1,000	NS	546	56.8	56.8	889	141	3,080	81.9	2,080	3,170	639	64.8	11.6
Magnesium, Total	NS	NS	NS	NS	5,370	1980	1,980	4,300	2,590	1,650	5,350	2,390	1,480	5,450	2060	2180
Manganese, Total	1,600	2,000	10,000	NS	237	317	317	237	154	165	115	230	97.1	191	186	89.7
Mercury, Total	0.18	0.81	2.8	NS	1.95	0.461	0.461	1.87	1.3	0.991	0.808	4.97	2.16	0.39	0.381	0.077 U
Nickel, Total	30	310	310	NS	56.2	12.4	12.4	25.8	32.3	14.6	8.39	18.1	10.1	16	15.2	16.3
Potassium, Total	NS	NS	NS	NS	836	620	620	910	1,040	264	453	673	403	572	601	726
Selenium, Total	3.9	180	1,500	NS	0.827 J	0.829 J	0.829 J	1.98	1.28 J	1.26 J	0.356 J	0.903 J	1.89 J	0.969 J	1.83 U	1.91 U
Silver, Total	2	180	1,500	NS	0.44 J	0.931 U	0.931 U	0.439 J	0.964 U	0.961 U	0.827 U	0.961 U	0.282 J	0.889 U	0.915 U	0.954 U
Sodium, Total	NS	NS	NS	NS	506	76.8 J	76.8 J	415	207	54.5 J	248	205	327	320	150 J	192
Thallium, Total	NS	NS	NS	NS	1.76 U	1.86 U	1.86 U	1.87 U	1.93 U	0.336 J	1.65 U	1.92 U	1.95 U	1.78 U	1.83 U	1.91 U
Vanadium, Total	NS	NS	NS	NS	23.1	20.2	20.2	25.7	22.1	19.4	15.9	23.8	20.4	14.8	20.7	19.7
Zinc, Total	109	10,000	10,000	NS	828	36	36	1,610	71.1	108	82.6	109	106	310	112	28.3
TCLP Metals by EPA 1311 mg/L																
Arsenic	NS	NS	NS	5	NA	NA	NA	0.023 J	NA	0.032 J	NA	0.021 J	0.954 J	NA	NA	NA
Barium	NS	NS	NS	100	NA	NA	NA	0.336 J	NA	0.576	NA	0.473 J	1.01	NA	NA	NA
Lead	NS	NS	NS	5	NA	NA	NA	1.15	NA	23.9	NA	4.4	25.6	NA	NA	NA
Mercury	NS	NS	NS	0.2	NA	NA	NA	0.001 U	NA	0.001 U	NA	0.001 U	0.001 U	NA	NA	NA
Hexavalent/Trivalent Chromium by USEPA method 7196A in mg/kg																
Chromium, Hexavalent	1	110	400	NS	0.23 J	0.976 U	0.974 U	0.954 U	0.991 U	0.982 U	0.218 J	0.988 U	1 U	0.906 U	0.19 U	0.986 U
Chromium, Trivalent	30	180	1,500	NS	25 J	22	13	26	20	16	9.5 J	14	110	9.3	12 J	12
Cyanide, Total by USEPA method 9010C/9021B in mg/kg																
Cyanide, Total	27	27	27	NS	1.1 U	1.1 U	1.1 U	0.32 J	1.2 U	1.1 U	1 U	1.2 U	0.57 J	1 U	1.1 U	1.2 U

Client Sample ID:	SB005			SB006			SB007			SB008			GT001		GT002		DUPE-1	DUPE-2
Sample Depth:	0-2'	8-10'	12-14'	2-4'	10-12'	19-21'	6-8'	12-14'	15-17'	4-6'	13-15'	19-21'	25-27'	30-32'	25-27'	30-32'		
Laboratory ID:	L1906083-03	L1906393-08	L1906393-07	L1906393-09	L1906480-01	L1906480-02	L1906480-03	L1906480-04	L1906480-05	L1906299-07	L1906299-03	L1906299-01	L1907747-03	L1907747-04	L1907747-01	L1907747-04	L1906480-07	L1906480-08
Sampling Date:	2/13/2019	2/18/2019	2/18/2019	2/18/2019	2/19/2019	2/19/2019	2/19/2019	2/19/2019	2/19/2019	2/15/2019	2/15/2019	2/15/2019	2/26/2019	2/26/2019	2/26/2019	2/26/2019	2/19/2019	2/19/2019
Total Metals by USEPA Method 6010 in mg/kg																		
Aluminum, Total	3,130	5,120	8,920	7,380	7,680	6,820	8,330	6,490	8,010	3,570	3,760	2,910	2,960	11,600	11,200	13,500	6,420	6,520
Antimony, Total	2.04 J	1.03 J	0.859 J	2.89 J	4.6 U	1.88 J	0.49 J	4.48 U	0.467 J	0.977 J	9.32	0.578 J	4.95 U	0.607 J	8.35 U	13.3 U	2.45 J	0.528 J
Arsenic, Total	6.5	3.4	3.32	8.82	2.82	3.7	3.3	1.7	2.64	5.57	6.86	8.27	5.84	8.97	2.99	2.16 J	6.6	2.97
Barium, Total	412	37.4	27.7	576	27.7	55.6	57.8	26.3	31.4	812	105	162	57.8	31.8	21.8	25.3	94.9	41.8
Beryllium, Total	0.157 J	0.322 J	0.356 J	0.423 J	0.35 J	0.408 J	0.365 J	0.34 J	0.404 J	0.271 J	0.282 J	0.263 J	0.168 J	0.579 J	0.368 J	0.533 J	0.406 J	0.319 J
Cadmium, Total	0.209 J	0.358 J	0.265 J	1.71	0.92 U	0.97 U	0.96 U	0.895 U	0.898 U	0.832 J	1.05 U	1.05 U	0.129 J	0.497 J	0.251 J	0.453 J	0.945 U	0.911 U
Calcium, Total	24,800	1340	783	33,000	1,070	1,510	7,240	690	755	27,600	1,820	9,170	3,790	2,490	2,530	3,480	2,550	1,990
Chromium, Total[4]	8.72	10.2	13.2	24.5	12.5	11.1	16.2	12.8	11.3	13.2	8.63	8.54	5.96	25.4	22.6	26	9.97	17
Cobalt, Total	3.2	4.7	4.61	5.68	5.45	4.78	7.27	5.08	5.06	6.5	12.1	4.3	3.01	8.24	8.19	9.03	5.04	7.67
Copper, Total	26	11.6	8.82	55	9.28	16	20.9	10.5	7.22	94.2	47	25.5	17.2	11.7	12.8	13.4	22.2	15
Iron, Total	7,890	13,800	12,600	26,600	11,500	11,200	14,000	10,600	11,100	7,810	13,700	7,910	7,270	27,900	12,700	22,600	11,200	18,900
Lead, Total	715	58.3	7.01	607	11	79	53.7	8.69	10.4	653	892	685	97.1	10.8	19.8	15	791	60.8
Magnesium, Total	4,940	1,950	2,170	3,650	2,020	1,410	3,520	2,160	1,760	3,580	727	1,400	784	5,930	5000	7890	1,350	2,740
Manganese, Total	118	166	106	246	130	138	201	109	148	166	109	73.3	75.8	318	123	250	142	568
Mercury, Total	0.556	0.19	0.075 U	0.381	0.074 U	0.426	0.54	0.072 U	0.073 U	1.19	0.492	0.873	0.227	0.112 U	0.133 U	0.216 U	1.58	0.073 J
Nickel, Total	14.7	13.5	11.6	28.2	13.4	10.2	26.8	17.2	11.6	24.6	31.7	10.8	6.86	19.9	17	25.3	10.8	37.9
Potassium, Total	639	661	614	1,070	622	485	976	708	537	652	343	410	476	2400	2,130	2,970	520	814
Selenium, Total	0.297 J	1.79 U	1.83 U	0.461 J	1.84 U	1.94 U	1.92 U	1.79 U	1.8 U	1.81 U	1.37 J	1.17 J	0.961 J	0.938 J	0.668 J	1.04 J	0.472 J	1.82 U
Silver, Total	0.872 U	0.895 U	0.914 U	0.961 U	0.92 U	0.97 U	0.96 U	0.895 U	0.898 U	0.905 U	1.05 U	1.05 U	0.991 U	1.38 U	1.67 U	2.66 U	0.945 U	0.911 U
Sodium, Total	227	109 J	130 J	728	219	250	151 J	84.7 J	111 J	168 J	83.4 J	222	274	3,260	3,200	3,130	320	132 J
Thallium, Total	1.74 U	1.79 U	1.83 U	1.92 U	1.84 U	1.94 U	1.92 U	1.79 U	1.8 U	1.81 U	2.09 U	2.1 U	1.98 U	2.76 U	3.34 U	5.33 U	1.89 U	1.82 U
Vanadium, Total	14.9	21.8	23	32.9	19.1	16	24.7	17.6	19.4	16.4	14.8	19.7	14.9	34.4	38.1	52.5	16.1	19
Zinc, Total	301	37.3	25	590	27.4	33.1	53.4	27.6	25.1	533	136	117	64.1	58.6	41.1	65.7	49.6	37.2
TCLP Metals by EPA 1311 mg/L																		
Arsenic	0.022 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA
Barium	0.521	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.27	NA	NA	NA	NA	NA	NA	NA
Lead	1.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	NA	NA	NA	NA	NA	NA	NA
Mercury	0.001 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.001 U	NA	NA	NA	NA	NA	NA	NA
Hexavalent/Trivalent Chromium by USEPA method 7196A in mg/kg																		
Chromium, Hexavalent	0.281 J	0.751 J	0.334 J	0.678 J	0.398 J	0.972 U	0.355 J	0.913 U	0.938 U	0.321 J	1.08 U	1.09 U	NA	NA	NA	NA	0.986 U	0.943 U
Chromium, Trivalent	8.4 J	9.4 J	13 J	24 J	12 J	11	24 J	13	11	13 J	8.6	8.5	NA	NA	NA	NA	1.2 U	1.1 U
Cyanide, Total by USEPA method 9010C/9021B in mg/kg																		
Cyanide, Total	1.1 U	1.1 U	1.1 U	0.3 J	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	0.26 J	1.2 U	0.39 J	NA	NA	NA	NA	1.2 U	1.1 U

Notes:
(1) New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
(2) New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
(3) New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
(4) USEPA Toxicity Characteristic Leaching Procedure, USEPA Resource Conservation and Recovery Act
DUPE-1 is a blind duplicate sampel of SB006 (19-21')
DUPE-2 is a blind duplicate sample of SB007 (15-17')
NS - No Standard
U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.
J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
P - The Relative Percent Difference between the results for the two columns exceeds the method-specified criteria.
I - The lower value for the two columns has been reported due to obvious interference.
Highlighted text denotes concentrations exceeding NYSDEC Unrestricted Use SCO
Highlighted text denotes concentrations exceeding NYSDEC Restricted-Residential Use SCO
Highlighted text denotes concentrations exceeding NYSDEC Commercial Use SCO
Highlighted text denotes concentrations exceeding TCLP Regulatory Level

Table 4
Soil Sample Analytical Data Summary
Pesticides and PCBs
204 4th Avenue, Brooklyn, NY

Client Sample ID:	NYSDEC Soil Cleanup Objectives Unrestricted Use [1]	NYSDEC Soil Cleanup Objectives Restricted-Residential Use [2]	NYSDEC Soil Cleanup Objectives Commercial Use [3]	SB001			SB002			SB003			SB004			SB005			SB006			SB007			SB008			DUPE-1	DUPE-2
Sample Depth:				2-4'	6-8'	13-15'	4-6'	8-10'	19-21'	0-2'	12-14'	19-21'	2-4'	12-14'	14-16'	0-2'	8-10'	12-14'	2-4'	10-12'	19-21'	6-8'	12-14'	15-17'	4-6'	13-15'	19-21'		
Laboratory ID:				L1905688-01	L1906299-05	L1906299-02	L1905688-02	L1906299-04	L1906299-06	L1906083-01	L1906393-04	L1906393-05	L1906083-02	L1906393-02	L1906393-01	L1906083-03	L1906393-08	L1906393-07	L1906393-09	L1906480-01	L1906480-02	L1906480-03	L1906480-04	L1906480-05	L1906299-07	L1906299-03	L1906299-01	L1906480-07	L1906480-08
Sampling Date:				2/12/2019	2/15/2019	2/15/2019	2/12/2019	2/15/2019	2/15/2019	2/13/2019	2/18/2019	2/18/2019	2/13/2019	2/18/2019	2/18/2019	2/13/2019	2/18/2019	2/18/2019	2/18/2019	2/19/2019	2/19/2019	2/19/2019	2/19/2019	2/19/2019	2/15/2019	2/15/2019	2/15/2019	2/19/2019	2/19/2019
Organochlorine Pesticides by USEPA Method 8081 in mg/kg																													
4,4'-DDD	0.0033	13	92	0.0343	0.00191 U	0.00186 U	0.00803 JP	0.00193 U	0.00191 U	0.00683 P	0.0968 U	0.00194 U	0.00164 JP	0.00188 U	0.00186 U	0.0679	0.00179 U	0.00184 U	0.00194 U	0.00184 U	0.0192 U	0.00326	0.00172 U	0.0181 U	0.00176 U	0.00207 U	0.00213 U	0.0387 U	0.0188 U
4,4'-DDE	0.0033	9	62	0.0254	0.00191 U	0.00186 U	0.147	0.00193 U	0.00191 U	0.00345	0.0968 U	0.00194 U	0.0086	0.00188 U	0.00186 U	0.236	0.00179 U	0.00184 U	0.0057	0.00184 U	0.0192 U	0.0012 JIP	0.00172 U	0.0181 U	0.115	0.00207 U	0.0211 P	0.0387 U	0.0188 U
4,4'-DDT	0.0033	8	47	0.0571	0.00358 U	0.00348 U	0.711	0.00362 U	0.00358 U	0.00655 P	0.181 U	0.00364 U	0.00758 JP	0.00352 U	0.00348 U	0.204	0.00335 U	0.00346 U	0.0119	0.00345 U	0.036 U	0.00248 JIP	0.00322 U	0.034 U	0.365	0.00388 U	0.004 U	0.0726 U	0.0352 U
Aldrin	0.005	0.097	0.68	0.00177 U	0.00191 U	0.00186 U	0.00189 U	0.00193 U	0.00191 U	0.00181	0.0968 U	0.00194 U	0.00173 U	0.00188 U	0.00186 U	0.00175 U	0.00179 U	0.00184 U	0.00194 U	0.00184 U	0.0192 U	0.00192 U	0.00172 U	0.0181 U	0.00176 U	0.00207 U	0.00213 U	0.0387 U	0.0188 U
Alpha-BHC	0.02	0.48	3.4	0.000736 U	0.000796 U	0.000774 U	0.000787 U	0.000805 U	0.000795 U	0.000684 U	0.0403 U	0.000809 U	0.000722 U	0.000783 U	0.000774 U	0.00073 U	0.000744 U	0.000768 U	0.00081 U	0.000767 U	0.008 U	0.0008 U	0.000716 U	0.00756 U	0.000734 U	0.000862 U	0.000888 U	0.0161 U	0.00783 U
Beta-BHC	0.036	0.36	3	0.00177 U	0.00191 U	0.00186 U	0.00189 U	0.00193 U	0.00191 U	0.00164 U	0.0968 U	0.00194 U	0.00173 U	0.00188 U	0.00186 U	0.00175 U	0.00179 U	0.00184 U	0.00194 U	0.00184 U	0.0192 U	0.00192 U	0.00172 U	0.0181 U	0.00176 U	0.00207 U	0.00213 U	0.0387 U	0.0188 U
Chlordane	NS	NS	NS	0.0143 U	0.0155 U	0.0151 U	0.0154 U	0.0157 U	0.0155 U	0.0133 U	0.786 U	0.0158 U	0.0141 U	0.0153 U	0.0151 U	0.0142 U	0.0145 U	0.015 U	0.0158 U	0.015 U	0.156 U	0.0156 U	0.014 U	0.147 U	0.0143 U	0.0168 U	0.0173 U	0.314 U	0.153 U
cis-Chlordane	0.094	4	24	0.00829	0.00239 U	0.00232 U	0.0293	0.00241 U	0.00238 U	0.0122	0.121 U	0.00243 U	0.00395	0.00235 U	0.00232 U	0.00463	0.00223 U	0.0023 U	0.00691	0.0023 U	0.024 U	0.0024	0.00215 U	0.0227 U	0.0454 IP	0.00259 U	0.00266 U	0.0484 U	0.0235 U
Delta-BHC	0.04	100	500	0.00177 U	0.00191 U	0.00186 U	0.00189 U	0.00193 U	0.00191 U	0.00164 U	0.0968 U	0.00194 U	0.00173 U	0.00188 U	0.00186 U	0.00175 U	0.00179 U	0.00184 U	0.00194 U	0.00184 U	0.0192 U	0.00192 U	0.00172 U	0.0181 U	0.00176 U	0.00207 U	0.00213 U	0.0387 U	0.0188 U
Dieldrin	0.005	0.2	1.4	0.0011 U	0.00119 U	0.00116 U	0.0137	0.00121 U	0.00119 U	0.1	0.0605 U	0.00121 U	0.00108 U	0.00117 U	0.00116 U	0.0011 U	0.00112 U	0.00115 U	0.00121 U	0.00115 U	0.012 U	0.0012 U	0.00107 U	0.0113 U	0.00966 IP	0.00129 U	0.00133 U	0.0242 U	0.0117 U
Endosulfan I	2.4	24	200	0.00177 U	0.00191 U	0.00186 U	0.00189 U	0.00193 U	0.00191 U	0.00164 U	0.0968 U	0.00194 U	0.00173 U	0.00188 U	0.00186 U	0.00175 U	0.00179 U	0.00184 U	0.00194 U	0.00184 U	0.0192 U	0.00192 U	0.00172 U	0.0181 U	0.00176 U	0.00207 U	0.00213 U	0.0387 U	0.0188 U
Endosulfan II	2.4	24	200	0.00177 U	0.00191 U	0.00186 U	0.00189 U	0.00193 U	0.00191 U	0.00164 U	0.0968 U	0.00194 U	0.00173 U	0.00188 U	0.00186 U	0.00175 U	0.00179 U	0.00184 U	0.00194 U	0.00184 U	0.0192 U	0.00122 JIP	0.00172 U	0.0181 U	0.00176 U	0.00207 U	0.00213 U	0.0387 U	0.0188 U
Endosulfan sulfate	2.4	24	200	0.000736 U	0.000796 U	0.000774 U	0.000787 U	0.000805 U	0.000795 U	0.000684 U	0.0403 U	0.000809 U	0.000722 U	0.000783 U	0.000774 U	0.00073 U	0.000744 U	0.000768 U	0.00081 U	0.000767 U	0.008 U	0.0008 U	0.000716 U	0.00756 U	0.000734 U	0.000862 U	0.000888 U	0.0161 U	0.00783 U
Endrin	0.014	11	89	0.000736 U	0.000796 U	0.000774 U	0.000787 U	0.000805 U	0.000795 U	0.00109 P	0.0403 U	0.000809 U	0.00463 JP	0.000783 U	0.000774 U	0.00073 U	0.000744 U	0.000768 U	0.00081 U	0.000767 U	0.008 U	0.0008 U	0.000716 U	0.00756 U	0.000734 U	0.000862 U	0.000888 U	0.0161 U	0.00783 U
Endrin aldehyde	NS	NS	NS	0.00221 U	0.00239 U	0.00232 U	0.00236 U	0.00241 U	0.00238 U	0.00205 U	0.121 U	0.00243 U	0.00217 U	0.00235 U	0.00232 U	0.00219 U	0.00223 U	0.0023 U	0.00243 U	0.0023 U	0.024 U	0.0024 U	0.00215 U	0.0227 U	0.0022 U	0.00259 U	0.00266 U	0.0484 U	0.0235 U
Endrin ketone	NS	NS	NS	0.00177 U	0.00191 U	0.00186 U	0.00189 U	0.00193 U	0.00191 U	0.00164 U	0.0968 U	0.00194 U	0.00173 U	0.00188 U	0.00186 U	0.00175 U	0.00179 U	0.00184 U	0.00194 U	0.00184 U	0.0192 U	0.00192 U	0.00172 U	0.0181 U	0.00176 U	0.00207 U	0.00213 U	0.0387 U	0.0188 U
Heptachlor	0.042	2.1	15	0.000883 U	0.000955 U	0.000929 U	0.000879 JP	0.000966 U	0.000954 U	0.000821 U	0.0484 U	0.000971 U	0.000867 U	0.000939 U	0.000928 U	0.000877 U	0.000893 U	0.000922 U	0.000972 U	0.00092 U	0.0096 U	0.00096 U	0.000859 U	0.00907 U	0.000881 U	0.00103 U	0.00106 U	0.0194 U	0.0094 U
Heptachlor epoxide	NS	NS	NS	0.00331 U	0.00358 U	0.00348 U	0.00121 JIP	0.00362 U	0.00358 U	0.00308 U	0.181 U	0.00364 U	0.00325 U	0.00352 U	0.00348 U	0.00329 U	0.00335 U	0.00346 U	0.00364 U	0.00345 U	0.036 U	0.0036 U	0.00322 U	0.034 U	0.00572 P	0.00388 U	0.004 U	0.0726 U	0.0352 U
Lindane	0.1	1.3	9.2	0.000736 U	0.000796 U	0.000774 U	0.000787 U	0.000805 U	0.000795 U	0.000684 U	0.0403 U	0.000809 U	0.000722 U	0.000783 U	0.000774 U	0.00073 U	0.000744 U	0.000768 U	0.00081 U	0.000767 U	0.008 U	0.0008 U	0.000716 U	0.00756 U	0.000734 U	0.000862 U	0.000888 U	0.0161 U	0.00783 U
Methoxychlor	NS	NS	NS	0.00331 U	0.00358 U	0.00348 U	0.00354 U	0.00362 U	0.00358 U	0.00308 U	0.181 U	0.00364 U	0.00325 U	0.00352 U	0.00348 U	0.00329 U	0.00335 U	0.00346 U	0.00364 U	0.00345 U	0.036 U	0.0036 U	0.00322 U	0.034 U	0.0033 U	0.00388 U	0.004 U	0.0726 U	0.0352 U
Toxaphene	NS	NS	NS	0.0331 U	0.0358 U	0.0348 U	0.0354 U	0.0362 U	0.0358 U	0.0308 U	1.81 U	0.0364 U	0.0325 U	0.0352 U	0.0348 U	0.0329 U	0.0335 U	0.0346 U	0.0364 U	0.0345 U	0.36 U	0.036 U	0.0322 U	0.34 U	0.033 U	0.0388 U	0.04 U	0.726 U	0.352 U
trans-Chlordane	NS	NS	NS	0.0075	0.00239 U	0.00232 U	0.0289	0.00241 U	0.00238 U	0.0154	0.121 U	0.00243 U	0.00361 JP	0.00235 U	0.00232 U	0.00878 P	0.00223 U	0.0023 U	0.00243 U	0.0023 U	0.024 U	0.00203 JIP	0.00215 U	0.0227 U	0.0552	0.00259 U	0.00266 U	0.0484 U	0.0235 U
Polychlorinated Biphenyls by USEPA Method 8082 in mg/kg																													
Aroclor 1016	0.1	1	1	0.0368 U	0.0398 U	0.0387 U	0.0394 U	0.0394 U	0.04 U	0.0355 U	0.0396 U	0.0401 U	0.0369 U	0.0389 U	0.0386 U	0.0354 U	0.0376 U	0.0384 U	0.0395 U	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0364 U	0.0424 U	0.0452 U	0.0399 U	0.0378 U
Aroclor 1221	0.1	1	1	0.0368 U	0.0398 U	0.0387 U	0.0394 U	0.0394 U	0.04 U	0.0355 U	0.0396 U	0.0401 U	0.0369 U	0.0389 U	0.0386 U	0.0354 U	0.0376 U	0.0384 U	0.0395 U	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0364 U	0.0424 U	0.0452 U	0.0399 U	0.0378 U
Aroclor 1232	0.1	1	1	0.0368 U	0.0398 U	0.0387 U	0.0394 U	0.0394 U	0.04 U	0.0355 U	0.0396 U	0.0401 U	0.0369 U	0.0389 U	0.0386 U	0.0354 U	0.0376 U	0.0384 U	0.0395 U	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0364 U	0.0424 U	0.0452 U	0.0399 U	0.0378 U
Aroclor 1242	0.1	1	1	0.0368 U	0.0398 U	0.0387 U	0.0394 U	0.0394 U	0.04 U	0.0355 U	0.0396 U	0.0401 U	0.0369 U	0.0389 U	0.0386 U	0.0354 U	0.0376 U	0.0384 U	0.0395 U	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0364 U	0.0424 U	0.0452 U	0.0399 U	0.0378 U
Aroclor 1248	0.1	1	1	0.0368 U	0.0398 U	0.0387 U	0.0394 U	0.0394 U	0.04 U	0.0355 U	0.0396 U	0.0401 U	0.0369 U	0.0389 U	0.0386 U	0.0354 U	0.0376 U	0.0384 U	0.0395 U	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0364 U	0.0424 U	0.0452 U	0.0399 U	0.0378 U
Aroclor 1254	0.1	1	1	0.0388	0.0398 U	0.0387 U	0.0394 U	0.0394 U	0.04 U	0.0451	0.0396 U	0.0401 U	0.00869 J	0.0389 U	0.0386 U	0.0354 U	0.0376 U	0.0384 U	0.0277 J	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0364 U	0.0424 U	0.0452 U	0.0399 U	0.0378 U
Aroclor 1260	0.1	1	1	0.0533	0.0398 U	0.0387 U	0.0264 J	0.0394 U	0.04 U	0.0261 J	0.0396 U	0.0401 U	0.0253 JP	0.0389 U	0.0386 U	0.0354 U	0.0376 U	0.0384 U	0.0287 J	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0451	0.0424 U	0.0452 U	0.0399 U	0.0378 U
Aroclor 1262	0.1	1	1	0.0368 U	0.0398 U	0.0387 U	0.0394 U	0.0394 U	0.04 U	0.0355 U	0.0396 U	0.0401 U	0.0369 U	0.0389 U	0.0386 U	0.0354 U	0.0376 U	0.0384 U	0.0395 U	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0364 U	0.0424 U	0.0452 U	0.0399 U	0.0378 U
Aroclor 1268	0.1	1	1	0.0368 U	0.0398 U	0.0387 U	0.0167 J	0.0394 U	0.04 U	0.00522 JP	0.0396 U	0.0401 U	0.0079 J	0.0389 U	0.0386 U	0.0102 JP	0.0376 U	0.0384 U	0.0395 U	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0364 U	0.0424 U	0.0452 U	0.0399 U	0.0378 U
PCBs, Total	0.1	1	1	0.0921	0.0398 U	0.0387 U	0.0431 J	0.0394 U	0.04 U	0.0764 J	0.0396 U	0.0401 U	0.0419 J	0.0389 U	0.0386 U	0.0102 J	0.0376 U	0.0384 U	0.0564 J	0.0378 U	0.0393 U	0.0406 U	0.0376 U	0.0376 U	0.0451	0.0424 U	0.0452 U	0.0399 U	0.0378 U
Herbicides by USEPA Method 8151A in µg/L																													
Silvex (2,4,5-TP)	3.8	100	500	0.191 U	0.2 U	0.2 U	0.195 U	0.2 U	0.199 U	0.179 U	0.2 U	0.201 U	0.185 U	0.197 U	0.2 U	0.184 U	0.19 U	0.196 U	0.204 U	0.192 U	0.2 U	0.198 U	0.187 U	0.195 U	0.188 U	0.22 U	0.222 U	0.201 U	0.194 U

Notes:

(1) New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

(2) New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

(3) New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

DUPE-1 is a blind duplicate sampel of SB006 (19-21')

DUPE-2 is a blind duplicate sample of SB007 (15-17')

NS - No Standard

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.

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

P - The Relative Percent Difference between the results for the two columns exceeds the method-specified criteria.

I - The lower value for the two columns has been reported due to obvious interference.

Highlighted text denotes concentrations exceeding NYSDEC Unrestricted Use SCO

Highlighted text denotes concentrations exceeding NYSDEC Restricted-Residential Use SCO

Highlighted text denotes concentrations exceeding NYSDEC Commercial Use SCO

Table 5
Groundwater Analytical Data Summary
Volatile Organic Compounds
204 4th Avenue, Brooklyn, NY

Client Sample ID:	NYSDEC	MW-2	MW-3	MW-7	MW-8	SB004-GW	SB005-GW	SB007-GW	SB008-GW	DUPE-2/14/19
Screened Interval:	Groundwater	12-22'	12-22'	12-22'	12-22'	13-15'	13-15'	13-15'	13-15'	12-22'
Laboratory ID:	Quality Standards (1)	L1906083-07	L1906083-06	L1906083-05	L1906083-04	L1906393-03	L1906393-08	L1906480-06	L1906299-09	L1906083-08
Sampling Date:		2/14/2019	2/14/2019	2/14/2019	2/14/2010	2/18/2019	2/18/2019	2/19/2019	2/15/2018	2/14/2019
Volatile Organic Compounds by USEPA Method 8260 in µg/L										
1,1,1,2-Tetrachloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,1-Trichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4,5-Tetramethylbenzene	5	0.6 J	1.6 J	61	2 U	0.7 J	2 U	0.54 J	1.5 J	2 U
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trimethylbenzene	5	2.5 U	2.5 U	0.79 J	2.5 U	0.8 J	2.5 U	0.79 J	2.5 U	2.5 U
1,2-Dibromo-3-chloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane	0.0006	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethene, Total	NS	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichloropropane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichloropropene, Total	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane	NS	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2,2-Dichloropropane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Butanone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	5 U	2.8 J	5 U	5 U	2.5 J	4.7 J	2.9 J	4.3 J	5 U
Acrylonitrile	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	1	0.5 U	0.5 U	9.6	0.5 U	0.59	0.2 J	0.5 U	0.5 U	0.5 U
Bromobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromochloromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon disulfide	60	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	NS	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethyl ether	NS	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	2.5 U	2.5 U	0.84 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Hexachlorobutadiene	0.5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene	5	2.5 U	2.5 U	39	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl tert butyl ether	10	5.7	21	9.7	2.5 U	2.5 U	2.5 U	2.5 U	4.7	2.5 U
Methylene chloride	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
n-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
n-Propylbenzene	5	2.5 U	2.5 U	51	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Naphthalene	10	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	3.7	2.5 U
o-Chlorotoluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
o-Xylene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
p-Chlorotoluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
p-Diethylbenzene	NS	2 U	2 U	8.8	2 U	2 U	2 U	2 U	2 U	2 U
p-Ethyltoluene	NS	2 U	2 U	2 U	2 U	0.73 J	2 U	2 U	2 U	2 U
p-Isopropyltoluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
p/m-Xylene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.87 J	2.5 U	2.5 U
sec-Butylbenzene	5	2.5 U	2.5 U	10	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
tert-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	2.5 U	2.5 U	2.5 U	2.5 U	0.75 J	2.5 U	2.5 U	2.5 U	2.5 U
trans-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
trans-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,4-Dichloro-2-butene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trichloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl acetate	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	NS	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.87 J	2.5 U	2.5 U

Notes:

(1) NYSDEC Ambient Water Quality Standards and Guidance Values 6/1998

* DUPE 2/14/2019 is a blind duplicate of MW-8

NS - No Standard

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL.

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit. The assocaited numerical value is the sample quantitation limit.

Highlighted values indicate exceedance of the NYSDEC AWQS

Table 6
Groundwater Analytical Data Summary
Semi-Volatile Organic Compounds
204 4th Avenue, Brooklyn, NY

Client Sample ID:	NYSDEC Groundwater Quality Standards [1]	MW-2		MW-3		MW-7		MW-8		SB004-GW		SB005-GW		SB007-GW		SB008-GW		DUPE-2/14/19	
Screened Interval:		12-22'		12-22'		12-22'		12-22'		13-15'		13-15'		13-15'		13-15'		12-22'	
Laboratory ID:		L1906083-07		L1906083-06		L1906083-05		L1906083-04		L1906393-03		L1906393-08		L1906480-06		L1906299-09		L1906083-08	
Sampling Date:		2/14/2019		2/14/2019		2/14/2019		2/14/2019		2/18/2019		2/18/2019		2/19/2019		2/15/2018		2/14/2019	
Semi-Volatile Organic Compounds by USEPA Method 8270 in µg/L																			
1,2,4,5-Tetrachlorobenzene	5	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	50	U
1,2,4-Trichlorobenzene	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
1,2-Dichlorobenzene	3	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
1,3-Dichlorobenzene	3	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
1,4-Dichlorobenzene	3	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
2,4,5-Trichlorophenol	NS	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2,4,6-Trichlorophenol	NS	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2,4-Dichlorophenol	1	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2,4-Dimethylphenol	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2,4-Dinitrophenol	10	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	100	U
2,4-Dinitrotoluene	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2,6-Dinitrotoluene	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2-Chlorophenol	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
2-Methylphenol	NS	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2-Nitroaniline	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2-Nitrophenol	NS	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	50	U
3,3'-Dichlorobenzidine	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
3-Methylphenol/4-Methylphenol	NS	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
3-Nitroaniline	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
4,6-Dinitro-o-cresol	NS	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	50	U
4-Bromophenyl phenyl ether	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
4-Chloroaniline	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
4-Chlorophenyl phenyl ether	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
4-Nitroaniline	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
4-Nitrophenol	NS	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	50	U
Acetophenone	NS	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Benzoic Acid	NS	50	U	50	U	50	U	50	U	50	U	12	J	50	U	10	J	250	U
Benzyl Alcohol	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
Biphenyl	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
Bis(2-chloroethoxy)methane	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Bis(2-chloroethyl)ether	1	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
Bis(2-chloroisopropyl)ether	5	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
Bis(2-ethylhexyl)phthalate	5	3	U	3	U	3	U	2.2	J	3	U	3	U	3	U	2.8	J	14	J
Butyl benzyl phthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Carbazole	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.75	J	10	U
Di-n-butylphthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Di-n-octylphthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Dibenzofuran	NS	2	U	2	U	1.3	J	2	U	2	U	2	U	2	U	0.54	J	10	U
Diethyl phthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Dimethyl phthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Hexachlorocyclopentadiene	5	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	100	U
Isophorone	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
n-Nitrosodi-n-propylamine	NS	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
NDPA/DPA	50	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
Nitrobenzene	0.4	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
p-Chloro-m-cresol	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	10	U
Phenol	1	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2-Chloronaphthalene	10	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
2-Methylnaphthalene	NS	0.04	J	0.03	J	0.03	J	0.1	U	0.03	J	0.05	J	0.08	J	0.37		0.04	J
Acenaphthene	20	3.3		5.4		64		0.1	U	0.03	J	0.04	J	0.04	J	2		0.03	J
Acenaphthylene	NS	0.07	J	0.06	J	0.61		0.1	U	0.1	U	0.1	U	0.1	U	0.1	J	0.04	J
Anthracene	50	0.09	J	0.45		0.47		0.03	J	0.1	U	0.03	J	0.03	J	0.61		0.15	
Benzo(a)anthracene	0.002	0.2		0.1	J	0.58		0.06	J	0.1	U	0.1	U	0.06	J	1.2		0.67	
Benzo(a)pyrene	0	0.16		0.06	J	0.82		0.04	J	0.02	J	0.02	J	0.06	J	1		0.86	
Benzo(b)fluoranthene	0.002	0.24		0.08	J	1.1		0.09	J	0.02	J	0.02	J	0.08	J	0.93		1.7	
Benzo(ghi)perylene	NS	0.13		0.04	J	0.85		0.09	J	0.02	J	0.1	U	0.03	J	0.68		1.5	
Benzo(k)fluoranthene	0.002	0.07	J	0.03	J	0.42		0.03	J	0.02	J	0.02	J	0.03	J	0.89		0.47	
Chrysene	0.002	0.18		0.08	J	0.68		0.02	J	0.02	J	0.1	U	0.06	J	1.4		0.8	
Dibenzo(a,h)anthracene	NS	0.05	J	0.01	J	0.22		0.02	J	0.1	U	0.1	U	0.1	U	0.21		0.28	
Fluoranthene	50	0.34		0.45		0.7		0.1		0.05	J	0.07	J	0.12		2.9		1.7	
Fluorene	50	0.29		2.7		6		0.1	U	0.01	J	0.03	J	0.04	J	1		0.04	J
Hexachlorobenzene	0.04	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Hexachlorobutadiene	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.06	J	0.5	U
Hexachloroethane	5	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Indeno(1,2,3-cd)pyrene	0.002	0.12		0.04	J	0.78		0.06	J	0.02	J	0.1	U	0.04	J	0.6		1	
Naphthalene	10	0.1	U	0.05	J	0.43		0.1	U	0.1	U	0.06	J	0.13		0.62		0.06	J
Pentachlorophenol	1	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Phenanthrene	50	0.14		2.3		1.4		0.1	U	0.05	J	0.13		0.17		3.5		0.18	
Pyrene	50	0.29		0.34		0.82		0.1		0.05	J	0.07	J	0.11		2.5		1.7	

Notes:

(1) NYSDEC Ambient Water Quality Standards and Guidance Values 6/1998 - Standard

* DUPE 2/14/2019 is a blind duplicate of MW-8

NS - No Standard

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL.

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit. The associated numerical value is the sample quantitation limit.

Highlighted values indicate exceedance of the NYSDEC AWQS or GV

Table 7
Groundwater Analytical Data Summary
Metals (Total and Dissolved)
204 4th Avenue, Brooklyn, NY

Client Sample ID:	NYSDEC Groundwater Quality Standards [1]	MW-2		MW-3		MW-7		MW-8		SB004-GW		SB005-GW		SB007-GW		SB008-GW		DUPE-2/14/19	
Screened Interval:		12-22'		12-22'		12-22'		12-22'		13-15'		13-15'		13-15'		13-15'		12-22'	
Laboratory ID:		L1906083-07		L1906083-07		L1906083-07		L1906083-07		L1906393-03		L1906393-08		L1906480-06		L1906299-09		L1906083-08	
Sampling Date:		2/14/2019		2/14/2019		2/14/2019		2/14/2019		2/18/2019		2/18/2019		2/19/2019		2/15/2019		2/14/2019	
Sample Type:		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Total Metals by USEPA Method 6010 in µg/L																			
Aluminum	NS	3,230	195	34	10 U	240	10 U	71	6.55 J	1,320	30.3	25,300	25.8	83,800	52.8	1,660	14.9	463	5.6 J
Antimony	3	2.26 J	2.42 J	1.07 J	4 U	2.25 J	1.09 J	1.96 J	1.37 J	2.36 J	3.01 J	1.29 J	1.43 J	0.53 J	1.13 J	1.61 J	2.2 J	2.45 J	1.53 J
Arsenic	25	13.13	5.36	0.71	0.61	50.21	33.61	1.13	0.54	39.23	4.51	35.85	4.64	59.36	12.63	10.14	4.07	2.5	0.49 J
Barium	1,000	361.3	266.8	489.7	389.2	721.5	616	32.5	38.82	487.8	290.1	1,442	163	1,451	232.7	466.9	197.6	36.7	29.26
Beryllium	3	0.38 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.33	0.5 U	6.84	0.5 U	0.14 J	0.5 U	0.5 U	0.5 U
Cadmium	5	0.11 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.05	0.2 U	2.04	0.2 U	0.31	0.2 U	0.2 U	0.2 U
Calcium	NS	143,000	123,000	261,000	249,000	458,000	448,000	106,000	94,300	201,000	198,000	139,000	110,000	180,000	154,000	210,000	199,000	107,000	99,800
Chromium	50	6.18	0.58 J	0.52 J	0.2 J	1.93	0.69 J	1.94	0.46 J	3.6	1 U	63.26	0.2 J	166.7	0.28 J	6.91	0.19 J	3.71	1 U
Cobalt	NS	3.26	1.09	0.45 J	0.45 J	2.49	1	0.19 J	0.24 J	3.31	2.25	24.07	1.93	91.18	1.97	5.77	4.21	0.5	0.18 J
Copper	200	20.71	1.72	0.75 J	0.46 J	14.63	1 U	4.63	1.54	4.77	1 U	85.3	0.51 J	443.3	0.42 J	28.47	0.4 J	13.09	0.64 J
Iron	300	6,010	290	4,110	1,250	3,430	255	726	50 J	33,300	1,900	50,300	65	180,000	11,400	9,290	119	1,770	45 J
Lead	25	245.9	14.55	2.91	1 U	94.69	0.51 J	1.65	1 U	50.18	1 U	1,258	1.07	1,973	2.09	351.2	1.4	12.37	1 U
Magnesium	35,000	42,200	39,700	61,100	59,400	86,400	88,300	13,600	12,000	60,600	59,700	32,300	23,200	80,800	47,000	31,500	31,100	15,200	13,400
Manganese	300	845.1	677.6	900.8	907.4	793	793.8	7.54	14.34	1,061	967.9	2,071	1,130	3,455	1,238	1,157	1,118	16.91	8.36
Mercury	0.7	0.2 U	0.2 U	0.86	0.2 U	0.2 U	0.2 U	0.33	0.2 U	0.2 U	0.2 U	0.2 U	0.64	0.77	0.2 U	0.66	0.2 U	0.2 U	0.2 U
Nickel	100	9.36	2.92	2 U	0.58 J	7.02	3.05	2.45	3.44	5.19	2.33	69.91	3.24	502.7	3.85	8.92	2.75	3.1	2.04
Potassium	NS	29,100	25,800	33,000	30,800	37,700	37,000	10,500	9,130	28,200	28,300	19,200	16,400	34,600	25,700	12,900	13,200	12,100	10,200
Selenium	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10	5 U	10.8	5 U	5 U	5 U	5 U	5 U
Silver	50	0.21 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.38 J	0.4 U	3.95	0.4 U	0.2 J	0.4 U	0.4 U	0.4 U
Sodium	20,000	365,000	353,000	289,000	275,000	250,000	256,000	150,000	171,000	412,000	415,000	373,000	382,000	447,000	478,000	39,100	41,500	144,000	141,000
Thallium	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.17 J	0.16 J	0.51	0.5 U	1.09	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vanadium	NS	19.79	9.52	5 U	5 U	4.28 J	2.88 J	5 U	5 U	5.87	5 U	95.43	5 U	243	5 U	8.75	5 U	2.3 J	5 U
Zinc	2,000	53.96	5.22 J	6.14 J	10 U	175.4	10 U	22.16	18.73	25.48	7.73 J	404.8	4.82 J	926.1	10 U	168.4	16.19	62.92	10 U
Hexavalent Chromium by USEPA method 7196A in mg/kg																			
Chromium, Hexavalent	50	4 J	NS	6 J	NS	10 U	NS	10 U	NS	10 U	NS	10 U	NS	10 U	NS	10 U	NS	3 J	NS
Chromium, Trivalent	NS	10 U	NS	10 U	NS	10 U	NS	10 U	NS	10 U	NS	63	NS	167	NS	10 U	NS	10 U	NS
Cyanide, Total by USEPA method 9010C/9021B in mg/kg																			
Cyanide, Total	200	3 J	NS	27	NS	57	NS	3 J	NS	6	NS	2 J	NS	5 U	NS	9	NS	3 J	NS

Notes:

(1) 6NYCRR Part 703.5 GA Groundwater Quality Standards (GQS) and Guidance Values (GV) 6/1998

* DUPE 2/14/2019 is a blind duplicate of MW-8

NS - No Standard

NA - Not Analysed

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.

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

Highlighted values indicate exceedance of the NYSDEC GQS or GV.

Table 8
Groundwater Analytical Data Summary
Pesticides and PCBs

204 4th Avenue, Brooklyn, NY

Client Sample ID:	NYSDEC Groundwater Quality Standards [1]	MW-2	MW-3	MW-7	MW-8	SB004-GW	SB005-GW	SB007-GW	SB008-GW	DUPE-2/14/19
Screened Interval:		12-22'	12-22'	12-22'	12-22'	13-15'	13-15'	13-15'	13-15'	12-22'
Laboratory ID:		L1906083-07	L1906083-06	L1906083-05	L1906083-04	L1906393-03	L1906393-08	L1906480-06	L1906299-09	L1906083-08
Sampling Date:		2/14/2019	2/14/2019	2/14/2019	2/14/2010	2/18/2019	2/18/2019	2/19/2019	2/15/2018	2/14/2019
Organochlorine Pesticides by USEPA Method 8081 in µg/L										
4,4'-DDD	0.3	0.029 U	0.571 U	0.286 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
4,4'-DDE	0.2	0.029 U	0.571 U	0.286 U	0.029 U	0.029 U	0.003 J	0.029 U	0.008 J	0.029 U
4,4'-DDT	0.2	0.029 U	0.571 U	0.286 U	0.005 JP	0.029 U	0.004 J	0.029 U	0.029	0.005 JP
Aldrin	0	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Alpha-BHC	0.01	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Beta-BHC	0.04	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Chlordane	0.05	0.143 U	2.86 U	1.43 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U
cis-Chlordane	NS	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Delta-BHC	0.04	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Dieldrin	0.004	0.029 U	0.571 U	0.286 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Endosulfan I	NS	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Endosulfan II	NS	0.029 U	0.571 U	0.286 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Endosulfan sulfate	NS	0.029 U	0.571 U	0.286 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Endrin	0	0.029 U	0.571 U	0.286 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Endrin aldehyde	5	0.029 U	0.571 U	0.286 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Endrin ketone	5	0.029 U	0.571 U	0.286 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Heptachlor	0.04	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Heptachlor epoxide	0.03	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Lindane	0.05	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Methoxychlor	35	0.143 U	2.86 U	1.43 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U
Toxaphene	0.06	0.143 U	2.86 U	1.43 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U
trans-Chlordane	NS	0.014 U	0.286 U	0.143 U	0.014 U	0.014 U	0.014 U	0.014 U	0.01 JIP	0.014 U
Polychlorinated Biphenyls by USEPA Method 8082 in µg/L										
Aroclor 1016	0.09	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
Aroclor 1221	0.09	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
Aroclor 1232	0.09	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
Aroclor 1242	0.09	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
Aroclor 1248	0.09	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
Aroclor 1254	0.09	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
Aroclor 1260	0.09	0.082 U	0.082 U	0.082 U	0.082 U	0.172	0.082 U	0.082 U	0.082 U	0.082 U
Aroclor 1262	0.09	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
Aroclor 1268	0.09	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U	0.082 U
PCBs, Total	NS	0.082 U	0.082 U	0.082 U	0.082 U	0.172	0.082 U	0.082 U	0.082 U	0.082 U
Herbicides by USEPA Method 8151A in µg/L										
Silvex (2,4,5-TP)	0.26	2 U	2 U	2 U	NA	2.22 U	2 U	2 U	2 U	NA U

(1) 6NYCRR Part 703.5 GA Groundwater Quality Standards (GQS) and Guidance Values (GV) 6/1998

* DUPE 2/14/2019 is a blind duplicate of MW-8

NS - No Standard

NA - Not Analysed

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numerical value is the approximate concentration of the
analyte in the sample.

Highlighted values indicate exceedance of the NYSDEC GQS or GV.

Table 9
Soil Vapor Sample Analytical Data Summary
Volatile Organic Compounds

204 4th Avenue, Brooklyn, NY

Client Sample ID: Sample Depth (bgs): Laboratory ID: Sampling Date: Volatile Organic Compounds by USEPA Method TO-15 in µg/m³	NYSDOH Sub-Salb Matrix Values [1]	USEPA VISL [2]	SV001 10' L10907143-01 2/22/2019	SV002 10' L10907143-02 2/22/2019	SV003 10' L10907143-03 2/22/2019	SV004 10' L10907143-04 2/22/2019	SV005 10' L10907143-05 2/22/2019	SV006 10' L10907143-06 2/22/2019	OA001 Above Ground L1907143-07 2/22/2019
1,1,1-Trichloroethane	100	170,000	1.09 U	5.46 U	58.9 U	3.58 U	1.09 U	1,950 U	1.09 U
1,1,2,2-Tetrachloroethane	NS	1.6	1.37 U	6.87 U	74.2 U	4.5 U	1.37 U	2,450 U	1.37 U
1,1,2-Trichloroethane	NS	5.8	1.09 U	5.46 U	58.9 U	3.58 U	1.09 U	1,950 U	1.09 U
1,1-Dichloroethane	NS	58	0.809 U	4.05 U	43.7 U	2.66 U	0.809 U	1,440 U	0.809 U
1,1-Dichloroethene	6	7,000	0.793 U	3.96 U	42.8 U	2.6 U	0.793 U	1,420 U	0.793 U
1,2,4-Trichlorobenzene	NS	70	1.48 U	7.42 U	80.2 U	4.87 U	1.48 U	2,650 U	1.48 U
1,2,4-Trimethylbenzene	NS	2,100	2.21	4.92 U	53.1 U	3.22 U	1.21	1,760 U	0.983 U
1,2-Dibromoethane	NS	0.16	1.54 U	7.69 U	83 U	5.04 U	1.54 U	2,740 U	1.54 U
1,2-Dichlorobenzene	NS	7,000	1.2 U	6.01 U	64.9 U	3.94 U	1.2 U	2,150 U	1.2 U
1,2-Dichloroethane	NS	3.6	0.809 U	4.05 U	43.7 U	2.66 U	0.809 U	1,440 U	0.809 U
1,2-Dichloropropane	NS	25	0.924 U	4.62 U	49.9 U	3.03 U	0.924 U	1,650 U	0.924 U
1,3,5-Trimethylbenzene	NS	2,100	0.983 U	4.92 U	53.1 U	3.22 U	0.983 U	1,760 U	0.983 U
1,3-Butadiene	NS	3.1	0.442 U	2.21 U	23.9 U	1.45 U	0.467	790 U	0.442 U
1,3-Dichlorobenzene	NS	NS	1.2 U	6.01 U	64.9 U	3.94 U	1.2 U	2,150 U	1.2 U
1,4-Dichlorobenzene	NS	8.5	1.2 U	6.01 U	64.9 U	3.94 U	1.2 U	2,150 U	1.2 U
1,4-Dioxane	NS	19	0.721 U	3.6 U	38.9 U	2.36 U	0.721 U	1,290 U	0.721 U
2,2,4-Trimethylpentane	NS	NS	2.62	2,010	12,100	1,010	12.4	509,000	0.934 U
2-Butanone	NS	170,000	2.21	7.4 U	79.3 U	4.84 U	2.51	2,630 U	1.47 U
2-Hexanone	NS	1,000	0.82 U	4.1 U	44.3 U	2.69 U	0.82 U	1,460 U	0.82 U
3-Chloropropene	NS	16	0.626 U	3.13 U	33.8 U	2.05 U	0.626 U	1,120 U	0.626 U
4-Ethyltoluene	NS	NS	0.983 U	4.92 U	53.1 U	3.22 U	0.983 U	1,760 U	0.983 U
4-Methyl-2-pentanone	NS	100,000	2.05 U	10.3 U	110 U	6.72 U	2.05 U	3,660 U	2.05 U
Acetone	NS	1,100,000	24.5	22.5	128 U	57	25.2	4,250 U	4.37
Benzene	NS	12	10.6	21.3	34.5 U	11.9	3.99	1,140 U	0.649
Benzyl chloride	NS	1.9	1.04 U	5.18 U	55.9 U	3.4 U	1.04 U	1,850 U	1.04 U
Bromodichloromethane	NS	2.5	1.34 U	6.7 U	72.4 U	4.39 U	1.34 U	2,390 U	1.34 U
Bromoform	NS	85	2.07 U	10.3 U	112 U	6.78 U	2.07 U	3,690 U	2.07 U
Bromomethane	NS	170	0.777 U	3.88 U	41.9 U	2.55 U	0.777 U	1,390 U	0.777 U
Carbon disulfide	NS	24,000	0.766	3.11 U	33.6 U	2.22	0.807	1,110 U	0.623 U
Carbon tetrachloride	6	16	1.26 U	6.29 U	67.9 U	4.13 U	1.26 U	2,250 U	1.26 U
Chlorobenzene	NS	1,700	0.921 U	4.61 U	49.7 U	3.02 U	0.921 U	1,640 U	0.921 U
Chloroethane	NS	350,000	0.528 U	2.64 U	28.5 U	1.73 U	0.528 U	942 U	0.528 U
Chloroform	NS	4.1	1.39	10.5	52.7 U	3.2 U	0.977 U	1,740 U	0.977 U
Chloromethane	NS	3,100	0.413 U	2.07 U	22.3 U	1.35 U	0.413 U	737 U	0.987
cis-1,2-Dichloroethene	6	NS	0.793 U	3.96 U	42.8 U	2.6 U	0.793 U	1,420 U	0.793 U
cis-1,3-Dichloropropene	NS	23	0.908 U	4.54 U	49 U	2.98 U	0.908 U	1,620 U	0.908 U
Cyclohexane	NS	210,000	1.1	84.3	375	47.2	1.68	1,230 U	0.688 U
Dibromochloromethane	NS	NS	1.7 U	8.52 U	92 U	5.59 U	1.7 U	3,040 U	1.7 U
Dichlorodifluoromethane	NS	3,500	1.86	4.94 U	53.4 U	3.24 U	2.11	1,770 U	2
Ethanol	NS	NS	26	47.3 U	507 U	30.9 U	41.1	16,800 U	9.42 U
Ethyl Acetate	NS	2,400	1.8 U	9.05 U	96.9 U	5.91 U	1.8 U	3,220 U	1.8 U
Ethylbenzene	NS	37	1.29	4.34 U	46.9 U	2.85 U	1.14	1,550 U	0.869 U
Freon-113	NS	170,000	1.53 U	7.66 U	82.8 U	5.03 U	1.53 U	2,740 U	1.53 U
Freon-114	NS	NS	1.4 U	6.99 U	75.5 U	4.59 U	1.4 U	2,500 U	1.4 U
Heptane	NS	NS	2.47	185	44.3 U	41.4	2.8	1,460 U	0.82 U
Hexachlorobutadiene	NS	4.3	2.13 U	10.7 U	115 U	7 U	2.13 U	3,810 U	2.13 U
Isopropanol	NS	7,000	197	127	165	150	79.4	2,200 U	6.46
Methyl tert butyl ether	NS	360	0.721 U	3.61 U	38.9 U	2.37 U	0.721 U	1,290 U	0.721 U
Methylene chloride	100	3,400	1.74 U	8.72 U	93.5 U	5.7 U	1.74 U	3,100 U	1.74 U
n-Hexane	NS	24,000	3.7	529	214	223	7.68	1,260 U	0.705 U
o-Xylene	NS	3,500	1.51	4.34 U	46.9 U	2.85 U	1.33	1,550 U	0.869 U
p/m-Xylene	NS	3,500	4.21	8.73 U	93.8 U	5.69 U	3.71	3,100 U	1.74 U
Styrene	NS	35,000	0.852 U	4.26 U	46 U	2.79 U	0.852 U	1,520 U	0.852 U
Tertiary butyl Alcohol	NS	NS	19.2	11.3	81.5 U	4.97 U	6.12	2,710 U	1.52 U
Tetrachloroethene	100	360	1.36 U	6.78 U	73.2 U	4.45 U	1.36 U	2,420 U	1.36 U
Tetrahydrofuran	NS	70,000	1.47 U	7.4 U	79.3 U	4.84 U	1.47 U	2,630 U	1.47 U
Toluene	NS	170,000	9.87	27.1	40.7 U	12.7	9.99	1,350 U	1.3
trans-1,2-Dichloroethene	NS	NS	0.793 U	3.96 U	42.8 U	2.6 U	0.793 U	1,420 U	0.793 U
trans-1,3-Dichloropropene	NS	23	0.908 U	4.54 U	49 U	2.98 U	0.908 U	1,620 U	0.908 U
Trichloroethene	6	16	1.07 U	5.37 U	58 U	3.53 U	1.07 U	1,920 U	1.07 U
Trichlorofluoromethane	NS	NS	1.12 U	5.62 U	60.7 U	3.69 U	7.19	2,010 U	1.12 U
Vinyl bromide	NS	2.9	0.874 U	4.37 U	47.2 U	2.87 U	0.874 U	1,560 U	0.874 U
Vinyl chloride	6	5.6	0.511 U	2.56 U	27.6 U	1.68 U	0.511 U	913 U	0.511 U

Notes:

(1) New York DOH Matrix A,B,C Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

(2) EPA VISL Default Residential Target Sub-Slab & Exterior Soil Gas Concentrations Criteria per VISL Calculator, Version 3.5, Updated October 2017 (June 2017 RSLs).

bgs- below ground surface

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.

Highlighted values indicate detectable concentration of compound

Highlited values indicae detecatable conentration in exceedance of EPA VISL

APPENDIX A
Geophysical Survey Report

DELTA Geophysics Inc.

GEOPHYSICAL INVESTIGATION REPORT

SITE LOCATION:

204 Fourth Avenue
Brooklyn, New York

PREPARED FOR:

PW Grosser
630 Johnson Ave, Suite 7
Bohemia, NY

PREPARED BY:

Benjamin Rimler
Delta Geophysics Inc.
738 Front Street
Catasauqua, PA 18032

February 5, 2019

Delta Geophysics, Inc. (Delta) is pleased to provide the results of the geophysical survey conducted at 204 Fourth Avenue, Brooklyn, New York.

1.0 INTRODUCTION

On January 30, 2019 Delta Geophysics personnel performed a limited geophysical investigation at 204 Fourth Avenue, Brooklyn, New York. The property is currently occupied by gas station facility. The area of interest was all accessible areas of the property. Subsurface conditions were unknown at the time of survey.

2.0 SCOPE OF WORK

The primary objective was to locate and mark detectable underground utilities within the property A secondary objective was to locate any unknown subsurface anomalous features consistent with USTs, or former excavations.

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 2-5 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 of 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.

Metallic Anomaly #1

Metallic anomaly #1 was located with TW-6 and confirmed with GPR. It is located south of the storage building. Approximate dimensions measure 6 feet by 5 feet. GPR transects over this area imaged soil disturbances. The anomaly was marked on site with pink paint.

Metallic Anomaly #2

Metallic anomaly #2 was located with TW-6 and confirmed with GPR. It is located south of the storage building, south west of anomaly #1. Approximate dimensions measure 10 feet by 6 feet. GPR transects over this area imaged soil disturbances. The anomaly was marked on site with pink paint.

Metallic anomaly #1 and / or #2 have the potential to be associated with former UST/s associated with the storage building based on a site map provided by the client.

Anomaly #3

Anomaly #3 was located south of the property, adjacent and east to the active Gasoline USTs. GPR transects over the anomaly imaged a patch of reinforced concrete that was not consistent with the concrete associated with the surrounding gasoline UST's. Approximate dimensions measure 8 feet by 5 feet. A site plan provided by the client portrays a former UST to be located in this immediate area. The TW-6 was not able to confirm if any metallic properties were associated with the anomaly due to the reinforced concrete. The anomaly was marked on site with pink paint.

Utility Survey

Delta performed a utility survey across the client specified area. The following utilities were identified: electrical conduits, water, product piping and vent lines, storm sewer, and sanitary sewer. Detectable utilities were marked onsite with appropriate colors. Anomalous features and unknown utilities were marked onsite in pink paint.

A site map (013019) is included with all located subsurface features.

5.0 SURVEY LIMITATIONS

GPR depth of penetration was limited to approximately 2-5 feet bgs. The limiting factor was due to conductive soils. Parked vehicles, dumpsters, and surface water prevented Delta from surveying some portions of the property. Delta was not able to detect the discharge location/s of the onsite stormwater system.

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.

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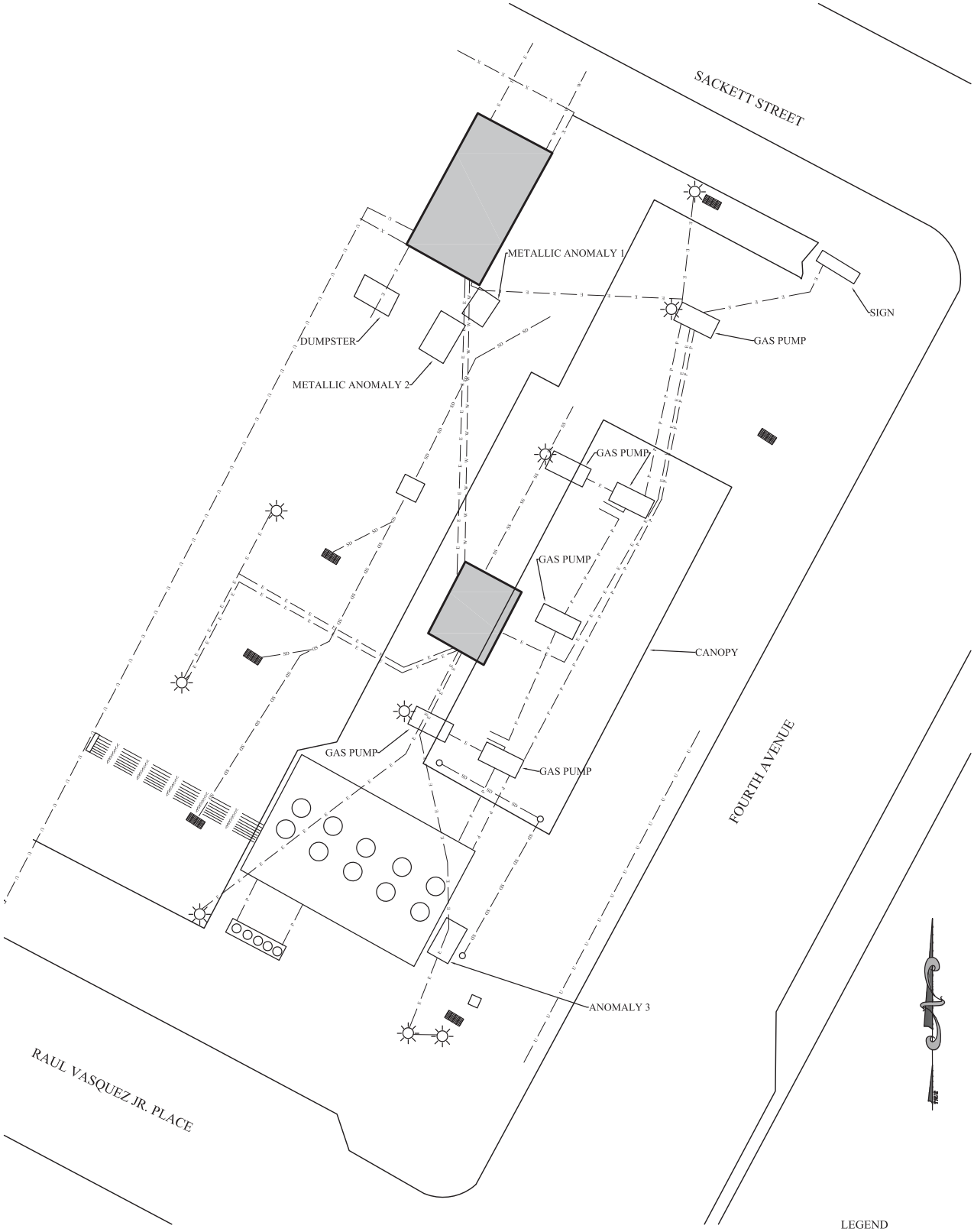

NOTES:

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.

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0 10 20 40 60

GRAPHIC SCALE IN FEET

LEGEND

- MANHOLE COVER
- LIGHT POLE
- STORM DRAIN
- V — VENT
- E — ELECTRIC
- P — GASOLINE
- SD — STORM SEWER
- SS — SANITARY SEWER
- W — WATER
- U — UNKNOWN UTILITY

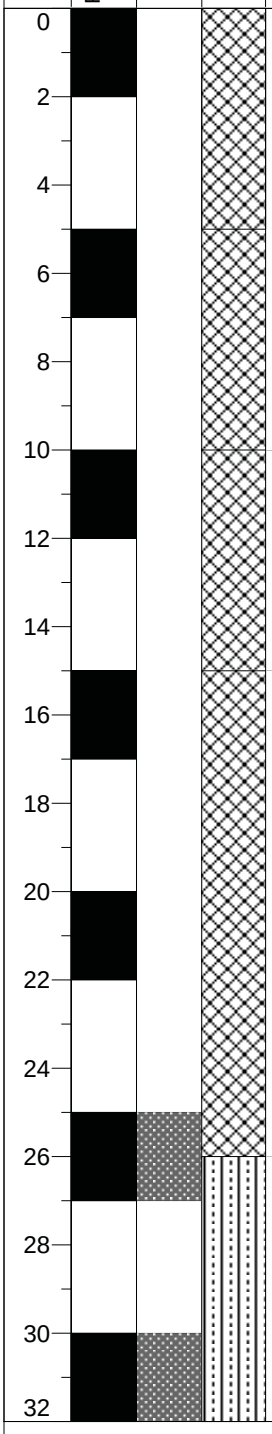
DATE	1/30/19
SCALE	1" = 20'
DWG NO.	013019
SHT NO.	1 OF 1
PROJECT.	

GEOPHYSICAL INVESTIGATION
204 FOURTH AVENUE, BROOKLYN, NEW YORK
FOR
PW GROSSER

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

APPENDIX B
Soil Boring Logs

PROJECT #:	AHI1903		
SITE ADDRESS:	204 4th Ave, Brooklyn, NY		
BORING ID:	GT001	BORING DEPTH (FT): 32	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 3.5
DRILLING CONTRACTOR:	UCEF	DATE STARTED: 02/27/2019	DATE FINISHED: 02/27/2019
DRILLING METHOD:	Direct Push	TIME STARTED: 07:30	TIME FINISHED: 11:00
DRILLING EQUIPMENT:	Geoprobe 78DT	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Split Spoon	PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley



DEPTH (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0–4	Historic fill material.BROWN FINE TO MED GRAINED SAND, SOME BRICK, LITTLE GRAVEL.	N/A	
4–8		N/A	
8–12	Historic fill material.DARK GREY TO BROWN MED GRAINED SAND, SOME WOOD AND GRAVEL, LITTLE BRICK.	N/A	
12–16		N/A	
16–26	Historic fill material.MOIST DARK GREY TO BROWN FINE TO MED GRAINED SAND,SOME GRAVEL, LITTLE BRICK, PETROLEUM ODOR.	N/A	
26–32	MOIST DARK BROWN SILT.	N/A	

P.W. Grosser Consulting	End of Boring Depth (feet): 32	Water Table Symbol: ▼	Page 1 of 1

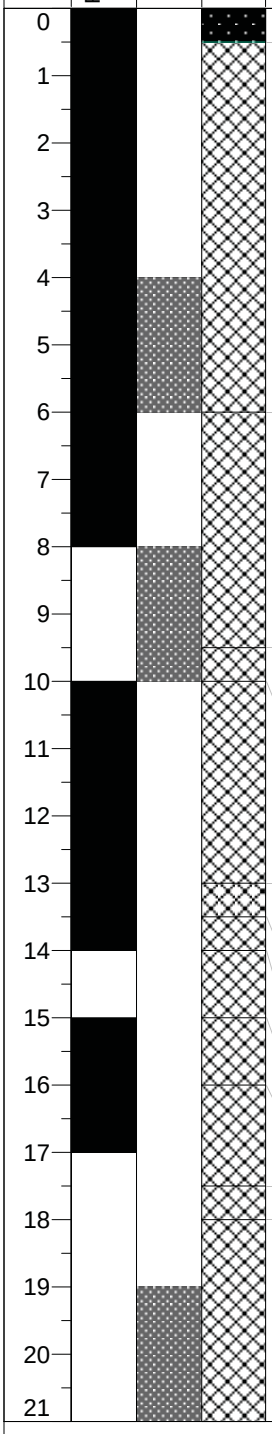
PROJECT #:	AHI1903		
SITE ADDRESS:	204 4th Ave, Brooklyn, NY		
BORING ID:	GT002	BORING DEPTH (FT): 32	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 3.5
DRILLING CONTRACTOR:	UCEF	DATE STARTED: 02/26/2019	DATE FINISHED: 02/26/2019
DRILLING METHOD:	Direct Push	TIME STARTED: 11:00	TIME FINISHED: 11:45
DRILLING EQUIPMENT:	Geoprobe 78DT	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Split Spoon	PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley

DEPTH (feet)	RECOVERY INTERVAL	SAMPLE INTERVAL	USCS KEY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0–4				Historic fill material.BROWN FINE TO MED GRAINED SAND, SOME BRICK, TRACE GRAVEL.	N/A	0–4	
4–8					N/A	4–8	
8–12				Historic fill material.DARK BROWN TO GREY MED GRAINED SAND, TRACE GRAVEL, BRICK.	N/A	8–12	
12–16						12–16	
16–24				Historic fill material.MOIST DARK BROWN TO GREY COARSE TO MED GRAINED SAND, TRACE BRICK, TRACE GRAVEL, PETROLEUM ODOR.	N/A	16–24	
24–32				MOIST DARK BROWN SILT.	N/A	24–32	

PROJECT #:	AHI1903		
SITE ADDRESS:	204 4th Ave, Brooklyn, NY		
BORING ID:	SB-001	BORING DEPTH (FT): 21	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR:	PAL Environmental Services, Inc.	DATE STARTED: 02/12/2019	DATE FINISHED: 02/15/2019
DRILLING METHOD:	Direct Push	TIME STARTED: 09:15	TIME FINISHED: 11:15
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Macrocore	PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley

DEPTH (feet)	RECOVERY INTERVAL	SAMPLE INTERVAL	USCS KEY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0–6				Asphalt	0	0–6	
0–6				Historic fill material. Brown, medium SAND and Brick, dry.	0	0–6	
6–10				Historic fill material. Brown to Orange, fine to medium SAND, some Gravel, little brick; dry.	0	6–10	
10–13				Historic fill material Brown to Grey, fine to medium SAND, some Gravel, trace brick; dry.	0	10–13	
13–14				Historic fill material. Brown, fine SAND, some Silt; moist.	2.1	13–14	
14–15				Historic fill material. Brown, fine SAND, some Gravel, trace brick and glass, wet.	302	14–15	
15–21				Historic fill matrial. Dark Grey, coarse SAND and Gravel, and trace brick; petroleum odor.	320	15–21	

PROJECT #:	AHI1903		
SITE ADDRESS:	204 4th Ave, Brooklyn, NY		
BORING ID:	SB-002	BORING DEPTH (FT): 21	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR:	PAL Environmental Services, Inc.	DATE STARTED: 02/12/2019	DATE FINISHED: 02/15/2019
DRILLING METHOD:	Direct Push	TIME STARTED: 07:15	TIME FINISHED: 09:15
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Macrocore	PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley



DEPTH (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0	Asphalt	0	0	
1–6	Historic fill material. Brown, fine to medium SAND, some Brick and Concrete, dry.	0	1–6	
6–9	Historic fill material. Brown, fine to medium SAND, some Brick and Gravel, little fine sand, dry.	0	6–9	
9–10	Historic fill material. Brown, fine to medium SAND, some Brick and Gravel, little fine sand, dry and petroleum odor.	0	9–10	
10–13	Historic fill material. Grey to Brown, medium to coarse SAND, some Gravel; moist and petroleum odor.	0	10–13	
13	Historic fill material. Grey to Brown, medium to coarse SAND, some Grave and wood; moist and petroleum odor.	0	13	▼
13–14		8	14	
14–15	Historic fill material. Dark Grey to Brown, fine SAND; moist and petroleum odor.	92	15	
15–16	Historic fill material. Dark Grey, medium SAND and GRAVEL, trace brick; moist and petroleum odor	0	16	
16–17	Historic fill material. Dark Grey, medium SAND, some gravel, trace brick, wet and petroelum odor.	0	17	
17–18	Historic fill material. Dark Brown, fine SAND, some Silt, wet and petroelum odor.	0	18	
18	Brick	0	18	
18–21	Historic fill material. Dark Grey, coarse SAND, some Gravel, pieces of plastic and metal, wet. Petroelum odor	26.2	19–21	

P.W. Grosser Consulting	End of Boring Depth (feet): 21	Water Table Symbol: ▼	Page 1 of 1

PROJECT #:	AHI1903		
SITE ADDRESS:	204 4th Ave, Brooklyn, NY		
BORING ID:	SB-003	BORING DEPTH (FT): 21	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR:	PAL Environmental Services, Inc.	DATE STARTED: 02/13/2019	DATE FINISHED: 02/18/2019
DRILLING METHOD:	Direct Push	TIME STARTED: 10:15	TIME FINISHED: 10:40
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Macrocore	PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley

DEPTH (feet)	RECOVERY INTERVAL	SAMPLE INTERVAL	USCS KEY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0				Asphalt	0	0	
1–6				Historic fill material. Brown, fine to medium SAND, some Brick and Concrete, dry.	0	1–6	
6–9				Historic fill material. Brown, medium SAND and BRICK, dry.	5.1	6–9	
9–12				Historic fill material. Brown, medium SAND, little brick and gravel, dry.	23.5	9–12	
12				Historic fill material. Brown, medium SAND, some Brick, little gravel, dry.	329.2	12	
12–13				Historic fill material. Brown, fine SAND, some Silt, little gravel, moist and petroleum odor.	1,326	12–13	
13–14				Histroic fill material. Dark Grey to Black, fine SAND, some Silt, little gravel, moist and petroleum odor.	1,326	13–14	
14–15				Brick	1,326	14–15	
15				Historic fill material. Dark Brown,medium SAND, little gravel, moist and petroleum odor.	358.2	15	
15–19				Historic fill material. Brown, medium SAND, some Brick, wet and petroleum odor.	321	15–19	
19–21				Historic fill material. Dark Grey, medium SAND, some Gravel, trace brick, wet and petroleum odor.	173	19–21	

PROJECT #:	AHI1903		
SITE ADDRESS:	204 4th Ave, Brooklyn, NY		
BORING ID:	SB-004	BORING DEPTH (FT): 21	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR:	PAL Environmental Services, Inc.	DATE STARTED: 02/13/2019	DATE FINISHED: 02/18/2019
DRILLING METHOD:	Direct Push	TIME STARTED: 07:00	TIME FINISHED: 09:40
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Macrocore	PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley

DEPTH (feet)	RECOVERY INTERVAL	SAMPLE INTERVAL	USCS KEY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0				Asphalt	0	0	
2				Historic fill material. Brown, fine to medium SAND, some Brick and Concrete, dry.	0	2	
4						4	
6				Historic fill material. Brown, fine to medium SAND, some Brick and Gravel, dry.	0	6	
8						8	
10				Historic fill material. Brown, fine to medium SAND, some Brick and Gravel, moist.	1.2	10	
12						12	
14				Brown, fine SAND and SILT, wet.	0.7	14	
16				Brown, medium SAND, some fine Sand and little gravel, wet.	0.7	16	
18						18	
20						20	
22						22	
24						24	

PROJECT #:	AHI1903
SITE ADDRESS:	204 4th Ave, Brooklyn, NY
BORING ID:	SB-005
WELL ID:	N/A
DRILLING CONTRACTOR:	PAL Environmental Services, Inc.
DRILLING METHOD:	Direct Push
DRILLING EQUIPMENT:	Geoprobe 6610
SAMPLING METHOD:	Macrocore

PWGC

BORING DEPTH (FT): 21	CORE LENGTH (FT): N/A
BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 2
DATE STARTED: 02/13/2019	DATE FINISHED: 02/18/2019
TIME STARTED: 11:00	TIME FINISHED: 12:00
LATITUDE: N/A	LONGITUDE: N/A
PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley

DEPTH (feet)	RECOVERY INTERVAL	SAMPLE INTERVAL	USCS KEY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
0				Concrete	0
1				Historic fill material. Light Brown, medium SAND, dry.	0
2				Historic fill material. Brown, fine to medium SAND, some Brick and Gravel; dry.	0
3					
4					
5					
6				Historic fill material. Brown, fine to medium SAND, some Brick, dry.	1.1
7				Historic fill material.Light Brownm fine SAND, some medium Sand, and little silt; moist.	0.1
8					
9					
10				Historic fill material. Light Brownm fine SAND, some medium Sand, little silt and trace brick; moist.	1.2
11					
12				Light Brownm fine SAND, some medium Sand, and little silt; wet.	0.7
13					
14					
15				Brown, medium SAND and trace brick; wet.	0.6
16					
17					
18					
19					
20					
21					

DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13 ▼	
14	
15	
16	
17	
18	
19	
20	
21	

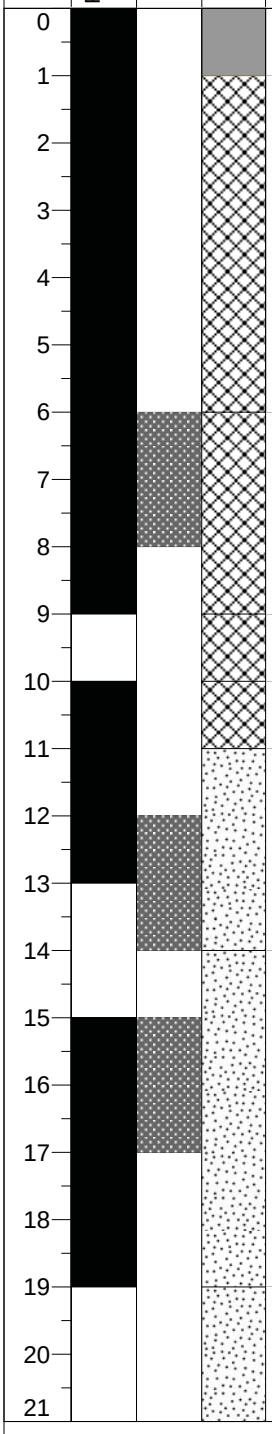
PROJECT #:	AHI1903		
SITE ADDRESS:	204 4th Ave, Brooklyn, NY		
BORING ID:	SB-006	BORING DEPTH (FT): 21	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR:	PAL Environmental Services, Inc.	DATE STARTED: 02/14/2019	DATE FINISHED: 02/19/2019
DRILLING METHOD:	Direct Push	TIME STARTED: 08:40	TIME FINISHED: 10:00
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Macrocore	PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley

DEPTH (feet)	RECOVERY INTERVAL	SAMPLE INTERVAL	USCS KEY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0–1				Asphalt	0	0–1	
1–6				Historic fill material. Brown, fine to medium SAND and BRICK, dry.	0	1–6	
6–8				Historic fill material. Brick and Aspahlt.	0	6–8	
8–10				Historic fill material. Brown, fine SAND, some Silt, moist.	0	8–10	
10–13				Historic fill material. Brown, fine SAND, some Silt, little gravel; moist.	0	10–13	
13–15				Grey, fine SAND, some Silt, little gravel; moist and petroleum odor.	0	13–15	▼
15–19				Brown, fine SAND, some Silt, little gravel; wet.	0	15–19	
19–21				Brown, fine SAND, some Silt, little gravel and trace wood and glass, wet.		19–21	

PROJECT #:	AHI1903
SITE ADDRESS:	204 4th Ave, Brooklyn, NY
BORING ID:	SB-007
WELL ID:	N/A
DRILLING CONTRACTOR:	PAL Environmental Services, Inc.
DRILLING METHOD:	Direct Push
DRILLING EQUIPMENT:	Geoprobe 6610
SAMPLING METHOD:	Macrocore

PWGC

BORING DEPTH (FT): 21	CORE LENGTH (FT): N/A
BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 2
DATE STARTED: 02/14/2019	DATE FINISHED: 02/19/2019
TIME STARTED: 11:10	TIME FINISHED: 11:40
LATITUDE: N/A	LONGITUDE: N/A
PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley



DEPTH (feet)	RECOVERY INTERVAL	SAMPLE INTERVAL	USCS KEY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0–1				Concrete	0	0–1	
1–6				Brick	0	1–6	
6–9				Historic fill material. Brown, fine to medium SAND, little brick and gravel, dry.	0	6–9	
9–10				Histroic fill material. Dark Grey to Brown, fine SAND, some medium Sand, little silt and gravel; moist.	0	9–10	
10–11				Historic fill material. Dark Grey to Brown, fine SAND, some medium Sand, little silt and trace brick; moist.	0	10–11	
11–14				Brown to Grey, medium SAND, some fine Sand, little silt and gravel; moist.	0	11–14	
14–19				Brown to Grey, medium SAND, some fine Sand, little silt and gravel; wet.	0	14–19	
19–21				Brown, medium SAND, little fine sand, trace wood and glass	0	19–21	

▼ Water table at 13 feet

P.W. Grosser Consulting	End of Boring Depth (feet): 21	Water Table Symbol: ▼	Page 1 of 1

PROJECT #:	AHI1903		
SITE ADDRESS:	204 4th Ave, Brooklyn, NY		
BORING ID:	SB-008	BORING DEPTH (FT): 21	CORE LENGTH (FT): N/A
WELL ID:	N/A	BORING DIAMETER (IN): 4	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR:	PAL Environmental Services, Inc.	DATE STARTED: 02/15/2019	DATE FINISHED: 02/15/2019
DRILLING METHOD:	Direct Push	TIME STARTED: 01:00	TIME FINISHED: 03:00
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE: N/A	LONGITUDE: N/A
SAMPLING METHOD:	Macrocore	PROJECT MANAGER: Ryan Morley	LOGGED BY: Janelle Cooley

DEPTH (feet)	RECOVERY INTERVAL	SAMPLE INTERVAL	USCS KEY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0–1				Asphalt		0–1	
1–6		4–6		Historic fill material. Brown, medium SAND, little Brick, dry.		1–6	
6–10	6–10			Historic fill material. Brown, fine to medium SAND, some Gravel and Brick, dry.	0	6–10	
10–13	10–19			Historic fill material. Brown, fine to medium SAND, some Gravel and trace brick; moist.	0	10–13	
13–15		13–15		Historic fill material. Grey, fine to medium SAND, some Gravel and trace brick; moist.	0	13–15	▼
15–21		19–21		Historic fill material. Dark Brown, medium SAND, little brick and wood; wet and petroleum odor.	2.2	15–21	

APPENDIX C
Monitoring Well Sampling Logs

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-2	**Sampled By:**	JC
Site Address:	204 4th Avenue, Brooklyn, New York	**Project Manager:**	Ryan Morley
Project Name:		**Project Number:**	AHI1903

Reference Elevation (ft):	21.34	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NP
Depth to Water (ft):	14.05	**Groundwater Elevation (ft):**	7.29
Depth to Bottom (ft):	24.89	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):		**Well Diameter (in):**	4
Standing Water Volume (gal):	0.00	**Calculated Purge Volume (gal):**	N/A
Sample Date:	2/14/2019	**Begin Purge Time:**	14:06
Sample Time:	905	**Complete Purge Time:**	14:21
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Perry Pump
Purge Rate (gpm):	0.10	**Purge Time (min):**	45
Actual Purge Volume (gal):	4.5	**Casing Volumes Removed:**	N/A
Sample Appearance:	None	**Odors Observed:**	Petro
Analytical Laboratory:	Alpha Analytical	**Notes:**	Odor
Date Shipped:	2/14/2019		
Headspace (ppm)			
Analyses Requested:			
Full Part 375			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	14:06	16.05	6.11	0,0	-82	3.320	9.42		
2	14:09	16.05	6.09	0,0	-80	3.280	9.15		
3	14:12	16.06	6.08	0,0	-79	3.250	9.02		
4	14:15	16.80	6.06	0,0	-71	3.060	8.61		
5	14:18	16.99	6.04	0,0	-68	2.990	8.60		
6	14:21	16.94	6.04	0,0	-68	2.980	8.61		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-3	**Sampled By:**	JC
Site Address:	204 4th Avenue, Brooklyn, New York	**Project Manager:**	Ryan Morley
Project Name:		**Project Number:**	AHI1903

Reference Elevation (ft):	22.69	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NP
Depth to Water (ft):	15.22	**Groundwater Elevation (ft):**	7.47
Depth to Bottom (ft):	24.95	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):		**Well Diameter (in):**	4
Standing Water Volume (gal):	0.00	**Calculated Purge Volume (gal):**	N/A
Sample Date:	2/14/2019	**Begin Purge Time:**	13:05
Sample Time:	905	**Complete Purge Time:**	13:25
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Perry Pump
Purge Rate (gpm):	0.04	**Purge Time (min):**	27
Actual Purge Volume (gal):	1	**Casing Volumes Removed:**	N/A
Sample Appearance:	Sheen	**Odors Observed:**	Petro Odor
Analytical Laboratory:	Alpha Analytical	**Notes:**	Clear
Date Shipped:	2/14/2019		
Headspace (ppm)			
Analyses Requested:			
Full Part 375			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	13:05	17.02	6.18	192.0	-96	0.968	9.36		
2	13:08	17.13	6.20	220.0	-102	1.140	9.28		
3	13:11	17.24	6.23	260.0	-106	1.580	9.23		
4	13:14	17.26	6.23	234.0	-115	2.170	9.19		
5	13:17	17.28	6.23	231.0	-127	2.460	9.14		
6	13:20	0.73	6.21	227.0	-144	2.690	9.07		
7	13:23	0.73	6.21	223.0	-163	2.860	9.05		
8	13:26	0.73	6.19	216.0	-179	3.010	9.04		
9	13:29	0.73	6.18	214.0	-185	3.080	9.03		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-8	**Sampled By:**	JC
Site Address:	204 4th Avenue, Brooklyn, New York	**Project Manager:**	Ryan Morley
Project Name:		**Project Number:**	AHI1903

Reference Elevation (ft):	21.43	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NP
Depth to Water (ft):	13.95	**Groundwater Elevation (ft):**	7.48
Depth to Bottom (ft):	17.60	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):		**Well Diameter (in):**	4
Standing Water Volume (gal):	0.00	**Calculated Purge Volume (gal):**	N/A
Sample Date:	2/14/2019	**Begin Purge Time:**	11:40
Sample Time:	905	**Complete Purge Time:**	12:01
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Perry Pump
Purge Rate (gpm):	0.04	**Purge Time (min):**	24
Actual Purge Volume (gal):	1	**Casing Volumes Removed:**	N/A
Sample Appearance:	Clear	**Odors Observed:**	Pet Odor
Analytical Laboratory:	Alpha Analytical	**Notes:**	Clear
Date Shipped:	2/14/2019		
Headspace (ppm)			
Analyses Requested:			
Full Part 375			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	11:40	15.80	6.33	106.0	-1	3.670	10.02		
2	11:43	15.64	6.29	73.7	-49	3.710	10.34		
3	11:46	15.63	6.30	54.8	-68	3.740	9.80		
4	11:49	15.76	6,29	50.4	-83	3.750	9.66		
5	11:52	15.77	6,27	46.2	-91	3.730	9.62		
6	11:55	15.85	6,26	45.7	-101	3.740	9.57		
7	11:58	15.88	6.25	42.8	-103	3.730	9.54		
8	12:01	15.92	6.24	41.6	-111	3.730	9.50		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-8	**Sampled By:**	JC
Site Address:	204 4th Avenue, Brooklyn, New York	**Project Manager:**	Ryan Morley
Project Name:		**Project Number:**	AHI1903

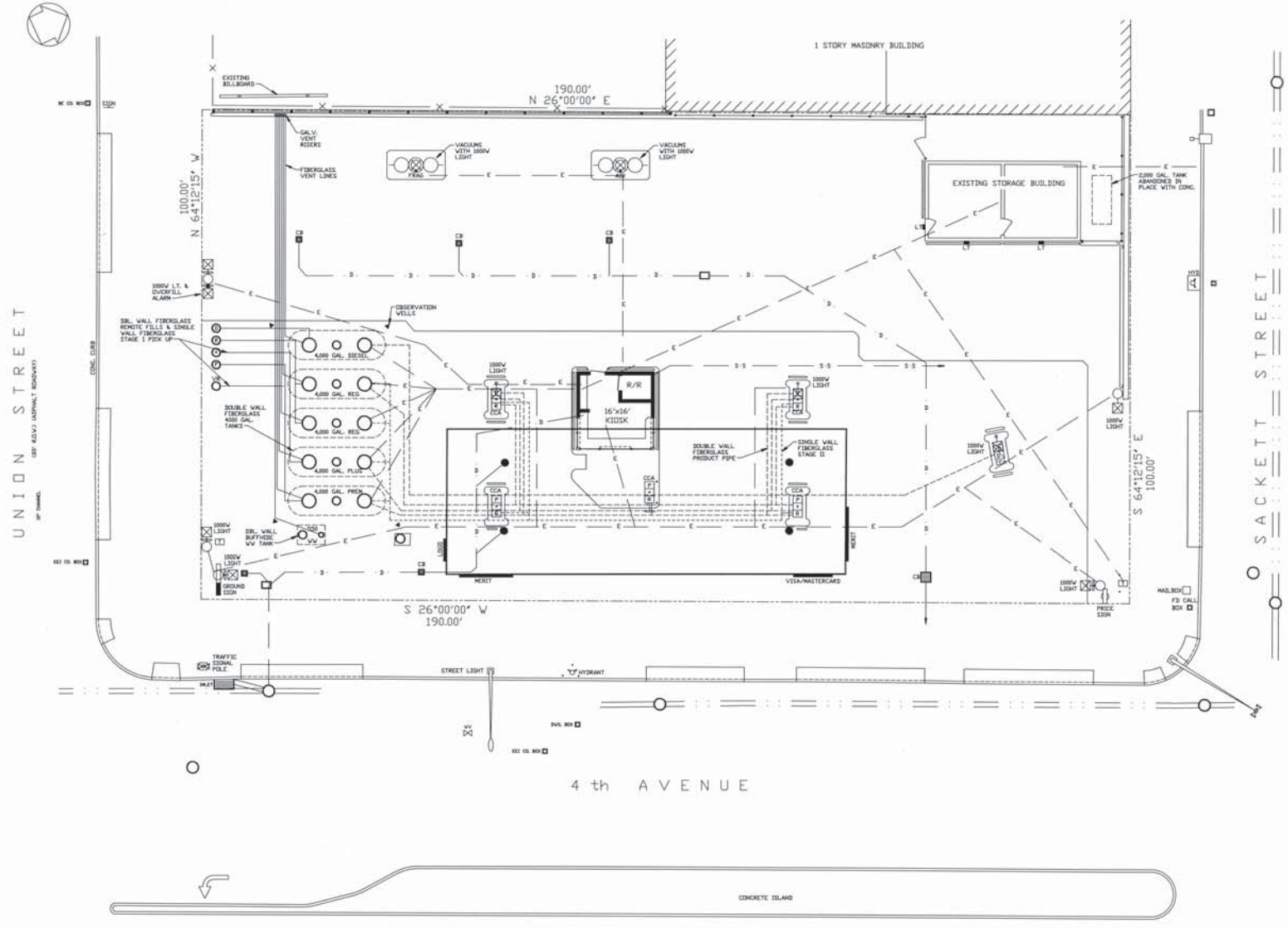
Reference Elevation (ft):	21.29	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NP
Depth to Water (ft):	11.32	**Groundwater Elevation (ft):**	9.97
Depth to Bottom (ft):	17.60	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):		**Well Diameter (in):**	4
Standing Water Volume (gal):	0.00	**Calculated Purge Volume (gal):**	N/A
Sample Date:	2/14/2019	**Begin Purge Time:**	8:40
Sample Time:	905	**Complete Purge Time:**	9:01
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Perry Pump
Purge Rate (gpm):	0.05	**Purge Time (min):**	39
Actual Purge Volume (gal):	2	**Casing Volumes Removed:**	N/A
Sample Appearance:	None	**Odors Observed:**	N/A
Analytical Laboratory:	Alpha Analytical	**Notes:**	Clear and DUPE02142019
Date Shipped:	2/14/2019		
Headspace (ppm)			
Analyses Requested:			
Full Part 375			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	8:40	12.97	6.26	930.0	80	1.830	9.95		
2	8:43	13.04	6.28	575.0	58	1.790	10.20		
3	8:46	12.98	6.33	315.0	37	1.720	10.46		
4	8:49	13.00	6.36	139.0	-56	1.660	10.56		
5	8:52	12.75	6.31	95.7	32	1.640	10.68		
6	8:55	12.69	6.30	67.3	33	1.620	10.70		
7	8:58	12.50	6.30	52.1	35	1.580	10.70		
8	9:01	12.42	6.31	51.3	38	1.570	10.69		

Take readings every three minutes

APPENDIX D
Envirotrac Provided Historical Documents



REV. NO.	DATE	BY:	DESCRIPTION
DRAWN BY: ALF	DATE: 11/17/94		204-222 4th AVE. BROOKLYN, NEW YORK
CHECKED BY:	DATE:		AS BUILT 11/96

DRAWING NUMBER: 94-715

SCALE: 1"=10'-0" (UNLESS NOTED)

32530354

SPEEDWAY LLC
UPDATE REPORT

Site Address: 204-222 4th Avenue Brooklyn, NY	**Regulatory Agency:** NYSDEC – Region 2 **Regulatory Contact:** Ainura Doronova **Spill #:** 96-05719 **Consultant:** EnviroTrac Ltd.
Speedway Contact: John Engdahl	**Project Manager:** Ed Russo

Report Date: July 2018

Spill Incident Cause: Petroleum-impacted soil encountered during underground storage tank (UST) upgrade activities in August 1996.

Current Site Status: Active Station

Monitoring Period: March 2018 – May 2018

Work Performed: March 5, April 11, and May 3, 2018 - Conducted enhanced fluid recovery (EFR) events on monitoring well SVE-1 and short term remediation events (STREs) on SVE-6/AS-1.

April 12, 2018 – Gauged four (4) and sampled three (3) monitoring wells.

May 8, 2018 – Gauged nine (9) and sampled eight (8) monitoring wells.

Groundwater Monitoring:

Wells Gauged:	MW-2, 3, 8; FW-7, 8, 9; CW-8, 9, and SVE-1
Wells Containing LPH (feet):	None
Groundwater Depth:	8.32 feet - 15.32 feet
Groundwater Flow:	Northerly
Wells Sampled:	MW-2, 3, 8; FW-7, 9; CW-8, 9, and SVE-1
Maximum Benzene Concentration:	620 micrograms per liter (µg/L) (MW-2)
Maximum MTBE Concentration:	56.7 µg/L (MW-2)

Current Plans/Proposals: Continue quarterly groundwater sampling, with the next sampling event scheduled for August 2018. An Update Report summarizing these activities will be submitted to NYSDEC in October 2018. Continue monthly EFR and STRE events.

List of Attachments:

Tables:
- Table 1 – Groundwater Gauging and Analytical Data
- Table 2 – Summary of Enhanced Fluid Recovery Monitoring
- Table 3 – Summary of Short Term Remediation Events (STREs)

Figures:
- Figure 1 – Aerial Photograph
- Figure 2 – Site Plan
- Figure 3 – Water-Table Elevation on May 8, 2018 Total Dissolved BTEX/MTBE Concentrations Map
- Figure 4 – Hydrograph of MW-2
- Figure 5 – Hydrograph of MW-3
- Figure 6 – Hydrograph of MW-7
- Figure 7 – Hydrograph of FW-8
- Figure 8 – Hydrograph of SVE-1

Attachments:
- Laboratory Analytical Report

Table 1
Groundwater Gauging and Analytical Data
204-222 4th Avenue
Brooklyn, New York

Well ID (Screen Zone)	Date	Top of Casing (feet)	Depth to Water (fbg)	Depth to Product (fbg)	Product Thickness (feet)	Relative GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)
MW-2 (7-15')	08/23/17	21.34	14.11			7.23	481	19.9	884	885	2,269.9	23.3
	11/21/17	21.34	14.69			6.65	791	59.6	1,410	1,290	3,550.6	35.7
	02/06/18	21.34	15.25			6.09	75.3	1.3	57.2	29.9	163.7	29.4
	4/12/18*	21.34	14.60			6.74	355	16.7	270	260	901.7	30.6
	05/08/18	21.34	14.47			6.87	620	34.8	911	1,040	2,605.8	56.7
MW-3 (7-15')	08/23/17	22.69	15.08			7.61	3.7	20.5	1.3	2.0J	27.5J	7.5
	11/21/17	22.69	15.64			7.05	ND	ND	1.1	ND	1.1	8.8
	02/06/18	22.69	18.58			4.11	ND	ND	ND	ND	ND	11.9
	05/08/18	22.69	15.32			7.37	ND	ND	1.9	ND	1.9	3.1
MW-7	08/23/17	21.43	14.17			7.26	115	1.5	8.0	5.0	129.5	11.7
	11/21/17	21.43	NA			NA	NS	NS	NS	NS	NS	NS
	02/06/18	21.43	15.29			6.14	ND	ND	ND	ND	ND	13.6
	05/08/18	21.43	NA			NA	NS	NS	NS	NS	NS	NS
MW-8 (4-19')	08/23/17	21.29	12.03			9.26	ND	ND	ND	ND	ND	ND
	11/21/17	21.29	13.05			8.24	ND	ND	ND	ND	ND	ND
	02/06/18	21.29	13.44			7.85	ND	2.9	105	2,600	2,602.9	ND
	4/12/18*	21.29	12.72			8.57	ND	ND	ND	ND	ND	ND
	05/08/18	21.29	12.55			8.74	ND	ND	ND	ND	ND	ND
FW-7	08/23/17	20.90	8.44			12.46	ND	3.1	52.0	66.9	122.0	ND
	11/21/17	20.90	8.25			12.65	ND	ND	32.6	44.3	76.9	ND
	02/06/18	20.90	7.68			13.22	2.9	3.4	35.5	68.2	110.0	ND
	05/08/18	20.90	8.32			12.58	3.0	3.0	53.4	61.3	120.7	ND
FW-8	08/23/17	20.83	11.82			9.01	13.0	3.9	19.2	28.1	64.2	ND
	11/21/17	20.83	12.33			8.50	24.4	4.2	24.2	13.9	66.7	ND
	02/06/18	20.83	D			D	NS	NS	NS	NS	NS	NS
	4/12/18*	20.83	D			D	NS	NS	NS	NS	NS	NS
	05/08/18	20.83	D			D	NS	NS	NS	NS	NS	NS
FW-9	08/23/17	21.22	11.23			9.99	48.0	13.4	44.8	20.1	126.3	ND
	11/21/17	21.22	11.84			9.38	28.1	3.7	23.0	13.3	68.1	ND
	02/06/18	21.22	12.50			8.72	NS	NS	NS	NS	NS	NS
	4/12/18*	21.22	11.58			9.64	6.0	ND	4.9	ND	10.9	ND
	05/08/18	21.22	11.55			9.67	23.3	1.2	4.6	8.3	37.4	ND
CW-8 (9-19')	08/23/17	20.77	13.62			7.15	16.4	ND	2.3	2.0J	20.7	ND
	11/21/17	20.77	14.23			6.54	2.8	ND	1.3	3.0	7.1	ND
	02/06/18	20.77	14.77			6.00	1.5	ND	ND	ND	1.5	ND
	05/08/18	20.77	14.01			6.76	3.9	ND	1.2	3.6	8.7	ND
CW-9 (9-19')	08/23/17	21.53	14.38			7.15	ND	ND	ND	ND	ND	2.3
	11/21/17	21.53	14.80			6.73	20.2	2.1	4.0	3.9	30.2	64.3
	02/06/18	21.53	15.52			6.01	ND	ND	ND	ND	ND	4.8
	05/08/18	21.53	14.73			6.80	ND	ND	ND	ND	ND	6.8
SVE-1 (5-15')	08/23/17	21.08	11.09			9.99	83.1	255	234	986	1,558.1	ND
	11/21/17	21.08	11.58			9.50	69.5	149	178	730	1,126.5	ND
	02/06/18	21.08	13.01			8.07	12.4	4.8	32.7	81.5	131.4	ND
	05/08/18	21.08	11.68			9.40	8.1	1.4	3.2	11.9	24.6	ND

Notes:
µg/L = micrograms per liter
NM = Not measured
ND = Not detected
NS = Not sampled
NA = Not accessible
D = Dry
* = Re-sample event on 04/12/2018

Table 2
Summary of Enhanced Fluid Recovery Monitoring
204-222 4th Avenue
Brooklyn, NY

Well ID	Date	BEFORE EFR			AFTER EFR					Water Recovered (gallons)
		DTP (fbg)	DTW (fbg)	Product Thickness (ft)	DTP (fbg)	DTW (fbg)	Product Thickness (ft)	Product Recovered (gallons)	EFR (hrs)	
FW-7	10/24/2008	10.60	10.65	0.05	NP	11.89	NP	0.03	2.00	21
	11/12/2008	NP	8.14	NP	NP	10.31	NP	NP	1.50	20
	12/2/2008	NP	9.90	NP	NP	10.18	NP	NP	2.00	20
	1/19/2009	NP	8.22	NP	NP	8.30	NP	NP	1.50	35
	2/23/2009	NP	6.83	NP	NP	9.06	NP	NP	2.00	40
	3/18/2009	NP	7.17	NP	NP	11.86	NP	NP	1.00	46
	4/28/2009	NP	10.62	NP	NP	10.56	NP	NP	2.00	37
	5/19/2009	NP	9.63	NP	NP	10.63	NP	NP	1.50	25
	6/29/2009	NP	7.66	NP	NP	11.84	NP	NP	1.25	25
	7/27/2009	NP	7.75	NP	NP	9.24	NP	NP	1.00	12
	8/10/2009	8.25	8.26	0.01	NP	9.20	NP	NP	1.50	28
	9/28/2009	8.73	8.75	0.02	NP	11.84	NP	0.01	1.50	25
	10/20/2009	NP	9.48	NP	NP	10.35	NP	NP	1.50	16
	4/12/2010	NP	6.19	NP	NP	6.79	NP	NP	0.00	0
	5/11/2010	NP	8.97	NP	NP	8.98	NP	NP	0.00	0
	6/28/2010	NP	9.61	NP	NP	11.04	NP	NP	0.00	0
	8/24/2010	NP	10.29	NP	NP	10.30	NP	NP	0.00	0
	9/14/2010	NP	9.30	NP	NP	9.34	NP	NP	0.00	0
	10/5/2010	NP	10.96	NP	NP	10.91	NP	NP	0.00	0
	2/22/2011	NM	NM	NM	NM	NM	NM	NM	NM	NM
FW-8	10/24/2008	11.50	11.52	0.02	NP	12.02	NP	0.01	2.00	18
	11/12/2008	NP	11.93	NP	NP	12.06	NP	NP	1.50	15
	12/2/2008	NP	11.81	NP	NP	11.66	0.01	0.01	1.50	20
	1/19/2009	NP	9.12	NP	NP	8.75	NP	NP	1.50	35
	2/23/2009	NP	8.02	NP	NP	8.14	NP	NP	2.00	50
	3/18/2009	NP	7.98	NP	NP	7.96	NP	NP	1.00	46
	4/28/2009	10.83	10.85	0.02	NP	10.97	NP	0.01	2.00	37
	5/19/2009	NP	11.43	NP	NP	11.89	NP	NP	1.50	25
	6/29/2009	NP	10.33	NP	NP	10.59	NP	NP	1.25	25
	7/27/2009	NP	9.91	NP	NP	11.19	NP	NP	1.00	12
	8/10/2009	9.78	9.80	0.02	NP	11.11	NP	NP	1.50	28
	9/28/2009	NP	10.94	NP	NP	11.33	NP	NP	1.50	25
	10/20/2009	NP	11.12	NP	NP	11.54	NP	NP	1.00	16
	4/12/2010	NP	9.96	NP	NP	11.31	NP	NP	0.00	0
	5/11/2010	NP	10.94	NP	NP	11.55	NP	NP	0.00	0
	6/28/2010	NP	11.82	NP	NP	12.14	NP	NP	0.00	0
	8/24/2010	NP	11.40	NP	NP	11.41	NP	NP	0.00	0
	9/14/2010	NP	10.48	NP	NP	10.51	NP	NP	0.00	0
	10/5/2010	NP	10.40	NP	NP	11.38	NP	NP	0.00	0
	2/22/2011	NP	10.85	NP	NP	12.18	NP	NP	0.00	0
FW-9	10/24/2008	NP	11.85	NP	NP	11.91	NP	NP	2.00	24
	11/12/2008	NP	11.35	NP	NP	11.40	NP	NP	1.50	25
	12/2/2008	NM	11.15	NM	NP	11.37	NP	NP	2.00	20
	1/19/2009	NP	8.96	NP	NP	8.85	NP	NP	1.50	35
	2/23/2009	NP	8.26	NP	NP	7.82	NP	NP	2.00	100
	3/18/2009	NP	8.21	NP	NP	8.14	NP	NP	1.00	46
	4/28/2009	NP	8.50	NP	NP	8.93	NP	NP	2.00	37
	5/19/2009	NP	11.11	NP	NP	D	NP	NP	2.50	25
	6/29/2009	NP	10.21	NP	NP	10.95	NP	NP	1.00	25
	7/27/2009	NP	8.48	NP	NP	10.23	NP	NP	1.00	12
	8/10/2009	NP	9.94	NP	NP	D	NP	NP	1.00	28
	9/28/2009	NP	10.83	NP	NP	11.51	NP	NP	1.00	15
	10/20/2009	NP	11.03	NP	NP	12.64	NP	NP	1.00	16
	4/12/2010	NP	9.94	NP	NP	10.66	NP	NP	0.00	0
	5/11/2010	NP	11.24	NP	NP	10.87	NP	NP	0.00	0
	6/28/2010	NP	11.57	NP	NP	11.97	NP	NP	0.00	0
	8/24/2010	NP	11.14	NP	NP	11.16	NP	NP	0.00	0
	9/14/2010	NP	11.13	NP	NP	11.17	NP	NP	0.00	0
	10/5/2010	NP	10.81	NP	NP	10.72	NP	NP	0.00	0
	2/22/2011	NP	11.01	NP	NP	11.09	NP	NP	0.00	0
SVE-1	10/24/2008	NP	10.64	NP	NP	11.52	NP	NP	2.00	30
	11/12/2008	NP	10.93	NP	NP	12.87	NP	NP	2.00	35
	12/2/2008	NP	10.93	NP	NP	11.02	NP	NP	1.50	20
	1/19/2009	NP	8.32	NP	NP	9.35	NP	NP	1.50	35
	2/23/2009	NP	7.79	NP	NP	9.56	NP	NP	2.00	40
	3/18/2009	NP	7.70	NP	NP	10.52	NP	NP	1.00	46
	4/28/2009	NP	9.63	NP	NP	12.90	NP	NP	2.00	37
	5/19/2009	NP	10.11	NP	NP	12.55	NP	NP	1.25	25
	6/29/2009	NP	9.37	NP	NP	10.43	NP	NP	1.00	25
	7/27/2009	NP	9.74	NP	NP	13.57	NP	NP	1.00	12
	8/10/2009	NP	9.77	NP	NP	13.26	NP	NP	1.00	28
	9/28/2009	NP	10.24	NP	NP	13.77	NP	NP	1.00	25
	10/20/2009	NP	10.53	NP	NP	13.60	NP	NP	1.25	16
	4/12/2010	NP	10.07	NP	NP	12.86	NP	NP	3.00	100
	5/11/2010	NP	10.55	NP	NP	14.10	NP	NP	3.00	90
	6/28/2010	NP	10.82	NP	NP	10.91	NP	NP	3.00	62.5
	8/24/2010	NP	11.21	NP	NP	14.06	NP	NP	3.00	65
	9/14/2010	NP	11.58	NP	NP	12.37	NP	NP	3.00	30
	10/5/2010	NP	10.84	NP	NP	13.17	NP	NP	3.00	105
SVE-1	2/22/2011	NP	10.01	NP	NP	10.06	NP	NP	3.00	90

Table 2
Summary of Enhanced Fluid Recovery Monitoring
204-222 4th Avenue
Brooklyn, NY

Well ID	Date	BEFORE EFR			AFTER EFR					Water Recovered (gallons)
		DTP (fbg)	DTW (fbg)	Product Thickness (ft)	DTP (fbg)	DTW (fbg)	Product Thickness (ft)	Product Recovered (gallons)	EFR (hrs)	
	6/6/2011	NP	10.88	NP	NP	13.93	NP	NP	3.00	20
	7/26/2011	NP	11.81	NP	NP	13.72	NP	NP	3.00	54
	8/17/2011	NP	9.62	NP	NP	NM	NP	NP	3.00	163
	9/23/2011	NP	9.86	NP	NP	NM	NP	NP	3.00	185
	10/20/2011	NP	10.13	NP	NP	10.13	NP	NP	3.00	7
	11/2/2011	NP	9.23	NP	NP	9.30	NP	NP	3.00	11
	12/28/2011	NP	11.10	NP	NP	NM	NP	NP	3.00	41
	1/10/2012	NP	11.59	NP	NP	NM	NP	NP	3.00	50
	3/14/2012	NP	11.94	NP	NP	12.49	NP	NP	3.00	47
	4/9/2012	NP	11.86	NP	NP	12.54	NP	NP	3.00	29
	5/2/2012	NP	11.88	NP	NP	12.81	NP	NP	3.00	46
	6/7/2012	NP	10.30	NP	NP	10.30	NP	NP	3.00	97
	7/16/2012	NP	10.51	NP	NP	10.52	NP	NP	3.00	20
	8/22/2012	NP	10.61	NP	NP	12.69	NP	NP	3.00	103
	9/24/2012	NP	11.03	NP	NP	12.81	NP	NP	3.00	93
	11/13/2012	NP	13.55	NP	NP	13.39	NP	NP	3.00	58
	12/3/2012	NP	11.02	NP	NP	D	NP	NP	3.00	20
	1/17/2013	NP	11.11	NP	NP	12.30	NP	NP	3.00	62
	2/20/2013	NP	NM	NP	NP	13.87	NP	NP	3.00	113
	3/11/2013	NP	11.25	NP	NP	13.76	NP	NP	3.00	209
	4/18/2013	NP	NM	NP	NP	13.89	NP	NP	3.00	60
	5/3/2013	NP	11.10	NP	NP	11.25	NP	NP	3.00	80
	6/4/2013	NP	NM	NM	NM	13.86	NP	NP	3.00	60
	7/2/2013	NP	9.95	NP	NP	DRY	NP	NP	3.00	90
	8/7/2013	NP	10.61	NP	NP	13.68	NP	NP	3.00	25
	9/10/2013	NP	10.69	NP	NP	13.85	NP	NP	3.00	40
	10/10/2013	NP	11.23	NP	NP	D	NP	NP	3.00	25
	11/6/2013	NP	11.10	NP	NP	13.95	NP	NP	3.00	94
	1/16/2014	NP	9.89	NP	NP	12.78	NP	NP	3.00	40
	2/19/2014	NP	10.31	NP	NP	12.75	NP	NP	3.00	68
	3/24/2014	NP	11.62	NP	NP	D	NP	NP	3.00	90
	4/15/2014	NP	13.45	NP	NP	D	NP	NP	3.00	60
	5/14/2014	NP	11.17	NP	NP	D	NP	NP	3.00	39
	6/12/2014	NP	10.97	NP	NP	D	NP	NP	3.00	189*
	7/10/2014	NP	10.90	NP	NP	13.91	NP	NP	3.00	39
	8/5/2014	NP	11.31	NP	NP	13.92	NP	NP	3.00	60
	9/15/2014	NP	11.75	NP	NP	14.08	NP	NP	3.00	8
	10/15/2014	NP	13.72	NP	NP	13.79	NP	NP	3.00	20
	11/10/2014	NP	11.14	NP	NP	D	NP	NP	3.00	30
	12/8/2014	NP	11.54	NP	NP	11.69	NP	NP	3.00	87
	1/9/2015	NP	11.03	NP	NP	D	NP	NP	3.00	25
	2/6/2015	NP	9.59	NP	NP	10.02	NP	NP	3.00	50
	3/9/2015	NP	10.57	NP	NP	D	NP	NP	6.00	78
	4/6/2015	NP	10.96	NP	NP	13..66	NP	NP	6.00	25
	5/6/2015	NP	11.30	NP	NP	12.40	NP	NP	6.00	218
	6/11/2015	NP	11.29	NP	NP	13.70	NP	NP	4.00	20
	7/14/2015	NP	11.10	NP	NP	NM	NM	NM	8.00	190
	8/7/2015	NP	11.20	NP	NP	13.83	NP	NP	8.00	22
	12/9/2015	NP	12.06	NP	NP	13.17	NP	NP	8.00	110
	1/28/2016	NP	11.31	NP	NP	13.88	NP	NP	8.00	89
	2/1/2016	NP	10.70	NP	NP	12.87	NP	NP	8.00	60
	3/1/2016	NP	10.92	NP	NP	12.80	NP	NP	8.00	50
	4/20/2016	NP	11.66	NP	NP	14.02	NP	NP	6.50	50
	5/6/2016	NP	11.21	NP	NP	D	NP	NP	8.00	60
	6/8/2016	NP	11.32	NP	NP	D	NP	NP	8.00	35
	7/13/2016	NP	11.58	NP	NP	D	NP	NP	8.00	100
	8/9/2016	NP	11.16	NP	NP	13.60	NP	NP	8.00	30
	9/2/2016	NP	11.52	NP	NP	NM	NP	NP	7.00	100
	10/17/2016	NP	10.72	NP	NP	NM	NP	NP	8.00	100
	11/8/2016	NP	11.08	NP	NP	10.72	NP	NP	7.00	35
	12/7/2016	NP	11.35	NP	NP	14.08	NP	NP	7.00	35
	1/11/2017	NP	11.29	NP	NP	13.55	NP	NP	7.00	103
	2/2/2017	NP	9.63	NP	NP	NM	NP	NP	7.00	126
	3/7/2017	NP	11.56	NP	NP	13.02	NP	NP	8.00	56
	4/7/2017	NP	13.89	NP	NP	9.13	NP	NP	8.00	44
	5/3/2017	NP	10.77	NP	NP	13.77	NP	NP	7.00	60
	6/14/2017	NP	10.72	NP	NP	14.14	NP	NP	8.00	68
	7/12/2017	NP	10.71	NP	NP	D	NP	NP	7.00	68
	8/15/2017	NP	11.00	NP	NP	14.00	NP	NP	8.00	147
	9/14/2017	NP	10.81	NP	NP	10.92	NP	NP	6.00	96
	10/30/2017	NP	11.65	NP	NP	D	NP	NP	6.00	36
	11/6/2017	NP	11.66	NP	NP	D	NP	NP	8.00	125
	12/11/2017	NP	11.88	NP	NP	D	NP	NP	6.00	68
	1/16/2018	NP	11.75	NP	NP	13.19	NP	NP	8.00	25
	2/1/2018	NP	12.81	NP	NP	13.12	NP	NP	8.00	5
	3/5/2018	NP	11.40	NP	NP	11.46	NP	NP	8.00	5
	4/11/2018	NP	11.54	NP	NP	13.84	NP	NP	8.00	10
	5/3/2018	NP	11.14	NP	NP	13.91	NP	NP	8.00	10
MW-2	10/24/2008	14.58	14.85	0.27	NP	14.9	NP	0.18	1.00	118
	11/12/2008	14.64	14.67	0.03	NP	14.9	NP	0.02	1.00	120
	12/2/2008	14.76	14.80	0.04	NP	NM	NP	NP	NA	NA
	1/19/2009	14.10	14.20	0.10	NP	13.50	NP	0.07	1.50	35

Table 2
Summary of Enhanced Fluid Recovery Monitoring
204-222 4th Avenue
Brooklyn, NY

Well ID	Date	BEFORE EFR			AFTER EFR					Water Recovered (gallons)
		DTP (fbg)	DTW (fbg)	Product Thickness (ft)	DTP (fbg)	DTW (fbg)	Product Thickness (ft)	Product Recovered (gallons)	EFR (hrs)	
MW-2	2/23/2009	NP	14.10	NP	NP	NM	NP	NP	2.00	70
	3/18/2009	14.91	15.00	0.09	14.99	15.00	0.01	0.06	1.50	46
	4/28/2009	NP	14.35	NP	NP	14.35	NP	NP	2.00	37
	5/19/2009	NM	NM	NM	NM	NM	NM	NM	NA	NA
	6/29/2009	NP	13.70	NP	13.71	NA	NA	NA	NA	NA
	7/27/2009	NP	14.16	NP	NP	14.16	NP	NP	1.00	12
	8/10/2009	13.10	13.15	0.05	NM	NM	NM	NM	1.50	28
	9/28/2009	NP	14.24	NP	NP	14.25	NP	NP	1.00	15
	10/20/2009	NP	14.62	NP	NP	14.58	NP	NP	1.50	16
	4/12/2010	13.91	13.92	0.01	NP	13.89	NP	0.01	3.00	330
	5/11/2010	NP	14.33	NP	NP	14.32	NP	NP	3.00	136
	6/28/2010	NP	14.52	NP	NP	15.29	NP	NP	3.00	62.5
	8/24/2010	14.74	14.76	0.02	NP	14.78	NP	0.01	3.00	65
	9/14/2010	NP	14.73	NP	NP	14.86	NP	NP	3.00	120
	10/5/2010	13.75	13.78	0.03	NP	15.06	NP	0.02	3.00	105
	2/22/2011	NP	14.68	NP	NP	15.01	NP	NP	3.00	80
	6/6/2011	NP	14.42	NP	NP	14.72	NP	NP	3.00	56
	7/26/2011	NP	12.84	NP	NP	15.03	NP	NP	3.00	44
	8/17/2011	NP	13.71	NP	NP	NM	NP	NP	3.00	123
	9/23/2011	NP	13.38	NP	NP	NM	NP	NP	3.00	200
	10/20/2011	NP	13.31	NP	NP	13.28	NP	NP	3.00	129
	11/2/2011	NP	13.62	NP	NP	13.74	NP	NP	3.00	124
	12/28/2011	NP	14.14	NP	NP	NM	NP	NP	3.00	292
	1/10/2012	NP	14.57	NP	NP	NM	NP	NP	3.00	135
	3/14/2012	NP	15.08	NP	NP	15.06	NP	NP	3.00	48
	4/9/2012	NP	14.83	NP	NP	15.01	NP	NP	3.00	150
	5/2/2012	NP	15.28	NP	NP	15.25	NP	NP	3.00	79
	6/7/2012	NP	14.60	NP	NP	16.57	NP	NP	3.00	97
	7/16/2012	NP	14.96	NP	NP	14.95	NP	NP	3.00	230
	8/22/2012	NP	14.07	NP	NP	14.33	NP	NP	3.00	111
	9/24/2012	NP	13.89	NP	NP	13.97	NP	NP	3.00	94
	11/13/2012	NP	14.54	NP	NP	14.79	NP	NP	3.00	57
	12/3/2012	NP	14.99	NP	NP	15.28	NP	NP	3.00	145
	1/17/2013	NP	14.95	NP	NP	15.13	NP	NP	3.00	63
	2/20/2013	NP	14.04	NP	NP	15.95	NP	NP	3.00	112
	3/11/2013	NP	14.95	NP	NP	14.96	NP	NP	3.00	183
	4/18/2013	NP	15.36	NP	NP	15.70	NP	NP	3.00	240
	5/3/2013	NP	15.50	NP	NP	15.64	NP	NP	3.00	206
	6/4/2013	NP	15.04	NP	NP	15.42	NP	NP	3.00	205
	7/2/2013	NP	14.33	NP	NP	14.49	NP	NP	3.00	215
	8/7/2013	NP	14.71	NP	NP	14.78	NP	NP	3.00	200
	9/10/2013	NP	14.92	NP	NP	D	NP	NP	3.00	210
	10/10/2013	NP	15.01	NP	NP	15.31	NP	NP	3.00	325
	11/6/2013	NP	15.47	NP	NP	15.98	NP	MP	3.00	156
	1/16/2014	NP	16.98	NP	NP	17.24	NP	NP	3.00	100
	2/19/2014	NP	15.04	NP	NP	14.92	NP	NP	3.00	172
	3/24/2014	NP	15.28	NP	NP	16.39	NP	NP	3.00	150
	4/15/2014	NP	15.00	NP	NP	16.41	NP	NP	3.00	150
	5/14/2014	NP	14.62	NP	NP	14.62	NP	NP	3.00	175
	6/12/2014	NP	14.75	NP	NP	15.77	NP	NP	3.00	189*
	7/10/2014	NP	14.72	NP	NP	14.81	NP	NP	3.00	426
	8/5/2014	NP	14.62	NP	NP	15.40	NP	NP	3.00	200
	9/15/2014	NP	14.97	NP	NP	15.42	NP	NP	3.00	350
	10/15/2014	NP	15.03	NP	NP	15.29	NP	NP	3.00	325
	11/10/2014	NP	15.00	NP	NP	15.63	NP	NP	3.00	150
	12/8/2014	NP	14.78	NP	NP	14.76	NP	NP	3.00	100
	1/9/2015	NP	14.40	NP	NP	16.21	NP	NP	3.00	25
	2/6/2015	NP	14.61	NP	NP	14.43	NP	NP	3.00	100
	6/11/2015	NP	14.52	NP	NP	15.70	NP	NP	4.00	109
	9/16/2015	NP	11.68	NP	NP	D	NP	NP	8.00	96
	10/9/2015	NP	11.60	NP	NP	D	NP	NP	8.00	252
	11/4/2015	NP	11.88	NP	NP	D	NP	NP	8.00	30

NOTE:
fbg - feet below grade
NP - No product
NA - Not available
NM - Not measured
D - Dry

Table 3
Summary of Short Term Remediation Events (STREs)
204-222 4th Avenue
Brooklyn, NY

Extraction Well/ Sparge Well	Date	SVE Vacuum ("H2O)	SVE Flow (cfm)	AS Pressure (psi)	AS Flow (cfm)	PID Effluent (ppm)
MW-2/ AS-2	12/8/2014	>60	40	7	15	290
SVE-6/ AS-1	1/9/2015	40	105	7.5	18	313
	2/6/2015	45	>110	8	14	233
	3/9/2015	52	80	8	14	357
	4/6/2015	50	80	7.5	16	241
	5/6/2015	35	70	10.5	11	208.1
	7/14/2015	35	80	9	12	210
	8/7/2015	52	90	9	13	500
	9/16/2015	52	88	9	12	606
	10/9/2015	46	70	2	20	496
	9/16/2015	52	88	9	12	606
	10/9/2015	46	70	2	20	496
	11/4/2015	32	95	9.5	12	736
	12/9/2015	46	85	8	13	589
	1/28/2016	40	85	8	14	499
	2/1/2016	44	85	13	18	402
	3/1/2016	25	95	9	12	376
	4/20/2016	29	>125	9.4	13	290
	5/6/2016	32	>125	14	8	352
	6/8/2016	30	>125	8	13	341
	7/13/2016	12	110	9	18	290
	8/9/2016	46	110	9	10	318
	9/2/2016	14	110	10	20	286
	10/17/2016	20	90	7.5	14	402.1
	11/8/2016	50	90	10	15	291.1
	12/7/2016	20	35	7	10	665.3
	1/11/2017	41	80	9	45	405.6
	2/2/2017	52	90	9	14	290.8
	3/7/2017	90	50	13	11	324.1
	4/7/2017	90	53	9	14	175.5
	6/14/2017	13	90	8	11	95.3
	7/12/2017	49	90	8	14	165.4
	8/15/2017	45	80	9	12	131.2
	9/14/2017	21	38	9.5	9	408.1
	10/30/2017	55	100	8	12	77.7
	11/6/2017	55	90	8	9	360.9
	12/11/2017	54	92	7.5	115	308.7
	1/16/2018	59	90	9	12	850.1
	2/1/2018	58	90	9	15	275.7
	3/5/2018	50	90	8	20	215.8
	4/11/2018	5	90	10	14	90.9
	5/3/2018	55	92	9.5	14	106.5

Notes:
cfm - cubic feet per minute
psi - pounds per square inch
ppm - parts per million

AERIAL PHOTOGRAPH

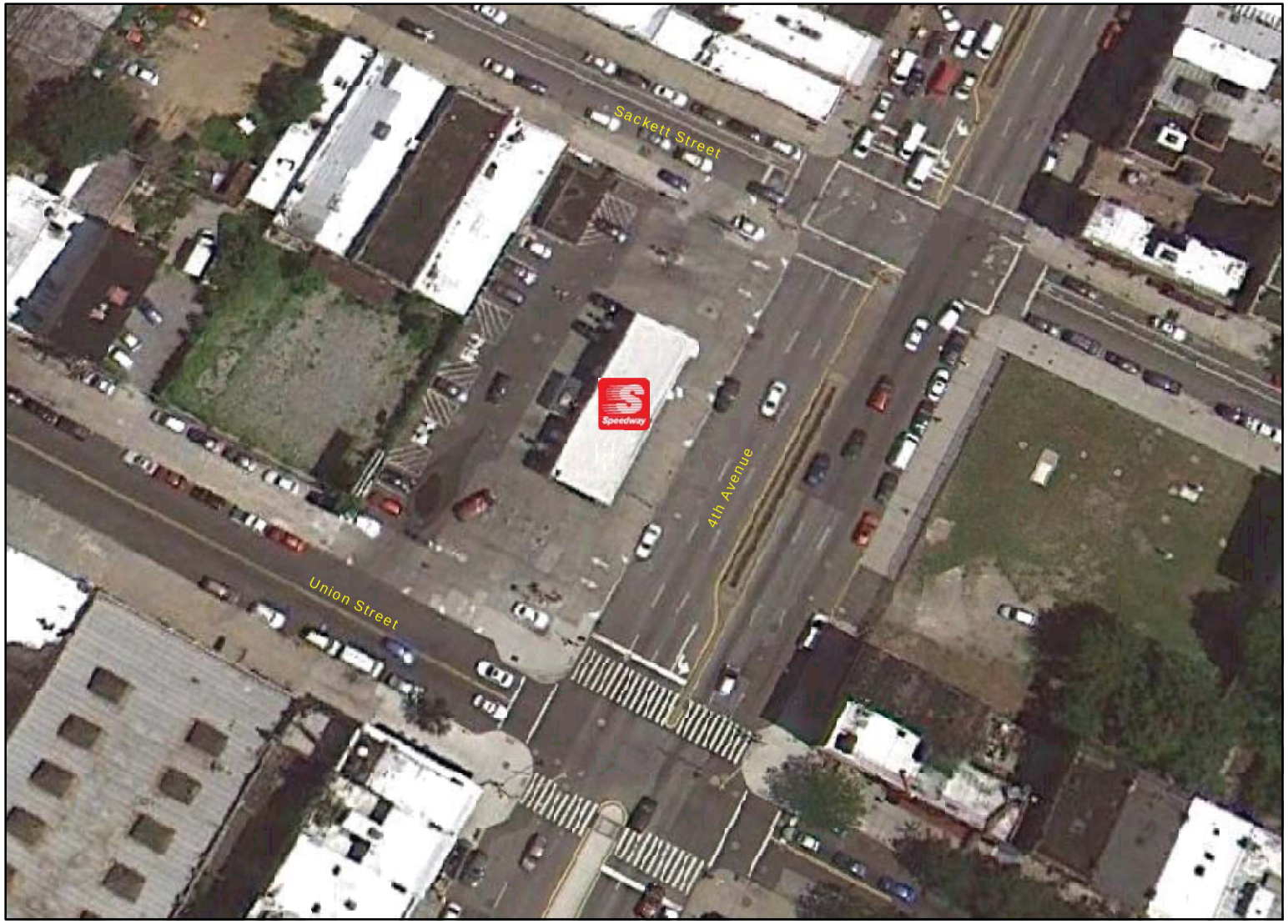


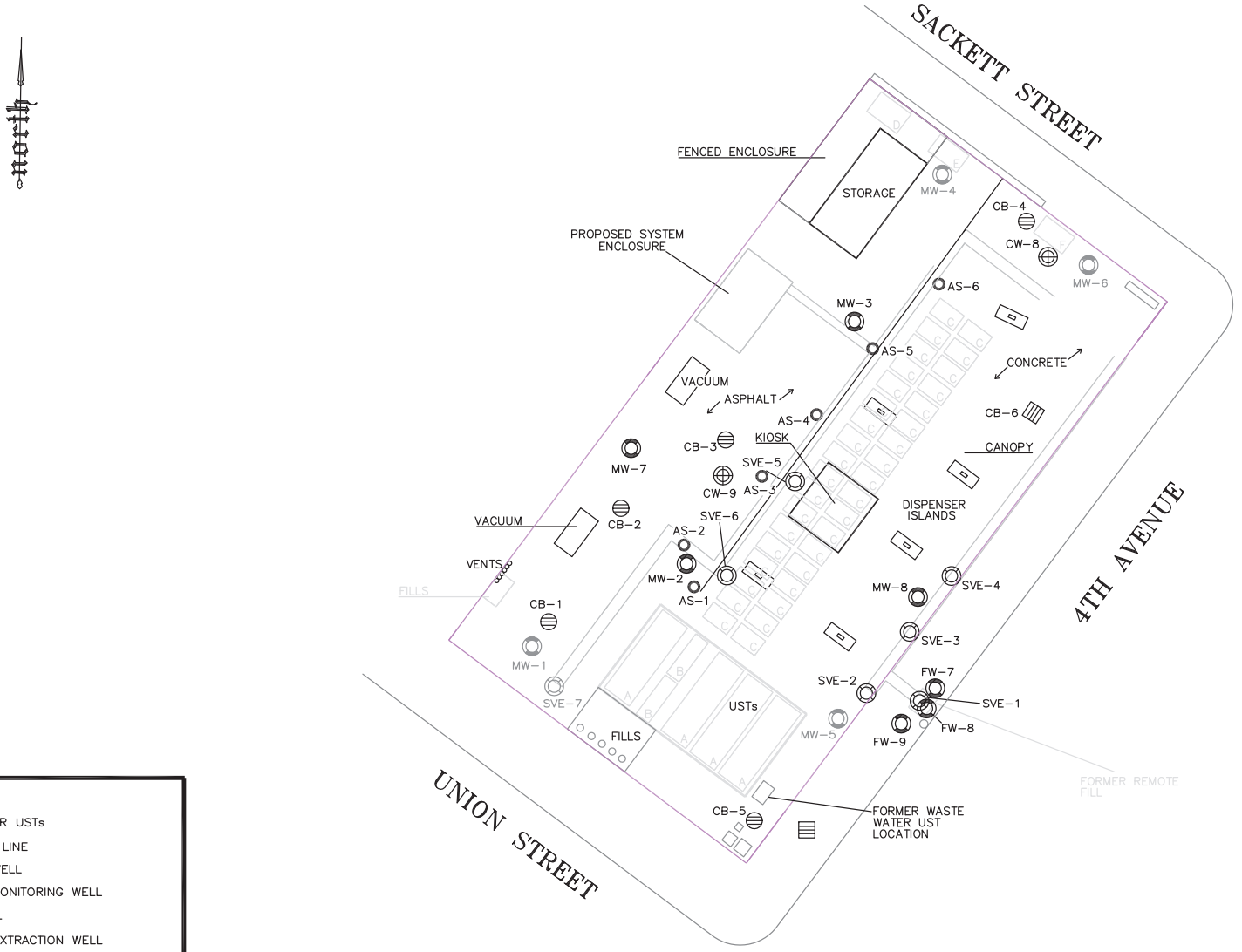
Figure 1
Aerial Photograph

Speedway #7835 (Hess #32530)
204-222 4th Avenue
Brooklyn, NY

Digital Imagery taken in 2010

N
W E
S

EnviroTrac
Environmental Services
5 Old Dock Road
Yaphank, NY 11980
P: 631-924-3001 F:631-924-5001



LEGEND:

- FORMER USTs
- PROPERTY LINE
- MONITORING WELL
- ABANDONED MONITORING WELL
- CLUSTER WELL
- SOIL VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- CATCH BASIN

Note: Base map taken from DELTA map dated 1/9/08

EnviroTrac
ENVIRONMENTAL SERVICES
5 OLD DOCK ROAD, YAPHANK, NEW YORK 11980
PHONE: (631)924-3001 FAX: (631)924-5001

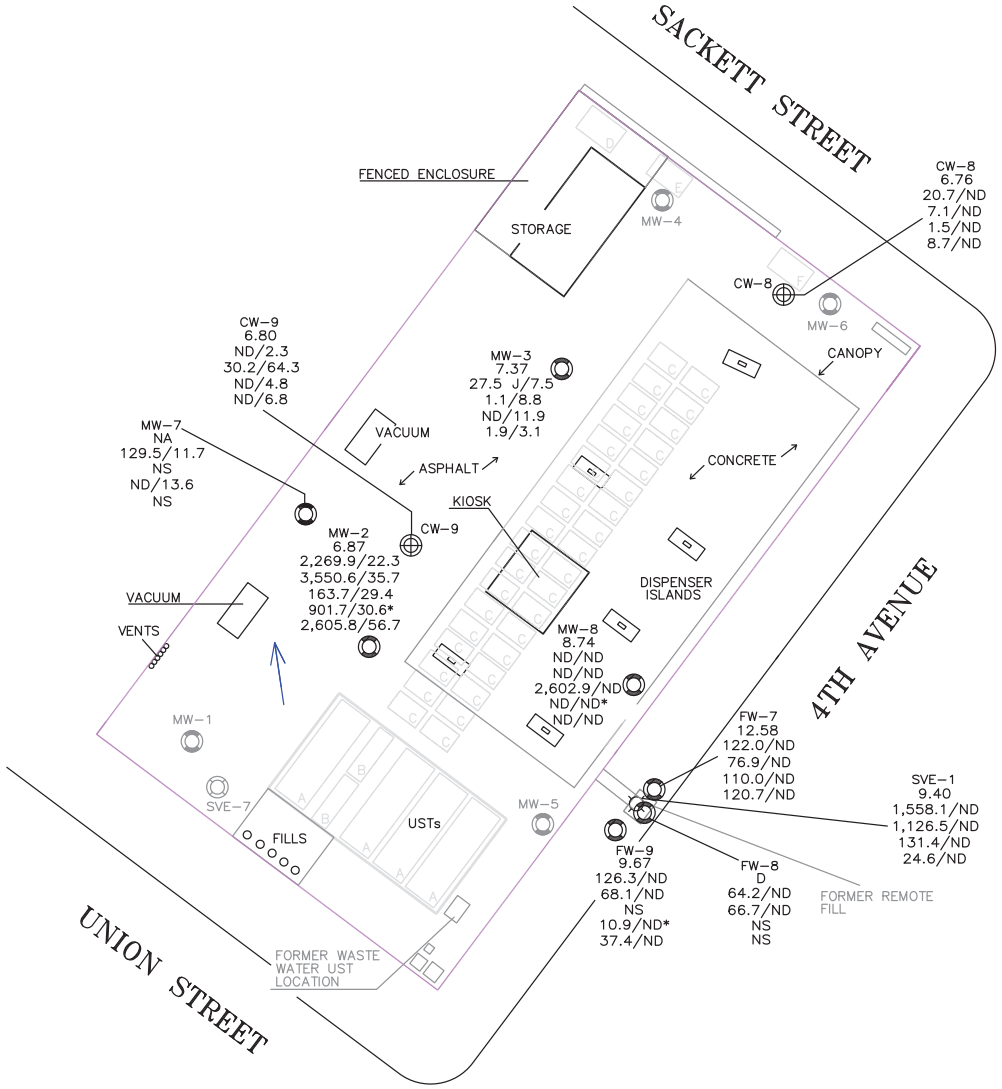
0 15 FT 30

REVISION DATE: FEBRUARY 7, 2018 | SCALE: 1" = 30 FEET | REVISED BY: TB

SPEEDWAY # 7835
204-222 FOURTH AVENUE
BROOKLYN, NEW YORK

SITE PLAN

FIGURE # 2



north

LEGEND:

- FORMER USTs
- PROPERTY LINE
- MONITORING WELL
- CLUSTER WELL
- SOIL VAPOR EXTRACTION WELL
- ABANDONED WELL

NSD = NO SURVEY DATA
NS = NOT SAMPLED
MDL = METHOD DETECTION LIMIT
D = DRY
ND = NOT DETECTED
NA = NOT ACCESSIBLE
J = ESTIMATED VALUE
* = WELL RE-SAMPLED ON APRIL 12, 2018

= INFERRED GROUNDWATER FLOW DIRECTION

SAMPLE WELL:

MW-3 = MONITORING WELL ID
7.37 = WATER-TABLE ELEVATION
27.5 J/7.5 = AUGUST 23, 2017
1.1/8.8 = NOVEMBER 21, 2017
ND/11.9 = FEBRUARY 2, 2018
1.9/3.1 = MAY 8, 2018

TOTAL BTEX/MTBE CONCENTRATIONS IN ug/L

Note: Base map taken from DELTA map dated 1/9/08

EnviroTrac
ENVIRONMENTAL SERVICES
5 OLD DOCK ROAD, YAPHANK, NEW YORK 11980
PHONE: (631)924-3001 FAX: (631)924-5001

0 15 FT 30

REVISION DATE: JUNE 22, 2018 | SCALE: 1" = 30 FEET | REVISED BY: TB

SPEEDWAY # 7835
204-222 FOURTH AVENUE
BROOKLYN, NEW YORK

WATER-TABLE ELEVATION ON MAY 8, 2018
TOTAL DISSOLVED BTEX/MTBE CONCENTRATIONS MAP

FIGURE # 3

Figure 4
Hydrograph of MW-2
204-222 4th Avenue
Brooklyn, NY

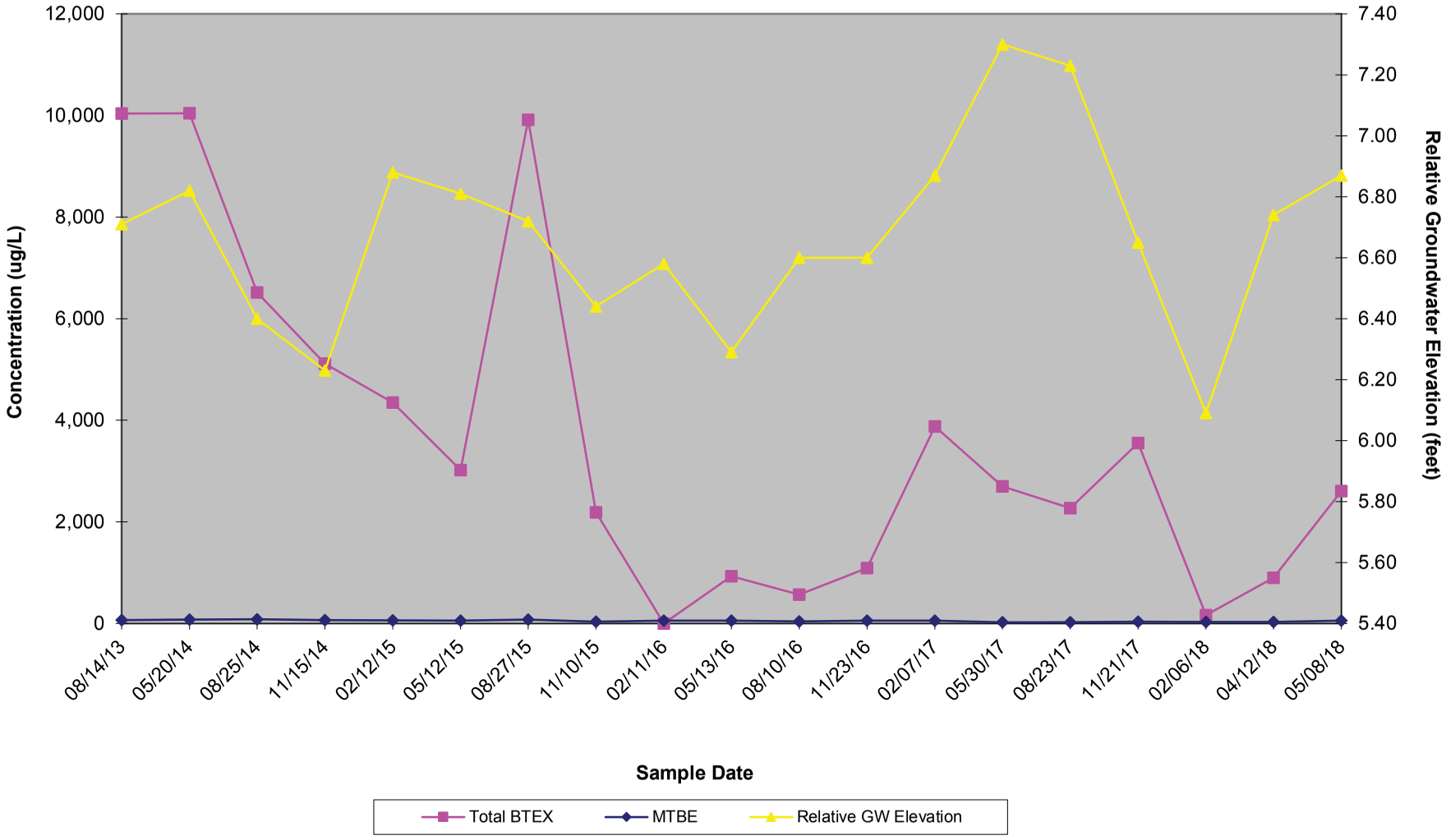


Figure 5
Hydrograph of MW-3
204-222 4th Avenue
Brooklyn, NY

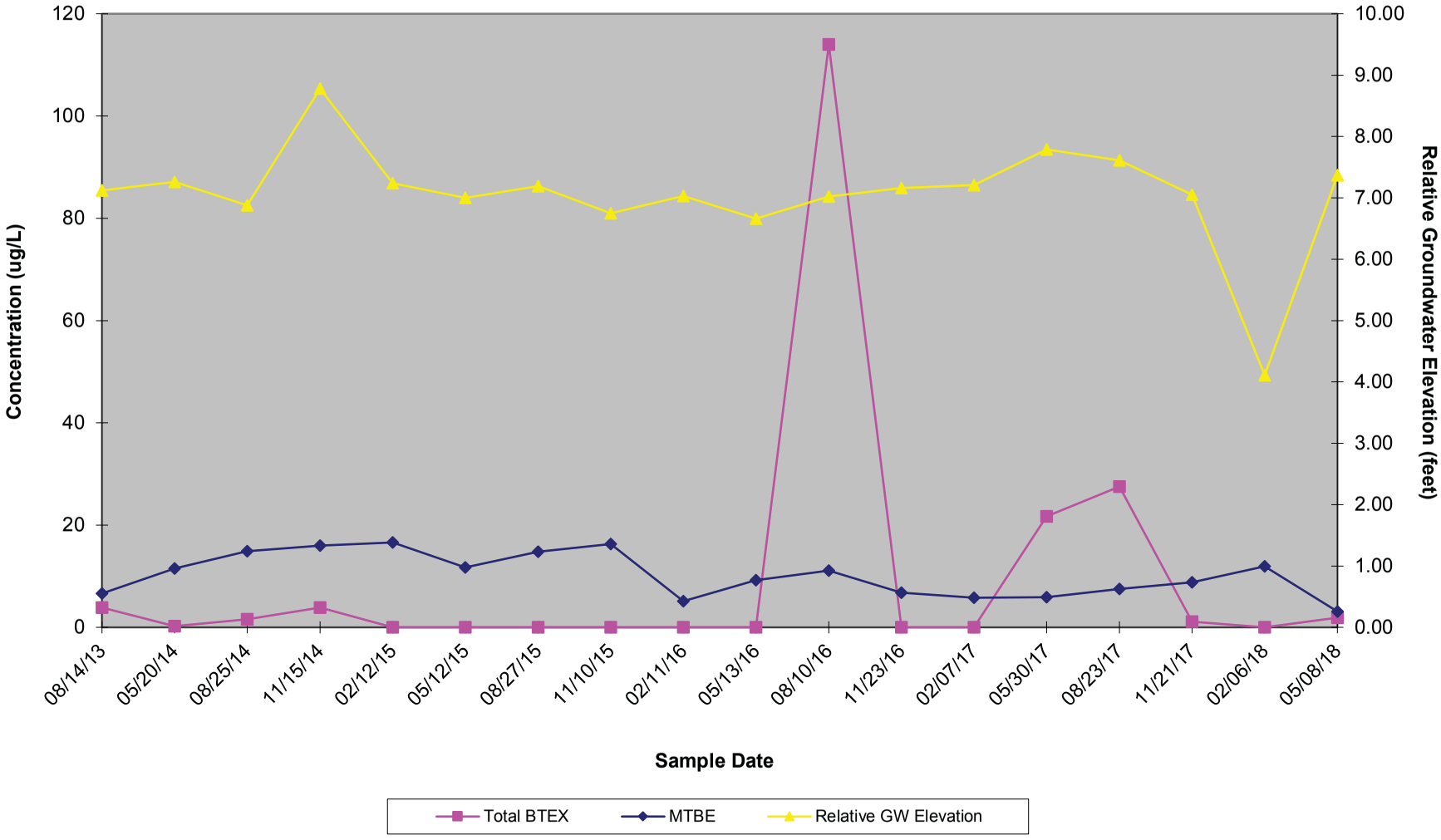


Figure 6
Hydrograph of MW-7
204-222 4th Avenue
Brooklyn, NY

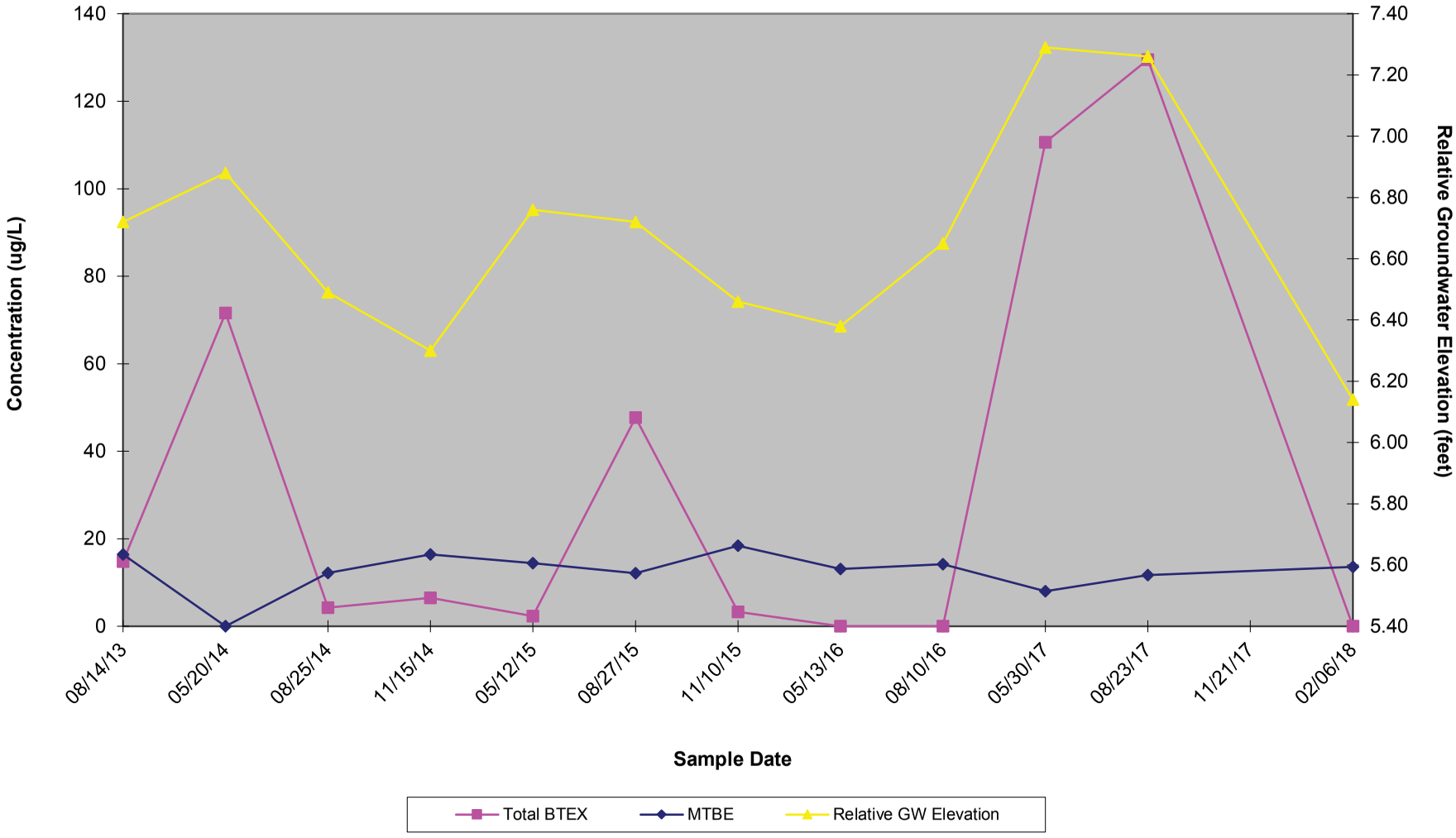


Figure 7
Hydrograph of FW-8
204-222 4th Avenue
Brooklyn, NY

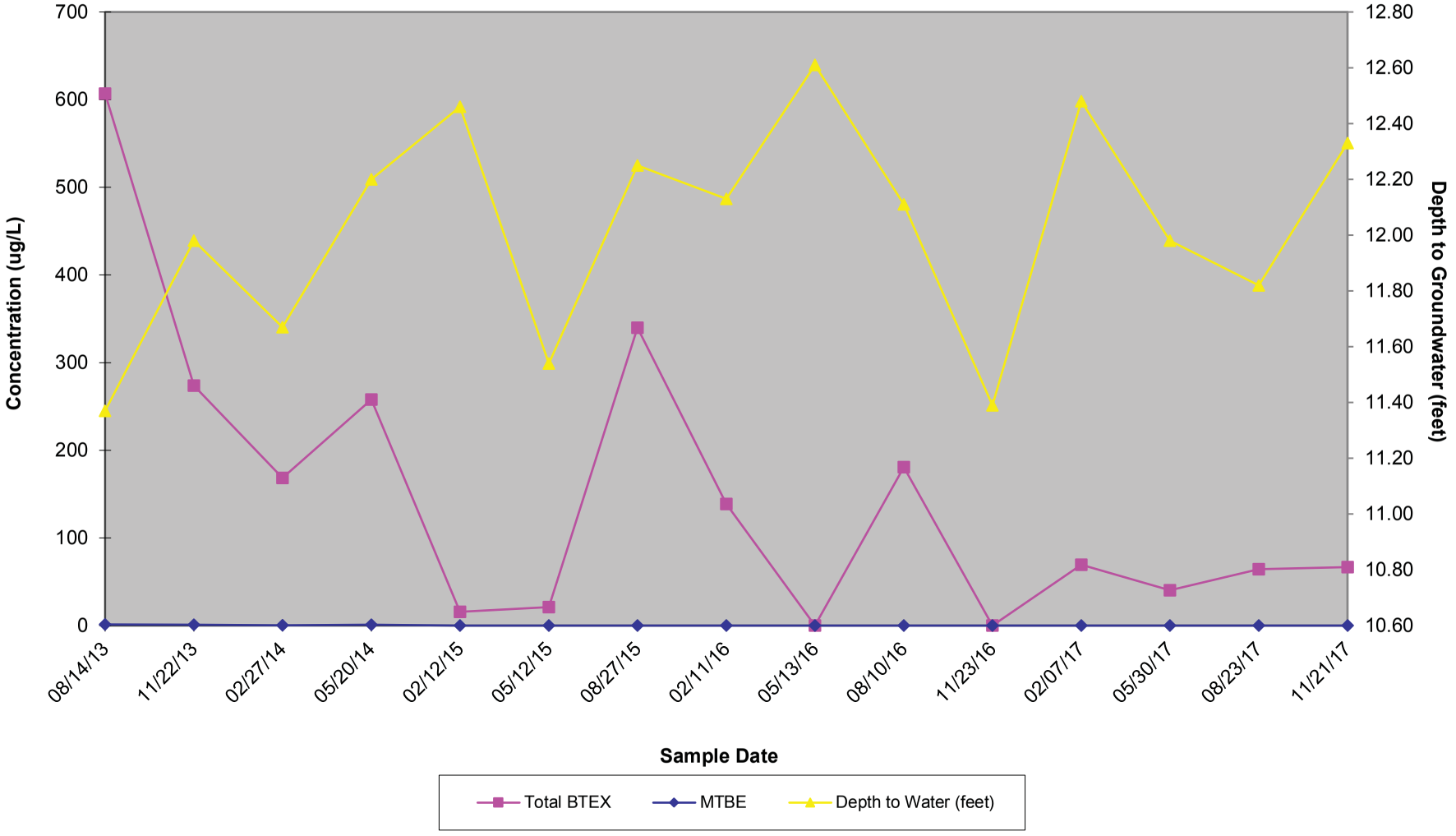
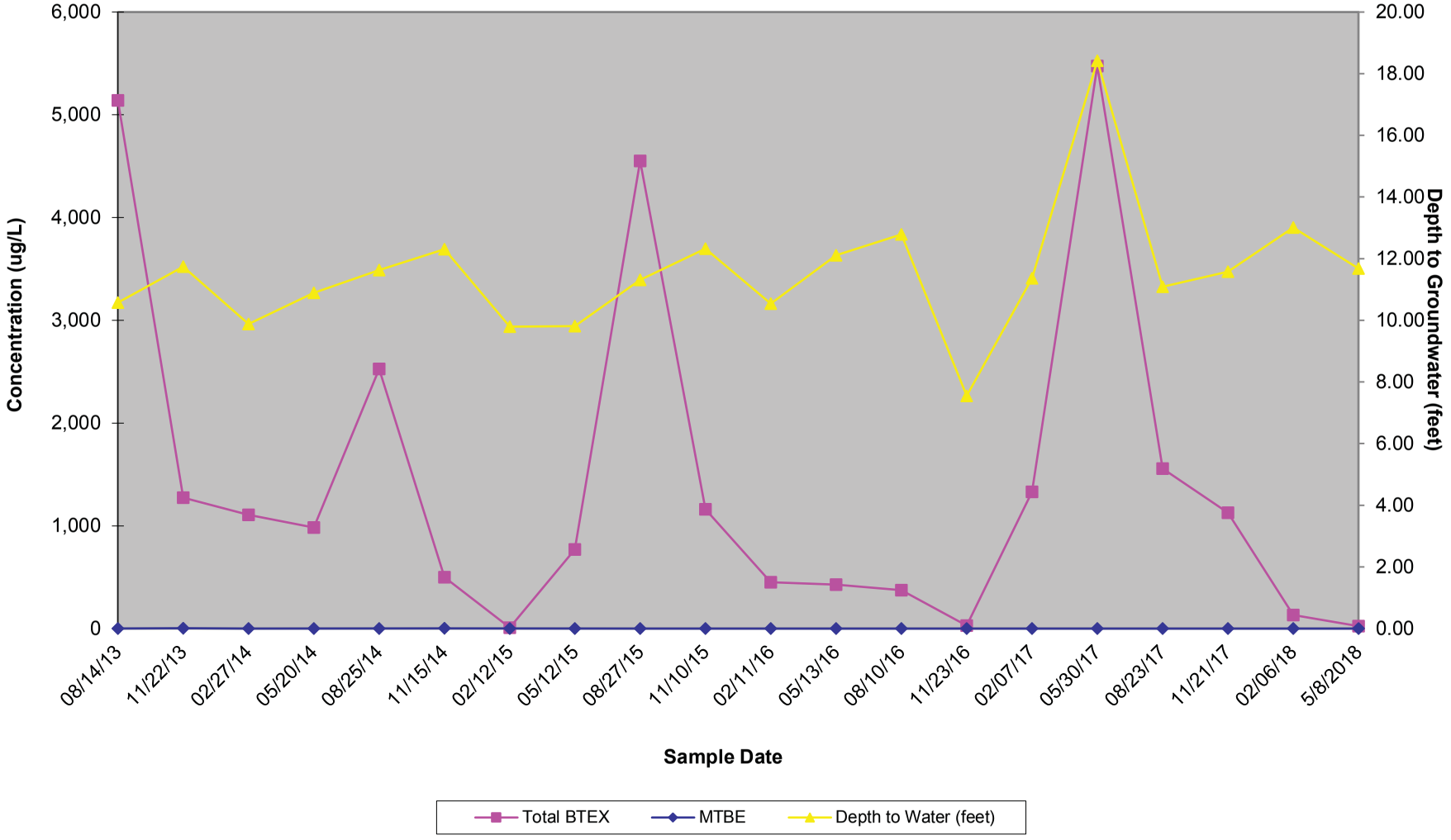


Figure 8
Hydrograph of SVE-1
204-222 4th Avenue
Brooklyn, NY



Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

May 18, 2018

Mr. Ed Russo
Envirotrac
5 Old Dock Road
Yaphank, NY 11980

RE: Project: SPEEDWAY #7835
Pace Project No.: 7051049

Dear Mr. Russo:
Enclosed are the analytical results for sample(s) received by the laboratory on May 09, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

John D. Stanton
john.stanton@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Ms. Crystal Bakewicz, Envirotrac
Priscilla Dejesus, Envirotrac
Mr. Joe Rennie, Envirotrac
Mr. Dan Ruffini, Envirotrac

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: SPEEDWAY #7835
Pace Project No.: 7051049

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435
Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: SPEEDWAY #7835
Pace Project No.: 7051049

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7051049001	**CW-8**	EPA 8260C/5030C	BBL	8	PACE-MV
7051049002	**CW-9**	EPA 8260C/5030C	BBL	8	PACE-MV
7051049003	**FW-7**	EPA 8260C/5030C	BBL	8	PACE-MV
7051049004	**FW-9**	EPA 8260C/5030C	BBL	8	PACE-MV
7051049005	**MW-2**	EPA 8260C/5030C	BBL	8	PACE-MV
7051049006	**MW-3**	EPA 8260C/5030C	BBL	8	PACE-MV
7051049007	**MW-8**	EPA 8260C/5030C	BBL	8	PACE-MV
7051049008	**SVE-1**	EPA 8260C/5030C	BBL	8	PACE-MV

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: SPEEDWAY #7835
Pace Project No.: 7051049

Sample: CW-8 **Lab ID: 7051049001** Collected: 05/08/18 10:11 Received: 05/09/18 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Initial Volume/Weight: 5 mL Final Volume/Weight: 5 mL							
Benzene	**3.9**	ug/L	1.0	1		05/10/18 19:01	71-43-2	
Ethylbenzene	**1.2**	ug/L	1.0	1		05/10/18 19:01	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		05/10/18 19:01	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		05/10/18 19:01	108-88-3	
Xylene (Total)	**3.6**	ug/L	3.0	1		05/10/18 19:01	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	88	%	68-153	1		05/10/18 19:01	17060-07-0	
4-Bromofluorobenzene (S)	97	%	79-124	1		05/10/18 19:01	460-00-4	
Toluene-d8 (S)	88	%	69-124	1		05/10/18 19:01	2037-26-5	

Sample: CW-9 **Lab ID: 7051049002** Collected: 05/08/18 09:16 Received: 05/09/18 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Initial Volume/Weight: 5 mL Final Volume/Weight: 5 mL							
Benzene	**<1.0**	ug/L	1.0	1		05/10/18 19:21	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/10/18 19:21	100-41-4	
Methyl-tert-butyl ether	**6.8**	ug/L	1.0	1		05/10/18 19:21	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		05/10/18 19:21	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/10/18 19:21	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%	68-153	1		05/10/18 19:21	17060-07-0	
4-Bromofluorobenzene (S)	101	%	79-124	1		05/10/18 19:21	460-00-4	
Toluene-d8 (S)	92	%	69-124	1		05/10/18 19:21	2037-26-5	

Sample: FW-7 **Lab ID: 7051049003** Collected: 05/08/18 10:53 Received: 05/09/18 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Initial Volume/Weight: 5 mL Final Volume/Weight: 5 mL							
Benzene	**3.0**	ug/L	1.0	1		05/10/18 19:42	71-43-2	
Ethylbenzene	**53.4**	ug/L	1.0	1		05/10/18 19:42	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		05/10/18 19:42	1634-04-4	
Toluene	**3.0**	ug/L	1.0	1		05/10/18 19:42	108-88-3	
Xylene (Total)	**61.3**	ug/L	3.0	1		05/10/18 19:42	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%	68-153	1		05/10/18 19:42	17060-07-0	
4-Bromofluorobenzene (S)	105	%	79-124	1		05/10/18 19:42	460-00-4	
Toluene-d8 (S)	95	%	69-124	1		05/10/18 19:42	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: SPEEDWAY #7835
Pace Project No.: 7051049

Sample: FW-9 **Lab ID: 7051049004** Collected: 05/08/18 11:37 Received: 05/09/18 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Initial Volume/Weight: 5 mL Final Volume/Weight: 5 mL							
Benzene	**23.3**	ug/L	1.0	1		05/10/18 20:02	71-43-2	
Ethylbenzene	**4.6**	ug/L	1.0	1		05/10/18 20:02	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		05/10/18 20:02	1634-04-4	
Toluene	**1.2**	ug/L	1.0	1		05/10/18 20:02	108-88-3	
Xylene (Total)	**8.3**	ug/L	3.0	1		05/10/18 20:02	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%	68-153	1		05/10/18 20:02	17060-07-0	
4-Bromofluorobenzene (S)	102	%	79-124	1		05/10/18 20:02	460-00-4	
Toluene-d8 (S)	93	%	69-124	1		05/10/18 20:02	2037-26-5	

Sample: MW-2 **Lab ID: 7051049005** Collected: 05/08/18 08:21 Received: 05/09/18 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Initial Volume/Weight: 5 mL Final Volume/Weight: 5 mL							
Benzene	**620**	ug/L	20.0	20		05/12/18 13:52	71-43-2	
Ethylbenzene	**911**	ug/L	20.0	20		05/12/18 13:52	100-41-4	
Methyl-tert-butyl ether	**56.7**	ug/L	1.0	1		05/10/18 20:22	1634-04-4	
Toluene	**34.8**	ug/L	1.0	1		05/10/18 20:22	108-88-3	
Xylene (Total)	**1040**	ug/L	60.0	20		05/12/18 13:52	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	85	%	68-153	1		05/10/18 20:22	17060-07-0	
4-Bromofluorobenzene (S)	100	%	79-124	1		05/10/18 20:22	460-00-4	
Toluene-d8 (S)	93	%	69-124	1		05/10/18 20:22	2037-26-5	

Sample: MW-3 **Lab ID: 7051049006** Collected: 05/08/18 08:50 Received: 05/09/18 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Initial Volume/Weight: 5 mL Final Volume/Weight: 5 mL							
Benzene	**<1.0**	ug/L	1.0	1		05/10/18 20:42	71-43-2	
Ethylbenzene	**1.9**	ug/L	1.0	1		05/10/18 20:42	100-41-4	
Methyl-tert-butyl ether	**3.1**	ug/L	1.0	1		05/10/18 20:42	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		05/10/18 20:42	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/10/18 20:42	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	88	%	68-153	1		05/10/18 20:42	17060-07-0	
4-Bromofluorobenzene (S)	103	%	79-124	1		05/10/18 20:42	460-00-4	
Toluene-d8 (S)	93	%	69-124	1		05/10/18 20:42	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: SPEEDWAY #7835
Pace Project No.: 7051049

Sample: MW-8 **Lab ID: 7051049007** Collected: 05/08/18 10:42 Received: 05/09/18 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Initial Volume/Weight: 5 mL Final Volume/Weight: 5 mL							
Benzene	**<1.0**	ug/L	1.0	1		05/10/18 21:02	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/10/18 21:02	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		05/10/18 21:02	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		05/10/18 21:02	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/10/18 21:02	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%	68-153	1		05/10/18 21:02	17060-07-0	
4-Bromofluorobenzene (S)	102	%	79-124	1		05/10/18 21:02	460-00-4	
Toluene-d8 (S)	92	%	69-124	1		05/10/18 21:02	2037-26-5	

Sample: SVE-1 **Lab ID: 7051049008** Collected: 05/08/18 11:54 Received: 05/09/18 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Initial Volume/Weight: 5 mL Final Volume/Weight: 5 mL							
Benzene	**8.1**	ug/L	1.0	1		05/12/18 17:34	71-43-2	
Ethylbenzene	**3.2**	ug/L	1.0	1		05/12/18 17:34	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		05/12/18 17:34	1634-04-4	
Toluene	**1.4**	ug/L	1.0	1		05/12/18 17:34	108-88-3	
Xylene (Total)	**11.9**	ug/L	3.0	1		05/12/18 17:34	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	88	%	68-153	1		05/12/18 17:34	17060-07-0	
4-Bromofluorobenzene (S)	104	%	79-124	1		05/12/18 17:34	460-00-4	
Toluene-d8 (S)	92	%	69-124	1		05/12/18 17:34	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: SPEEDWAY #7835
Pace Project No.: 7051049

QC Batch: 66985 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Associated Lab Samples: 7051049001, 7051049002, 7051049003, 7051049004, 7051049005, 7051049006, 7051049007

METHOD BLANK: 306923 Matrix: Water
Associated Lab Samples: 7051049001, 7051049002, 7051049003, 7051049004, 7051049005, 7051049006, 7051049007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<1.0	1.0	05/10/18 13:37	
Ethylbenzene	ug/L	<1.0	1.0	05/10/18 13:37	
Methyl-tert-butyl ether	ug/L	<1.0	1.0	05/10/18 13:37	
Toluene	ug/L	<1.0	1.0	05/10/18 13:37	
Xylene (Total)	ug/L	<3.0	3.0	05/10/18 13:37	
1,2-Dichloroethane-d4 (S)	%	85	68-153	05/10/18 13:37	
4-Bromofluorobenzene (S)	%	103	79-124	05/10/18 13:37	
Toluene-d8 (S)	%	95	69-124	05/10/18 13:37	

LABORATORY CONTROL SAMPLE: 306924

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	45.1	90	73-119	
Ethylbenzene	ug/L	50	43.2	86	70-113	
Methyl-tert-butyl ether	ug/L	50	50.1	100	72-131	
Toluene	ug/L	50	45.3	91	72-119	
Xylene (Total)	ug/L	150	131	88	71-109	
1,2-Dichloroethane-d4 (S)	%			86	68-153	
4-Bromofluorobenzene (S)	%			101	79-124	
Toluene-d8 (S)	%			96	69-124	

MATRIX SPIKE SAMPLE: 308099

Parameter	Units	7051075006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	<0.70	50	53.2	106	73-119	
Ethylbenzene	ug/L	<1.0	50	50.6	101	70-113	
Methyl-tert-butyl ether	ug/L	<1.0	50	59.9	120	72-131	
Toluene	ug/L	<1.0	50	53.9	108	72-119	
Xylene (Total)	ug/L	<3.0	150	152	102	71-109	
1,2-Dichloroethane-d4 (S)	%				87	68-153	
4-Bromofluorobenzene (S)	%				103	79-124	
Toluene-d8 (S)	%				93	69-124	

SAMPLE DUPLICATE: 308098

Parameter	Units	7051075002 Result	Dup Result	RPD	Qualifiers
Benzene	ug/L	<0.70	<1.0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: SPEEDWAY #7835
Pace Project No.: 7051049

SAMPLE DUPLICATE: 308098

Parameter	Units	7051075002 Result	Dup Result	RPD	Qualifiers
Ethylbenzene	ug/L	<1.0	<1.0		
Methyl-tert-butyl ether	ug/L	<1.0	<1.0		
Toluene	ug/L	<1.0	<1.0		
Xylene (Total)	ug/L	<3.0	<3.0		
1,2-Dichloroethane-d4 (S)	%	87	90	3	
4-Bromofluorobenzene (S)	%	103	102	1	
Toluene-d8 (S)	%	94	93	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: SPEEDWAY #7835
Pace Project No.: 7051049

QC Batch: 67236
QC Batch Method: EPA 8260C/5030C
Associated Lab Samples: 7051049008

Analysis Method: EPA 8260C/5030C
Analysis Description: 8260 MSV

METHOD BLANK: 308252
Matrix: Water
Associated Lab Samples: 7051049008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<1.0	1.0	05/12/18 12:58	
Ethylbenzene	ug/L	<1.0	1.0	05/12/18 12:58	
Methyl-tert-butyl ether	ug/L	<1.0	1.0	05/12/18 12:58	
Toluene	ug/L	<1.0	1.0	05/12/18 12:58	
Xylene (Total)	ug/L	<3.0	3.0	05/12/18 12:58	
1,2-Dichloroethane-d4 (S)	%	84	68-153	05/12/18 12:58	
4-Bromofluorobenzene (S)	%	101	79-124	05/12/18 12:58	
Toluene-d8 (S)	%	94	69-124	05/12/18 12:58	

LABORATORY CONTROL SAMPLE: 308253

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	44.6	89	73-119	
Ethylbenzene	ug/L	50	42.8	86	70-113	
Methyl-tert-butyl ether	ug/L	50	47.9	96	72-131	
Toluene	ug/L	50	44.8	90	72-119	
Xylene (Total)	ug/L	150	131	87	71-109	
1,2-Dichloroethane-d4 (S)	%			82	68-153	
4-Bromofluorobenzene (S)	%			103	79-124	
Toluene-d8 (S)	%			94	69-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 308273 308274

Parameter	Units	7050817001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Benzene	ug/L	239	50	50	288	284	98	90	73-119	1	E
Ethylbenzene	ug/L	<1.0	50	50	50.5	48.4	101	97	70-113	4	
Methyl-tert-butyl ether	ug/L	28.9	50	50	86.4	85.6	115	113	72-131	1	
Toluene	ug/L	4.8	50	50	59.0	56.9	108	104	72-119	4	
Xylene (Total)	ug/L	3.9	150	150	152	149	99	96	71-109	3	
1,2-Dichloroethane-d4 (S)	%						85	84	68-153		
4-Bromofluorobenzene (S)	%						101	102	79-124		
Toluene-d8 (S)	%						90	91	69-124		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: SPEEDWAY #7835
Pace Project No.: 7051049

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PACE-MV Pace Analytical Services - Melville

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SPEEDWAY #7835
Pace Project No.: 7051049

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7051049001	**CW-8**	EPA 8260C/5030C	66985		
7051049002	**CW-9**	EPA 8260C/5030C	66985		
7051049003	**FW-7**	EPA 8260C/5030C	66985		
7051049004	**FW-9**	EPA 8260C/5030C	66985		
7051049005	**MW-2**	EPA 8260C/5030C	66985		
7051049006	**MW-3**	EPA 8260C/5030C	66985		
7051049007	**MW-8**	EPA 8260C/5030C	66985		
7051049008	**SVE-1**	EPA 8260C/5030C	67236		

WO#:7051049

7051049

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CHAIN-OF-CUSTODY / Analytical Request Docu

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed acc

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	EnviroTrac Ltd.	Report To:	edr@envirotrac.com	Attention:	
Address:	5 Old Dock Road	Copy To:		Company Name:	
	Yaphank, NY 11980			Address:	
Email To:	edr@envirotrac.com	Purchase Order No.:		Pace Quote Reference:	
Phone: 631-924-3001	Fax:	Project Name:	Sackett	Pace Project Manager:	
Requested Due Date/TAT:	Standard	Project Number:	Speedway #7835	Pace Profile #:	

REGULATORY AGENCY		
NPDES	GROUND WATER (circled)	DRINKING WATER
UST	RCRA	OTHER
Site Location STATE:	NY	

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	BTEX/ MTBE 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-2	WT	G	-	-	5/8	0821		2				2						X		
2	MW-3	WT	G	-	-	5/8	0850		2				2						X		
3	~~MW-7~~	~~WT~~	~~G~~	-	-				~~2~~				~~2~~						~~X~~		NO sample taken
4	MW-8	WT	G	-	-	5/8	1042		2				2						X		
5	FW-7	WT	G	-	-	5/8	1053		2				2						X		
6	~~FW-8~~	~~WT~~	~~G~~						~~2~~				~~2~~						~~X~~		NO sample taken
7	FW-9	WT	G	-	-	5/8	1137		2				2						X		
8	CW-8	WT	G	-	-	5/8	1011		2				2						X		
9	CW-9	WT	G	-	-	5/8	0916		2				2						X		
10	SVE-1	WT	G	-	-	5/8	1154		2				2						X		
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Priscilla DeJesus / ETNY	05/08/18	1400	ETNY Fridge	05/08/18	1400
	ETNY Fridge	05/09/18	1000	[signature] / ETNY	05/09/18	1000
	[signature] / ETNY	05/09/18	1100	[signature]	5/9/18	1120
	[signature]	5/9/18	1340	Danielle [signature]	5/9/18	1340

SAMPLE CONDITIONS			
Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
2.1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Priscilla De Jesus

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 05/08/18

WO#:7051049

PM: JDS Due Date: 05/18/18

CLIENT: SPDWY ENVIRO

TURN AROUND TIME

STANDARD

Record

Speedway Project Information

Speedway Store #:	C210007835	**Facility ID**	2-297666
Address:	204 4th Ave		
City:	Brooklyn	**State:**	NY
Phone #:		**Fax #:**	
Speedway Proj. Mgr:	John Engdahl	****INVOICE TO SPEEDWAY****	
AFE #:	150170	**Work Order #:**	1100686634

COC ID # 00048498

Lab Information

Lab:	Pace Analytical Services (NY)
Consultant:	EnviroTrac Ltd - Yaphank, NY
Project Mgr:	Joe Rennie
Address:	
Phone #:	**Fax #:**
Sampler:	Priscilla De Jesus
Shipped:	Pickup
Tracking #:	IN PERSON PICK UP

Sample ID	Date/Time Sampled	Matrix	Count	Container Type	Preservative	Analysis to be Performed	Method	Remarks
CW-8	05/08/2018 10:11am	W	2	VOA	HCL	BTEX/MTBE 8260	8260C	
CW-9	05/08/2018 09:16am	W	2	VOA	HCL	BTEX/MTBE 8260	8260C	
FW-7	05/08/2018 10:53am	W	2	VOA	HCL	BTEX/MTBE 8260	8260C	
FW-9	05/08/2018 11:37am	W	2	VOA	HCL	BTEX/MTBE 8260	8260C	
MW-2	05/08/2018 08:21am	W	2	VOA	HCL	BTEX/MTBE 8260	8260C	
MW-3	05/08/2018 08:50am	W	2	VOA	HCL	BTEX/MTBE 8260	8260C	
MW-8	05/08/2018 10:42am	W	2	VOA	HCL	BTEX/MTBE 8260	8260C	
SVE-1	05/08/2018 11:54am	W	2	VOA	HCL	BTEX/MTBE 8260	8260C	

Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by laboratory:	Date	Time
Special Reporting Requirements:			Lab Notes:	Temp	

Chain of Custody Analysis to be Performed
COC ID # 48498

Analysis Name: BTEX/MTBE 8260 (Water)

Analysis Description / Method: BTEX/MTBE 8260 (groundwater) / 8260C

Container Type / Preservative: VOA / HCL

Analytes: Benzene ug/L, Ethylbenzene ug/L, Methyl tert butyl ether ug/L, Toluene ug/L, Total Xylenes ug/L

Sample Condition Upon Receipt

Pace Analytical
Long Island Laboratory

WO#: 7051049
PM: JDS Due Date: 05/18/18
CLIENT: SPDWY ENVIRO

Client Name: Speedway Proje

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☑ Yes ☐ No

Temperature Blank Present: ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Type of Ice: Wet / Blue None

Thermometer Used: TH091 Correction Factor:

☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): 2.1 Cooler Temperature Corrected (°C): 2.1

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample) Date and Initials of person examining contents: AW 5/9/18

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☐ NO

Did samples orignate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑Yes	☐No		1.
Chain of Custody Filled Out:	☑Yes	☐No		2.
Chain of Custody Relinquished:	☑Yes	☐No		3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No		6.
Rush Turn Around Time Requested:	☐Yes	☑No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☑Yes	☐No		8.
Correct Containers Used:	☑Yes	☐No		9.
-Pace Containers Used:	☑Yes	☐No		
Containers Intact:	☑Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☑Yes	☐No		12.
-Includes date/time/ID/Analysis Matrix SL WT OIL				
All containers needing preservation have been checked	☐Yes	☐No	☑N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot #				
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☐Yes	☐No	☑N/A	Sample #
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
KI starch test strips Lot #				
Residual chlorine strips Lot #				Positive for Res. Chlorine? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	15.
Trip Blank Present:	☐Yes	☐No	☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.