

Consulting
Engineers and
Scientists

Feasibility Study

Nassau Works MGP

Kent Avenue and Clymer Street

Brooklyn, New York

NYSDEC Consent Index No. W2-1090-06-06

Site Number 224091B

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National Grid

One MetroTech Center

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Submitted by:

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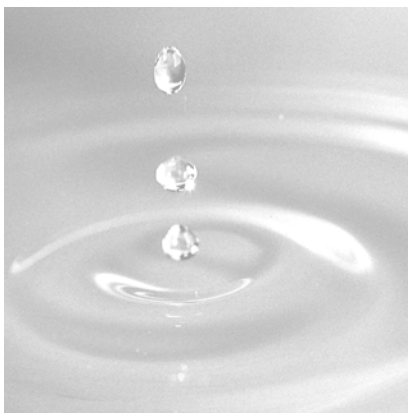
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Table of Contents

Executive Summary	1
1. Introduction	6
1.1 Introduction	6
1.2 Report Organization	7
2. Site Description and History	8
2.1 Site Description	8
2.2 Site History	8
2.2.1 Adjacent Properties Remedial Actions	10
2.3 Future Site Use	12
3. Summary of Remedial Investigation and Exposure Assessment	13
3.1 Remedial Investigation	13
3.2 Exposure and Risk Assessment	16
4. Remedial Goals and Remedial Action Objectives	18
4.1 Remedial Goals	18
5. General Response Actions	20
6. Identification and Screening of Technologies	22
6.1 Excavation and Off-Site Treatment or Disposal	22
6.2 In-situ Treatment	23
6.2.1 In-Situ Chemical Oxidation	23
6.2.2 In-Situ Solidification	23
6.3 DNAPL Recovery	24
6.4 Containment Technologies	25
6.4.1 Surface Cover System	25
6.4.2 Barrier Walls	25
6.5 Institutional Controls	25
7. Development and Analysis of Alternatives	27
7.1 Development of Alternatives	27
7.1.1 Alternative 1 – Surface Cover System and Institutional Controls	27
7.1.2 Alternative 2 – Surface Cover System, Institutional Controls and DNAPL Recovery	29
7.2 Analysis of Alternatives	30
7.3 Comparison of Alternatives	33
8. Recommended Remedy	34
References	35

Table of Contents (cont.)

Tables

- 1 Summary of Remedial Technology Screening
- 2 Opinion of Cost for Remedial Alternative 2: Engineered Soil Cover
- 3 Opinion of Cost for Remedial Alternative 3: Engineered Soil Cover and Removal of Source Material
- 4 Opinion of Cost for Remedial Alternative 4: Restore to Pre-Release Conditions
- 5 Opinion of Cost for Remedial Alternative 5: Engineered Soil Cover and In-Situ Stabilization
- 6 Detailed Evaluation of Alternatives
- 7 Summary comparison of the detailed analysis of remediation alternatives

Figure

- 1 Site Location Map
- 2 Site Layout
- 3 Lateral Extent of Visual Impacts
- 4 Soil Impacts Above the Water Table
- 5 Soil Impacts from the Water Table to 15 Feet Below Ground Surface
- 6 Remedial Alternatives

Appendix

- A Development Plan, Brooklyn Navy Yard
- B Cross-Sections
- C Remedial Investigation Soil Analytical Data
- D Feasibility Level Cost Estimate (Alternatives 1 and 2)

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Executive Summary

On behalf of National Grid, GEI Consultants, Inc., P.C. (GEI) conducted a Feasibility Study (FS) to address environmental conditions related to the historical and modern uses of a parcel of land on which the former Nassau Works manufactured gas plant (MGP) operated (the Site). The former MGP was once owned and operated by the Nassau Gas Light Company. The Site is located in the Borough of Brooklyn, Kings County, New York near the current-day intersection of Kent Avenue and Clymer Street. The Site is approximately 3.71-acres in area and is located in the northeast portion of a 13-acre parcel, utilized by the City of New York (the City), that is itself located in the northeastern corner of the ±265-acre Brooklyn Navy Yard industrial park. The Site, Site No. 224019B, is currently under an Administrative Consent Order between the New York State Department of Environmental Conservation (NYSDEC), the City, and National Grid.

This FS was developed to address impacts at the Site and MGP-related impacts that have migrated from the Site and was prepared in accordance with NYSDEC Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation* (DER-10), dated May 3, 2010.

Background

The Site is situated among mixed industrial, commercial/manufacturing land uses within the Brooklyn Navy Yard industrial park and off-site residential land uses. The Brooklyn Navy Yard Development Corporation (BNYDC) is the not-for-profit corporation that manages the Navy Yard industrial park under a contract with the City. Access to the Brooklyn Navy Yard is limited by locked gates and a guarded entrance. There are no significant aboveground structures currently on the Site, and the ground surface of the Site consists of the concrete foundation of the former Navy Yard Boat Shop and pavement. Two surface water bodies are located in the vicinity of the Site. They are the Wallabout Channel (including the Wallabout Channel Barge Basin) and the Navy Yard Basin. Both are man-made waterways. There are no groundwater supply wells on the Site or in the surrounding area. The BNYDC is currently in the planning stages for an 18-story industrial/commercial development on the majority of the land surface for the 13-acre parcel, including the Site.

The shoreline of the Brooklyn Navy Yard has changed substantially between the late 1800s and today. The Brooklyn Navy Yard was an industrial behemoth with a multitude of maritime activities which have their own contamination impacts. The Site and vicinity were initially developed for industrial use in the mid-1800s and were subject to considerable

filling prior to development. There were numerous industries on and adjacent to the Site that produced byproducts and waste very similar to an MGP operation.

The remedial instigation (RI) of the Site and adjacent areas within the Brooklyn Navy Yard was completed between 2004 and 2005. The RI delineated the lateral and vertical extent of impacts at the Site and the Brooklyn Navy Yard. The extent of impacts outside of the Brooklyn Navy Yard, on the abutting Consolidated Edison Company of New York, Inc. parcel to the north (the Con-Edison Parcel), and within the Brooklyn Navy Yard beneath the Wallabout Channel, the Wallabout Channel Barge Basin and the Navy Yard Basin, , were delineated during the supplemental remedial investigation (SRI) which was completed in 2014.

NAPL impacts were identified in the RI and SRI. The origin of these impacts can be from numerous sources that utilized and produced similar feedstock materials and byproducts as mentioned above, and in turn are likely to account for the NAPL impacts observed in the study area. NAPL impacts were identified from approximately 15 feet below ground surface to depths of 100 feet below ground surface at the surface of the Gardiners Clay. Isolated lenses of NAPL impacts were identified in an area encompassing approximately 12.5 acres including the southwestern corner of the Con-Edison Parcel, beneath the Wallabout Channel to the northwest, and Wallabout Channel Barge Basin and adjacent property to the southwest of the Site.

NAPL impacts observed beneath the Wallabout Channel and Wallabout Channel Barge Basin were beneath a blanket of organic-rich harbor deposits ranging up to 30-feet thick. These sediments represent materials that have accumulated since the last maintenance dredging by the United States Navy in 1957 and 1961 and were observed to contain non-MGP impacts related to combined sewer overflow and industrial discharges.

The soil analytical data indicates that soil above the water table on the Site does not exceed the 6 NYCRR Part 375 Restricted Use Commercial SCOs and/or the subsurface soil cleanup guidance for total polycyclic aromatic hydrocarbons (PAHs) of 500 ppm for industrial or commercial use for soil beneath a cover system presented in the NYSDEC CP-51 Soil Cleanup Guidance, dated October 21, 2010 (CP-51). Of the soil samples collected from the water table to 15 feet below ground surface, there were three for which detected analytical concentrations exceeded the Industrial Use SCOs.

Remedial Action Objectives

The remedial action objectives (RAOs) are site-specific goals that address the media of concern, specific contaminants, and the exposure pathways at the Site for the protection of human health and the environment. The media of concern for the Site are soil, groundwater, and dense non-aqueous phase liquid (DNAPL).

The media-specific RAOs identified for the Site are listed below.

Soil

- Prevent ingestion of and direct contact with contaminated soil.
- Prevent inhalation of contaminants volatilizing from contaminated soil.

Groundwater

- Prevent ingestion of and direct contact with contaminated groundwater.
- Prevent inhalation of contaminants volatilizing from contaminated groundwater.

DNAPL

- Remove source material where practicable.
- Prevent DNAPL from further migration to the extent practicable.

Technology Screening and Development and Analysis of Alternatives

The following technologies were screened to identify those that are technically implementable and can, either alone or in combination with other technologies, meet the RAOs:

- Excavation and off-site treatment or disposal
- In-Situ Treatment
 - In-situ chemical oxidation (ISCO)
 - In-situ solidification (ISS)
- Containment
 - Surface Cover system
 - Barrier Wall
- DNAPL Recovery
- Institutional Controls

Excavation and off-site treatment or disposal, ISS and barrier walls were eliminated from development into remedial alternatives because they were not implementable at the scale required to effectively meet the RAOs. The distribution of NAPL impacts ranges from 15 to 100 feet below ground surface and encompasses an area of approximately 12.5 acres. ISCO was eliminated from further evaluation because it would not meet the RAOs.

DNAPL recovery, surface cover systems and institutional controls were included in the development of following remedial alternatives:

- Alternative 1 – Surface Cover System and Institutional Controls:
 - Surface Cover System - Use of the CP-51 guidance for total PAHs requires a surface cover system of permanent structures, pavement, or similar cover

systems; or a least one foot of soil cover which meet the applicable SCOs. The current surface of the Site consists of a former concrete foundation and asphalt pavement. Therefore, placement of a surface cover system is not required under current conditions. Future development plans include permanent structures, pavement and/or landscaped areas. Institutional controls, as described below, would be required to maintain the surface cover system and to ensure any future development meets the requirements of the surface cover system.

- Institutional Controls for the Site would include restriction of the use and development of the property to commercial or industrial use; restriction of the use of groundwater as a source of potable or process water, without necessary water quality treatment; compliance with the SMP for managing future exposure to soil and groundwater during intrusive activities and inspection and maintenance; and provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the Site.
- Alternative 2 - Surface Cover System, Institutional Controls and DNAPL Recovery: Implementation and cost of the surface cover system and institutional controls would remain the same as in Alternative 1. Additional investigation would be performed to locate areas of potentially recoverable DNAPL. It is assumed this investigation would include the installation of up to twelve soil borings and six DNAPL recovery wells. Once the DNAPL recovery wells are installed, a NAPL monitoring and recovery plan would be developed specifying the required monitoring frequency and NAPL recovery methods based on the rate and volume of recoverable DNAPL observed in the wells. The final well locations will be coordinated with reasonably anticipated future site use.

The alternatives have been evaluated based on the following criteria in accordance with Section 4.2 of DER-10:

- Overall protectiveness of the public health and the environment;
- Conformance with SCGs;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contamination;
- Short-term impact and effectiveness;
- Implementability;
- Land use; and
- Cost effectiveness.

Each alternative was ranked based on the ability of the alternative to meet the criteria. The scores ranged from 1, if the alternative did not meet the criteria, to 5 if the alternative best met the criteria. The scores were then totaled for each alternative, both Alternative 1 and Alternative 2 had a total score of 27.

Both Alternative 1 and 2 include a surface cover system and institutional controls, and Alternative 2 includes DNAPL recovery. Alternative 2 scored lower than Alternative 1 for Overall Protectiveness of Public Health and the Environment and Short-term Impacts and Effectiveness due to the potential for DNAPL exposure during DNAPL recovery and the resultant increased risk to human health and the environment and short-term impacts. Alternative 2 also scored lower than Alternative 1 for Implementability and Land Use due to the likely conflict of a DNAPL recovery system with the current site development plans. Alternative 2 scored higher than Alternative 1 for Long Term Effectiveness and Permanence and Reduction of Toxicity, Mobility or Volume due to the potential to recover some DNAPL from the subsurface and the slight reduction in overall NAPL volume and resultant potentially reduced NAPL mobility. The cost effectiveness for Alternatives 1 and 2 are the same as the added cost associated with DNAPL recovery associated with Alternative 2 is reasonable given the potential added remedial effectiveness of DNAPL recovery.

Recommended Remedy

The recommended remedy for the Site is Alternative 2 – Surface Cover System, Institutional Controls and DNAPL Recovery. Alternative 2 was selected based on its added benefit of potentially removing permanently some DNAPL and reducing the volume of NAPL in the subsurface.

1. Introduction

1.1 Introduction

On behalf of National Grid, GEI Consultants, Inc., P.C. (GEI) conducted a Feasibility Study (FS) to address environmental conditions related to the historical and modern uses of a parcel of land on which the former Nassau Works manufactured gas plant (MGP) hereinafter “the Former MGP”, operated. The Former MGP was once owned and operated by the Nassau Gas Light Company. The subject parcel is located in the Borough of Brooklyn, Kings County, New York near the current-day intersection of Kent Avenue and Clymer Street. The parcel is approximately 3.71-acres in area and is located in the northeast portion of a 13-acre parcel, utilized by the City of New York (the City), that is itself located in the northeastern corner of the ±265-acre Brooklyn Navy Yard industrial park (Figure 1).

The following is a summary of the New York State Department of Environmental Conservation (NYSDEC) regulatory history of the 13-acre parcel and the Former MGP. The historic regulatory site boundaries are identified on Figure 1. The current regulatory site boundaries are identified on Figure 2 and all subsequent figures in this report:

- 1996 - The City and the NYSDEC entered into an Administrative Consent Order (ACO) Index No: D2-0001-9403 for the 13-acre parcel (hereinafter “the 13-Acre Parcel”). The 13-Acre Parcel was designated by NYSDEC as a Class 2 Inactive Hazardous Waste Disposal Site (IHWDS), Site No. 224019A.
- 2006 - The 1996 ACO was superseded and replaced with two separate ACOs:
 - The NYSDEC and the City - Site Number 224019A – Operable Unit 1 (9.29 acres)
 - The NYSDEC and the City and KeySpan Energy Corporation - Site No. 224019A – Operable Unit 2 (3.71 acres – the parcel on which operated the Former MGP, hereinafter “the Site”).
- 2011 the two ACOs were further modified¹ as follows:

¹ As stated in the fourth whereas clause of the 2011 Modified Order on Consent, “KeySpan Energy Corporation was an original respondent on this order. The proper respondent should have been The Brooklyn Union Gas Company currently d/b/a National Grid NY, a business corporation organized under the laws of the State of New York, and a successor corporation to Nassau Gas Works, which owned and operated a manufactured gas plant (“MGP”) on the northeastern portion of the property now known as the Brooklyn Navy Yard. On August 24, 2007, National Grid USA acquired KeySpan Corporation and all of its subsidiaries including KeySpan Energy Corporation. To properly reflect the new corporate parent, and in accordance with Article I below, National Grid NY will be substituted for KeySpan as the respondent throughout this order.” The legal name of the company is The Brooklyn Union Gas Company. Its current assumed name (d/b/a) is National Grid NY which is shortened to simply *National Grid*.

- The NYSDEC and the City - Site No. 224019A - Operable Unit 1 would be known and referred to as Site Number 224019A, known as the Brooklyn Navy Yard 13 Acre Parcel site, and would no longer be considered as an operable unit.
- The NYSDEC and the City and National Grid - Site No. 224019A - Operable Unit 2 (the Site) would be known and referred to as Site Number 224019B (a Class “A” site) and that it would no longer be considered as an operable unit to Site No. 224019A.
- 2018 - The NYSDEC-approved June 2018 Site Management Plan for The 13 Acre Parcel, Site No. 224019A, identifies the Site as 5.89 acres by the exclusion from the 9.29-acre site definition of approximately 3.61 acres of land under water.

This FS was developed to address impacts at the Site and MGP-related impacts that have migrated from the Site.

1.2 Report Organization

This FS report was prepared in accordance with NYSDEC Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation* (DER-10), dated May 3, 2010 and has been organized as follows.

- Section 1 Introduction
- Section 2 Site Description and History
- Section 3 Summary of Site Investigations and Exposure Assessment
- Section 4 Remedial Goals and Remedial Action Objectives
- Section 5 General Response Actions
- Section 6 Identification and Screening of Technologies
- Section 7 Development and Analysis of Alternatives
- Section 8 Recommended Remedy
- Section 9 References

2. Site Description and History

This section presents a summary description of the Site and its history. A detailed site description and history are presented in the *Final Remedial Investigation Report, Nassau Gas Works, Brooklyn New York*, prepared by GEI Consultants Inc., dated October 2007 (RI report), and the *Supplemental Remedial Investigation Report, Off-Site Areas, Nassau Gas Works Brooklyn New York*, prepared by GEI Consultants, Inc., P.C. dated February 2017 (SRI report). The Site layout is presented on Figure 2. Historic on-Site and adjacent operations are identified on Figure 3.

2.1 Site Description

The Site is situated among mixed industrial, commercial/manufacturing land uses within the Brooklyn Navy Yard industrial park and off-site residential land uses. The Brooklyn Navy Yard Development Corporation (BNYDC) is the not-for-profit corporation that manages the Navy Yard industrial park under a contract with the City. The BNYDC is currently in the planning stages for an 18-story industrial/commercial development on the majority of the land surface for the 13-Acre Parcel, including the Site.

Access to the Brooklyn Navy Yard is limited by locked gates and a guarded entrance. There are no significant aboveground structures currently on the Site, and the ground surface of the Site consists of the concrete foundation of the former Navy Yard Boat Shop and pavement. Two surface water bodies are located in the vicinity of the Site. They are the Wallabout Channel (including the Wallabout Channel Barge Basin) and the Navy Yard Basin. Both are man-made waterways. There are no groundwater supply wells on the Site or in the surrounding area.

2.2 Site History

The shoreline of the Brooklyn Navy Yard has changed substantially between the late 1800s and today. The Brooklyn Navy Yard was an industrial behemoth with a multitude of maritime activities which have their own contamination impacts. The Site and vicinity were initially developed for industrial use in the mid-1800s and were subject to considerable filling prior to development. The following is a brief chronological summary of the industrial use of the Site location and immediate surroundings:

- The Wallabout Oil Works was located on the northern third of the Site and a portion of the adjacent property north of the Site (The Con-Edison Parcel) from 1860 until prior to 1904 (Figure 3). In its 40-year plus history, the Wallabout Oil Works produced significant amounts of non-aqueous phase liquid (NAPL)

byproducts and waste very similar to an MGP operation. ExxonMobil is a successor to the Wallabout Oil Works through the Standard Oil ownership chain and acquisition of the Charles Pratt Company.

- Also located on the Con-Edison Parcel bordering the Site to the north, partly overlapping with the former location of the Wallabout Oil Works, a coal-fired power plant operated for over eighty years starting at the turn of the 19th century. This property has been operated by Brooklyn Rapid Transit Company, Brooklyn Manhattan Transit Corporation, City of New York (Metropolitan Transit Authority), and Consolidated Edison Company of New York, Inc. (Con Edison), which used the parcel for plant operations and distribution purposes until 1989 when the plant turbines were decommissioned. All structures associated with the plant have been demolished and remedial actions were completed at the Site in February 2014.
- The Nassau Gas Works MGP was operating circa 1873 and ceased operations prior to 1935. The MGP was originally an independent gas works, owned by the Nassau Gas Light Company. In 1895, the Nassau Gas Light Company was acquired by The Brooklyn Union Gas Company (hereinafter “BUG”).
- During World War I (1914 to 1918), a toluol plant constructed by the United States Government was located within the footprint of the MGP and extracted toluol and benzol for the production of explosives to support the World War I effort. The toluol plant operations included four light oil storage tanks near the northern boundary of the Site.
- In 1941, BUG sold the Site to the United States Navy to accommodate shipbuilding operations at the Brooklyn Navy Yard, the largest United States Government owned shipbuilding yard until it closed in 1965. The Site was redeveloped by the United States Navy and included a Boat Shop and Saw Mill. In 1942, approximately 0.46 acres of the Site were dredged to create the Wallabout Channel Barge Basin.
- Most recently the New York City Department of Sanitation utilized the Site for salt storage operations.

Since the mid-1900s combined sewer overflows (CSOs) have operated and discharged to the waterway adjacent to the Site, the Wallabout Channel, including the Wallabout Channel Barge Basin. In addition, cooling water and ash pit materials were historically discharged to the Wallabout Channel from the former Con Edison power plant. The Wallabout Channel Barge Basin and portions of the Wallabout Channel were actively dredged, between 1957 and 1961, during the operation of the Brooklyn Navy Yard.

2.2.1 Adjacent Properties Remedial Actions

Remedial actions have been approved by the NYSDEC for the following parcels in the vicinity of to the Site. The location and extent of these parcels is illustrated on Figure 1.

- The Con-Edison Parcel bordering the Site to the north (Site No.: V00732): *Former Kent Avenue Generating Station, Kings County, New York, Final Engineering Report (FER), NYSDEC Site No. V00732-2, dated February 2015:*
 - Excavation and off-site disposal of soil above the water table (with the exception of the building footprint) in exceedance of the restricted residential soil cleanup objectives (SCOs) as defined by Chapter 6 of the New York Code of Rules and Regulations Part 375 (6 NYCRR Part 375).
 - Removal of fuel oil underground storage tank and adjacent soil in northern section of the Site.
 - Placement of Site cover consisting of the structures such as buildings, pavement and sidewalks comprising future site development and a soil cover system consisting of 2-feet of clean soil underlain by a demarcation layer.
 - Institutional Controls:
 - Limit land use to restricted residential, industrial and commercial.
 - Restrict use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) or New York City Department of Environmental Protection (NYCDEP);
 - Require compliance with a Site Management Plan (SMP) that includes: possible long-term groundwater monitoring; site-wide inspections and reporting requirements for engineering and institutional controls; an excavation work plan that details the provisions for management of future excavation in areas of remaining contamination; and evaluation of the potential for soil vapor intrusion for any buildings developed on the Site, including for implementing actions.
- The 13-Acre Parcel bordering the Site to the south and southeast (Site No. 224019A): *Brooklyn Navy Yard 13-Acre Parcel, Kings County, New York, SMP, NYSDEC Site No. 224019A, dated June 2018* (this SMP covers the 5.89-acres of the 13-Acre Parcel that are neither the Site nor within the Wallabout Channel Barge Basin):
 - Excavation and off-site disposal of soil containing PCBs at concentrations greater than 10 parts per million (ppm) and lead concentration in the TCLP extract at concentrations greater than 5 milligrams per liter (mg/L), to depths up to 3 feet below ground surface.

- Site-wide cover of existing or new soil, pavement or concrete, a minimum of 6-inches thick. Soil cover will consist of one-foot of clean soil underlain by a demarcation layer.
- Institutional Controls:
 - Limit the use and development of the property to commercial and industrial including passive recreational uses, cultural uses, and college or graduate academic and administrative facilities, all with limited potential for soil contact. Rooftop gardens shall be allowed so long as they are not grown using soil from the Site.
 - Restrict use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDEP.
 - Require compliance with a SMP that includes: site-wide inspections and reporting requirements for engineering and institutional controls; an excavation work plan that details the management of future excavation in areas of remaining contamination; and provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the Site, including the mitigation of impacts identified.
- 152-Acre portion of the Brooklyn Navy Yard industrial park bordering the 13 Acre Parcel to the southeast, south and southwest (Site No. V00120): *Brooklyn Navy Yard Industrial Park, Kings County, Brooklyn, New York, SMP, NYSDEC Site No. V00120, dated June 2018:*
 - Removal and off-site disposal of PCB-impacted material, oil and structures.
 - Site-wide cover of existing buildings, roads and parking lots. Reconstruction will consist of a minimum of 6-inch thick pavement or 1-foot thick soil cover meeting Commercial Use SCOs and underlain by a demarcation layer.
 - Institutional Controls:
 - Limit the use and development of the property to commercial and industrial including passive recreational uses, cultural uses, and college or graduate academic and administrative facilities, all with limited potential for soil contact. Rooftop gardens shall be allowed so long as they are not grown using soil from the Site.
 - Restrict use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDEP.
 - Require compliance with a SMP that includes: site-wide inspections and reporting requirements for engineering and institutional controls; an excavation work plan that details the management of future excavation in areas of remaining contamination; and the future decommissioning of 16 transformer substations.

2.3 Future Site Use

The most recent (July 31, 2019) information provided to National Grid from BNYDC regarding future use specifies development of an industrial/commercial complex on the 13-Acre Parcel, including the Site. The information provided states that the buildings will likely encompass 116,000 square feet and will likely be 18 stories high. The July 2019 development scenario provided by BNYDC is presented in Appendix A.

3. Summary of Remedial Investigation and Exposure Assessment

The results of the RI and SRI, and the results of the Qualitative Human Health and Exposure Assessments (QHHEA) and Fish and Wildlife Resource Impacts Analysis (FWRIA) provided in the RI and SRI are summarized below.

3.1 Remedial Investigation

The RI of the Site and adjacent areas within the Brooklyn Navy Yard was completed between 2004 and 2005. The RI delineated the lateral and vertical extent of impacts at the Site and the Brooklyn Navy Yard. The extent of impacts on the abutting Con-Edison Parcel to the north at 500 Kent Avenue, the Wallabout Channel and Wallabout Channel Barge Basin, and the Navy Yard Basin to the southwest, within the Brooklyn Navy Yard, were delineated during the SRI, which was completed in 2014. The RI and SRI study areas are presented in Figure 2. The investigation locations and the lateral extent of visual impacts delineated are presented in Figure 3. The vertical extent of visual impacts is illustrated on RI and SRI Report cross-sections provided in Appendix B.

Key findings of the RI and SRI are as follows:

Stratigraphy

- Soil borings indicated that the shallowest subsurface materials consist of fill underlain by alluvial, marsh and harbor deposits. Beneath these materials, glacial till, glacial outwash sands, glacial lake clay, Gardiners Clay, and bedrock were encountered, although not all of these materials were observed in each boring.

Non-Aqueous Phase Liquid

- NAPL impacts were identified in the RI and SRI. The origin of these impacts can be from numerous sources that utilized and produced similar feedstock materials and byproducts and in turn are likely to account for the NAPL impacts observed in the study area. Potential sources of the delineated NAPL impacts include:
 - Wallabout Oil Works (located on the Site and on the Con-Edison Parcel),
 - ConEdison Kent Avenue power plant (located on the Con-Edison Parcel),
 - Nassau Gas Works MGP,
 - U.S. Government toluol plant (located on the Site),

- New York City's former power plant and other operations supporting Brooklyn Rapid Transit and Brooklyn-Manhattan Transit rail operations (located on the Con-Edison Parcel),
- Filling associated with the Brooklyn Navy Yard and Navy Yard operations on the Site, and
- New York City Department of Sanitation operations (located on the Site).

These former operations used and/or produced similar feedstocks and products which can generate similar environmental impacts including petroleum and NAPL.

- NAPL-related impacts were identified beneath the western portion of the Site which includes the location of the former Wallabout Oil Works. The NAPL associated with historic operations of both the former MGP and the Wallabout Oil Works, including portions on the Con-Edison Parcel, include a dense non-aqueous phase liquid (DNAPL) that generally migrated downward through fill and coarse-grained soils until it encountered glacial deposits (glacial lacustrine and till). A portion of the NAPL migrated on top of the glacial lake deposits to the. The remainder of the NAPL migrated downward to the top of the Gardiners Clay. Some NAPL penetrated the Gardiners Clay within lenses of fine sand in the clay on the western portion of the MGP Site and west of the Site, adjacent to the Wallabout Channel Barge Basin at 103 feet below grade.
- Petroleum-related impacts (staining, sheen and odors) were observed at and above the water table (between 0 and 5 feet below ground surface). The shallowest indications of DNAPL impacts were observed in the northern portion of the Site with staining and odors at a depth of approximately 5.5 feet below ground surface at one location and the shallowest residual DNAPL impacts were detected at approximately 15 feet below ground surface. A portion of the NAPL spread northward under the southwestern corner of the Con-Edison Parcel and to the northwest of the Site beneath the Wallabout Channel near the contact with the glacial deposits (outwash sand and glacial till). Isolated and sporadic lenses of NAPL-impacted soils were observed from 22 to 90 feet below ground surface on the Con-Edison Parcel north of the Site. Shallow petroleum impacts were encountered above the deeper NAPL impacts at or near the water table in the footprint of the Wallabout Oil Works beneath the SRI area. Petroleum-impacted soils (sheen and staining within petroleum odors) were observed near the water table (between 5 feet and 15 feet below ground surface).
- Areas of deep NAPL-saturated soils were observed below the harbor deposits in glacial till deposits between approximately 20 and 70 feet below the mudline within the Wallabout Channel and between approximately 25 and 39 feet below the mudline within the Barge Basin. Some deep NAPL was observed on top of

the Gardiners Clay and within sand lenses and/or fractures in the upper portion of the Gardiners Clay. The deepest NAPL impacts were observed in boring B45 at approximately 95 feet below the mudline of the Wallabout Channel.

- Measurable DNAPL was detected in monitoring wells at two locations during the RI.
 - 2.45 feet of DNAPL were measured in monitoring well MW-2D in 2005. The DNAPL was pumped out in February 2005. No measurable DNAPL was detected the following day. MW-2D is located on the northwest portion of the Site and is screened from 75 to 95 feet below ground surface, at the surface of the Gardiners Clay unit.
 - 8.5 feet of DNAPL were measured in MW-14I in 2005. Accumulated DNAPL within monitoring well MW-14I was removed in February 2005. One hour after DNAPL removal, approximately 4 feet of DNAPL were measured in the well. Approximately, 7 feet of DNAPL accumulated in MW-14I within 24 hours of DNAPL removal. Monitoring well MW-14I is located within the western extent of the RI study area and is screened at 35 to 45 feet bgs primarily within alluvial sand across a 2-foot thick NAPL saturated zone at the top of the well screen. The NAPL saturated zone is within a coarser sand unit above a silty-sand unit.

Sediments

- A blanket of organic-rich harbor deposits ranging up to 30-feet thick was observed in the Wallabout Channel/Wallabout Channel Barge Basin and Navy Yard Basin. These sediments represent materials that have accumulated since the last maintenance dredging by the United States Navy in 1957 and 1961 and were observed to contain non-MGP impacts relating to CSO and industrial discharges. Petroleum impacts were observed within the Navy Yard Basin sediments and within the Wallabout Channel sediments.

Soil Analytical Results

- A summary of soil analytical data and visual impacts above the water table (to approximately 4 feet below ground surface) on the Site are presented in Figure 4. There were no observances of visual DNAPL impacts above the water table. The soil analytical data indicates that soil above the water table on the Site does not exceed the 6 NYCRR Part 375 Restricted Use Commercial SCOs and/or the subsurface soil cleanup guidance for total polycyclic aromatic hydrocarbons (PAHs) of 500 ppm for industrial or commercial use for soil beneath a cover system presented in the NYSDEC CP-51 Soil Cleanup Guidance, dated October 21, 2010 (CP-51). The complete analytical data are provided in the RI report.

The RI soil data have been compared against the December 14, 2006 6 NYCRR Part 375 SCOs in Appendix C.

- A summary of soil analytical data and visual impacts from the water table to 15 feet below ground surface are presented in Figure 5. There were staining and naphthalene odors detected at TP-204 in this depth interval. The shallowest observations of residual DNAPL were at approximately 15 feet below ground surface or deeper. There were 3 soil samples collected from this depth interval for which detected analytical concentrations exceeded the Industrial Use SCOs. These three samples are B15 (5.5-6), TP-204 (5.5), AB3-SS1 (7-8).

Groundwater Analytical Results

- Analysis of dissolved phase groundwater samples identified concentrations of volatile organic compounds and semi-volatile organic compounds above New York State Ambient Water Quality Standards (NYSAWQS) in shallow and deep groundwater monitoring wells.

3.2 Exposure and Risk Assessment

The RI and SRI QHHEA identified the following potential human health exposures to contaminants of potential concern (COPCs) in soil, groundwater and soil vapor at the Site:

- Workers in the course of performing potential future subsurface utility repairs or construction or any future intrusive activity may come into contact with COPCs at the Site in subsurface soil, groundwater and soil vapor.
- The potential for soil vapor intrusion in future buildings on Site should be evaluated prior to construction.

A summary of the RI and SRI FWRIA results are provided below:

The Site and vicinity are disturbed urban habitat due to the developed nature of the area and limited presence of vegetation. The Wallabout Channel Barge Basin, Wallabout Channel and Navy Yard Basin are the most significant (yet poor) ecological resource near the Site providing habitat for a variety of aquatic flora and fauna.

The exposure of wildlife resources to surface soil was not considered a significant complete exposure pathway due to the presence of concrete foundations and pavement at the Site and the placement of clean fill at the Con-Edison Parcel to the north, the absence of terrestrial habitat at the Site and surrounding area, and the transient nature of urban wildlife.

Surface water was not collected as a component of the investigation due to the tidal exchange and combined sewer overflow (CSO) inputs into the Wallabout Channel and Wallabout Channel Barge Basin; therefore, surface water was not evaluated within the FWRIA.

As documented in the SRI, surficial sediments in the vicinity of the Site have been shown to contain impacts relating to CSO discharges, industrial discharges, and recent deposition (post-MGP, 1961 dredging) in a stagnant water body. Shallow sediment conditions currently represent urban background sediment concentrations. Therefore, sediments were not evaluated as part of the FWRIA.

4. Remedial Goals and Remedial Action Objectives

4.1 Remedial Goals

6 NYCRR Subpart 375.2.8 puts forth the following remedial goals for inactive hazardous waste sites:

- Restoration of the Site to pre-disposal/pre-release conditions, to the extent feasible.
- At a minimum, to eliminate or mitigate all significant threats to public health and the environment presented by the contaminants disposed at the Site through the proper application of scientific and engineering principles and in a manner not inconsistent with the national oil and hazardous substances pollution contingency plan as set forth in section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended as by the Superfund Amendments and Reauthorization Act (SARA).

Restoration to pre-disposal/pre-release conditions would be technically infeasible at the Site and would present considerable risks to the community and the environment. This lack of feasibility is primarily attributable to the significant depths (greater than 100 feet below ground surface) to which some contaminants have migrated and the lateral extent beneath multiple properties and water bodies (greater than 12.5 acres in area). Risks to the community and environment include the potential releases during management of previously inaccessible, excavated material and risks due to settlement of adjacent structures.

Restoration of the Site to pre-disposal/pre-release conditions will not be evaluated further as part of this FS due to the lack of feasibility and increased risk to the community and environment. Therefore, the Site remedial goal is to eliminate or mitigate all significant threats to public health and the environment.

As defined in DER-10 Standards, Criteria and Guidelines (SCGs) are the New York State regulations or statutes that dictate the cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations that are generally applicable, consistently applied, officially promulgated, and are directly applicable to a remedial action.

The SCGs that apply to this Site are:

- New York State Code of Rules and Regulations 6(NYCRR) Subpart 375-1: General Remedial Program Requirements
- 6 NYCRR§ 375-2: Inactive Hazardous Waste Disposal Site Remedial Program
- 6 NYCRR§ 375-6: Remedial Program SCOs
- Guidance for Evaluating Soil Vapor Intrusion in New York
- DER-10 Technical Guidance for Site Investigation and Remediation
- DER-31 Green Remediation
- NYSDEC CP-51 Soil Cleanup Guidance (CP-51)
- New York State Ambient Water Quality Standards

Site-specific cleanup levels for the COPCs in soil at the Site are the SCGs that will be used to define the Remedial Action Objectives (RAOs) and to develop the remedial alternatives. The 6 NYCRR Part 375 Commercial Use SCOs were applied to the Site as the current and anticipated future site use is commercial and/or industrial. In addition, a soil cleanup level for total PAHs of 500 ppm as defined in CP-51, Paragraph H, for areas where the Commercial Use SCOs apply, will be used in lieu of achieving individual compound specific cleanup levels for PAHs.

4.2 Remedial Action Objectives

The RAOs are site-specific goals that address the media of concern, specific contaminants, and the exposure pathways at the Site for the protection of human health and the environment. The media of concern for the Site are soil, groundwater, and DNAPL.

The media-specific RAOs identified for the Site are listed below.

Soil

- Prevent ingestion of and direct contact with contaminated soil.
- Prevent inhalation of contaminants volatilizing from contaminated soil.

Groundwater

- Prevent ingestion of and direct contact with contaminated groundwater.
- Prevent inhalation of contaminants volatilizing from contaminated groundwater.

DNAPL

- Remove source material where practicable.
- Prevent DNAPL from further migration to the extent practicable.

5. General Response Actions

In accordance with the guidance provided in DER-10 regarding the development and evaluation of remedial alternatives, this section describes the development of General Response Actions (GRAs) to address the RAOs identified in Section 4. GRAs are not specific to any single technology but represent categories or approaches that may be combined and further defined to create remedial alternatives. To meet the RAOs developed for the Site, the following GRAs were identified and, as discussed, were or were not retained for further evaluation:

1. **No Action.** There is no exposure to impacts under current site use conditions. However, there is potential for exposure to impacted soil and groundwater during soil intrusive construction activities, and potential source material is present at some locations. Therefore, due to potential future exposure, no action would result in not meeting the RAOs and was not contemplated for the Site.
2. **Excavation and Off-Site Treatment/Disposal of Soil.** These actions include excavation of impacted soil that exceed the Commercial Use SCO and DNAPL impacts within soil, and off-site treatment/disposal at properly permitted facilities.

The vertical extent of NAPL impacts at the Site is to depths greater than 100 feet below ground surface and the aerial extent of impacts is approximately 12.5 acres. Excavation to this extent is technically infeasible at the Site and will present considerable risks to the community. Therefore, excavation of NAPL impacts at the Site was not included in the technology screening.

There are no exceedances of the Commercial Use SCO above the water table (approximately 4 feet below ground surface). There are three isolated soil exceedances of the Commercial Use SCO from the water table to 15 feet below ground surface. Excavation of these impacts was retained for the technology screening.

3. **In-Situ Treatment of Soil.** This action includes in-situ reduction in the volume, toxicity, and/or mobility of the contaminants in soil and/or of NAPL. In-situ technologies will be included in the technology screening.
4. **Containment.** Containment actions involve little or no treatment but provide physical barriers to exposure and/or prevent migration of NAPL. These actions

- include surface cover systems and vertical barriers and were included in the technology screening.
5. **DNAPL Recovery.** DNAPL recovery involves the installation of recovery wells and/or trenches to collect recoverable DNAPL from the subsurface. The collected DNAPL can then be removed and treated/disposed of off-site. DNAPL recovery was included in the technology screening.
 6. **Institutional Controls.** Institutional controls minimize the potential for contact with the contaminated soil and groundwater and monitor and document the effectiveness of the implemented remedy. They can include access controls, site use restrictions, groundwater use restrictions, site management plans, excavation work plans, health and safety plans, maintenance and monitoring plans, and/or notifications. Institutional controls were included in the technology screening.

6. Identification and Screening of Technologies

This section of the report describes the technologies selected to meet the GRAs identified previously. In accordance with DER-10, the technologies were screened to identify those that are technically implementable and can, either alone or in combination with other technologies, meet the RAOs.

The following technologies were screened for the Site

- Excavation and off-site treatment or disposal
- In-Situ Treatment
 - In-situ chemical oxidation (ISCO)
 - In-situ solidification (ISS)
- Containment
 - Surface Cover system
 - Barrier Wall
- DNAPL Recovery
- Institutional Controls

Table 1 provides a summary of the initial screening and identifies the technologies retained for use in the alternative evaluation presented in Section 7. The remainder of this section provides descriptions of the technologies and the results of the initial screening.

6.1 Excavation and Off-Site Treatment or Disposal

Excavation of soil that exceed the Commercial Use SCOs to 15 feet below ground surface would potentially include excavations of soil impacts in the vicinity of B15 (5.5-6), TP-204 (5.5), AB3-SS1 (7-8) (Figure 5). There are no exceedances of Commercial Use SCOs above the water table (approximately 4 feet below ground surface). The shallowest observations of residual DNAPL were at approximately 15 feet below ground surface and extended to greater than 100 feet below ground surface.

Technologies for excavation include use of conventional trackhoe equipment for excavation to depths of 20 feet. Control of odors and VOC emissions would be required at the Site. Excavation and loading activities would be conducted using odor-controlling foam, temporary plastic covering, and direct load-out to minimize odors and emissions. An air monitoring program would be required during excavation activities to ensure emissions would be within acceptable levels. Excavation below the water table would require dewatering and waste water treatment and disposal. Material management including

handling and treatment/disposal of soils, asphalt, and debris encountered in subsurface fill material would also be required.

Excavation and off-site treatment of soil is implementable. However, the soil at the Site above the water table meets the Commercial Use SCOs and excavation to 15 feet below ground surface would not be effective in the removal of source material or preventing the migration of NAPL. Attainment of the SCOs above the water table is consistent with the NYSDEC approved remedial actions at adjacent properties. As summarized in **Table 1**, performing excavations below the water table to meet the Commercial Use SCOs is not justified due to the limited additional benefit in the protection of human health and the environment and the added potential short term exposure risks to workers and the community. Therefore, excavation was not be retained for inclusion in the remedial alternative development.

6.2 In-situ Treatment

In-situ treatment technologies use chemical, thermal or biological processes to reduce the toxicity or volume of contaminants. In-situ technologies identified for the Site were ISCO and ISS for the treatment of impacted soil.

6.2.1 In-Situ Chemical Oxidation

ISCO uses various formulations of oxidants to degrade contaminants in the subsurface. The most common oxidants used in ISCO treatment are permanganate (MnO_4^-), Fenton's (H_2O_2 and Fe^{2+} , or catalyzed hydrogen peroxide), ozone (O_3), and persulfate ($\text{S}_2\text{O}_8^{2-}$). The technology has been used previously at MGP sites with some limited success, although it had not been effective at treating NAPL source areas. When using ISCO as a remedial technology, the project engineer must have a very thorough understanding of site characteristics such as subsurface geology, hydrologic conditions, and contaminant chemistry.

Due to the widespread distribution of residual NAPL at the Site, ISCO will not be effective in meeting SCOs, the elimination of exposure pathways, reducing the volume of source material or preventing NAPL migration. Therefore, ISCO is eliminated from further evaluation.

6.2.2 In-Situ Solidification

ISS treatment of impacted soil involves the in-place mixing of cementitious reagents, such as Portland cement, with impacted soil to create a solid monolith to contain source material. The ISS technology relies on the selection of the appropriate agents and proportions (the "mix design") as well as the successful delivery system to provide in-situ contact and

encapsulation of the impacted soil. The three common delivery systems used for ISS are bucket mixing, auger mixing, and pressure/jet grouting.

ISS results in the formation of a solid monolith of relatively impermeable material in the subsurface. Groundwater is forced around and under the ISS monolith, thus preventing contact of groundwater with the source material contained in the monolith. The effect of solidified material on the groundwater flow patterns and the potential for groundwater mounding at the Site, side-gradient and upgradient would need to be evaluated. For the reasons discussed below, ISS would not be effective in meeting the SCOs and would not reduce the volume of source material. Past industrial use of the Site presents an implementation challenge to using site-wide ISS as numerous underground structures exist in the subsurface. These structures would have to be removed, along with any deep foundations and/or pilings. There would also be potential implementation issues associated with treating NAPL impacts at depth and excavation of surface material would be required to account for volume expansion of the solidified material. Compatibility of the solidified material with the future site development plans would also need to be coordinated.

ISS could potentially be used at the Site to stabilize NAPL impacted source material to potentially reduce the mobilization of this material. However, as illustrated in Figure 3 and the cross-sections provided in Appendix B, horizontal migration of NAPL at depth has occurred. The current distribution of NAPL indicates that it has migrated to a point of residual saturation levels and is not mobile at most locations. In addition, the NAPL that has migrated is below the bottom of the sediments in the Wallabout Channel, and therefore, discharge to surface water or sediments is unlikely. The investigation results indicate that there is presently no migration of DNAPL into Wallabout Channel.

ISS was eliminated from alternative development due to the numerous implementation issues associated with this technology at the Site and the limited potential effectiveness in meeting the RAOs.

6.3 DNAPL Recovery

DNAPL recovery can reduce the amount of source material in the subsurface by removing the mass of NAPL and reduce the mobility of residual NAPL by recovering the flowable fraction. Typical recovery systems include specially constructed wells or recovery trenches. Collection may be passive or may require an active pumping system. Several NAPL pumping systems are available, including low-flow NAPL-only pumps.

Measurable DNAPL was detected at two monitoring wells during the RI. Although the distribution of DNAPL at the Site indicates that it is likely not mobile, there is the potential for the recovery of pockets of DNAPL collected within permeable lenses located above less

permeable lenses in the subsurface. A pre-design investigation is required to determine the potential for recoverable DNAPL and the DNAPL recovery rates. DNAPL recovery methods were retained for further consideration as a component of the remedial action for the Site.

6.4 Containment Technologies

Containment technologies screened included soil cover systems and containment barrier walls.

6.4.1 Surface Cover System

Surface cover systems include surface cover soil and impervious caps, which are effective for controlling exposure to impacted surface and shallow subsurface soils. The CP-51 PAH guidance criteria applies to subsurface soil and requires that cover systems such as pavement, permanent structures, or at least 1 foot of surface soil that meets the SCOs for the Site be present. Therefore, surface cover systems were retained for further consideration as a component of remedial alternatives at the Site.

6.4.2 Barrier Walls

Barrier walls are applied to prevent the potential migration of NAPL from a site. There are several construction options for barrier walls including sheet pile walls, slurry walls, soil mix walls, and secant pile walls. Barrier walls for NAPL at depth are typically installed at the lateral limits of the mobile NAPL and keyed into a lower confining unit.

As stated above, the current distribution of NAPL indicates that it has migrated to a point of residual saturation levels and is not mobile at most locations. In addition, the NAPL that has migrated is below the bottom of the sediments in Wallabout Channel, and the results of the RI and SRI indicate NAPL is not discharging to surface water or to sediments.

Installation of a barrier wall would not result in reduction of source material and would not eliminate exposure pathways. Based on the current distribution of NAPL at the Site, it is unlikely that a barrier wall would significantly limit the further migration of NAPL. Installation of a barrier wall at the lateral extent of NAPL impacts would be difficult if not impossible to implement due to the distribution of NAPL at depth beneath multiple properties and waterways and the presence of subsurface obstructions and utilities. Therefore, barrier walls were eliminated from inclusion in the development of remedial alternatives for the Site.

6.5 Institutional Controls

Institutional controls can effectively prevent exposures for potential receptors. Institutional controls, such as site use restrictions, a SMP, and/or groundwater use restrictions are required

when using a restricted use SCOs and are consistent with NYSDEC-approved remedial actions on adjacent properties.

An important component of any institutional control program is ongoing monitoring of the effectiveness of the controls. This includes annually certifying that the controls are in place and are effective. There is no exposure to impacted material under current property use at the Site, however, there is potential exposure to impacted material during intrusive construction work. An excavation work plan would be required for managing intrusive work and would include establishing a protocol for overseeing worker and public health and safety, having a plan for managing any contaminated soil or groundwater removed during the work. The above information would be included as part of the SMP for the Site. Institutional controls were retained for inclusion in remedial alternative development.

7. Development and Analysis of Alternatives

The most applicable technologies, as determined by the detailed analysis in Section 6, were carried forward for development of the remedial alternatives to achieve the desired RAOs. The following technologies were included in the development of remedial alternatives:

- DNAPL Recovery
- Surface Cover System
- Institutional Controls

Each alternative is discussed in detail below.

7.1 Development of Alternatives

The following two remedial alternatives were developed for detailed evaluation. The locations of the remedial technologies applied for each of the alternatives are provided in Figure 6.

7.1.1 *Alternative 1 – Surface Cover System and Institutional Controls*

Under current conditions the impacts present at the Site do not pose a risk to human health. The soil above the water table on the Site meets the 6 NYCRR Part 375 Restricted Use Commercial SCOs and/or the CP-51 subsurface soil cleanup guidance for total PAHs of 500 ppm for industrial or commercial use for soil beneath a cover system. There is a potential risk to potential future utility and construction workers during intrusive subsurface activities.

- Surface Cover System Use of the CP-51 guidance for total PAHs requires a surface cover system of permanent structures, pavement, or similar cover systems; or a least one foot of soil cover which meet the applicable SCOs. The current surface of the Site consists of a former concrete foundation and asphalt pavement. Therefore, placement of a surface cover system is not required under current conditions. Future development plans include permanent structures, pavement and/or landscaped areas. Institutional controls, as described below, would be required to maintain the surface cover system and to ensure any future development meets the requirements of the surface cover system. Therefore, the costs associated with inspection and maintenance of the surface cover system are covered under the costs for implementation of institutional controls. The location of the surface cover system is illustrated in Figure 6.

- Institutional Controls: The following institutional controls would be implemented at the Site:
 - Restriction of the use and development of the property to commercial or industrial use.
 - Restriction of the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDEP.
 - Compliance with the SMP that includes:
 - site-wide inspection, maintenance, monitoring and reporting requirements for engineering and institutional controls;
 - an excavation work plan which details the provisions for management of future excavation in areas of remaining contamination including an air monitoring plan, health and safety plan, groundwater management and soil handling, management and disposal requirements; and
 - provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the Site.

The above institutional controls are consistent with the institutional controls currently in-place for the adjacent properties as described in Section 2.2.1.

The costs associated with implementation of the above institutional controls is estimated to be approximately \$700,000. This cost includes development of the SMP, site survey, implementation of the environmental easement and SMP for the Site and all associated NYSDOC oversight costs. Implementation of the SMP assumes an average annual cost of \$20,000 will be required to perform annual certification and inspections. Implementation of the SMP will also require environmental oversight and material management during subsurface intrusive activities which will incur one-time capital costs during site redevelopment and potential periodic costs for future site work. These costs would potentially include environmental oversight and transportation and disposal of excavated impacted material, which likely came from a variety of sources as discussed in Section 3.1. National Grid would only be responsible for the costs associated with the management of MGP impacted material and would not be responsible for the costs associated with the management of non-MGP impacted material removed during subsurface intrusive activities at the Site. The scope and timing of these activities are not currently known and therefore, these costs are not included in the above cost estimate. Details of the assumptions for this cost estimate are provided in Appendix D.

7.1.2 Alternative 2 – Surface Cover System, Institutional Controls and DNAPL Recovery

Implementation and cost of the surface cover system and institutional controls would remain the same as in Alternative 1. Alternative 2 also includes DNAPL recovery as described below.

- **DNAPL Recovery:** The current distribution of NAPL indicates that significant horizontal and vertical migration has occurred. Lenses of NAPL impacts have been identified at depths from 15 feet to greater than 100 feet below ground surface and across an area in excess of 12.5 acres. Although the distribution of NAPL at the Site indicates that it is likely not mobile, there is the potential for the recovery of pockets of DNAPL collected within permeable lenses located above less permeable lenses in the subsurface.

Measurable DNAPL was detected at two monitoring wells during the RI, MW-2D and MW-14I:

- MW-2D is located on the northwest portion of the Site where the Wallabout Oil Works was located and is screened from 75 to 95 feet below ground surface at the surface of the Gardiners Clay unit. In February 2005, 0.45 feet of DNAPL were measured at this location and pumped out. No measurable DNAPL had collected in the well by the following day and no additional measurements have been collected at this location.
- MW-14I is located within the western portion of the RI study area and is screened at 35 to 45 feet below ground surface primarily within alluvial sand across a 2-foot thick DNAPL saturated zone at the top of the well screen. The DNAPL saturated zone is within a coarser sand unit above a silty-sand unit. In February 2005, 8.5 feet of DNAPL were measured at this location and pumped out. One hour after DNAPL removal, approximately 4 feet of DNAPL was measured in the well. Approximately 7 feet of DNAPL accumulated in MW-14I within 24 hours of DNAPL removal.

The majority of wells installed during the RI and SRI have been destroyed and/or cannot be located. Therefore, additional investigation would be performed to locate areas of potentially recoverable DNAPL. It is assumed this would involve the installation of twelve soil borings to depths of 50 to 100 feet below ground surface and recoverable DNAPL will be identified and DNAPL recovery wells will be installed at six of the twelve soil boring locations. It is assumed four wells will be installed on the Site; two screened at approximately 90 to 100 feet below ground surface at DNAPL saturated lenses above the Gardiners Clay and two screened at approximately 30 to 50 feet below ground surface at DNAPL saturated lenses located above less permeable

units. Two additional DNAPL recovery wells would be installed at the north western extent of DNAPL impacts on the BNYDC property at depths of approximately 30 to 50 feet below ground surface across zones of DNAPL saturated lenses. The final well locations will also be coordinated with reasonably anticipated future site use. The general locations of these potential wells are illustrated in Figure 6.

Once the DNAPL recovery wells are installed, a NAPL monitoring and recovery plan would be developed specifying the required monitoring frequency and NAPL recovery methods based on the rate and volume of recoverable DNAPL observed in the wells.

The costs associated with DNAPL recovery are estimated to be approximately \$1.8 million based on the above assumptions. Annual costs of \$120,000 for performing manual DNAPL monitoring, recovery and disposal on a quarterly basis are included for an assumed duration of ten years. NYSDEC oversight costs during design and installation of the DNAPL recovery system and annual costs during implementation of DNAPL recovery at the Site are also included in the cost estimate. The actual number of DNAPL recovery wells, frequency and duration of DNAPL monitoring and recovery events and resultant costs will be determined based on the results of the pre-design investigation and subsequent monitoring and recovery results.

The total cost of Alternative 2 is \$2.5 million. This includes the cost for institutional controls discussed under Alternative 1 of \$700,000. The costs for institutional controls do not include the additional costs associated with environmental oversight and materials management during subsurface activities for implementation of the SMP.

7.2 Analysis of Alternatives

The alternatives have been evaluated based on the following criteria in accordance with Section 4.2 of DER-10:

- Overall protectiveness of the public health and the environment;
- Conformance with SCGs;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contamination;
- Short-term impact and effectiveness;
- Implementability;
- Land use; and
- Cost effectiveness.

A summary of the results of the analysis for each of the alternatives is presented in Table 2 and described below.

Overall protectiveness of the public health and the environment

- **Alternative 1:** A surface cover system to prevent exposure to soil and the implementation of institutional controls to maintain the surface cap, restrict site use and prevent exposure during future construction or subsurface activities would be protective of public health and the environment.
- **Alternative 2:** As in Alternative 1 the surface cover system and institutional controls would be protective of public health and the environment, however, DNAPL recovery has the potential to increase risk to public health and the environment due to potential exposure to previously inaccessible, recovered DNAPL.

Conformance with SCGs

- **Alternative 1:** The surface cover system and institutional controls will be implemented to prevent exposure to soil and groundwater in exceedance of the SCGs.
- **Alternative 2:** The surface cover system and institutional controls will be implemented to prevent exposure to soil and groundwater in exceedance of the SCGs. Recovery of DNAPL will potentially reduce DNAPL volume slightly, however, the majority of NAPL impacts will remain.

Long-term effectiveness and permanence

- **Alternative 1:** The surface cover system can be effective long-term at preventing exposure to soil impacts provided long-term maintenance and monitoring programs are specified in the institutional controls. The institutional controls can be effective in the long-term through the implementation of site-use restrictions and a SMP.
- **Alternative 2:** The surface cover system and institutional controls can be effective in the long-term. DNAPL recovery will potentially be effective in the permanent removal of some DNAPL from the subsurface, however, the majority of residual NAPL will remain.

Reduction of toxicity, mobility, or volume of contamination

- **Alternative 1:** The surface cover system and institutional controls provide no reduction of toxicity, mobility or volume of contamination.

Alternative 2: The surface cover system and institutional controls provide no reduction of toxicity, mobility or volume of contamination, and DNAPL recovery will have no impact on the toxicity of NAPL remaining in the subsurface. Recovery of DNAPL could reduce the potential for NAPL migration and the

NAPL volume, however, the distribution of NAPL at the Site indicates that it has migrated to a point of residual saturation levels and is not mobile or recoverable at most locations.

Short-term impact and effectiveness

- **Alternative 1:** The surface cover system and institutional controls will be effective in the short-term with no short-term impacts.
- **Alternative 2:** The surface cover system and institutional controls will be effective in the short-term with no short-term impacts. DNAPL recovery will increase potential for exposure to DNAPL in the short term.

Implementability

- **Alternative 1:** Both a surface cover system and institutional controls are implementable. A surface cover system currently exists at the Site and the proposed future site structures and surface features are compatible with the requirements for a surface cover system. Negotiations and access agreements with the property owner will be required for implementation of land use restrictions and application of the SMP.
- **Alternative 2:** Both a surface cover system and institutional controls are implementable. Negotiations and access agreements with the property owner will be required for implementation of land use restrictions and application of the SMP. There are potentially greater implementation issues for DNAPL recovery associated with the current site development plans, the location of the recovery wells and site access for DNAPL recovery and monitoring.

Land Use

- **Alternative 1:** A surface cover system and the proposed institutional controls are consistent with current and proposed future land use both on-Site and on adjacent properties.
- **Alternative 2:** A surface cover system and the proposed institutional controls are consistent with current and proposed future land use both on-Site and on adjacent properties. There is a conflict with a DNAPL recovery system and proposed land use. The location of the recovery wells and the duration of the DNAPL recovery efforts could interfere with proposed site development.

Cost effectiveness

A description of the costs for each of the components of the remedial alternatives is provided in Section 7.1 above. Details of this cost estimate are presented in Appendix D.

- **Alternative 1:** The cost is estimated to be approximately \$700,000.
- **Alternative 2:** The cost is estimated to be approximately \$2.5 million.

The cost for Alternative 1 is estimated to be less than Alternative 2 due to the additional estimated \$1.8 million associated with implementation of DNAPL recovery for Alternative 2. However, the likely additional costs that were excluded from both alternatives, associated with environmental oversight and materials management during subsurface activities for implementation of the SMP, will likely make the total costs for both alternatives comparable. Therefore, the cost effectiveness of both alternatives is assumed to be similar as the added cost associated with DNAPL recovery is reasonable given the potential added remedial effectiveness of DNAPL recovery.

7.3 Comparison of Alternatives

A comparison of Alternatives 1 and 2 using the above criteria is presented in Table 2. Each alternative was ranked based on the ability of the alternative to meet the criteria. The scores ranged from 1, if the alternative did not meet the criteria, to 5 if the alternative best met the criteria. The scores were then totaled for each alternative, both Alternative 1 and Alternative 2 had a total score of 27.

Both Alternative 1 and 2 include a surface cover system and institutional controls, and Alternative 2 includes DNAPL recovery. Alternative 2 scored lower than Alternative 1 for Overall Protectiveness of Public Health and the Environment and Short-term Impacts and Effectiveness due to the potential for DNAPL exposure during DNAPL recovery and the resultant increased risk to human health and the environment and short-term impacts. Alternative 2 also scored lower than Alternative 1 for Implementability and Land Use due to the likely conflict of a DNAPL recovery system with the current site development plans. Alternative 2 scored higher than Alternative 1 for Long Term Effectiveness and Permanence and Reduction of Toxicity, Mobility or Volume due to the potential to recover some DNAPL from the subsurface and the slight reduction in overall NAPL volume and resultant potentially reduced NAPL mobility. The cost effectiveness for Alternatives 1 and 2 are the same as the added cost associated with DNAPL recovery associated with Alternative 2 is reasonable given the potential added remedial effectiveness of DNAPL recovery.

8. Recommended Remedy

The recommended remedy for the Site is Alternative 2 – Surface Cover System, Institutional Controls and DNAPL Recovery. Alternative 2 was selected based on its added benefit of potentially removing permanently some DNAPL and reducing the volume of NAPL in the subsurface.

The current surface of the Site meets the requirements for a surface cover system. An SMP would be developed to provide the requirements for the Site use restrictions; site-wide inspection, and reporting; inspection and maintenance of the surface cover system; an excavation work plan detailing the provisions for management of future excavation in areas of remaining contamination, including an air monitoring plan, health and safety plan, and soil handling, management and disposal requirements; and the provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the Site.

The current distribution of NAPL indicates that significant horizontal and vertical migration of NAPL has occurred and therefore, the majority of NAPL at the Site is likely not mobile. However, there is the potential for the recovery of pockets of DNAPL collected within permeable lenses located above less permeable lenses in the subsurface. Implementation of DNAPL recovery at the Site would be an iterative process. An investigation would be performed to locate areas of potentially recoverable DNAPL and to install DNAPL recovery wells at these locations. The final well locations will also be coordinated with reasonably anticipated future site use. If DNAPL recovery wells are installed, a DNAPL monitoring and recovery plan would be developed based on the rate and volume of recoverable DNAPL observed in the wells.

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GEI Consultants, Inc. (GEI), 2017. Supplemental Remedial Investigation Report, Off-Site Areas, Nassau Gas Works, Brooklyn New York, Site No. 2-24-019B, February 2017.

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Tables

Table 1. Technology Screening
Feasibility Study
Former Nassau Gas Works
Brooklyn, New York

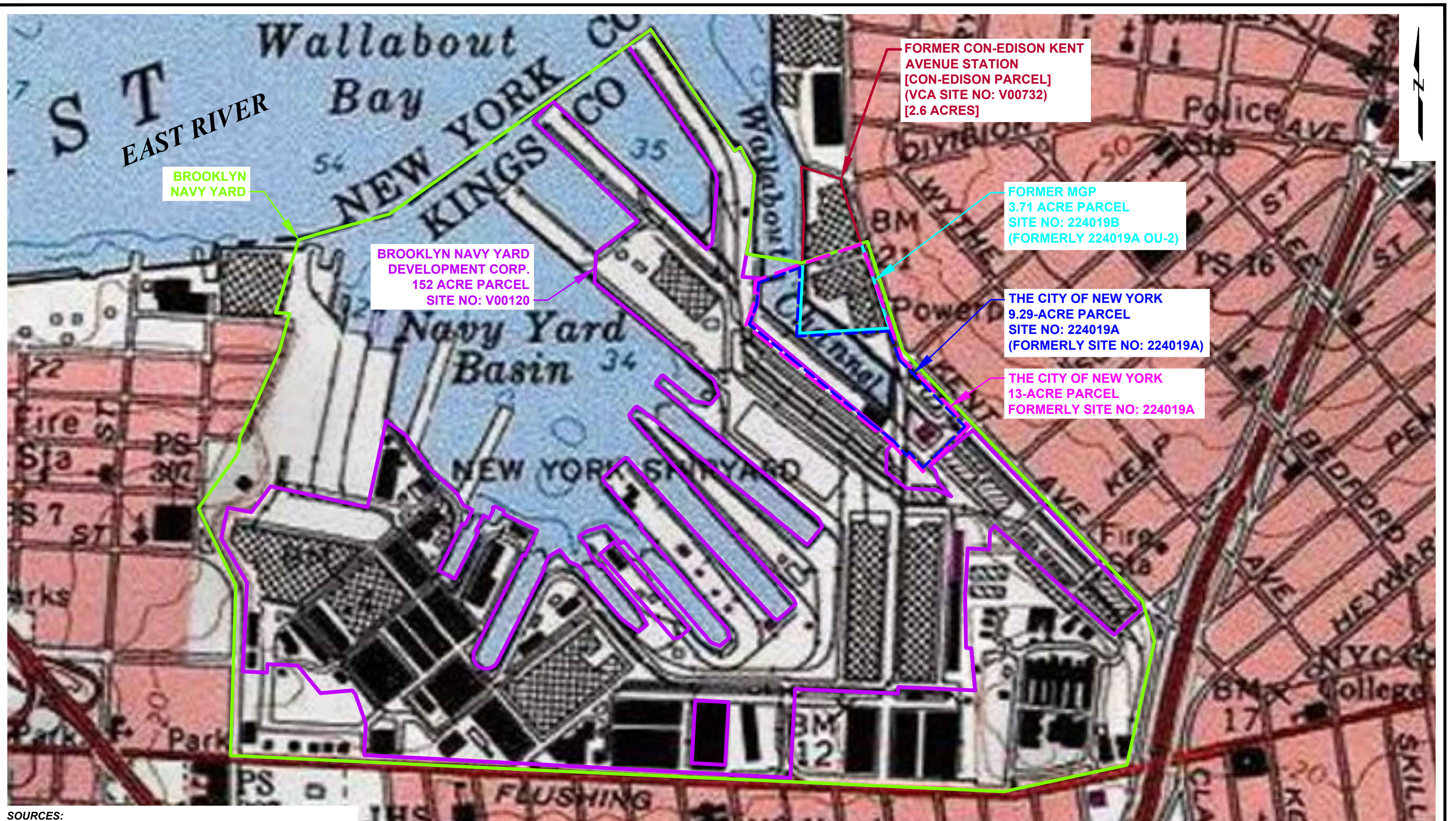
Response Action	Technology	Effectiveness in Meeting RAOs	Implementability	Status for Alternative Development
Excavation	Excavation of Soil Exceeding SCOs Below the Water Table to 15 Feet Below Ground Surface	Effective in meeting SCOs. Not effective in preventing migration of NAPL. Not effective in removing source material. Potential short term exposure risk to workers and the community. Not consistent with NYSDEC approved remedies on adjacent properties.	Technology proven and can be implemented. Implementation issues associated with dewatering. Disruption to the community increases with increased excavation extent.	Rejected for alternative development.
In-Situ Treatment	In-Situ Chemical Oxidation	Not effective in meeting SCOs. Not effective in elimination of exposure pathways. Not effective in preventing migration of NAPL. Does not reduce the volume of source material.	Technology can be implemented.	Rejected for alternative development.
	In-Situ Solidification	Not effective in meeting SCOs. Can reduce migration of subsurface NAPL. Can be used to stabilize source material. Will increase exposure to impacts in the short-term to both workers and the community.	Technology can be implemented. Implementation issues with treatment of DNAPL impacts at depth. Subsurface obstructions would need to be removed via excavation. Groundwater flow patterns and potential for groundwater mounding would need to be evaluated. Potential implementation issues with compatibility of solidified material with future development.	Rejected for alternative development.
NAPL Recovery	DNAPL Recovery	Not effective in meeting SCOs. Not effective in elimination of exposure pathways. Somewhat effective in preventing migration of tar. Does reduce the volume of source material.	Technology proven and readily implemented. Potential implementation issues associated with access for operation of long term DNAPL recovery systems. A pre-design investigation is required to determine locations of recoverable DNAPL.	Retained for alternative development.
Containment	Soil Cover System	Not effective in meeting SCOs. Effective at controlling the pathways for current and future exposure. Not effective in preventing migration of NAPL. Does not reduce the volume of source material.	Technology proven and readily implemented.	Retained for alternative development.
	Barrier Wall	Not effective in meeting SCOs. Not effective in elimination of exposure pathways. Effective in preventing potential migration of NAPL. Does not reduce the volume of source material.	Technology proven and can be implemented. Significant disruption to the community. Access issues at off-site properties likely to prevent implementation. Implementability issues associated with subsurface structures and utilities.	Rejected for alternative development.
Institutional Controls	Site Use Restrictions, Groundwater Use Restrictions, Site Management Plan, Excavation Work Plan, Inspection and Reporting Requirements.	Not effective in meeting SCOs. Effective at controlling the pathways for current and future exposure. Not effective in preventing migration of NAPL. Does not reduce the volume of source material.	Readily implementable. Consistent with property use and NYSDEC approved remedial actions on adjacent properties.	Retained for alternative development.

Table 2. Remedial Alternative Evaluation

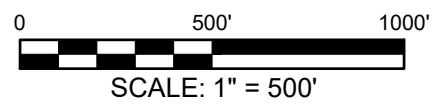
Feasibility Study
Nassau Gas Works
Brooklyn, New York

Criteria	Alternative 1: Surface Cap and Institutional Controls	Alternative 2: Surface Cap, Institutional Controls and DNAPL Recovery
Overall Protectiveness of Public Health and the Environment	Will be protective of public health and the environment.	DNAPL Recovery will potentially increase risk to the public health and the environment.
Score	4	3
Conformance with SCGs	Will prevent exposure to soil and groundwater in exceedance of SCGs.	Will prevent exposure to soil and groundwater in exceedance of SCGs. Recovery of DNAPL will potentially reduce DNAPL volume. The majority of DNAPL impacts will remain.
Score	2	3
Long Term Effectiveness and Permanence	Can be effective at preventing long-term exposure to soil and groundwater impacts.	Can be effective at preventing long-term exposure to soil and groundwater impacts. Potentially effective in permanent removal of some DNAPL.
Score	3	4
Reduction of Toxicity, Mobility or Volume	No reduction of toxicity, mobility or volume.	No reduction of toxicity. Potential reduction in mobility and volume.
Score	1	3
Short-term Impacts and Effectiveness	No short-term impacts. Will be effective in the short-term.	DNAPL recovery will increase the potential for short-term impacts.
Score	5	4
Implementability	Implementable. Negotiations/access agreements with property owners required.	Implementable. Negotiations/access agreements with property owners required. Greater potential for access issues associated with DNAPL recovery.
Score	4	3
Land Use	Consistent with current and potential future land use.	Potential conflict with implementation of DNAPL recovery system and future site development.
Score	5	4
Cost Effectiveness	\$700,000	\$2.5 Million - Potential additional remedial effectiveness due to DNAPL recovery.
Score	3	3
Total Score	27	27
Notes: Score Range 1 to 5: 1= Does not meet criteria, 5= Meets criteria		

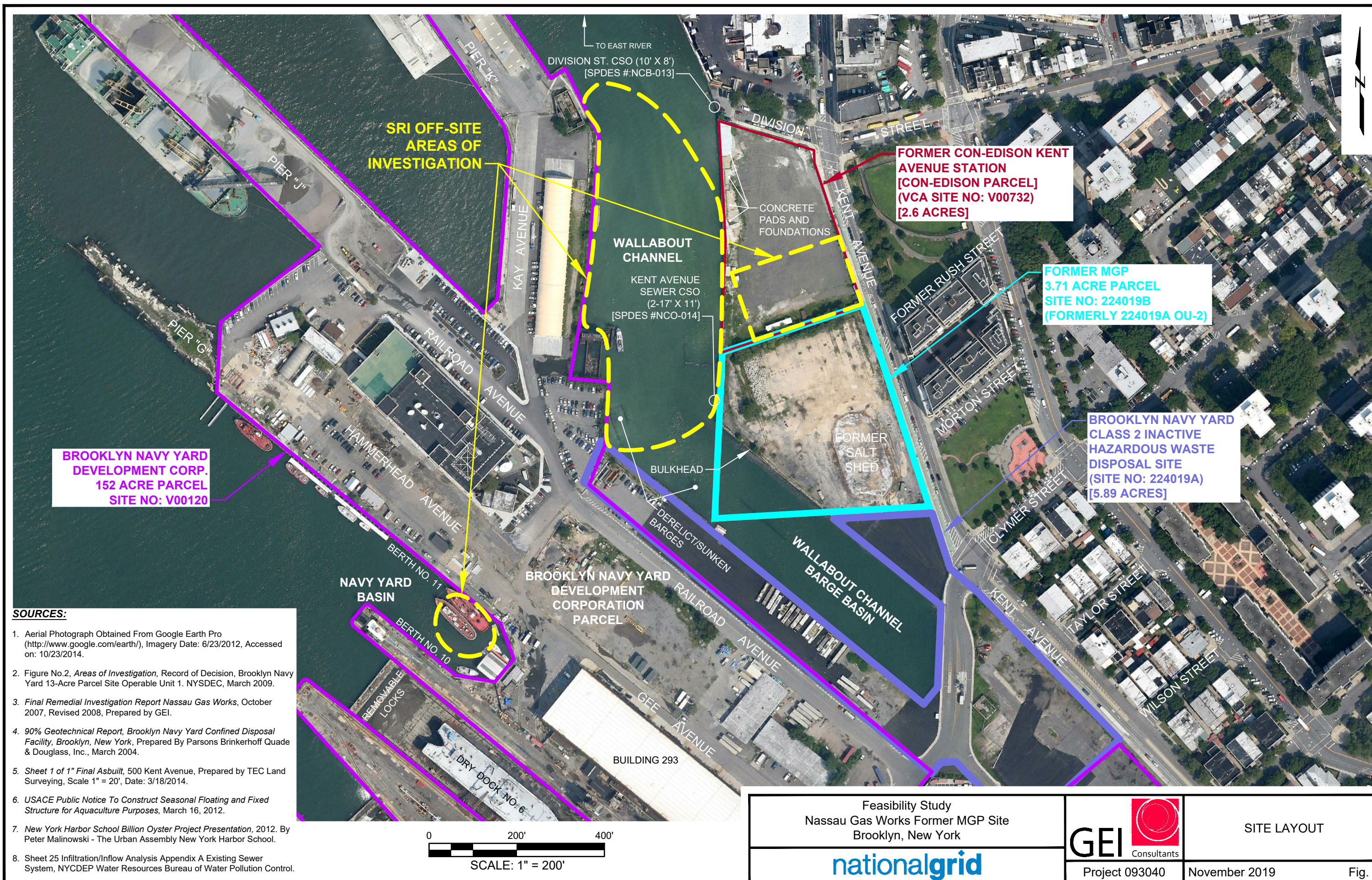
Figures

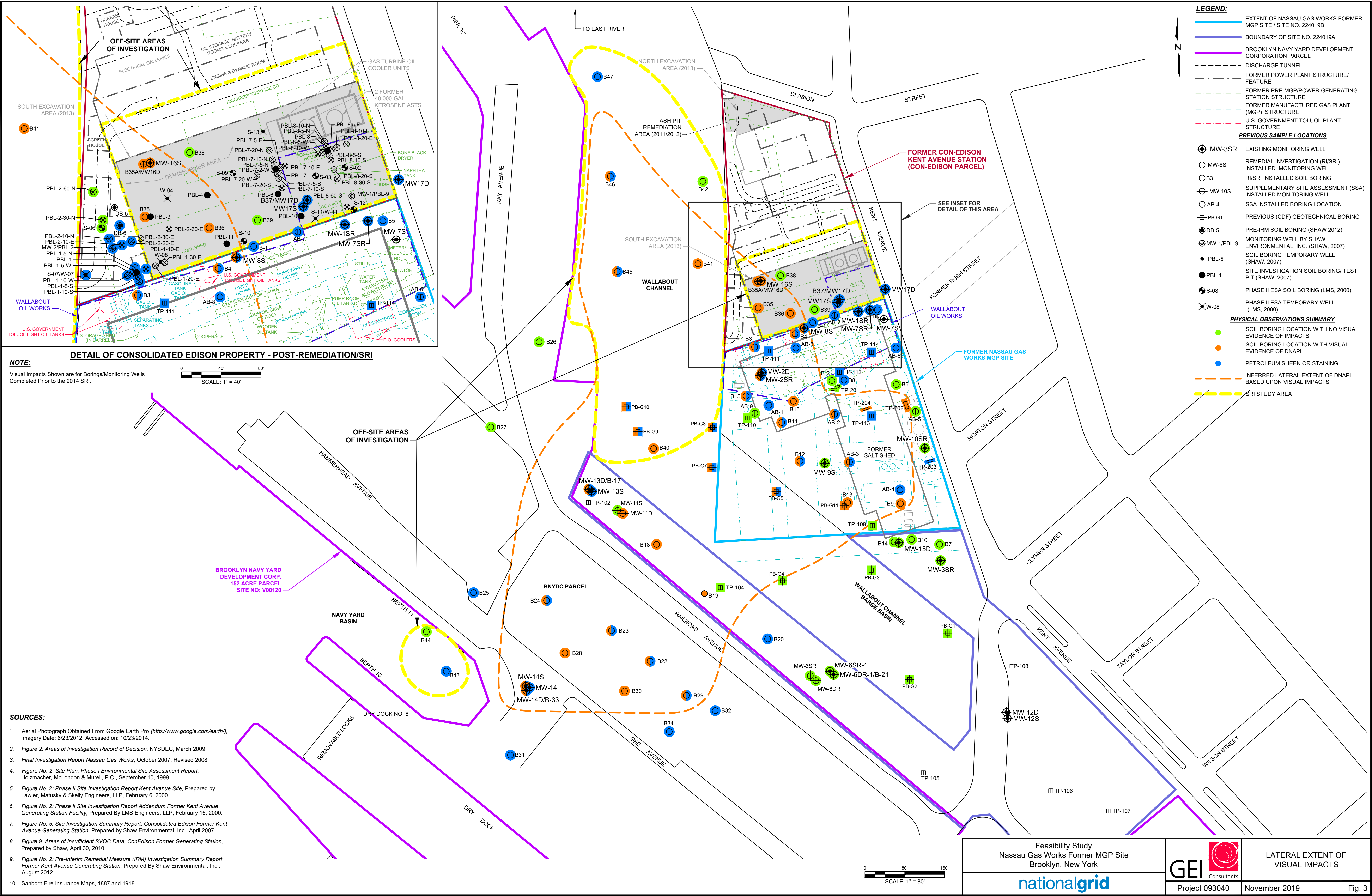


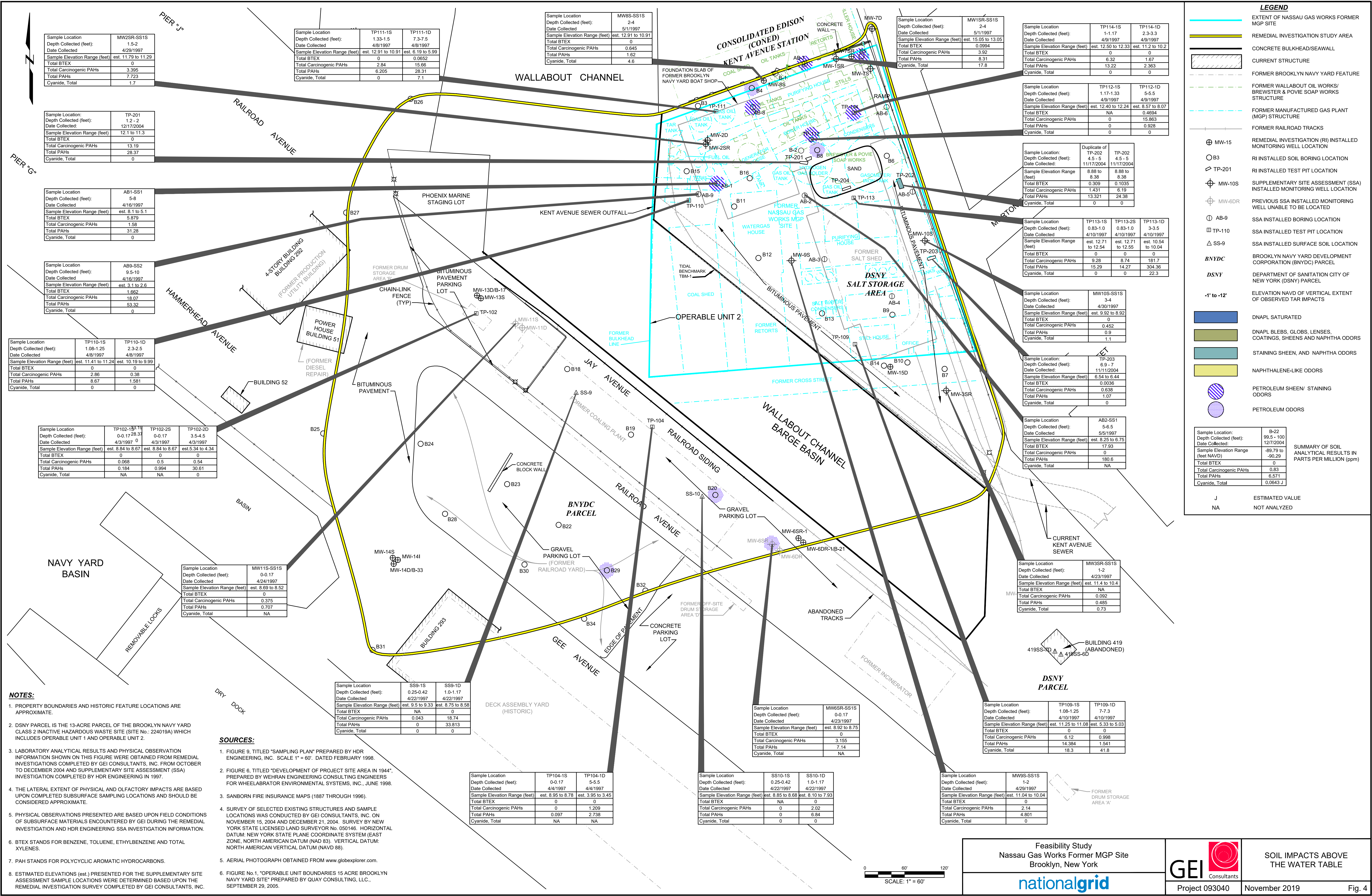
- SOURCES:**
1. USGS Topographic Map via ESRI USA Topo Maps, © 2013 National Geographic Society, i-cubed
 2. Map of U.S. Navy Yard, New York, NY, F-569-S-244, signed by P.R. Yates, Captain, (C.E.C.), U.S. Navy, Public Works Officer, Date: 06/30/1944, Scale: 1" = 100'.
 3. Figure 2: Site Map, Brooklyn Navy Yard, 63 Flushing Avenue, Brooklyn, NY., Prepared by Core Environmental Consultants, Scale: 1" = 200', Date: 3/21/2018.



Feasibility Study Nassau Gas Works Former MGP Site Brooklyn, New York	GEI Consultants	SITE LOCATION MAP
nationalgrid	Project 093040	November 2019 Fig. 1







- NOTES:**
- PROPERTY BOUNDARIES AND HISTORIC FEATURE LOCATIONS ARE APPROXIMATE.
 - DSNY PARCEL IS THE 13-ACRE PARCEL OF THE BROOKLYN NAVY YARD CLASS 2 INACTIVE HAZARDOUS WASTE SITE (SITE NO.: 224019A) WHICH INCLUDES OPERABLE UNIT 1 AND OPERABLE UNIT 2.
 - LABORATORY ANALYTICAL RESULTS AND PHYSICAL OBSERVATION INFORMATION SHOWN ON THIS FIGURE WERE OBTAINED FROM REMEDIAL INVESTIGATIONS COMPLETED BY GEI CONSULTANTS, INC. FROM OCTOBER TO DECEMBER 2004 AND SUPPLEMENTARY SITE ASSESSMENT (SSA) INVESTIGATION COMPLETED BY HDR ENGINEERING IN 1997.
 - THE LATERAL EXTENT OF PHYSICAL AND OLFACTORY IMPACTS ARE BASED UPON COMPLETED SUBSURFACE SAMPLING LOCATIONS AND SHOULD BE CONSIDERED APPROXIMATE.
 - PHYSICAL OBSERVATIONS PRESENTED ARE BASED UPON FIELD CONDITIONS OF SUBSURFACE MATERIALS ENCOUNTERED BY GEI DURING THE REMEDIAL INVESTIGATION AND HDR ENGINEERING SSA INVESTIGATION INFORMATION.
 - BTEX STANDS FOR BENZENE, TOLUENE, ETHYLBENZENE AND TOTAL XYLENES.
 - PAH STANDS FOR POLYCYCLIC AROMATIC HYDROCARBONS.
 - ESTIMATED ELEVATIONS (est.) PRESENTED FOR THE SUPPLEMENTARY SITE ASSESSMENT SAMPLE LOCATIONS WERE DETERMINED BASED UPON THE REMEDIAL INVESTIGATION SURVEY COMPLETED BY GEI CONSULTANTS, INC.

- SOURCES:**
- FIGURE 9, TITLED "SAMPLING PLAN" PREPARED BY HDR ENGINEERING, INC. SCALE 1" = 60'. DATED FEBRUARY 1998.
 - FIGURE 6, TITLED "DEVELOPMENT OF PROJECT SITE AREA IN 1944", PREPARED BY WEHRAN ENGINEERING CONSULTING ENGINEERS FOR WHEELABRATOR ENVIRONMENTAL SYSTEMS, INC., JUNE 1998.
 - SANBORN FIRE INSURANCE MAPS (1887 THROUGH 1996).
 - SURVEY OF SELECTED EXISTING STRUCTURES AND SAMPLE LOCATIONS WAS CONDUCTED BY GEI CONSULTANTS, INC. ON NOVEMBER 15, 2004 AND DECEMBER 21, 2004. SURVEY BY NEW YORK STATE LICENSED LAND SURVEYOR No. 050146. HORIZONTAL DATUM: NEW YORK STATE PLANE COORDINATE SYSTEM (EAST ZONE, NORTH AMERICAN DATUM (NAD 83). VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM (NAVD 88).
 - AERIAL PHOTOGRAPH OBTAINED FROM www.globexplorer.com.
 - FIGURE No 1, "OPERABLE UNIT BOUNDARIES 15 ACRE BROOKLYN NAVY YARD SITE" PREPARED BY QUAY CONSULTING, LLC., SEPTEMBER 29, 2005.

LEGEND

EXTENT OF NASSAU GAS WORKS FORMER MGP SITE

REMEDIAL INVESTIGATION STUDY AREA

CONCRETE BULKHEAD/SEAWALL

CURRENT STRUCTURE

FORMER BROOKLYN NAVY YARD FEATURE

FORMER WALLABOUT OIL WORKS/ BREWSTER & POVIE SOAP WORKS STRUCTURE

FORMER MANUFACTURED GAS PLANT (MGP) STRUCTURE

FORMER RAILROAD TRACKS

REMEDIAL INVESTIGATION (RI) INSTALLED MONITORING WELL LOCATION

RI INSTALLED SOIL BORING LOCATION

RI INSTALLED TEST PIT LOCATION

SUPPLEMENTARY SITE ASSESSMENT (SSA) INSTALLED MONITORING WELL LOCATION

PREVIOUS SSA INSTALLED MONITORING WELL UNABLE TO BE LOCATED

SSA INSTALLED BORING LOCATION

SSA INSTALLED TEST PIT LOCATION

SSA INSTALLED SURFACE SOIL LOCATION

BNYDC BROOKLYN NAVY YARD DEVELOPMENT CORPORATION (BNYDC) PARCEL

DSNY DEPARTMENT OF SANITATION CITY OF NEW YORK (DSNY) PARCEL

ELEVATION NAVD OF VERTICAL EXTENT OF OBSERVED TAR IMPACTS

DNAPL SATURATED

DNAPL BLEBS, GLOBS, LENSES, COATINGS, SHEENS AND NAPHTHA ODORS

STAINING SHEEN, AND NAPHTHA ODORS

NAPHTHALENE-LIKE ODORS

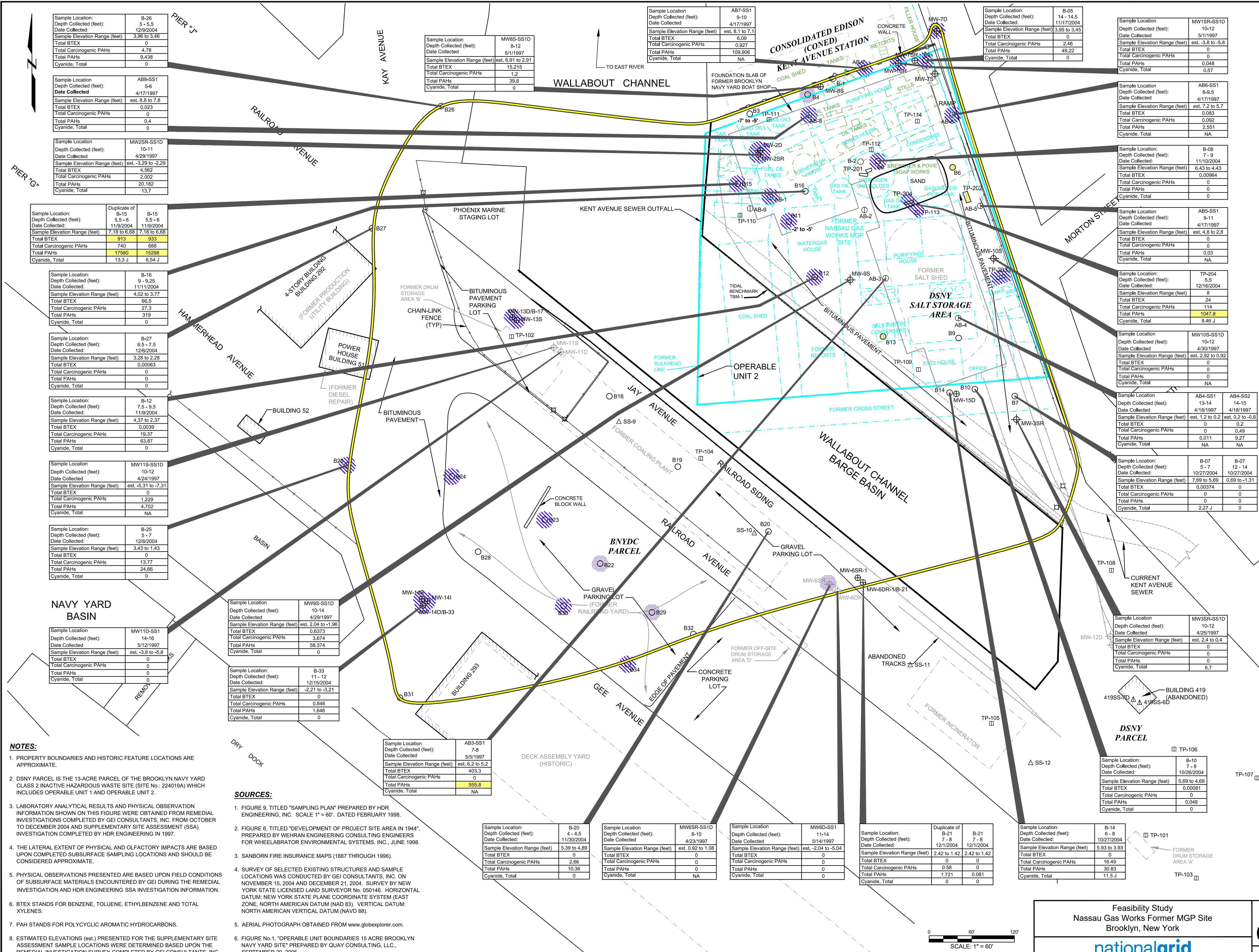
PETROLEUM SHEEN/ STAINING ODORS

PETROLEUM ODORS

SUMMARY OF SOIL ANALYTICAL RESULTS IN PARTS PER MILLION (ppm)

Sample Location:	B-22
Depth Collected (feet):	99.5 - 100
Date Collected:	12/7/2004
Sample Elevation Range (feet) (feet NAVD)	-89.79 to -90.29
Total BTEX	0
Total Carcinogenic PAHs	0.83
Total PAHs	6.571
Cyanide, Total	0.0843 J

J ESTIMATED VALUE
NA NOT ANALYZED



LEGEND

EXTENT OF NASSAU GAS WORKS FORMER MGP SITE

REMEDIAL INVESTIGATION STUDY AREA

CONCRETE BULKHEAD/SEAWALL

CURRENT STRUCTURE

FORMER BROOKLYN NAVY YARD FEATURE

FORMER WALLABOUT OIL WORKS/ BREVSTER & POVIE SOAP WORKS STRUCTURE

FORMER MANUFACTURED GAS PLANT (MGP) STRUCTURE

FORMER RAILROAD TRACKS

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RI INSTALLED SOIL BORING LOCATION

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J ESTIMATED VALUE

NA NOT ANALYZED

1047.8 VALUE EXCEEDS COMMERCIAL USE SCOS

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5. AERIAL PHOTOGRAPH OBTAINED FROM www.globexplorer.com.

6. FIGURE No. 1, "OPERABLE UNIT BOUNDARIES 15 ACRE BROOKLYN NAVY YARD SITE" PREPARED BY QUAY CONSULTING, LLC., SEPTEMBER 29, 2005.

Feasibility Study
Nassau Gas Works Former MGP Site
Brooklyn, New York

nationalgrid

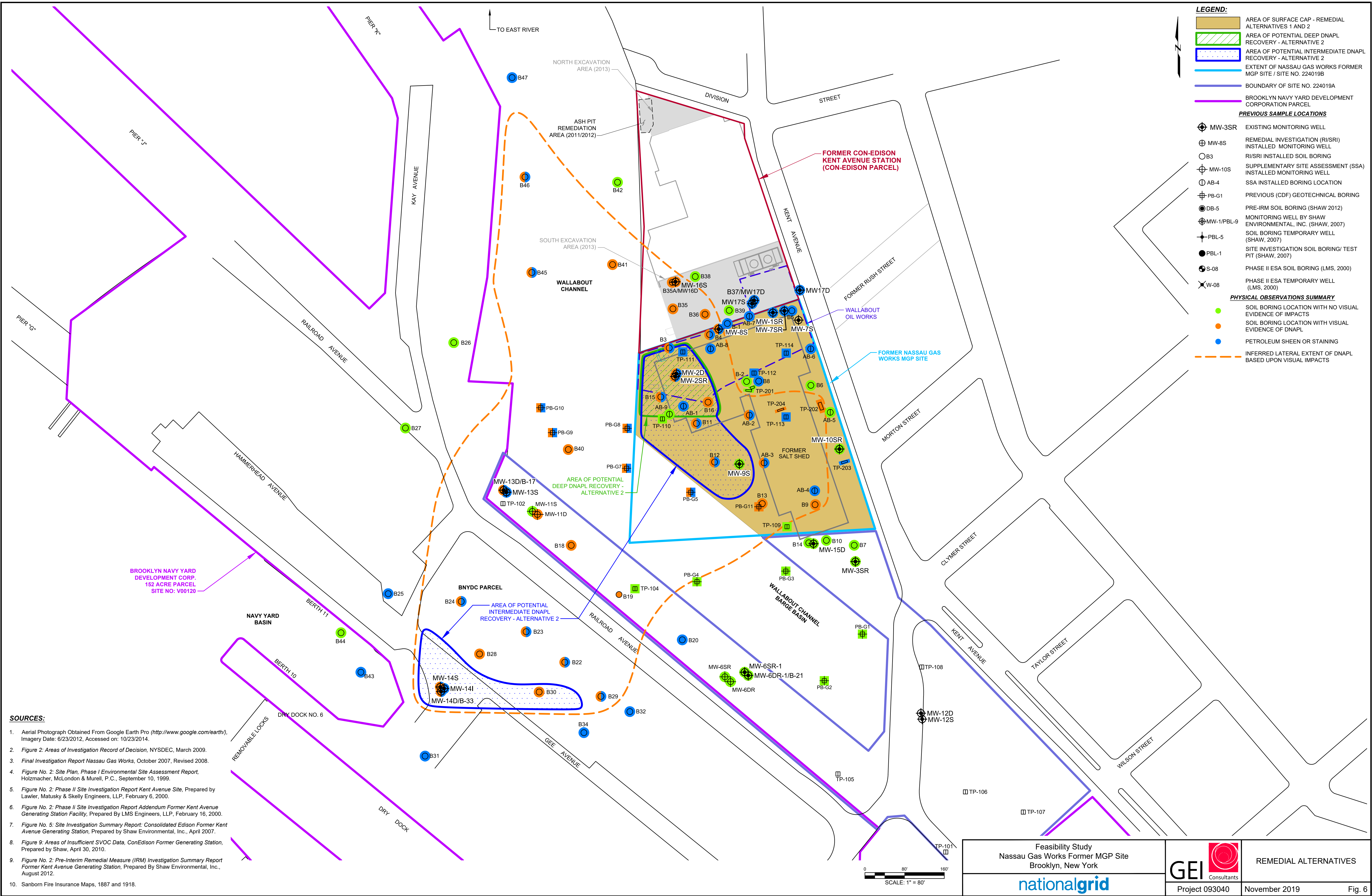
GEI Consultants

Project 093040

SOIL IMPACTS FROM THE
WATER TABLE TO 15 FEET
BELOW GROUND SURFACE

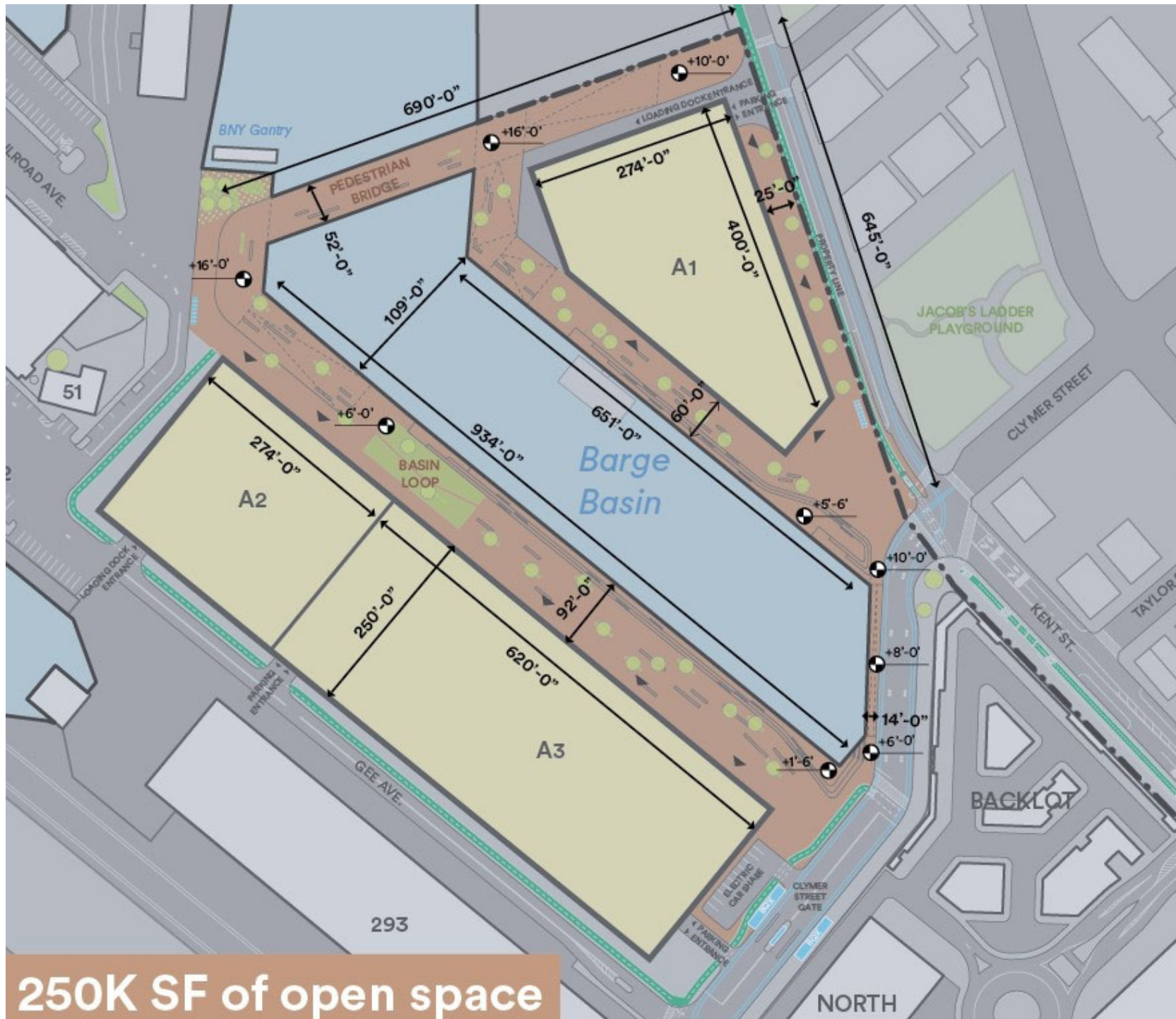
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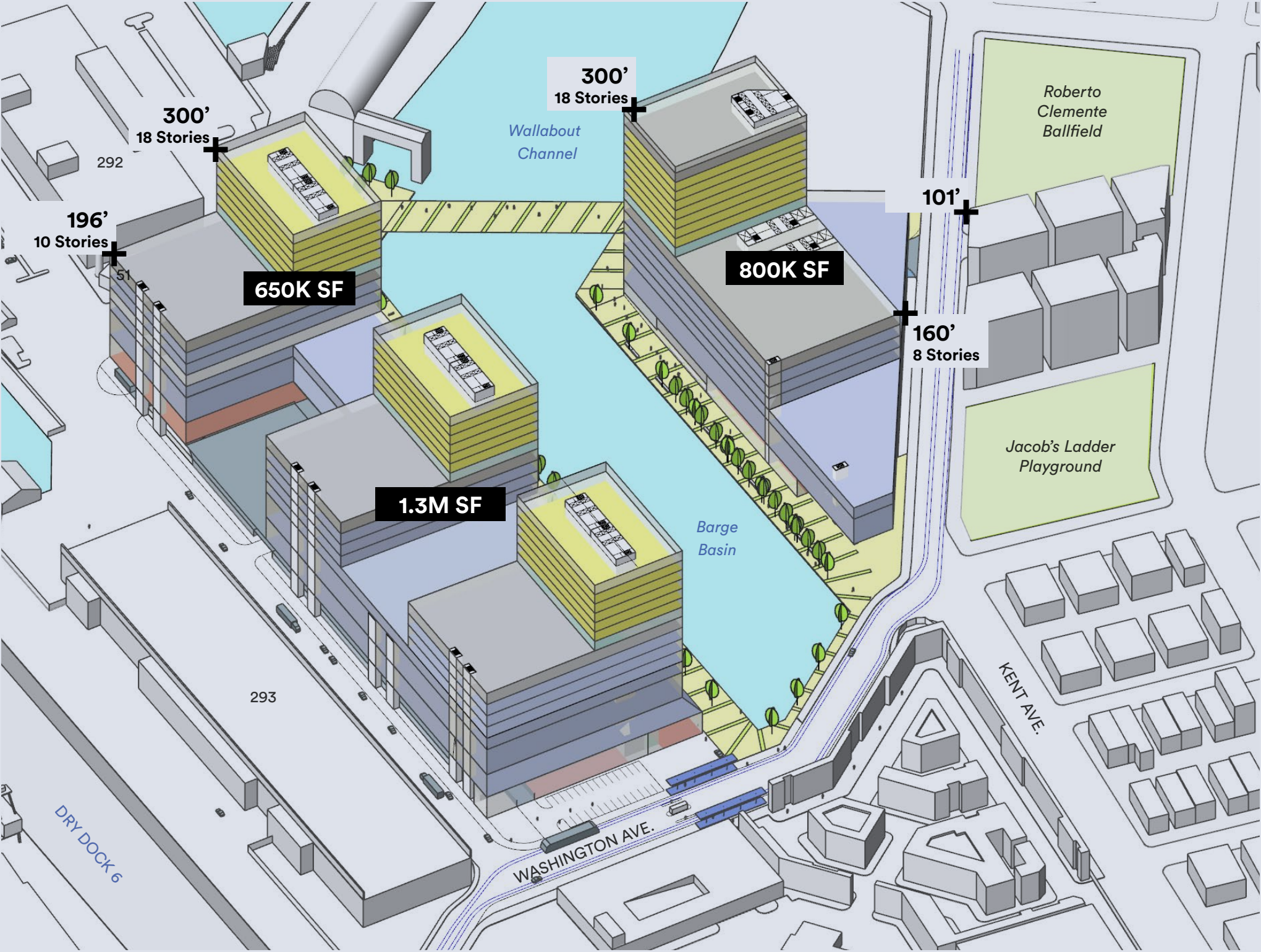
Fig. 5



Appendix A

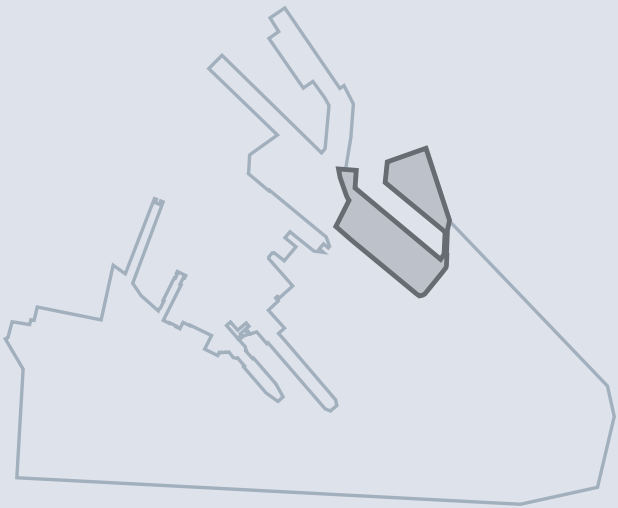
Development Plan, Brooklyn Navy Yard





5.2k jobs
2.7M GSF
177K SF Parking
30 Berths

- Manufacturing 1.7M SF
- Creative Office 475K SF
- Lobby & Amenities 272K SF
- Parking/Loading 253K SF



*BQX facility as alternate use in parking areas of northeast Kent Avenue Development Site

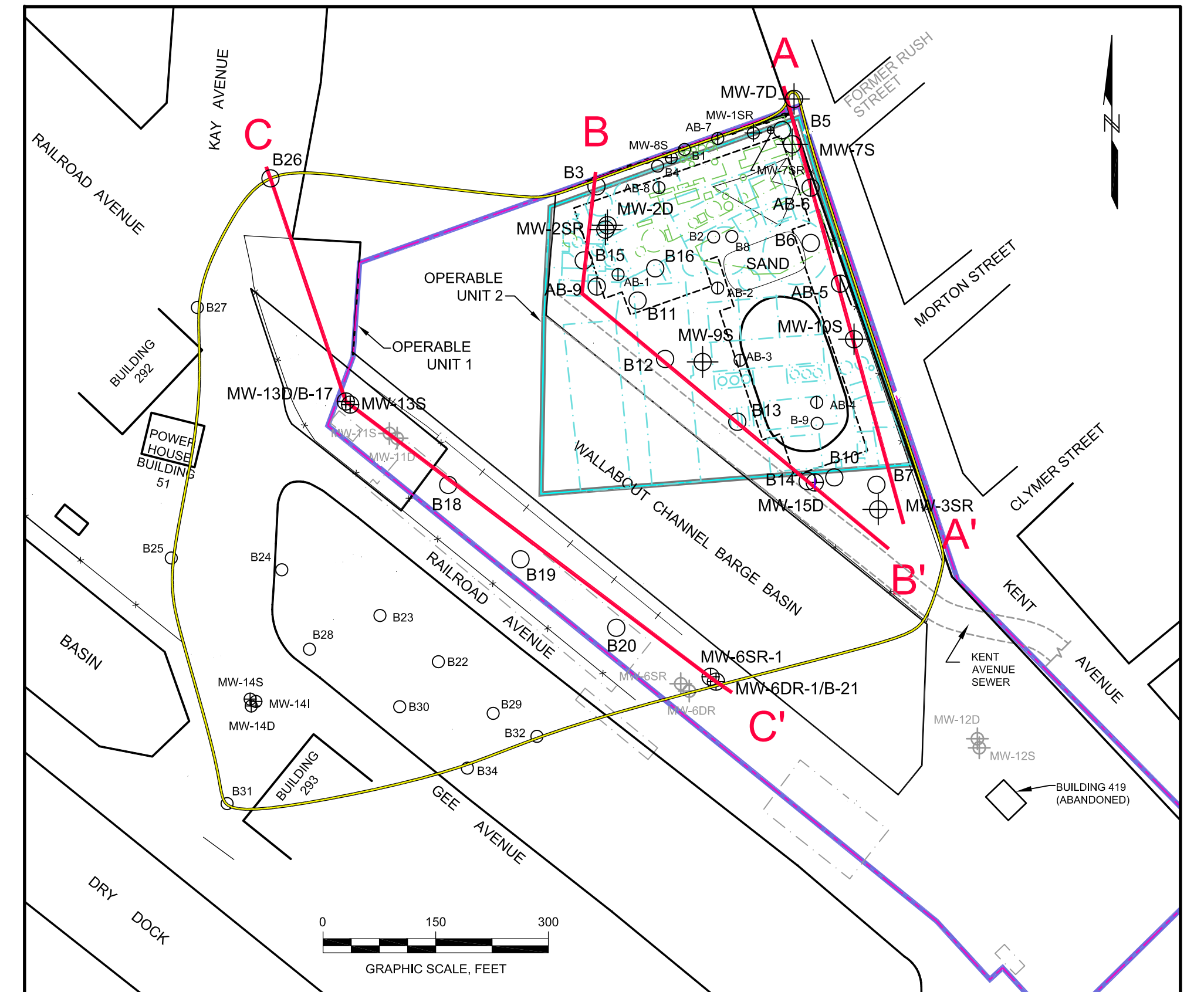
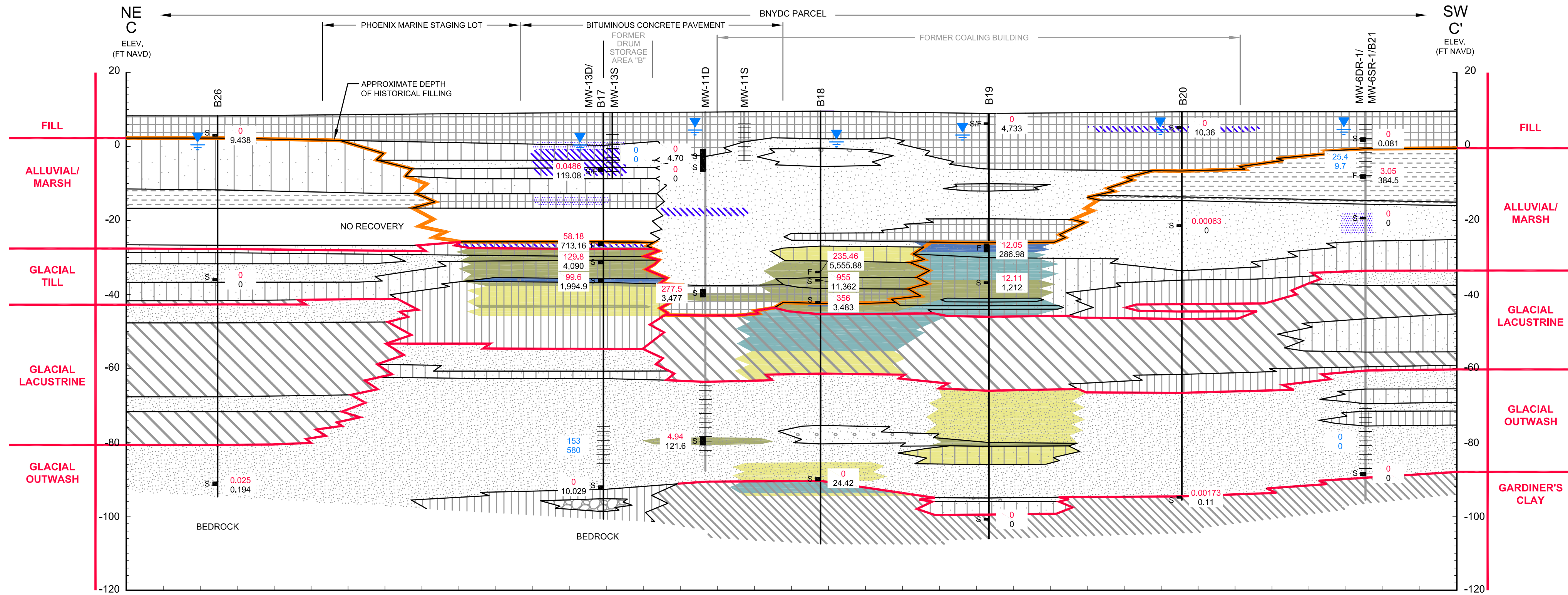
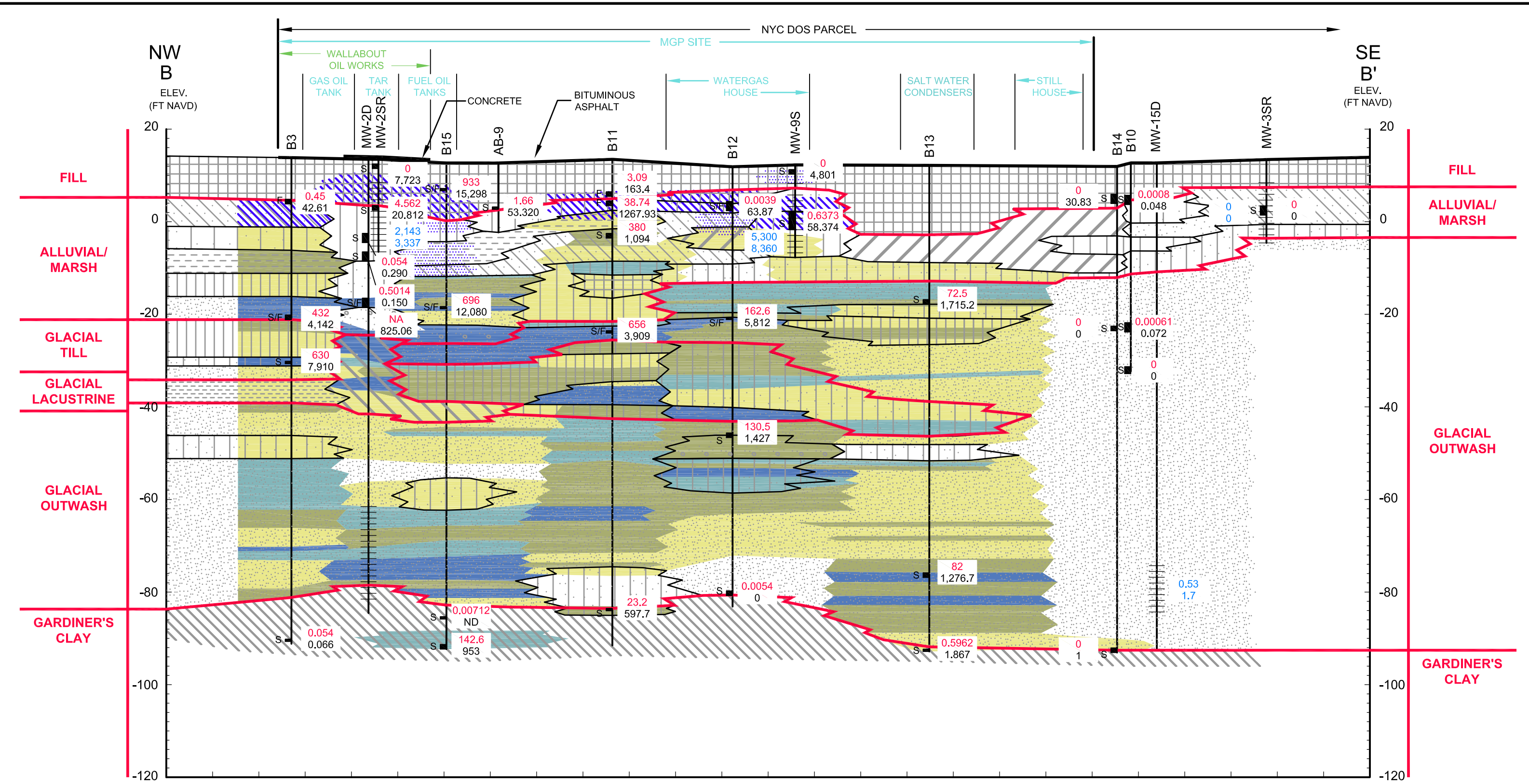
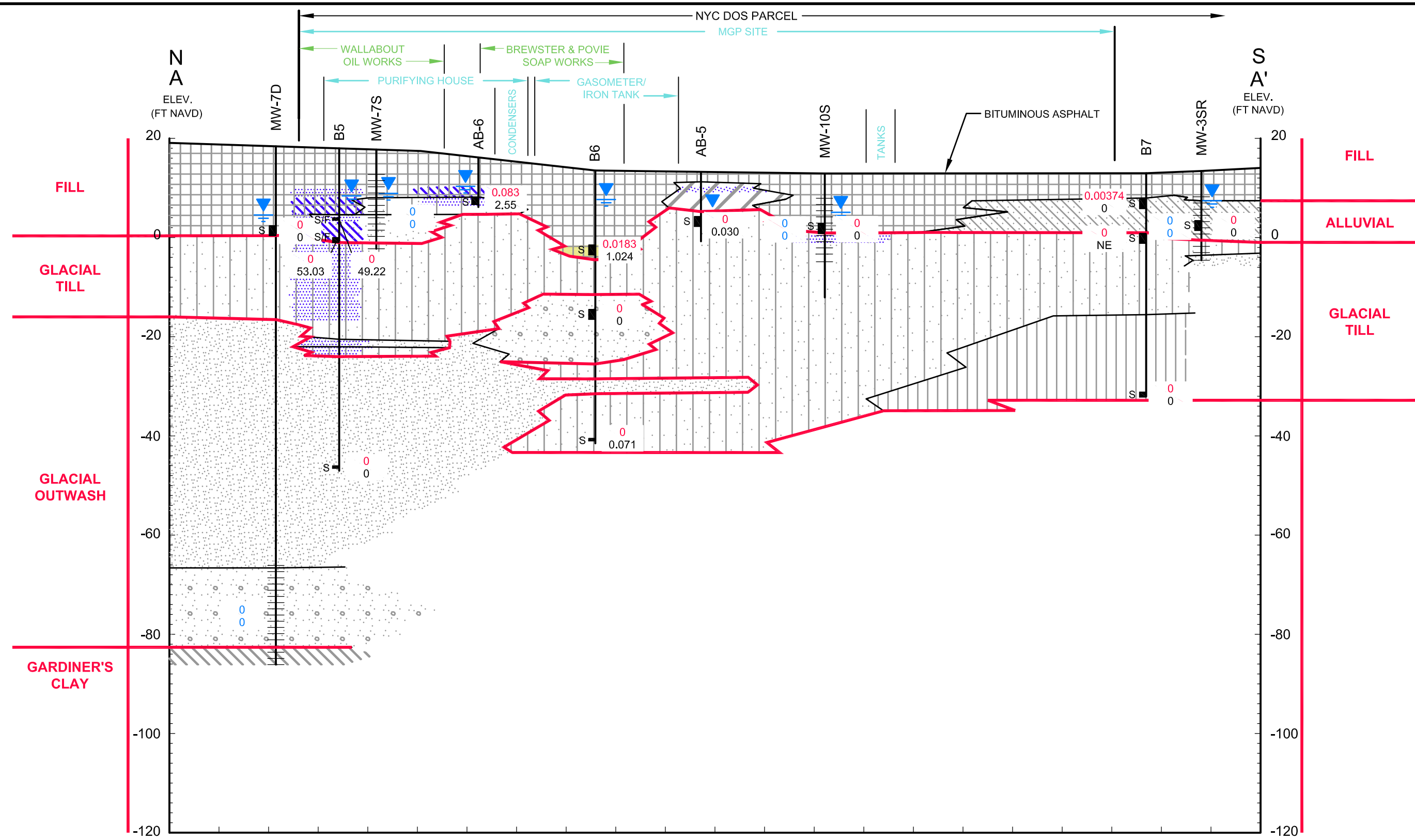
Site A Kent Ave

Site Section



Appendix B

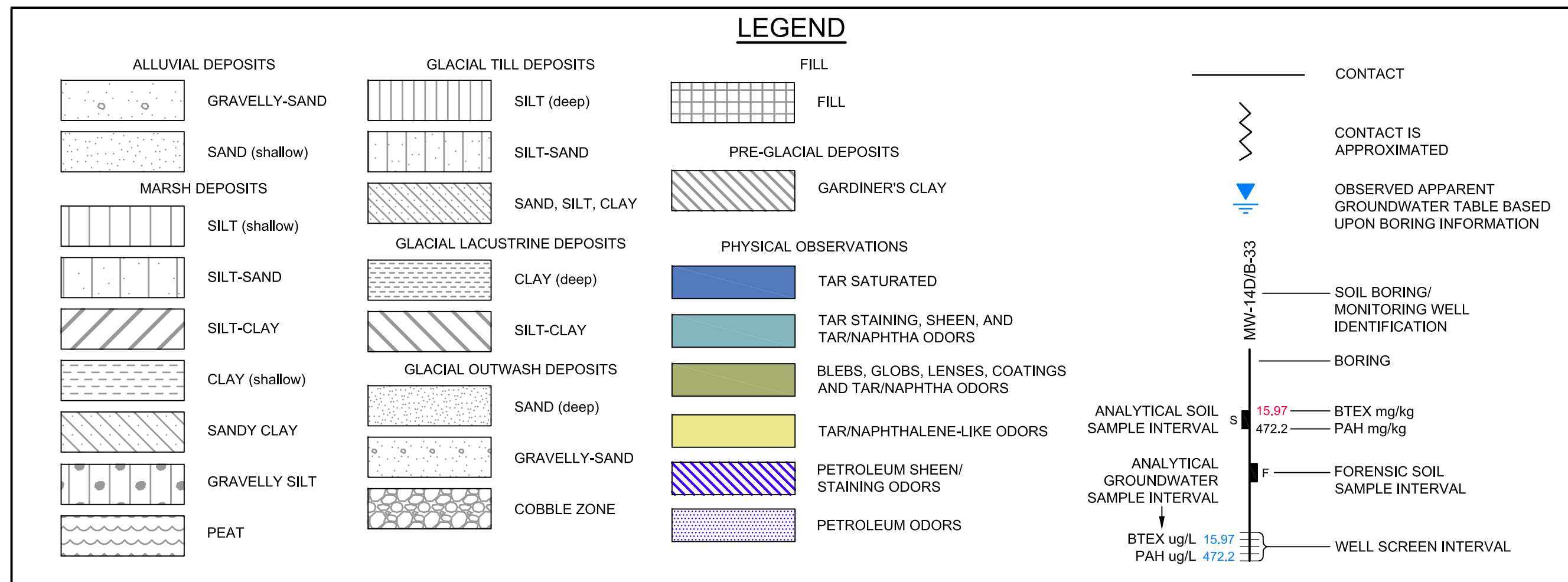
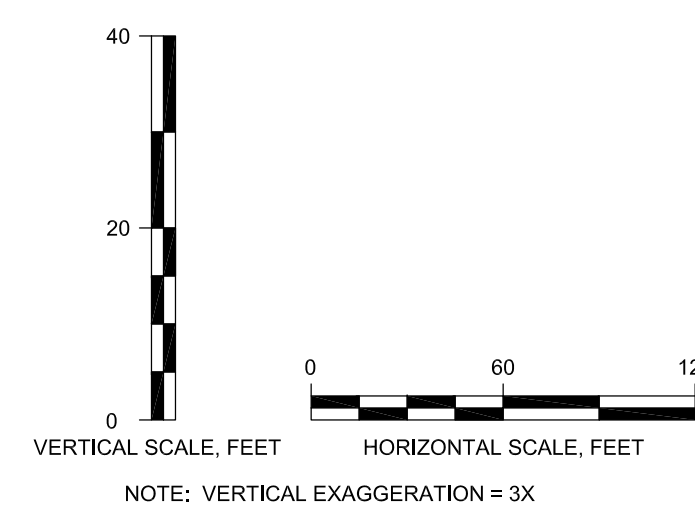
Cross-Sections

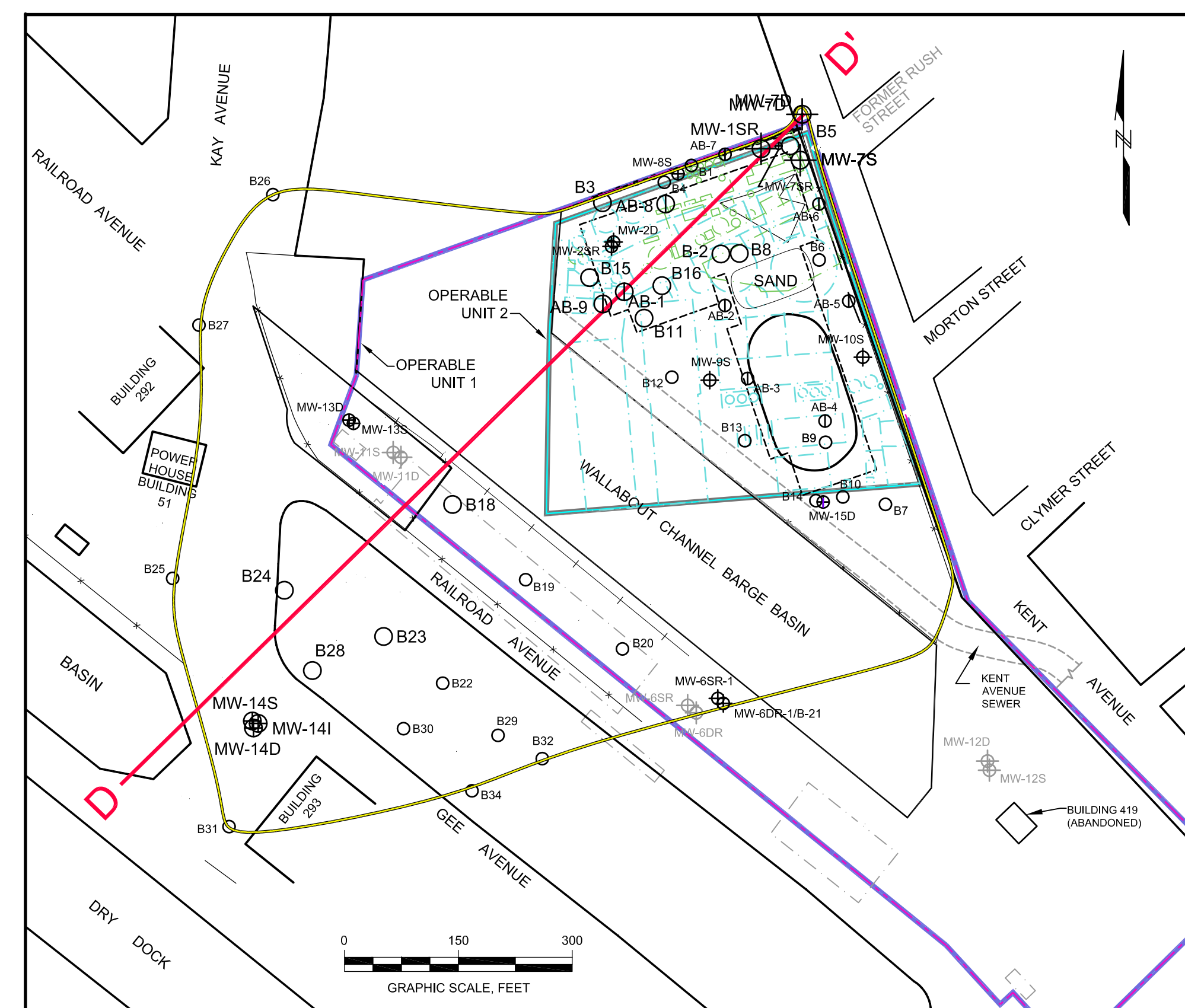


CROSS SECTION LOCATION MAP

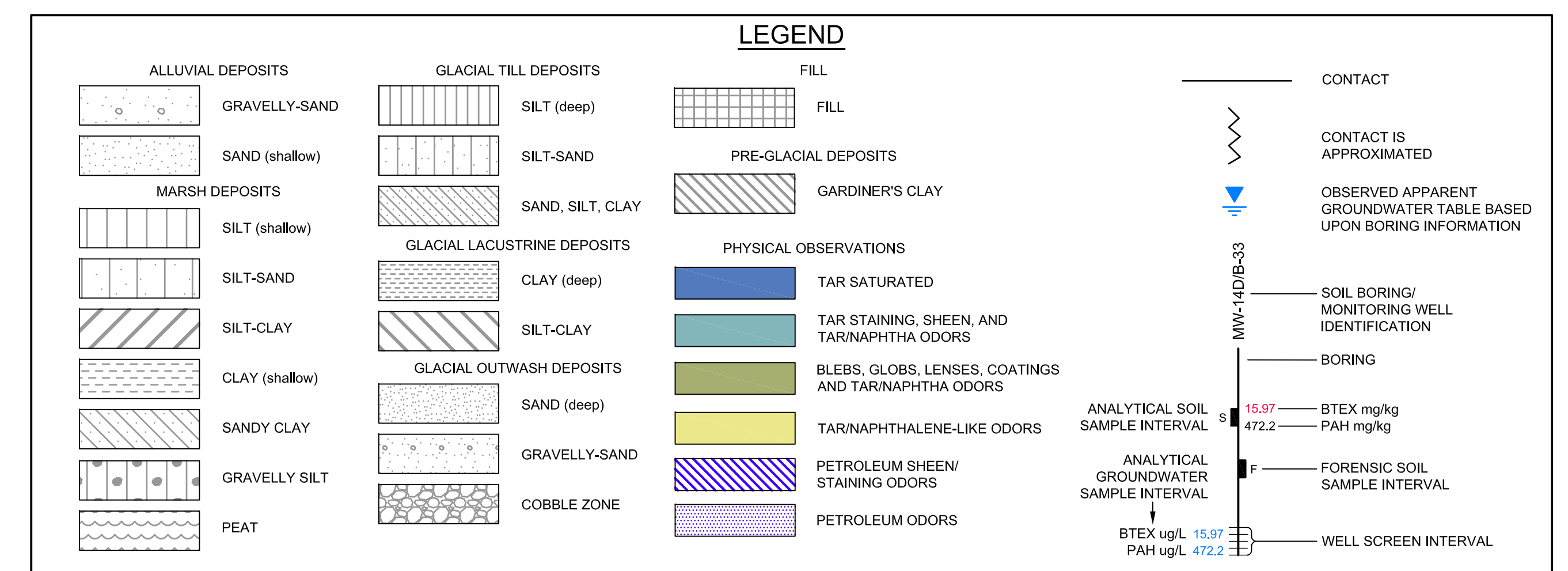
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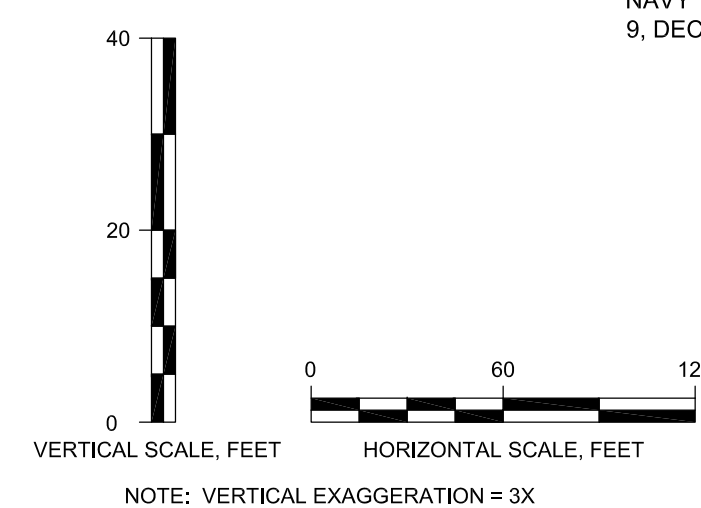




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 3. PAH STANDS FOR POLYCYCLIC AROMATIC HYDROCARBONS.
 4. GEOLOGIC INFORMATION WAS OBTAINED FROM BORING 64 NAVY YARD EXTENSION, SHEET 4, BORING LOGS PART 3 OF 9, DECEMBER 1943.

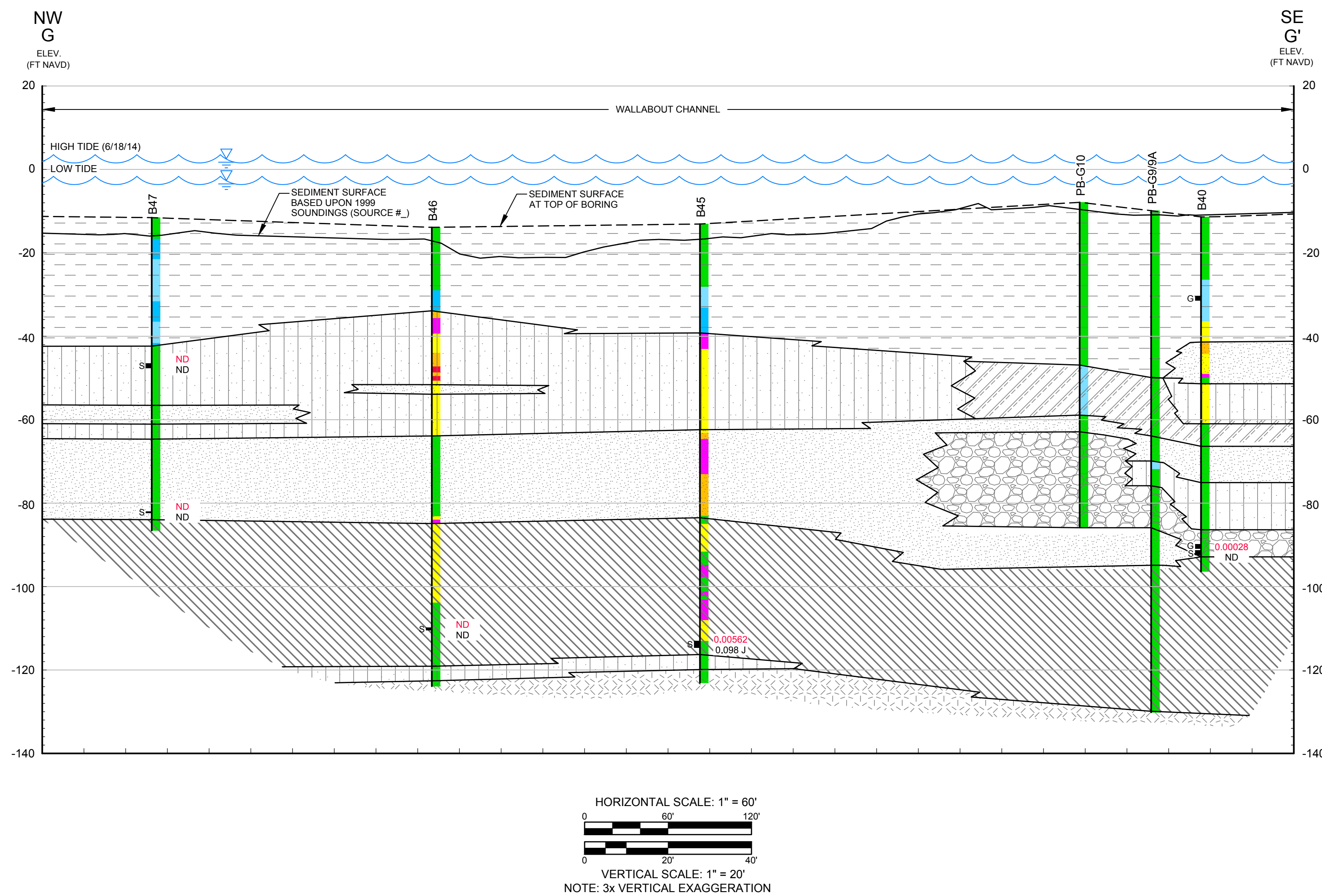
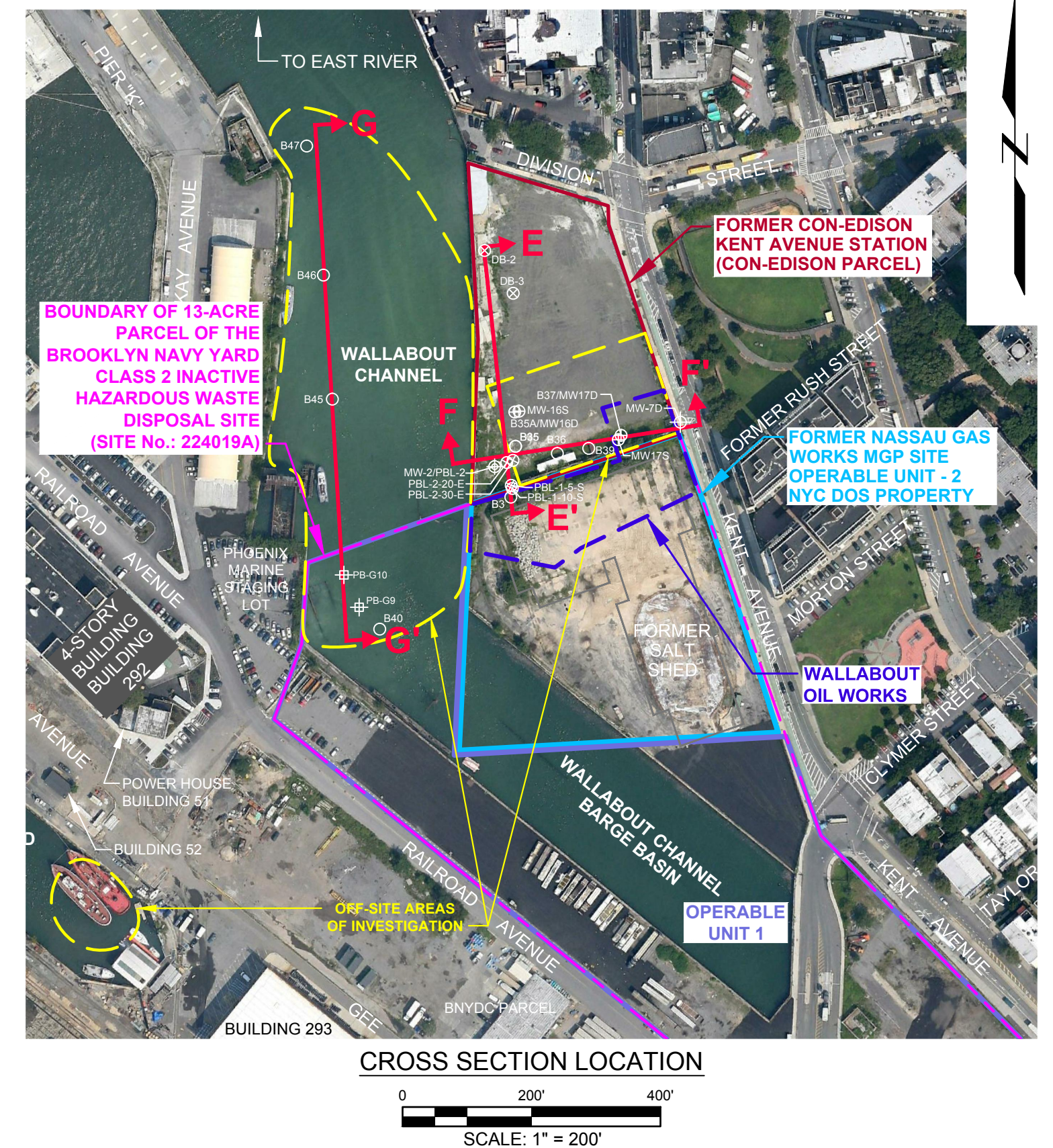
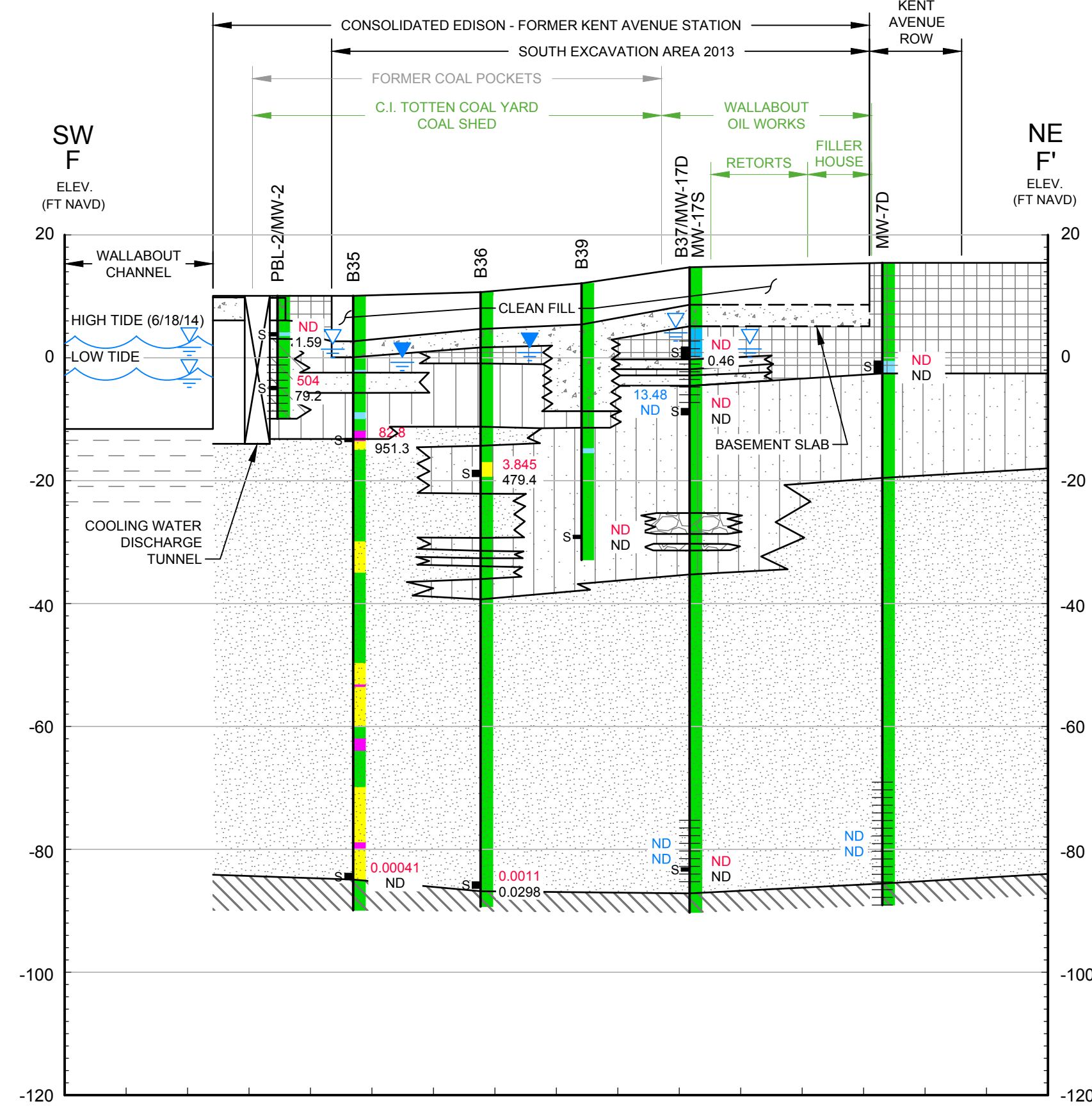
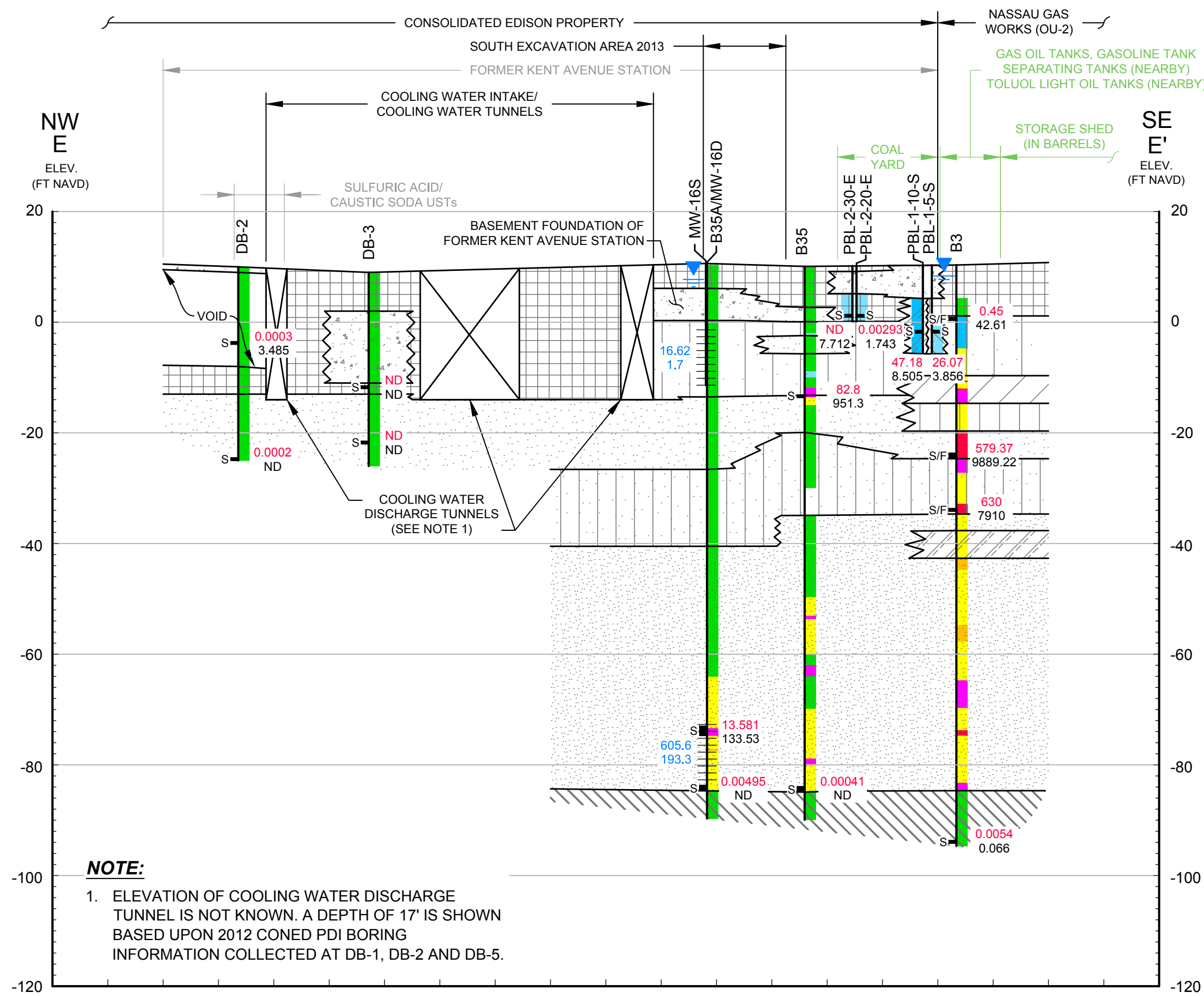


GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

CROSS SECTION D-D'

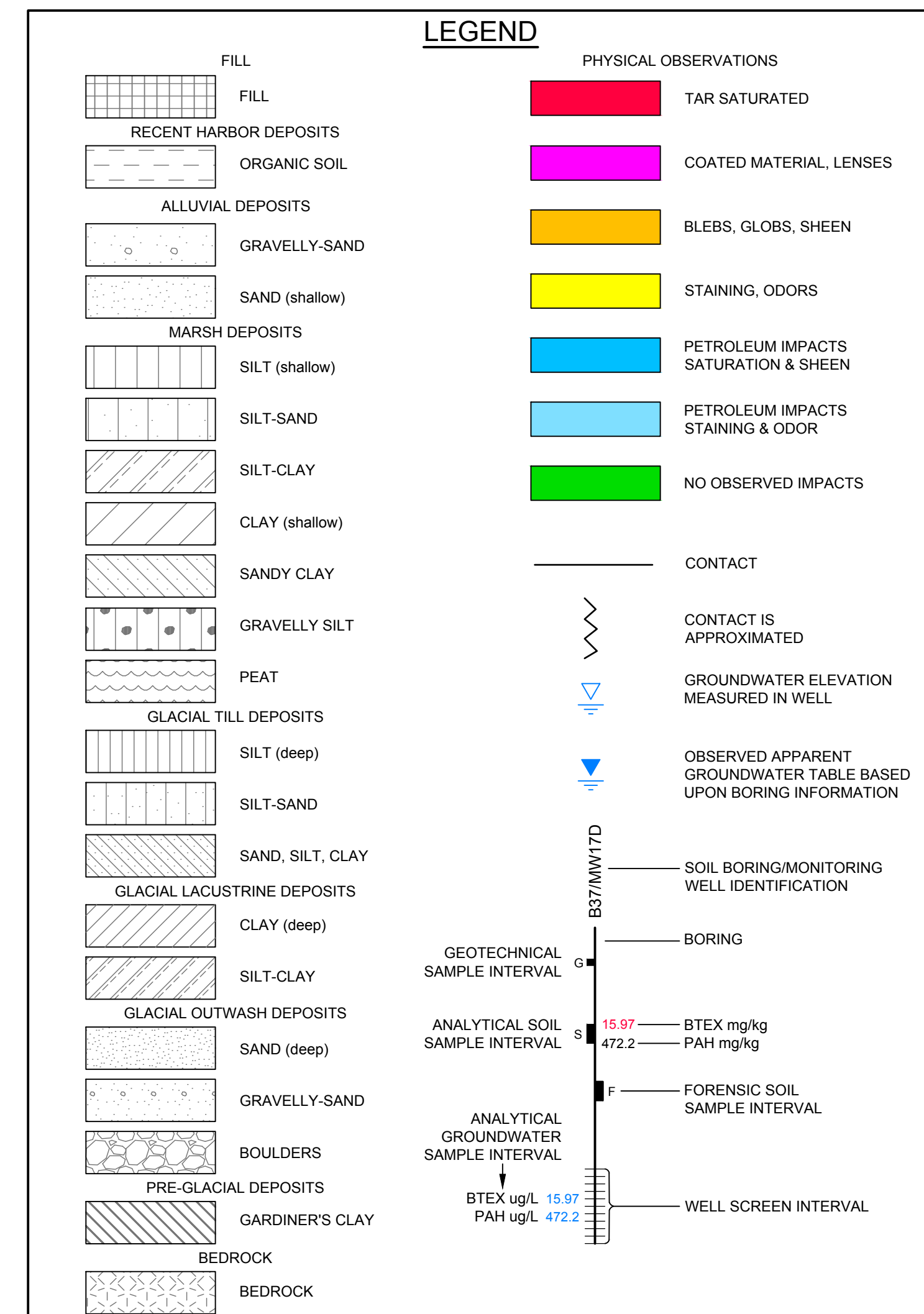
October 2007

Plate 4



SOURCES:

1. Aerial Photograph Obtained from Google Earth Pro (<http://www.google.com/earth/>), Imagery Date: 6/23/2012, Accessed on: 10/23/2014.
2. Figure No.1, *Operable Unit Boundaries 15 Acre Brooklyn Navy Yard Site*, Prepared By Quay Consulting, LLC., September 29, 2005.
3. *Final Investigation Report Nassau Gas Works*, October 2007, Revised 2008.
4. 90% Geotechnical Report, *Brooklyn Navy Yard Confined Disposal Facility*, Brooklyn, New York, Prepared by Parsons Brinkerhoff Quade & Douglass, Inc., March 2004.
5. *Plate 2: Existing Conditions and Sample Locations* from Remedial Investigation Report, Prepared by GEI Consultants, Inc., December 2006.
6. *Figure 2: Site Plan, Former Kent Avenue Generating Station, 500 Kent Avenue, Brooklyn, NY*, Prepared By Shaw Environmental, Inc., Scale: 1" = 50', Date: 04/05/12.
7. *Figure 3: Soil Analytical Data, Former Kent Avenue Generating Station, 500 Kent Avenue, Brooklyn, NY*, Prepared By Shaw Environmental & Infrastructure, Scale: 1" = 50', Date: 01/24/07.
8. *Figure 4: Pre-Design Investigation Boring Location Plan, ConEdison Former Generating Station, 500 Kent Avenue, Brooklyn, NY*, Prepared By Shaw Environmental & Infrastructure, Scale: 1" = 50', Date: 02/19/10.
9. *Figure 2: Pre-IRM Soil Boring Locations, Former Kent Avenue Generating Station, 500 Kent Avenue, Brooklyn, NY*, Prepared By Shaw Environmental, Inc., Scale: 1" = 50', Date: 06/22/12.
10. *Figure 2: Site Plan, Consolidated Edison Company of New York, Inc., Kent Avenue Station, 500 Kent Avenue, Brooklyn, New York*, Prepared By H2MGroup, Not to Scale, Date: 7/28/99.



Supplemental Remedial Investigation - Off-Site Areas
Nassau Gas Works Former MGP Site
Brooklyn, New York

nationalgrid



Project 093040

CROSS SECTIONS
E-E', F-F' AND G-G'

February 2017

Fig. 28

Appendix C

Remedial Investigation Soil Analytical Data

Location Name					B-03	B-03	B-03	B-04	B-04	B-04	B-04	B-05	B-05	B-05	B-06	B-06	B-06
Start Depth					34	44	104	22.5	43	43	100.5	14	18	64	15	28	54
End Depth					35	44.5	104.5	23	43.5	43.5	101	14.5	19	64.5	17	30	54.5
Depth Unit					ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date					11/15/2004	11/15/2004	11/15/2004	11/15/2004	11/15/2004	11/15/2004	11/16/2004	11/17/2004	11/17/2004	11/17/2004	11/11/2004	11/11/2004	11/11/2004
Parent Sample										NGW-B4(43-43.5)							
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
1.12 Other VOCs																	
Benzene	mg/kg	0.06	44	89	12 J	68	0.004 J	96	12	18	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Toluene	mg/kg	0.7	500	1000	34 U	57	0.0014 J	270	39	55	0.0016 J	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Ethylbenzene	mg/kg	1	390	780	160	75	0.0068 U	76	180	240	0.00078 J	0.55 U	0.56 U	0.0051 U	0.0043 J	0.0056 U	0.0056 U
Total Xylene	mg/kg	0.26	500	1000	260	430	0.0068 UJ	320	340	450	0.0037 J	0.55 U	0.56 U	0.0051 U	0.014	0.0056 U	0.0056 U
Total BTEX (ND=0)	mg/kg		NE	NE	432	630	0.0054	762	571	763	0.00608				0.0183		
1.12 Other VOCs																	
Acetone	mg/kg	0.05000	500.0	1000	84 U	15 U	0.014 UJ	29 U	29 U	29 U	0.012 UJ	1.4 U	1.4 U	0.01 UJR	0.11 J	0.011 UJ	0.011 UJ
Bromodichloromethane	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Bromoform	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Bromomethane	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 UJ	12 U	12 U	12 U	0.0058 UJ	0.55 UJ	0.56 UJ	0.0051 U	0.0058 UJ	0.0056 UJ	0.0056 UJ
Carbon disulfide	mg/kg	NE	NE	NE	34 U	6.1 U	0.034	12 U	12 U	12 U	0.0013 J	0.55 U	0.56 U	0.0051 U	0.0038 J	0.0056 U	0.0056 U
Carbon tetrachloride	mg/kg	0.7600	22.00	44.00	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Chlorobenzene	mg/kg	1.100	500.0	1000	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Chloroethane	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 UJ	12 U	12 U	12 U	0.0058 UJ	0.55 U	0.56 U	0.0051 UJ	0.0058 UJ	0.0056 UJ	0.0056 UJ
Chloroform (Trichloromethane)	mg/kg	0.3700	350.0	700.0	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Chloromethane	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Dibromochloromethane	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
1,1-Dichloroethane	mg/kg	0.2700	240.0	480.0	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
1,2-Dichloroethane	mg/kg	0.02000	30.00	60.00	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
1,1-Dichloroethene	mg/kg	0.3300	500.0	1000	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
cis-1,2-Dichloroethene	mg/kg	0.2500	500.0	1000	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
trans-1,2-Dichloroethene	mg/kg	0.1900	500.0	1000	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
1,2-Dichloropropane	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
cis-1,3-Dichloropropene	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
trans-1,3-Dichloropropene	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
2-Hexanone	mg/kg	NE	NE	NE	34 U	6.1 U	0.014 UJ	12 U	12 U	12 U	0.012 UJ	0.55 U	0.56 U	0.01 UJ	0.012 U	0.011 U	0.011 U
Methyl ethyl ketone (2-Butanone)	mg/kg	0.1200	500.0	1000	34 U	6.1 U	0.014 UJ	12 U	12 U	12 U	0.012 UJ	0.55 U	0.56 U	0.01 U	0.012 UJ	0.011 UJ	0.011 UJ
4-Methyl-2-pentanone (MIBK)	mg/kg	NE	NE	NE	34 U	6.1 U	0.014 UJ	12 U	12 U	12 U	0.012 UJ	0.55 U	0.56 U	0.01 U	0.012 U	0.011 U	0.011 U
Methylene chloride	mg/kg	0.05000	500.0	1000	34 U	6.1 U	0.0068 UJ	12 U	12 U	12 U	0.0058 UJ	0.55 U	0.56 U	0.0051 UJ	0.0058 UJ	0.0056 UJ	0.0056 UJ
Styrene	mg/kg	NE	NE	NE	100	46	0.0068 U	210	73	97	0.0028 J	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
1,1,2,2-Tetrachloroethane	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 U	12 U	2.7 J	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Tetrachloroethene (PCE)	mg/kg	1.300	150.0	300.0	34 U	6.1 U	0.0068 UJ	12 U	12 U	12 U	0.0058 UJ	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
1,1,1-Trichloroethane (TCA)	mg/kg	0.6800	500.0	1000	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
1,1,2-Trichloroethane	mg/kg	NE	NE	NE	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Trichloroethene (TCE)	mg/kg	0.4700	200.0	400.0	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
Vinyl chloride	mg/kg	0.02000	13.00	27.00	34 U	6.1 U	0.0068 U	12 U	12 U	12 U	0.0058 U	0.55 U	0.56 U	0.0051 U	0.0058 U	0.0056 U	0.0056 U
2.33 NYSDEC PAH17																	
Acenaphthene	mg/kg	20.00	500.0	1000	90 J	780 U	0.44 U	86 J	750 U	72 J	0.37 U	4.6	6.9	0.33 U	0.21 J	0.36 U	0.36 U
Acenaphthylene	mg/kg	100.0	500.0	1000	350 J	350 J	0.44 U	750	770	550	0.057 J	0.71 J	0.83 J	0.33 U	0.055 J	0.36 U	0.36 U
Anthracene	mg/kg	100.0	500.0	1000	150 J	310 J	0.44 U	280 J	310 J	190 J	0.37 U	1.7 J	2.4 J	0.33 U	0.07 J	0.36 U	0.36 U
Benzo(a)anthracene	mg/kg	1.000	5.600	11.00	76 J	130 J	0.44 U	110 J	130 J	90 J	0.37 U	0.84 J	1 J	0.33 U	0.059 J	0.36 U	0.36 U
Benzo(b)fluoranthene	mg/kg	1.000	5.600	11.00	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Benzo(k)fluoranthene	mg/kg	0.8000	56.00	110.0	350 U	780 U	0.44 U	60 J	750 U	45 J	0.37 U	2.8 UJ	0.4 J	0.33 U	0.38 U	0.36 U	0.36 U
Benzo(g,h,i)perylene	mg/kg	100.0	500.0	1													

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-03 34 35 ft 11/15/2004	B-03 44 44.5 ft 11/15/2004	B-03 104 104.5 ft 11/15/2004	B-04 22.5 23 ft 11/15/2004	B-04 43 43.5 ft 11/15/2004	B-04 43 43.5 ft 11/15/2004 NGW-B4(43-43.5)	B-04 100.5 101 ft 11/16/2004	B-05 14 14.5 ft 11/17/2004	B-05 18 19 ft 11/17/2004	B-05 64 64.5 ft 11/17/2004	B-06 15 17 ft 11/11/2004	B-06 28 30 ft 11/11/2004	B-06 54 54.5 ft 11/11/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
2-Chlorophenol	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
4-Chlorophenyl phenyl ether	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Dibenzofuran	mg/kg	7.000	350.0	1000	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
1,2-Dichlorobenzene (o-DCB)	mg/kg	1.100	500.0	1000	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
1,3-Dichlorobenzene (m-DCB)	mg/kg	2.400	280.0	560.0	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
1,4-Dichlorobenzene (p-DCB)	mg/kg	1.800	130.0	250.0	350 U	780 U	0.44 UJ	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
3,3-Dichlorobenzidine	mg/kg	NE	NE	NE	700 U	1600 U	0.87 U	740 U	1500 U	750 U	0.74 U	5.6 U	5.7 U	0.67 U	0.75 U	0.73 U	0.72 U
2,4-Dichlorophenol	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Diethyl phthalate	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Dimethyl phthalate	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
2,4-Dimethylphenol	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Di-n-butyl phthalate	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
4,6-Dinitro-2-methylphenol	mg/kg	NE	NE	NE	1700 U	3800 U	2.1 U	1800 U	3600 U	1800 U	1.8 U	14 U	14 U	1.6 U	1.8 U	1.8 U	1.7 U
2,4-Dinitrophenol	mg/kg	NE	NE	NE	1700 U	3800 U	2.1 UJ	1800 UJ	3600 UJ	1800 U	1.8 UJ	14 UJ	14 U	1.6 U	1.8 U	1.8 U	1.7 U
2,4-Dinitrotoluene	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
2,6-Dinitrotoluene	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Di-n-octyl phthalate	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Hexachlorobenzene	mg/kg	0.3300	6.000	12.00	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
1,3-Hexachlorobutadiene (C-46)	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Hexachlorocyclopentadiene	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Hexachloroethane	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Isophorone	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
2-Methylphenol (o-Cresol)	mg/kg	0.3300	500.0	1000	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
4-Methylphenol (p-Cresol)	mg/kg	0.3300	500.0	1000	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
2-Nitroaniline	mg/kg	NE	NE	NE	1700 U	3800 U	2.1 U	1800 U	3600 U	1800 U	1.8 U	14 U	14 U	1.6 U	1.8 U	1.8 U	1.7 U
3-Nitroaniline	mg/kg	NE	NE	NE	1700 U	3800 U	2.1 U	1800 U	3600 U	1800 U	1.8 U	14 U	14 U	1.6 U	1.8 U	1.8 U	1.7 U
4-Nitroaniline	mg/kg	NE	NE	NE	700 U	1600 U	0.87 U	740 U	1500 U	750 U	0.74 U	5.6 U	5.7 U	0.67 U	0.75 U	0.73 U	0.72 U
Nitrobenzene	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.088 J
2-Nitrophenol	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
4-Nitrophenol	mg/kg	NE	NE	NE	1700 U	3800 U	2.1 U	1800 U	3600 U	1800 U	1.8 U	14 U	14 U	1.6 U	1.8 U	1.8 U	1.7 U
N-Nitrosodiphenylamine (NDFA)	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
N-Nitrosodi-n-propylamine (NDPA)	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
2,2-oxybis(1-Chloropropane)	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
Pentachlorophenol	mg/kg	0.8000	6.700	55.00	1700 U	3800 U	2.1 UJ	1800 U	3600 U	1800 U	1.8 U	14 U	14 U	1.6 U	1.8 U	1.8 U	1.7 U
Phenol	mg/kg	0.3300	500.0	1000	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
1,2,4-Trichlorobenzene	mg/kg	NE	NE	NE	350 U	780 U	0.44 UJ	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
2,4,5-Trichlorophenol	mg/kg	NE	NE	NE	1700 U	3800 U	2.1 U	1800 U	3600 U	1800 U	1.8 U	14 U	14 U	1.6 U	1.8 U	1.8 U	1.7 U
2,4,6-Trichlorophenol	mg/kg	NE	NE	NE	350 U	780 U	0.44 U	370 U	750 U	380 U	0.37 U	2.8 U	2.9 U	0.33 U	0.38 U	0.36 U	0.36 U
3.10 PCB Aroclors																	
Aroclor 1016	mg/kg	NE	NE	NE	0.045 UJ	0.041 UJ	0.023 UJ	0.02 UJ	0.2 UJ	0.039 UJ	0.02 U	0.018 U	0.019 U	0.017 U	0.019 UJ	0.019 U	0.019 U
Aroclor 1221	mg/kg	NE	NE	NE	0.087 UJ	0.079 UJ	0.045 UJ	0.039 UJ	0.38 UJ	0.075 UJ	0.038 U	0.035 U	0.037 U	0.033 U	0.038 UJ	0.037 U	0.036 U
Aroclor 1232	mg/kg	NE	NE	NE	0.045 UJ	0.041 UJ	0.023 UJ	0.02 UJ	0.045 UJ	0.039 UJ	0.02 UJ	0.018 U	0.019 U	0.017 U	0.019 UJ	0.019 U	0.019 U
Aroclor 1242	mg/kg	NE	NE	NE	0.045 UJ	0.041 UJ	0.023 UJ	0.02 UJ	0.2 UJ	0.039 UJ	0.02 U	0.018 U	0.019 U	0.017 U	0.019 UJ	0.019 U	0.019 U
Aroclor 1248	mg/kg	NE	NE	NE	0.045 UJ	0.041 UJ	0.023 UJ	0.02 UJ	0.2 UJ	0.039 UJ	0.02 U	0.018 U	0.019 U	0.017 U	0.019 UJ	0.019 U	0.019 U
Aroclor 1254	mg/kg	NE	NE	NE	0.045 UJ	0.041 UJ	0.023 UJ	0.02 UJ	0.2 UJ	0.039 UJ	0.02 U	0.018 U	0.019 U	0.017 U	0.019 UJ	0.019 U	0.019 U
Aroclor 1260	mg/kg	NE	NE	NE	0.045 UJ	0.041 UJ	0.023 UJ	0.02 UJ	0.2 UJ	0.039 UJ	0.02 U	0.018 U	0.019 U	0.017 U	0.019 UJ	0.019 U	0.019 U
6.1 Metals																	
Arsenic	mg/kg	13.00	16.00	16.00	12.8 UJ	11.6 UJ	9 J	10.8 UJ	2.2 J	9.8 UJ	10.1 UJ	8.9 UJ	10.4 UJ	10 UJ	1.6 J	1.3 J	8.4 U
Barium	mg/kg	350.0	400.0	10000	39.4 J	48.9 J	45 J	23.8 J	27.7 J	31 J	13.9 J	47.8	38.3 J	16.7 J	20.4 J	47.3	22.3 J
Cadmium	mg/kg	2.500	9.300	60.00	4.8 U	4.3 U	4.7 U	4.1 U	3.4 U	3.7 U	3.8 U	3.3 U	3.9 U	3.7 U	3.2 U	3.2 U	3.1 U
Chromium	mg/kg	NE	NE	NE	9.9 J	11.2 J	37.1 J	15.3 J	5.5 J	6.8 J	11.4 J	19.6 J	19.1 J	5.4 J	15.2	21.3	6
Lead	mg/kg	63.00	1000	3900	6.2	4.7	13.9	6.4	2.6	2.7	4.1	4.7 J	4.6	1.9 J	9.4	6.3 J	1.6 J
Mercury	mg/kg	0.1800	2.800	5.700	0.02 U	0.014 U	0.025	0.016 J	0.012 U	0.015 U	0.012 U	0.016 U	0.015 U	0.013 U	0.012 U	0.012 U	0.012 U
Selenium	mg/kg	3.900	1500	6800	25.6 U	23.1 U	24.8 UJ	21.6 U	18 U	19.5 U	20.1 U	17.7 UJ	20.9 U	19.9 U	17.2 U	17.2 U	16.7 U
Silver	mg/kg	2.000	1500	6800	4.8 U	4.3 U	4.7 U	4.1 U	3.4 U	3.7 U	3.8 U	3.3 U	3.9 U	3.7 U	3.2 U	3.2 U	3.1 U
7.10 Cyanides																	
Total Cyanide	mg/kg	27.00	27.00	10000	0.647 UJ	0.583 UJ	0.676 UJ	0.567 UJ	0.583 UJ	0.563 UJ	0.556 UJ	0.533 UJ	0.548 UJ	0.484 UJ	0.56 UJ	0.543 UJ	0.556 UJ
9.9 Other																	
Percent Moisture	%	NE	NE	NE	25.7	17.6	26.8	15.2	14.3	14.6	13.6	8.9	10.5	1.6	14.1	11.4	10.1
Percent Solids	%	NE	NE	NE	74.3	82.4	73.2	84.8	85.7	85.4	86.4	91.1	89.5	98.4	85.9	88.6	89.9

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-07 5 7 ft 10/27/2004	B-07 12 14 ft 10/27/2004	B-07 44 45 ft 10/27/2004	B-08 7 9 ft 11/10/2004	B-08 23 23.5 ft 11/10/2004	B-08 90 90.5 ft 11/10/2004	B-09 15 17 ft 10/26/2004	B-09 24 24.5 ft 10/26/2004	B-09 99.5 100 ft 10/26/2004	B-09 99.5 100 ft 10/26/2004 NGW-B9(99.5-100)	B-10 7 8 ft 10/26/2004	B-10 34.5 35 ft 10/26/2004	B-10 44 44.5 ft 10/26/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
1.12 Other VOCs																	
Acetone	mg/kg	0.05000	500.0	1000	0.012 UJ	0.011 UJ	0.011 UJ	0.063 J	0.011 UJ	0.012 UJ	6 J	0.0087 J	0.023 J	0.014 J	0.01 J	0.011 U	0.011 UJ
Bromodichloromethane	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Bromoform	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Bromomethane	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 UJ	0.0057 UJ	0.0058 UJ	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Carbon disulfide	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0018 J	0.0057 U	0.0027 J	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Carbon tetrachloride	mg/kg	0.7600	22.00	44.00	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Chlorobenzene	mg/kg	1.100	500.0	1000	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.001 J	14 U	0.0056 U	0.0037 J	0.0052 J	0.0059 UJ	0.0056 U	0.0055 UJ
Chloroethane	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 UJ	0.0057 UJ	0.0058 UJ	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Chloroform (Trichloromethane)	mg/kg	0.3700	350.0	700.0	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Chloromethane	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Dibromochloromethane	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
1,1-Dichloroethane	mg/kg	0.2700	240.0	480.0	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
1,2-Dichloroethane	mg/kg	0.02000	30.00	60.00	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
1,1-Dichloroethene	mg/kg	0.3300	500.0	1000	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
cis-1,2-Dichloroethene	mg/kg	0.2500	500.0	1000	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0087 J
trans-1,2-Dichloroethene	mg/kg	0.1900	500.0	1000	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
1,2-Dichloropropane	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
cis-1,3-Dichloropropene	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
trans-1,3-Dichloropropene	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
2-Hexanone	mg/kg	NE	NE	NE	0.012 UJ	0.011 UJ	0.011 UJ	0.011 U	0.011 U	0.012 U	14 U	0.011 U	0.011 U	0.011 UJ	0.012 UJ	0.011 U	0.011 UJ
Methyl ethyl ketone (2-Butanone)	mg/kg	0.1200	500.0	1000	0.012 UJ	0.011 UJ	0.011 UJ	0.011 UJ	0.011 UJ	0.012 UJ	14 U	0.011 U	0.011 U	0.011 UJ	0.012 UJ	0.011 U	0.011 UJ
4-Methyl-2-pentanone (MIBK)	mg/kg	NE	NE	NE	0.012 UJ	0.011 UJ	0.011 UJ	0.011 U	0.011 U	0.012 U	14 U	0.011 U	0.011 U	0.011 UJ	0.012 UJ	0.011 U	0.011 UJ
Methylene chloride	mg/kg	0.05000	500.0	1000	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 UJ	0.0057 UJ	0.0058 UJ	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Styrene	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
1,1,2,2-Tetrachloroethane	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 R	0.0056 U	0.0055 UJ
Tetrachloroethene (PCE)	mg/kg	1.300	150.0	300.0	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
1,1,1-Trichloroethane (TCA)	mg/kg	0.6800	500.0	1000	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
1,1,2-Trichloroethane	mg/kg	NE	NE	NE	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
Trichloroethene (TCE)	mg/kg	0.4700	200.0	400.0	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.03 J
Vinyl chloride	mg/kg	0.02000	13.00	27.00	0.0058 UJ	0.0056 UJ	0.0055 UJ	0.0056 U	0.0057 U	0.0058 U	14 U	0.0056 U	0.0055 U	0.0057 UJ	0.0059 UJ	0.0056 U	0.0055 UJ
2.33 NYSDEC PAH17																	
Acenaphthene	mg/kg	20.00	500.0	1000	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	110 J	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Acenaphthylene	mg/kg	100.0	500.0	1000	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	65 J	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Anthracene	mg/kg	100.0	500.0	1000	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	54 J	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Benzo(a)anthracene	mg/kg	1.000	5.600	11.00	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	36 J	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Benzo(b)fluoranthene	mg/kg	1.000	5.600	11.00	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Benzo(k)fluoranthene	mg/kg	0.8000	56.00	110.0	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Benzo(g,h,i)perylene	mg/kg	100.0	500.0	1000	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Benzo(a)pyrene	mg/kg	1.000															

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-07 5 7 ft 10/27/2004	B-07 12 14 ft 10/27/2004	B-07 44 45 ft 10/27/2004	B-08 7 9 ft 11/10/2004	B-08 23 23.5 ft 11/10/2004	B-08 90 90.5 ft 11/10/2004	B-09 15 17 ft 10/26/2004	B-09 24 24.5 ft 10/26/2004	B-09 99.5 100 ft 10/26/2004	B-09 99.5 100 ft 10/26/2004 NGW-B9(99.5-100)	B-10 7 8 ft 10/26/2004	B-10 34.5 35 ft 10/26/2004	B-10 44 44.5 ft 10/26/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
2-Chlorophenol	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
4-Chlorophenyl phenyl ether	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Dibenzofuran	mg/kg	7.000	350.0	1000	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
1,2-Dichlorobenzene (o-DCB)	mg/kg	1.100	500.0	1000	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
1,3-Dichlorobenzene (m-DCB)	mg/kg	2.400	280.0	560.0	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
1,4-Dichlorobenzene (p-DCB)	mg/kg	1.800	130.0	250.0	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
3,3-Dichlorobenzidine	mg/kg	NE	NE	NE	0.76 U	0.73 U	0.72 U	0.72 U	0.73 U	0.73 U	350 U	0.74 U	0.69 U	0.74 U	0.78 U	0.74 U	0.69 U
2,4-Dichlorophenol	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Diethyl phthalate	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Dimethyl phthalate	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
2,4-Dimethylphenol	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Di-n-butyl phthalate	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
4,6-Dinitro-2-methylphenol	mg/kg	NE	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	850 U	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.7 U
2,4-Dinitrophenol	mg/kg	NE	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	850 U	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.7 U
2,4-Dinitrotoluene	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
2,6-Dinitrotoluene	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Di-n-octyl phthalate	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Hexachlorobenzene	mg/kg	0.3300	6.000	12.00	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
1,3-Hexachlorobutadiene (C-46)	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Hexachlorocyclopentadiene	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Hexachloroethane	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Isophorone	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
2-Methylphenol (o-Cresol)	mg/kg	0.3300	500.0	1000	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
4-Methylphenol (p-Cresol)	mg/kg	0.3300	500.0	1000	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
2-Nitroaniline	mg/kg	NE	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	850 U	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.7 U
3-Nitroaniline	mg/kg	NE	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	850 U	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.7 U
4-Nitroaniline	mg/kg	NE	NE	NE	0.76 U	0.73 U	0.72 U	0.72 U	0.73 U	0.73 U	350 U	0.74 U	0.69 U	0.74 U	0.78 U	0.74 U	0.69 U
Nitrobenzene	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
2-Nitrophenol	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
4-Nitrophenol	mg/kg	NE	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	850 U	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.7 U
N-Nitrosodiphenylamine (NDFA)	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
N-Nitrosodi-n-propylamine (NDPA)	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
2,2-oxybis(1-Chloropropane)	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
Pentachlorophenol	mg/kg	0.8000	6.700	55.00	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	850 U	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.7 U
Phenol	mg/kg	0.3300	500.0	1000	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
1,2,4-Trichlorobenzene	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
2,4,5-Trichlorophenol	mg/kg	NE	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	850 U	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.7 U
2,4,6-Trichlorophenol	mg/kg	NE	NE	NE	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	180 U	0.37 U	0.35 U	0.37 U	0.39 U	0.37 U	0.34 U
3.10 PCB Aroclors																	
Aroclor 1016	mg/kg	NE	NE	NE	0.02 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.023 U	0.019 U	0.019 U	0.019 U	0.02 U	0.019 U	0.018 U
Aroclor 1221	mg/kg	NE	NE	NE	0.038 U	0.036 U	0.036 U	0.036 U	0.037 U	0.038 U	0.045 U	0.036 U	0.037 U	0.037 U	0.039 U	0.037 U	0.036 U
Aroclor 1232	mg/kg	NE	NE	NE	0.02 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.023 U	0.019 U	0.019 U	0.019 U	0.02 U	0.019 U	0.018 U
Aroclor 1242	mg/kg	NE	NE	NE	0.02 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.023 U	0.019 U	0.019 U	0.019 U	0.02 U	0.019 U	0.018 U
Aroclor 1248	mg/kg	NE	NE	NE	0.02 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.023 U	0.019 U	0.019 U	0.019 U	0.02 U	0.019 U	0.018 U
Aroclor 1254	mg/kg	NE	NE	NE	0.02 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.023 U	0.019 U	0.019 U	0.019 U	0.02 U	0.019 U	0.018 U
Aroclor 1260	mg/kg	NE	NE	NE	0.02 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.023 U	0.019 U	0.019 U	0.019 U	0.02 U	0.019 U	0.018 U
6.1 Metals																	
Arsenic	mg/kg	13.00	16.00	16.00	2.8 J	1.7 J	8.1 UJ	1.8 J	1.8 J	10.1 U	2.6 J	7.8 UJ	8.6 UJ	9.2 UJ	2.8 J	2.3 J	9.2 UJ
Barium	mg/kg	350.0	400.0	10000	24.8 J	27.2 J	69.1	37.5 J	55.5	7.7 J	19.9 J	41	6 J	7.3 J	44.4	51	61.4
Cadmium	mg/kg	2.500	9.300	60.00	4 UJ	3.2 UJ	3 UJ	3.5 U	3.2 U	3.8 U	4.7 UJ	2.9 UJ	3.2 UJ	3.4 UJ	3.2 UJ	3.4 UJ	3.4 UJ
Chromium	mg/kg	NE	NE	NE	13.3	13.9	17.4	28.3	24.4	7.1	10.3	13.6	8.1	6.4	21.5	11.1	17.7
Lead	mg/kg	63.00	1000	3900	9.4 J	27.8 J	5.4 J	6.7 J	6.1 J	2.1 J	3.9 J	3.9 J	2.2 J	1.7 J	35.2 J	3.1 J	4.9 J
Mercury	mg/kg	0.1800	2.800	5.700	0.023	0.045 U	0.041 U	0.01 U	0.015 U	0.012 U	0.056 U	0.04 U	0.051 U	0.039 U	0.12	0.052 U	0.053 U
Selenium	mg/kg	3.900	1500	6800	21.5 UJ	17.3 UJ	16.2 UJ	18.5 U	17.2 U	20.3 U	25.2 UJ	15.5 UJ	17.2 UJ	18.3 UJ	17.1 UJ	17.9 UJ	18.3 UJ
Silver	mg/kg	2.000	1500	6800	4 U	3.2 U	3 U	3.5 U	3.2 U	3.8 U	4.7 U	2.9 U	3.2 U	3.4 U	3.2 U	3.4 U	3.4 U
7.10 Cyanides																	
Total Cyanide	mg/kg	27.00	27.00	10000	2.27 J	0.562 UJ	0.552 UJ	0.554 UJ	0.56 UJ	0.561 UJ	0.653 UJ	0.548 UJ	0.538 UJ	0.569 UJ	0.583 UJ	0.536 UJ	0.54 UJ
9.9 Other																	
Percent Moisture	%	NE	NE	NE	14.5	11.1	9.4	10.7	12.4	13.5	26.4	10.6	9.8	12.1	15.9	11.2	8.3
Percent Solids	%	NE	NE	NE	85.5	88.9	90.6	89.3	87.6	86.5	73.6	89.4	90.2	87.9	84.1	88.8	91.7

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-11 16 17 ft 11/16/2004	B-11 37 37.5 ft 11/16/2004	B-11 97 97.5 ft 11/16/2004	B-12 7.5 9.5 ft 11/9/2004	B-12 32.5 33 ft 11/9/2004	B-12 57.5 58.5 ft 11/9/2004	B-12 90 92.5 ft 11/9/2004	B-13 29 30 ft 11/8/2004	B-13 104.5 105 ft 11/8/2004	B-13 88 89 ft 11/8/2004	B-14 6 8 ft 10/27/2004	B-14 34.5 35 ft 10/27/2004	B-14 104 104.5 ft 10/27/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
Benzene	mg/kg	0.06	44	89	19	100	2.8 U	0.0056 U	4.9 J	2.7 J	0.0011 J	2.4 J	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Toluene	mg/kg	0.7	500	1000	71	86	2.8 U	0.0056 U	7.7 J	2.8 J	0.0011 J	3.1 J	0.0062 J	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Ethylbenzene	mg/kg	1	390	780	140	110	14	0.0021 J	53	52	0.0011 J	38	0.28	47	0.0057 UJ	0.0055 UJ	0.028 UJ
Total Xylene	mg/kg	0.26	500	1000	150	360	9.2	0.0018 J	97	73	0.0021 J	29	0.31	35	0.0057 UJ	0.0055 UJ	0.028 UJ
Total BTEX (ND=0)	mg/kg		NE	NE	380	656	23.2	0.0039	162.6	130.5	0.0054	72.5	0.5962	82			
1.12 Other VOCs																	
Acetone	mg/kg	0.05000	500.0	1000	8.9 U	74 U	7.1 U	0.011 UJ	30 U	13 U	0.011 UJ	15 U	0.063 UJ	30 U	0.011 UJ	0.011 UJ	0.056 UJ
Bromodichloromethane	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Bromoform	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Bromomethane	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 UJ	12 U	5.4 U	0.0057 UJ	5.9 U	0.032 UJ	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Carbon disulfide	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0038 J	12 U	5.4 U	0.0025 J	5.9 U	0.0052 J	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Carbon tetrachloride	mg/kg	0.7600	22.00	44.00	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Chlorobenzene	mg/kg	1.100	500.0	1000	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.045	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Chloroethane	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 UJ	12 U	5.4 U	0.0057 UJ	5.9 U	0.032 UJ	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Chloroform (Trichloromethane)	mg/kg	0.3700	350.0	700.0	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Chloromethane	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Dibromochloromethane	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
1,1-Dichloroethane	mg/kg	0.2700	240.0	480.0	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
1,2-Dichloroethane	mg/kg	0.02000	30.00	60.00	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
1,1-Dichloroethene	mg/kg	0.3300	500.0	1000	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
cis-1,2-Dichloroethene	mg/kg	0.2500	500.0	1000	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
trans-1,2-Dichloroethene	mg/kg	0.1900	500.0	1000	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
1,2-Dichloropropane	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
cis-1,3-Dichloropropene	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
trans-1,3-Dichloropropene	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
2-Hexanone	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.011 U	12 U	5.4 U	0.011 U	5.9 U	0.063 U	12 U	0.011 UJ	0.011 UJ	0.056 UJ
Methyl ethyl ketone (2-Butanone)	mg/kg	0.1200	500.0	1000	3.5 U	29 U	2.8 U	0.011 UJ	12 U	5.4 U	0.011 UJ	5.9 U	0.063 U	12 U	0.011 UJ	0.011 UJ	0.056 UJ
4-Methyl-2-pentanone (MIBK)	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.011 U	12 U	5.4 U	0.011 U	5.9 U	0.063 U	12 U	0.011 UJ	0.011 UJ	0.056 UJ
Methylene chloride	mg/kg	0.05000	500.0	1000	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 UJ	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Styrene	mg/kg	NE	NE	NE	0.65 J	170	2.8 U	0.0056 U	53	16	0.0057 U	5.9 U	0.032 U	4.7 J	0.0057 UJ	0.0055 UJ	0.028 UJ
1,1,2,2-Tetrachloroethane	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Tetrachloroethene (PCE)	mg/kg	1.300	150.0	300.0	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
1,1,1-Trichloroethane (TCA)	mg/kg	0.6800	500.0	1000	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
1,1,2-Trichloroethane	mg/kg	NE	NE	NE	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Trichloroethene (TCE)	mg/kg	0.4700	200.0	400.0	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
Vinyl chloride	mg/kg	0.02000	13.00	27.00	3.5 U	29 U	2.8 U	0.0056 U	12 U	5.4 U	0.0057 U	5.9 U	0.032 U	12 U	0.0057 UJ	0.0055 UJ	0.028 UJ
2.33 NYSDEC PAH17																	
Acenaphthene	mg/kg	20.00	500.0	1000	20 J	380 U	13 J	9.3	59 J	140 U	0.36 U	41 J	0.39 U	19 J	0.73 U	0.36 U	0.37 U
Acenaphthylene	mg/kg	100.0	500.0	1000	82 J	350 J	86	2.5 J	520	140 J	0.36 U	180	0.39 U	130	0.27 J	0.36 U	0.37 U
Anthracene	mg/kg	100.0	500.0	1000	30 J	160 J	39	6.4	220 J	62 J	0.36 U	95	0.39 U	65 J	0.63 J	0.36 U	0.37 U
Benzo(a)anthracene	mg/kg	1.000	5.600	11.00	15 J	62 J	14 J	5	100 J	28 J	0.36 U	48 J	0.39 U	32 J	3.2	0.36 U	0.37 U
Benzo(b)fluoranthene	mg/kg	1.000	5.600	11.00	94 U	380 U	36 U	1.6 J	310 U	140 U	0.36 U	75 U	0.39 U	76 U	2.8	0.36 U	0.37 U
Benzo(k)fluoranthene	mg/kg	0.8000	56.00	110.0	94 U	380 U	5.9 J	2.2 J	48 J	140 U	0.36 U	21 J	0.39 U	13 J	2.1	0.36 U	0.37 U
Benzo(g,h,i)perylene	mg/kg	100.0	500.0	1000	94 U	380 U	36 U	1.4 J	310 U	140 U	0.36 U	9.1 J	0.39 U	8.7 J	1.9	0.36 U	0.37 U
Benzo(a)pyrene	mg/kg	1.000	1.000	1.100	12 J	380 U	11 J	3.7	75 J	19 J	0.36 U	32 J	0.39 U	21 J	2.9	0.36 U	0.37 U
Chrysene	mg/kg	1.000	56.00	110.0	14 J	67 J	13 J	5.1	100 J	27 J	0.36 U	51 J	0.39 U	33 J	2.9	0.36 U	0.37 U
Dibenz(a,h)anthracene	mg/kg	0.3300	0.5600	1.100	94 U	380 U	36 U	0.57 J	140 U	140 U	0.36 U	75 U	0.39 U	76 U	0.69 J	0.36 U	0.37 U
Fluoranthene	mg/kg	100.0	500.0	1000	30 J	130 J	30 J	7.2	180 J	49 J	0.36 U	80	0.39 U	55 J	5.3	0.36 U	0.37 U
Fluorene	mg/kg	30.00	500.0	1000	48 J	160 J	49	3.6 U	270 J	73 J	0.36 U	110	0.39 U	77	0.1 J	0.36 U	0.37 U
Indeno(1,2,3-cd)pyrene	mg/kg	0.5000	5.600	11.00	94 U	380 U	3.8 J	1.2 J	310 U	140 U	0.36 U	8.1 J	0.39 U	76 U	1.9	0.36 U	0.37 U
2-Methylnaphthalene	mg/kg		NE	NE	250	850	26 J	3.6 U	1200	280	0.36 U	180	0.39 U	160	0.73 U	0.36 U	0.37 U
Naphthalene	mg/kg	12.00	500.0	1000	450	1400	130	3.6 U	2000	450	0.36 U	410	1.8	360	0.14 J	0.36 U	1
Phenanthrene	mg/kg	100.0	500.0	1000	100	520	130	4.7	760	200	0.36 U	330	0.067 J	210	1.3	0.36 U	0.37 U
Pyrene	mg/kg	100.0	500.0	1000	43 J	210 J	47	13	280 J	99 J	0.36 U	120	0.39 U	93	4.7	0.36 U	0.37 U
Total cPAH (7 of 17) (ND=0)	mg/kg	NE	NE	NE	41	129	47.7	19.37	323	74		160.1		99	16.49		
Total ncPAH (10 of 17) (ND=0)	mg/kg	NE	NE	NE	1053	3780	550	44.5	5489	1353		1555.1	1.867	1177.7	14.34		1
Total PAHs	mg/kg	NE	NE	NE	1094	3909	597.7	63.87	5812	1427		1715.2	1.867	1276.7	30.83		1
2.34 NYSDEC PAH17 Other SVOCs																	
Benzyl alcohol	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Bis(2-chloroethoxy)methane	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Bis(2-chloroethyl)ether	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Bis(2-ethylhexyl)phthalate	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
4-Bromophenyl phenyl ether	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 UJ	0.37 UJ
Butyl benzyl phthalate	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Carbazole	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
4-Chloro-3-methylphenol	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
4-Chloroaniline	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
2-Chloronaphthalene	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-11 16 17 ft 11/16/2004	B-11 37 37.5 ft 11/16/2004	B-11 97 97.5 ft 11/16/2004	B-12 7.5 9.5 ft 11/9/2004	B-12 32.5 33 ft 11/9/2004	B-12 57.5 58.5 ft 11/9/2004	B-12 90 92.5 ft 11/9/2004	B-13 29 30 ft 11/8/2004	B-13 104.5 105 ft 11/8/2004	B-13 88 89 ft 11/8/2004	B-14 6 8 ft 10/27/2004	B-14 34.5 35 ft 10/27/2004	B-14 104 104.5 ft 10/27/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
2-Chlorophenol	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
4-Chlorophenyl phenyl ether	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Dibenzofuran	mg/kg	7.000	350.0	1000	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
1,2-Dichlorobenzene (o-DCB)	mg/kg	1.100	500.0	1000	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
1,3-Dichlorobenzene (m-DCB)	mg/kg	2.400	280.0	560.0	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
1,4-Dichlorobenzene (p-DCB)	mg/kg	1.800	130.0	250.0	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 UJ	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
3,3-Dichlorobenzidine	mg/kg	NE	NE	NE	190 U	760 U	72 U	7.2 U	620 U	280 U	0.73 U	150 U	0.79 U	150 U	1.5 UJ	0.72 U	0.74 U
2,4-Dichlorophenol	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Diethyl phthalate	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Dimethyl phthalate	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
2,4-Dimethylphenol	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Di-n-butyl phthalate	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
4,6-Dinitro-2-methylphenol	mg/kg	NE	NE	NE	450 U	1800 U	170 U	17 U	1500 U	680 U	1.8 UJ	360 U	1.9 UJ	370 U	3.5 U	1.8 U	1.8 U
2,4-Dinitrophenol	mg/kg	NE	NE	NE	450 U	1800 UJ	170 U	17 U	1500 UJ	680 U	1.8 UJ	360 UJ	1.9 UJ	370 U	3.5 U	1.8 U	1.8 U
2,4-Dinitrotoluene	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
2,6-Dinitrotoluene	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Di-n-octyl phthalate	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Hexachlorobenzene	mg/kg	0.3300	6.000	12.00	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
1,3-Hexachlorobutadiene (C-46)	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Hexachlorocyclopentadiene	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 UJ	140 U	0.36 UJ	75 UJ	0.39 UJ	76 U	0.73 U	0.36 U	0.37 U
Hexachloroethane	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Isophorone	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
2-Methylphenol (o-Cresol)	mg/kg	0.3300	500.0	1000	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
4-Methylphenol (p-Cresol)	mg/kg	0.3300	500.0	1000	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
2-Nitroaniline	mg/kg	NE	NE	NE	450 U	1800 U	170 U	17 U	1500 U	680 U	1.8 U	360 U	1.9 U	370 U	3.5 U	1.8 U	1.8 U
3-Nitroaniline	mg/kg	NE	NE	NE	450 U	1800 U	170 U	17 U	1500 U	680 U	1.8 U	360 U	1.9 U	370 U	3.5 U	1.8 U	1.8 U
4-Nitroaniline	mg/kg	NE	NE	NE	190 U	760 U	72 U	7.2 U	620 U	280 U	0.73 U	150 U	0.79 U	150 U	1.5 U	0.72 U	0.74 U
Nitrobenzene	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
2-Nitrophenol	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
4-Nitrophenol	mg/kg	NE	NE	NE	450 U	1800 U	170 U	17 U	1500 U	680 U	1.8 U	360 U	1.9 U	370 U	3.5 U	1.8 U	1.8 U
N-Nitrosodiphenylamine (NDFA)	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
N-Nitrosodi-n-propylamine (NDPA)	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
2,2-oxybis(1-Chloropropane)	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
Pentachlorophenol	mg/kg	0.8000	6.700	55.00	450 U	1800 U	170 U	17 U	1500 U	680 U	1.8 U	360 U	1.9 U	370 U	3.5 U	1.8 U	1.8 U
Phenol	mg/kg	0.3300	500.0	1000	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
1,2,4-Trichlorobenzene	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 UJ	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
2,4,5-Trichlorophenol	mg/kg	NE	NE	NE	450 U	1800 U	170 U	17 U	1500 U	680 U	1.8 U	360 U	1.9 U	370 U	3.5 U	1.8 U	1.8 U
2,4,6-Trichlorophenol	mg/kg	NE	NE	NE	94 U	380 U	36 U	3.6 U	310 U	140 U	0.36 U	75 U	0.39 U	76 U	0.73 U	0.36 U	0.37 U
3.10 PCB Aroclors																	
Aroclor 1016	mg/kg	NE	NE	NE	0.024 U	0.02 U	0.019 U	0.019 U	0.02 U	0.018 U	0.019 U	0.02 U	0.021 U	0.02 U	0.019 U	0.019 U	0.019 U
Aroclor 1221	mg/kg	NE	NE	NE	0.046 U	0.038 U	0.037 U	0.037 U	0.039 U	0.035 U	0.037 U	0.038 U	0.041 U	0.038 U	0.038 U	0.036 U	0.037 U
Aroclor 1232	mg/kg	NE	NE	NE	0.024 U	0.02 U	0.019 U	0.019 U	0.02 U	0.018 U	0.019 U	0.02 U	0.021 U	0.02 U	0.019 U	0.019 U	0.019 U
Aroclor 1242	mg/kg	NE	NE	NE	0.024 U	0.02 U	0.019 U	0.019 U	0.02 U	0.018 U	0.019 U	0.02 U	0.021 U	0.02 U	0.019 U	0.019 U	0.019 U
Aroclor 1248	mg/kg	NE	NE	NE	0.024 U	0.02 U	0.019 U	0.019 U	0.02 U	0.018 U	0.019 U	0.02 U	0.021 U	0.02 U	0.019 U	0.019 U	0.019 U
Aroclor 1254	mg/kg	NE	NE	NE	0.024 U	0.02 U	0.019 U	0.019 U	0.02 U	0.018 U	0.019 U	0.02 U	0.021 U	0.02 U	0.019 U	0.019 U	0.019 U
Aroclor 1260	mg/kg	NE	NE	NE	0.024 U	0.02 U	0.019 U	0.019 U	0.02 U	0.018 U	0.0092 J	0.02 U	0.021 U	0.02 U	0.069 J	0.019 U	0.019 U
6.1 Metals																	
Arsenic	mg/kg	13.00	16.00	16.00	3 J	4.5 J	1.5 J	2.8 J	4.2	1.6 J	11.1 U	4.5	7.4	1.7 J	3.5 J	1.4 J	8.2 UJ
Barium	mg/kg	350.0	400.0	10000	19.5 J	40.5 J	10.9 J	27.6 J	28.8 J	42.9	4.9 J	42.7 J	36.1 J	15.8 J	46.4	36 J	8.5 J
Cadmium	mg/kg	2.500	9.300	60.00	5 U	3.2 U	3.5 U	3 U	3.5 U	3 U	4.2 U	3.5 U	4.3 U	3.4 U	3.5 UJ	3.1 UJ	3.1 UJ
Chromium	mg/kg	NE	NE	NE	17.3 J	7.2 J	14.8 J	14.5	15.5	19.5	4.6	13.2	34.6	10.7	13.8	11.3	8.2
Lead	mg/kg	63.00	1000	3900	9.9	4.1 J	3.9	11.2	3	3.7	1.5 J	5.2	14.6 J	2.4	39.4 J	4.5 J	2.6 J
Mercury	mg/kg	0.1800	2.800	5.700	0.021 U	0.015 U	0.016 U	0.029	0.012 U	0.0096 U	0.012 U	0.013 U	0.015 U	0.015 U	0.12	0.046 U	0.051 U
Selenium	mg/kg	3.900	1500	6800	26.8 U	17.1 UJ	18.7 U	16.1 U	18.6 U	16 U	22.3 U	18.5 U	22.7 U	18.2 U	18.5 UJ	16.4 UJ	16.5 UJ
Silver	mg/kg	2.000	1500	6800	5 U	3.2 U	0.59 J	3 U	3.5 U	3 U	4.2 U	3.5 U	4.3 U	3.4 U	3.5 U	3.1 U	3.1 U
7.10 Cyanides																	
Total Cyanide	mg/kg	27.00	27.00	10000	0.695 UJ	0.567 UJ	0.55 UJ	0.536 UJ	0.58 UJ	0.531 UJ	0.568 UJ	0.56 UJ	0.624 UJ	0.581 UJ	11.5 J	0.529 UJ	0.565 UJ
9.9 Other																	
Percent Moisture	%	NE	NE	NE	29.5	15.2	11.8	11.2	17.9	6.7	12.9	15	20.7	15.6	12.9	9.9	11.5
Percent Solids	%	NE	NE	NE	70.5	84.8	88.2	88.8	82.1	93.3	87.1	85	79.3	84.4	87.1	90.1	88.5

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-15 5.5 6 ft 11/9/2004	B-15 5.5 6 ft 11/9/2004 NGW-B15(5.5-6.0)	B-15 31 31.5 ft 11/9/2004	B-15 104.5 105 ft 11/10/2004	B-15 98 98.5 ft 11/10/2004	B-16 9 9.25 ft 11/11/2004	B-16 29 30 ft 11/11/2004	B-16 103.5 104 ft 11/12/2004	B-16 114 114.5 ft 11/12/2004	B-17 15 16 ft 12/3/2004	B-17 40 41 ft 12/3/2004	B-17 45 46 ft 12/3/2004	B-17 101 102 ft 12/3/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
Benzene	mg/kg	0.06	44	89	53	53	24 J	5.6	0.0064	4.2	32	11 U	0.0071 U	0.011 UJ	1.8 J	0.9 J	0.0055 U
Toluene	mg/kg	0.7	500	1000	100	100	32 J	10	0.00072 J	0.3 J	25	4.5 J	0.00093 J	0.0075 J	11 U	7.7	0.0055 U
Ethylbenzene	mg/kg	1	390	780	320	310	290	17	0.0063 U	36	160	46	0.0071 U	0.0091 J	76	44	0.0055 U
Total Xylene	mg/kg	0.26	500	1000	460	450	350	110	0.0063 U	26	270	83	0.0071 UJ	0.032 J	47 J	47 J	0.0055 U
Total BTEX (ND=0)	mg/kg		NE	NE	933	913	696	142.6	0.00712	66.5	487	133.5	0.00093	0.0486	124.8	99.6	
1.12 Other VOCs																	
Acetone	mg/kg	0.05000	500.0	1000	30 U	32 U	160 U	8.7 U	0.071 J	2.9 U	31 U	29 U	0.014 UJ	0.083 J	28 UJ	15 UJ	0.011 U
Bromodichloromethane	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
Bromoform	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
Bromomethane	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 UJ	1.2 U	13 U	11 U	0.0071 UJ	0.011 UJ	11 UJ	6.1 UJ	0.0055 UJ
Carbon disulfide	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.019	0.095 J	13 U	11 U	0.043	0.0041 J	11 U	6.1 U	0.0055 U
Carbon tetrachloride	mg/kg	0.7600	22.00	44.00	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
Chlorobenzene	mg/kg	1.100	500.0	1000	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	1.5 J	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
Chloroethane	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 UJ	1.2 U	13 U	11 U	0.0071 UJ	0.011 UJ	11 U	6.1 U	0.0055 UJ
Chloroform (Trichloromethane)	mg/kg	0.3700	350.0	700.0	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
Chloromethane	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
Dibromochloromethane	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
1,1-Dichloroethane	mg/kg	0.2700	240.0	480.0	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
1,2-Dichloroethane	mg/kg	0.02000	30.00	60.00	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
1,1-Dichloroethene	mg/kg	0.3300	500.0	1000	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
cis-1,2-Dichloroethene	mg/kg	0.2500	500.0	1000	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
trans-1,2-Dichloroethene	mg/kg	0.1900	500.0	1000	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
1,2-Dichloropropane	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
cis-1,3-Dichloropropene	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
trans-1,3-Dichloropropene	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
2-Hexanone	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.013 U	1.2 U	13 U	11 U	0.014 UJ	0.021 UJ	11 UJ	6.1 UJ	0.011 U
Methyl ethyl ketone (2-Butanone)	mg/kg	0.1200	500.0	1000	12 U	13 U	64 U	3.5 U	0.033 J	1.2 U	13 U	11 U	0.027 J	0.021 UJ	11 UJ	6.1 UJ	0.011 UJ
4-Methyl-2-pentanone (MIBK)	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.013 U	1.2 U	13 U	11 U	0.014 UJ	0.021 UJ	11 UJ	6.1 UJ	0.011 U
Methylene chloride	mg/kg	0.05000	500.0	1000	12 U	13 U	64 U	3.5 U	0.0063 UJ	1.2 U	13 U	11 U	0.0071 UJ	0.011 UJ	11 U	6.1 U	0.0055 U
Styrene	mg/kg	NE	NE	NE	33	33	64 U	60	0.0063 U	0.37 J	80	39	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
1,1,2,2-Tetrachloroethane	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
Tetrachloroethene (PCE)	mg/kg	1.300	150.0	300.0	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 UJ	0.011 UJ	11 U	6.1 U	0.0055 U
1,1,1-Trichloroethane (TCA)	mg/kg	0.6800	500.0	1000	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
1,1,2-Trichloroethane	mg/kg	NE	NE	NE	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
Trichloroethene (TCE)	mg/kg	0.4700	200.0	400.0	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.009 J	11 U	6.1 U	0.0055 U
Vinyl chloride	mg/kg	0.02000	13.00	27.00	12 U	13 U	64 U	3.5 U	0.0063 U	1.2 U	13 U	11 U	0.0071 U	0.011 UJ	11 U	6.1 U	0.0055 U
2.33 NYSDEC PAH17																	
Acenaphthene	mg/kg	20.00	500.0	1000	210 J	590 J	750 J	89 U	0.4 U	50	820 U	380 U	0.47 U	14 J	440	180	0.21 J
Acenaphthylene	mg/kg	100.0	500.0	1000	1100	1000 J	540 J	95	0.4 U	5.6 J	560 J	540	0.47 U	1.4 J	64 J	34 J	0.96
Anthracene	mg/kg	100.0	500.0	1000	480 J	640 J	410 J	42 J	0.4 U	22	230 J	200 J	0.47 U	3.4 J	220	99	0.67
Benzo(a)anthracene	mg/kg	1.000	5.600	11.00	220 J	250 J	170 J	16 J	0.4 U	7.9 J	120 J	90 J	0.47 U	5.9 J	100 J	47 J	0.24 J
Benzo(b)fluoranthene	mg/kg	1.000	5.600	11.00	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	4.6 J	190 U	77 U	0.36 U
Benzo(k)fluoranthene	mg/kg	0.8000	56.00	110.0	88 J	1700 U	810 UJ	89 U	0.4 U	3.9 J	820 U	380 U	0.47 U	4.9 J	42 J	20 J	0.14 J
Benzo(g,h,i)perylene	mg/kg	100.0	500.0	1000	780 U	1700 U	810 U	89 U	0.4 U	2.1 J	810 U	380 U	0.47 U	3.2 J	190 U	11 J	0.049 J
Benzo(a)pyrene	mg/kg	1.000	1.000	1.100	170 J	230 J	130 J	14 J	0.4 U	6.9 J	820 U	62 J	0.47 U	5.1 J	66 J	37 J	0.18 J
Chrysene	mg/kg	1.000	56.00	110.0	210 J	260 J	160 J	17 J	0.4 U	8.6 J	820 U	96 J	0.47 U	5.8 J	98 J	45 J	0.23 J
Dibenz(a,h)anthracene	mg/kg	0.3300	0.5600	1.100	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	0.98 J	190 U	77 U	0.36 U
Fluoranthene	mg/kg	100.0	500.0	1000	430 J	520 J	340 J	32 J	0.4 U	19	200 J	170 J	0.47 U	19 J	140 J	82	0.58
Fluorene	mg/kg	30.00	500.0	1000	690 J	770 J	510 J	52 J	0.4 U	23	380 J	270 J	0.47 U	3.1 J	250	120	0.58
Indeno(1,2,3-cd)pyrene	mg/kg	0.5000	5.600	11.00	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	2.8 J	190 U	9.9 J	0.05 J
2-Methylnaphthalene	mg/kg		NE	NE	3100	3500	2600	180	0.4 U	17	1400	990 J	0.47 U	2.7 J	810	400	1.3
Naphthalene	mg/kg	12.00	500.0	1000	5900	6800	4600	300	0.4 U	55	2600	2200	0.47 U	15 J	880	460	1.6
Phenanthrene	mg/kg	100.0	500.0	1000	1700	2100	1300 J	140	0.4 U	72	810 J	730	0.094 J	8.2 J	670	320	2.3
Pyrene	mg/kg	100.0	500.0	1000	1000	920 J	570 J	65 J	0.4 U	26 J	290 J	250 J	0.47 U	19 J	310 J	130 J	0.94 J
Total cPAH (7 of 17) (ND=0)	mg/kg	NE	NE	NE	688	740	460	47		27.3	120	248		30.08	306	158.9	0.84
Total ncPAH (10 of 17) (ND=0)	mg/kg	NE	NE	NE	14610	16840	11620	906		291.7	6470	5350	0.094	89	3784	1836	9.189
Total PAHs	mg/kg	NE	NE	NE	15298	17580	12080	953		319	6590	5598	0.094	119.08	4090	1994.9	10.029
2.34 NYSDEC PAH17 Other SVOCs																	
Benzyl alcohol	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Bis(2-chloroethoxy)methane	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Bis(2-chloroethyl)ether	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Bis(2-ethylhexyl)phthalate	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3 J	190 U	77 U	0.36 U
4-Bromophenyl phenyl ether	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Butyl benzyl phthalate	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Carbazole	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	1.1 J	190 U	77 U	0.36 U
4-Chloro-3-methylphenol	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
4-Chloroaniline	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
2-Chloronaphthalene	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-15 5.5 6 ft 11/9/2004	B-15 5.5 6 ft 11/9/2004 NGW-B15(5.5-6.0)	B-15 31 31.5 ft 11/9/2004	B-15 104.5 105 ft 11/10/2004	B-15 98 98.5 ft 11/10/2004	B-16 9 9.25 ft 11/11/2004	B-16 29 30 ft 11/11/2004	B-16 103.5 104 ft 11/12/2004	B-16 114 114.5 ft 11/12/2004	B-17 15 16 ft 12/3/2004	B-17 40 41 ft 12/3/2004	B-17 45 46 ft 12/3/2004	B-17 101 102 ft 12/3/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
2-Chlorophenol	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
4-Chlorophenyl phenyl ether	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Dibenzofuran	mg/kg	7.000	350.0	1000	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	2.4 J	190 U	77 U	0.071 J
1,2-Dichlorobenzene (o-DCB)	mg/kg	1.100	500.0	1000	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
1,3-Dichlorobenzene (m-DCB)	mg/kg	2.400	280.0	560.0	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
1,4-Dichlorobenzene (p-DCB)	mg/kg	1.800	130.0	250.0	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
3,3-Dichlorobenzidine	mg/kg	NE	NE	NE	1600 U	3300 U	1600 UJ	180 U	0.8 U	30 U	1600 U	760 U	0.93 U	6.9 UJ	370 U	150 U	0.72 U
2,4-Dichlorophenol	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Diethyl phthalate	mg/kg	NE	NE	NE	780 U	1700 U	810 UJ	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Dimethyl phthalate	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
2,4-Dimethylphenol	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Di-n-butyl phthalate	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 UJ
4,6-Dinitro-2-methylphenol	mg/kg	NE	NE	NE	3800 U	8100 U	3900 U	430 U	1.9 UJ	74 U	4000 U	1800 U	2.3 U	17 UJ	900 U	370 U	1.7 UJ
2,4-Dinitrophenol	mg/kg	NE	NE	NE	3800 U	8100 U	3900 U	430 U	1.9 UJ	74 UJ	4000 U	1800 U	2.3 UJ	17 R	900 R	370 R	1.7 R
2,4-Dinitrotoluene	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
2,6-Dinitrotoluene	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Di-n-octyl phthalate	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Hexachlorobenzene	mg/kg	0.3300	6.000	12.00	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
1,3-Hexachlorobutadiene (C-46)	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Hexachlorocyclopentadiene	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 UJ	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Hexachloroethane	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Isophorone	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
2-Methylphenol (o-Cresol)	mg/kg	0.3300	500.0	1000	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
4-Methylphenol (p-Cresol)	mg/kg	0.3300	500.0	1000	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
2-Nitroaniline	mg/kg	NE	NE	NE	3800 U	8100 U	3900 U	430 U	1.9 U	74 U	4000 U	1800 U	2.3 U	17 UJ	900 U	370 U	1.7 U
3-Nitroaniline	mg/kg	NE	NE	NE	3800 U	8100 U	3900 U	430 U	1.9 U	74 U	4000 U	1800 U	2.3 U	17 UJ	900 U	370 U	1.7 U
4-Nitroaniline	mg/kg	NE	NE	NE	1600 U	3300 U	1600 U	180 U	0.8 U	30 U	1600 U	760 U	0.93 U	6.9 UJ	370 U	150 U	0.72 U
Nitrobenzene	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
2-Nitrophenol	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
4-Nitrophenol	mg/kg	NE	NE	NE	3800 U	8100 U	3900 U	430 U	1.9 U	74 U	4000 U	1800 U	2.3 U	17 UJ	900 U	370 U	1.7 U
N-Nitrosodiphenylamine (NDFA)	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
N-Nitrosodi-n-propylamine (NDPA)	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
2,2-oxybis(1-Chloropropane)	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
Pentachlorophenol	mg/kg	0.8000	6.700	55.00	3800 U	8100 U	3900 UJ	430 U	1.9 U	74 U	4000 U	1800 U	2.3 U	17 UJ	900 U	370 U	1.7 U
Phenol	mg/kg	0.3300	500.0	1000	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
1,2,4-Trichlorobenzene	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
2,4,5-Trichlorophenol	mg/kg	NE	NE	NE	3800 U	8100 U	3900 U	430 U	1.9 U	74 U	4000 U	1800 U	2.3 U	17 UJ	900 U	370 U	1.7 U
2,4,6-Trichlorophenol	mg/kg	NE	NE	NE	780 U	1700 U	810 U	89 U	0.4 U	15 U	820 U	380 U	0.47 U	3.5 UJ	190 U	77 U	0.36 U
3.10 PCB Aroclors																	
Aroclor 1016	mg/kg	NE	NE	NE	0.02 U	0.021 U	0.021 U	0.023 U	0.021 U	0.02 U	0.021 UJ	0.019 R	0.024 UJ	0.18 UJ	0.095 U	0.021 U	0.019 U
Aroclor 1221	mg/kg	NE	NE	NE	0.04 U	0.042 U	0.042 U	0.045 U	0.041 U	0.038 U	0.041 UJ	0.037 R	0.046 UJ	0.34 UJ	0.19 U	0.04 U	0.036 U
Aroclor 1232	mg/kg	NE	NE	NE	0.02 U	0.021 U	0.021 U	0.023 U	0.021 U	0.02 U	0.021 UJ	0.019 R	0.024 UJ	0.18 UJ	0.095 U	0.021 U	0.019 U
Aroclor 1242	mg/kg	NE	NE	NE	0.02 U	0.021 U	0.021 U	0.023 U	0.021 U	0.02 U	0.021 UJ	0.019 R	0.024 UJ	0.18 UJ	0.095 U	0.021 U	0.019 U
Aroclor 1248	mg/kg	NE	NE	NE	0.02 U	0.021 U	0.021 U	0.023 U	0.021 U	0.02 U	0.021 UJ	0.019 R	0.024 UJ	0.91 J	0.095 U	0.021 U	0.019 U
Aroclor 1254	mg/kg	NE	NE	NE	0.02 U	0.021 U	0.021 U	0.023 U	0.021 U	0.02 U	0.021 UJ	0.019 R	0.024 UJ	0.99 J	0.095 U	0.021 U	0.019 U
Aroclor 1260	mg/kg	NE	NE	NE	0.02 U	0.021 U	0.021 U	0.023 U	0.021 U	0.02 U	0.021 UJ	0.019 R	0.024 UJ	0.34 J	0.095 U	0.021 U	0.019 U
6.1 Metals																	
Arsenic	mg/kg	13.00	16.00	16.00	8.9	11.3	5.4	11.6	8.2	4.2	4.6 J	2 J	4 J	46.7 J	9 UJ	11.4 UJ	9.4 UJ
Barium	mg/kg	350.0	400.0	10000	104	108	19.3 J	51.6 J	33.1 J	51.3	94.5	41.1 J	48.4 J	225 J	87.5 J	17.1 J	32.5 J
Cadmium	mg/kg	2.500	9.300	60.00	4.3 U	3.6 U	3.6 U	4.1 U	3.8 U	3.1 U	3.6 U	3.3 U	4.9 U	2.8 J	3.4 U	4.3 U	3.5 U
Chromium	mg/kg	NE	NE	NE	14.4	13.4	9.6	41.1	33.9	24.9	12.7 J	13.9 J	13.2 J	51.6 J	9.1 J	6.1 J	13.2 J
Lead	mg/kg	63.00	1000	3900	242	409	4.8	12.6 J	14.5 J	8.2 J	134	65.5	61.5	527 J	10 J	1.8 J	12.7 J
Mercury	mg/kg	0.1800	2.800	5.700	0.41	0.71	0.015 U	0.023	0.021	0.031	0.013 U	0.013 U	0.02 J	3.6	0.074	0.015 U	0.011 U
Selenium	mg/kg	3.900	1500	6800	4.7 J	4 J	19.1 U	21.7 U	20.1 U	16.6 U	19.4 U	17.7 U	26 U	34.9 UJ	18.1 U	22.8 U	18.7 U
Silver	mg/kg	2.000	1500	6800	4.3 U	3.6 U	3.6 U	4.1 U	3.8 U	3.1 U	3.6 U	3.3 U	4.9 U	0.98 J	3.4 UJ	4.3 UJ	3.5 UJ
7.10 Cyanides																	
Total Cyanide	mg/kg	27.00	27.00	10000	6.54 J	13.3 J	0.616 UJ	0.662 UJ	0.604 UJ	0.588 UJ	0.602 UJ	0.568 UJ	0.7 UJ	1 UJ	0.569 UJ	0.609 UJ	0.536 UJ
9.9 Other																	
Percent Moisture	%	NE	NE	NE	17.7	22	21.9	28.1	20.4	14.9	20.1	12.9	29.3	52.6	12.1	17.9	8.6
Percent Solids	%	NE	NE	NE	82.3	78	78.1	71.9	79.6	85.1	79.9	87.1	70.7	47.4	87.9	82.1	91.4

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-18 51.5 52 ft 12/2/2004	B-18 45.5 46 ft 12/2/2004	B-18 99 100 ft 12/2/2004	B-19 2.5 3 ft 11/18/2004	B-19 45.5 46 ft 11/18/2004	B-19 109.5 110 ft 11/18/2004	B-20 4 4.5 ft 11/30/2004	B-20 30.5 31 ft 11/30/2004	B-20 104 104.5 ft 11/30/2004	B-21 7 8 ft 12/1/2004	B-21 7 8 ft 12/1/2004 NGW-B21(7-8)	B-21 28.5 29 ft 12/1/2004	B-21 97.5 98.5 ft 12/1/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
1.11 BTEX																	
Benzene	mg/kg	0.06	44	89	26	25 J	0.0055 U	0.0059 U	0.61 J	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Toluene	mg/kg	0.7	500	1000	12 U	61 U	0.0055 U	0.0059 U	1.2	0.0055 U	0.0057 U	0.00063 J	0.00077 J	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Ethylbenzene	mg/kg	1	390	780	170	430	0.0055 U	0.0059 U	4.9	0.0055 U	0.0057 U	0.0062 U	0.00096 J	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Total Xylene	mg/kg	0.26	500	1000	160	500	0.0055 U	0.0059 U	5.4	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Total BTEX (ND=0)	mg/kg		NE	NE	356	955			12.11			0.00063	0.00173				
1.12 Other VOCs																	
Acetone	mg/kg	0.05000	500.0	1000	31 U	150 U	0.011 U	0.012 UJ	1.6 U	0.011 UJ	0.011 U	0.012 U	0.013 U	0.013 U	0.13	0.013 U	0.011 U
Bromodichloromethane	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Bromoform	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Bromomethane	mg/kg	NE	NE	NE	12 U	61 U	0.0055 UJ	0.0059 U	0.66 UJ	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Carbon disulfide	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.00089 J	0.66 U	0.0059	0.0018 J	0.00064 J	0.0029 J	0.0025 J	0.002 J	0.0033 J	0.00078 J
Carbon tetrachloride	mg/kg	0.7600	22.00	44.00	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Chlorobenzene	mg/kg	1.100	500.0	1000	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.006 J	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Chloroethane	mg/kg	NE	NE	NE	12 U	61 U	0.0055 UJ	0.0059 UJ	0.66 U	0.0055 UJ	0.0057 UJ	0.0062 UJ	0.0064 UJ	0.0067 UJ	0.0065 UJ	0.0065 UJ	0.0055 UJ
Chloroform (Trichloromethane)	mg/kg	0.3700	350.0	700.0	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Chloromethane	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Dibromochloromethane	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
1,1-Dichloroethane	mg/kg	0.2700	240.0	480.0	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
1,2-Dichloroethane	mg/kg	0.02000	30.00	60.00	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
1,1-Dichloroethene	mg/kg	0.3300	500.0	1000	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
cis-1,2-Dichloroethene	mg/kg	0.2500	500.0	1000	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
trans-1,2-Dichloroethene	mg/kg	0.1900	500.0	1000	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
1,2-Dichloropropane	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
cis-1,3-Dichloropropene	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
trans-1,3-Dichloropropene	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
2-Hexanone	mg/kg	NE	NE	NE	12 U	61 U	0.011 U	0.012 UJ	0.66 U	0.011 UJ	0.011 U	0.012 U	0.013 U	0.013 U	0.012 U	0.013 U	0.011 U
Methyl ethyl ketone (2-Butanone)	mg/kg	0.1200	500.0	1000	12 U	61 U	0.011 UJ	0.012 U	0.66 U	0.011 U	0.011 UJ	0.012 U	0.013 U	0.013 UJ	0.027 J	0.013 U	0.011 U
4-Methyl-2-pentanone (MIBK)	mg/kg	NE	NE	NE	12 U	61 U	0.011 U	0.012 U	0.66 U	0.011 U	0.011 U	0.012 U	0.013 U	0.013 U	0.013 U	0.013 U	0.011 U
Methylene chloride	mg/kg	0.05000	500.0	1000	12 U	61 U	0.0055 U	0.0059 UJ	0.66 U	0.0055 UJ	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Styrene	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
1,1,2,2-Tetrachloroethane	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 R	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Tetrachloroethene (PCE)	mg/kg	1.300	150.0	300.0	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
1,1,1-Trichloroethane (TCA)	mg/kg	0.6800	500.0	1000	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
1,1,2-Trichloroethane	mg/kg	NE	NE	NE	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Trichloroethene (TCE)	mg/kg	0.4700	200.0	400.0	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
Vinyl chloride	mg/kg	0.02000	13.00	27.00	12 U	61 U	0.0055 U	0.0059 U	0.66 U	0.0055 U	0.0057 U	0.0062 U	0.0064 U	0.0067 U	0.0065 U	0.0065 U	0.0055 U
2.33 NYSDEC PAH17																	
Acenaphthene	mg/kg	20.00	500.0	1000	350	1100	0.4 J	0.39 U	110	0.36 U	0.79	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Acenaphthylene	mg/kg	100.0	500.0	1000	49 J	130 J	2.4	0.39 U	16 J	0.36 U	0.15 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Anthracene	mg/kg	100.0	500.0	1000	160	500 J	1.1	0.39 U	55	0.36 U	0.54	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Benzo(a)anthracene	mg/kg	1.000	5.600	11.00	58 J	180 J	0.5 J	0.088 J	22 J	0.36 U	0.51	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Benzo(b)fluoranthene	mg/kg	1.000	5.600	11.00	160 U	620 U	0.71 U	0.14 J	43 U	0.36 U	0.37 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Benzo(k)fluoranthene	mg/kg	0.8000	56.00	110.0	28 J	82 J	0.26 J	0.075 J	10 J	0.36 U	0.4 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Benzo(g,h,i)perylene	mg/kg	100.0	500.0	1000	160 U	620 U	0.13 J	0.13 J	43 U	0.36 U	0.13 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Benzo(a)pyrene	mg/kg	1.000	1.000	1.100	46 J	130 J	0.41 J	0.08 J	15 J	0.36 U	0.44	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Chrysene	mg/kg	1.000	56.00	110.0	62 J	160 J	0.53 J	0.21 J	22 J	0.36 U	0.57	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Dibenz(a,h)anthracene	mg/kg	0.3300	0.5600	1.100	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.12 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Fluoranthene	mg/kg	100.0	500.0	1000	120 J	350 J	1.1	0.14 J	44	0.36 U	2.2	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Fluorene	mg/kg	30.00	500.0	1000	180	560 J	1.3	0.11 J	68	0.36 U	0.32 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Indeno(1,2,3-cd)pyrene	mg/kg	0.5000	5.600	11.00	160 U	620 U	0.096 J	0.39 U	43 U	0.36 U	0.25 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
2-Methylnaphthalene	mg/kg		NE	NE	800	2600	4.7	1.7	260	0.36 U	0.23 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Naphthalene	mg/kg	12.00	500.0	1000	950	3600	5.4	1	340	0.36 U	0.67	0.39 U	0.11 J	0.081 J	0.1 J	0.41 U	0.35 U
Phenanthrene	mg/kg	100.0	500.0	1000	500	1400	4.4	0.84	180	0.36 U	0.86	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Pyrene	mg/kg	100.0	500.0	1000	180 J	570 J	1.7 J	0.22 J	70 J	0.36 U	1.6 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Total cPAH (7 of 17) (ND=0)	mg/kg	NE	NE	NE	194	552	1.796	0.593	69		2.66				0.58		
Total ncPAH (10 of 17) (ND=0)	mg/kg	NE	NE	NE	3289	10810	22.63	4.14	1143		7.7		0.11	0.081	1.141		
Total PAHs	mg/kg	NE	NE	NE	3483	11362	24.426	4.733	1212		10.36		0.11	0.081	1.721		
2.34 NYSDEC PAH17 Other SVOCs																	
Benzyl alcohol	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Bis(2-chloroethoxy)methane	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Bis(2-chloroethyl)ether	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Bis(2-ethylhexyl)phthalate	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.12 J	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
4-Bromophenyl phenyl ether	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Butyl benzyl phthalate	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-18 51.5 52 ft 12/2/2004	B-18 45.5 46 ft 12/2/2004	B-18 99 100 ft 12/2/2004	B-19 2.5 3 ft 11/18/2004	B-19 45.5 46 ft 11/18/2004	B-19 109.5 110 ft 11/18/2004	B-20 4 4.5 ft 11/30/2004	B-20 30.5 31 ft 11/30/2004	B-20 104 104.5 ft 11/30/2004	B-21 7 8 ft 12/1/2004	B-21 7 8 ft 12/1/2004 NGW-B21(7-8)	B-21 28.5 29 ft 12/1/2004	B-21 97.5 98.5 ft 12/1/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
2-Chlorophenol	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
4-Chlorophenyl phenyl ether	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Dibenzofuran	mg/kg	7.000	350.0	1000	160 U	620 U	0.15 J	0.4	43 U	0.36 U	0.34 J	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
1,2-Dichlorobenzene (o-DCB)	mg/kg	1.100	500.0	1000	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
1,3-Dichlorobenzene (m-DCB)	mg/kg	2.400	280.0	560.0	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
1,4-Dichlorobenzene (p-DCB)	mg/kg	1.800	130.0	250.0	160 U	620 U	0.71 UJ	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
3,3-Dichlorobenzidine	mg/kg	NE	NE	NE	310 U	1200 U	1.4 U	0.77 U	87 U	0.71 U	0.73 U	0.79 U	0.8 U	0.84 U	0.84 U	0.83 U	0.7 U
2,4-Dichlorophenol	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Diethyl phthalate	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Dimethyl phthalate	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
2,4-Dimethylphenol	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Di-n-butyl phthalate	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
4,6-Dinitro-2-methylphenol	mg/kg	NE	NE	NE	760 U	3000 U	3.4 U	1.9 U	210 U	1.7 U	1.8 U	1.9 U	1.9 U	2 U	2 U	2 U	1.7 U
2,4-Dinitrophenol	mg/kg	NE	NE	NE	760 UJ	3000 U	3.4 U	1.9 U	210 UJ	1.7 UJ	1.8 UJ	1.9 U	1.9 U	2 U	2 U	2 U	1.7 U
2,4-Dinitrotoluene	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
2,6-Dinitrotoluene	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Di-n-octyl phthalate	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Hexachlorobenzene	mg/kg	0.3300	6.000	12.00	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
1,3-Hexachlorobutadiene (C-46)	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Hexachlorocyclopentadiene	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Hexachloroethane	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Isophorone	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
2-Methylphenol (o-Cresol)	mg/kg	0.3300	500.0	1000	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
4-Methylphenol (p-Cresol)	mg/kg	0.3300	500.0	1000	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
2-Nitroaniline	mg/kg	NE	NE	NE	760 U	3000 U	3.4 U	1.9 U	210 U	1.7 U	1.8 U	1.9 U	1.9 U	2 U	2 U	2 U	1.7 U
3-Nitroaniline	mg/kg	NE	NE	NE	760 U	3000 U	3.4 U	1.9 U	210 U	1.7 U	1.8 U	1.9 U	1.9 U	2 U	2 U	2 U	1.7 U
4-Nitroaniline	mg/kg	NE	NE	NE	310 U	1200 U	1.4 U	0.77 U	87 U	0.71 U	0.73 U	0.79 U	0.8 U	0.84 U	0.84 U	0.83 U	0.7 U
Nitrobenzene	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
2-Nitrophenol	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
4-Nitrophenol	mg/kg	NE	NE	NE	760 U	3000 U	3.4 U	1.9 U	210 U	1.7 U	1.8 U	1.9 U	1.9 U	2 U	2 U	2 U	1.7 U
N-Nitrosodiphenylamine (NDFA)	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
N-Nitrosodi-n-propylamine (NDPA)	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
2,2-oxybis(1-Chloropropane)	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
Pentachlorophenol	mg/kg	0.8000	6.700	55.00	760 U	3000 U	3.4 R	1.9 U	210 U	1.7 U	1.8 U	1.9 U	1.9 U	2 U	2 U	2 U	1.7 U
Phenol	mg/kg	0.3300	500.0	1000	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
1,2,4-Trichlorobenzene	mg/kg	NE	NE	NE	160 U	620 U	0.71 UJ	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
2,4,5-Trichlorophenol	mg/kg	NE	NE	NE	760 U	3000 U	3.4 U	1.9 U	210 U	1.7 U	1.8 U	1.9 U	1.9 U	2 U	2 U	2 U	1.7 U
2,4,6-Trichlorophenol	mg/kg	NE	NE	NE	160 U	620 U	0.71 U	0.39 U	43 U	0.36 U	0.37 U	0.39 U	0.4 U	0.42 U	0.42 U	0.41 U	0.35 U
3.10 PCB Aroclors																	
Aroclor 1016	mg/kg	NE	NE	NE	0.021 U	0.021 U	0.019 U	0.019 U	0.022 U	0.019 U	0.019 U	0.021 U	0.021 U	0.023 U	0.022 U	0.022 U	0.019 U
Aroclor 1221	mg/kg	NE	NE	NE	0.041 U	0.04 U	0.036 U	0.038 U	0.043 U	0.036 U	0.038 U	0.04 U	0.041 U	0.044 U	0.043 U	0.042 U	0.036 U
Aroclor 1232	mg/kg	NE	NE	NE	0.021 U	0.021 U	0.019 U	0.019 U	0.022 U	0.019 U	0.019 U	0.021 U	0.021 U	0.023 U	0.022 U	0.022 U	0.019 U
Aroclor 1242	mg/kg	NE	NE	NE	0.021 U	0.021 U	0.019 U	0.019 U	0.022 U	0.019 U	0.019 U	0.021 U	0.021 U	0.023 U	0.022 U	0.022 U	0.019 U
Aroclor 1248	mg/kg	NE	NE	NE	0.021 U	0.021 U	0.019 U	0.019 U	0.022 U	0.019 U	0.019 U	0.021 U	0.021 U	0.023 U	0.022 U	0.022 U	0.019 U
Aroclor 1254	mg/kg	NE	NE	NE	0.021 U	0.021 U	0.019 U	0.019 U	0.022 U	0.019 U	0.019 U	0.021 U	0.021 U	0.023 U	0.022 U	0.022 U	0.019 U
Aroclor 1260	mg/kg	NE	NE	NE	0.021 U	0.021 U	0.019 U	0.02	0.022 U	0.019 U	0.011 J	0.021 U	0.021 U	0.023 U	0.022 U	0.022 U	0.019 U
6.1 Metals																	
Arsenic	mg/kg	13.00	16.00	16.00	10.2 UJ	11.9 UJ	3.4 J	3.5 J	9.5 UJ	9.1 UJ	2.7 J	9.9 UJ	4.3 J	4.8 J	4.4 J	11.4 UJ	8.9 UJ
Barium	mg/kg	350.0	400.0	10000	19 J	73.2 J	29.4 J	31 J	17.7 J	34.8 J	61.5 J	32.3 J	25.6 J	56.4 J	49.1 J	11.5 J	6.5 J
Cadmium	mg/kg	2.500	9.300	60.00	3.8 U	4.5 U	3.9 U	4 U	3.6 U	3.4 U	4 U	3.7 U	3.4 U	3.9 U	4.3 U	4.3 U	3.3 U
Chromium	mg/kg	NE	NE	NE	7.9 J	20.3 J	19.7 J	6.1 J	8.8 J	13.1 J	18 J	9.3 J	20.3 J	24.5 J	22.5 J	10.8 J	6.6 J
Lead	mg/kg	63.00	1000	3900	4 J	23.2 J	8.1 J	24.2	6.3	3.9	109 J	6.2 J	6.7 J	47 J	33.8 J	6.5 J	2.6 J
Mercury	mg/kg	0.1800	2.800	5.700	0.016 U	0.11	0.016 U	0.028	0.014	0.014 U	0.13	0.017 U	0.013 U	0.13	0.099	0.012 U	0.016 U
Selenium	mg/kg	3.900	1500	6800	20.5 U	23.8 U	20.6 U	4.5 J	19 U	18.3 U	21.5 U	19.9 U	18.4 U	20.8 U	22.9 U	22.9 U	17.7 U
Silver	mg/kg	2.000	1500	6800	3.8 UJ	4.5 UJ	3.9 UJ	4 U	3.6 U	0.63 J	4 UJ	3.7 UJ	3.4 UJ	3.9 UJ	4.3 UJ	4.3 UJ	3.3 UJ
7.10 Cyanides																	
Total Cyanide	mg/kg	27.00	27.00	10000	0.606 UJ	0.584 UJ	0.55 UJ	2.18 J	0.624 UJ	0.527 UJ	0.547 UJ	0.609 UJ	0.608 UJ	0.641 UJ	0.622 UJ	0.622 UJ	0.554 UJ
9.9 Other																	
Percent Moisture	%	NE	NE	NE	19.9	18.4	9.1	14.7	23.7	8.8	13	19.5	21.7	25	23.4	22.7	9.7
Percent Solids	%	NE	NE	NE	80.1	81.6	90.9	85.3	76.3	91.2	87	80.5	78.3	75	76.6	77.3	90.3

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-22 0 2 ft 12/7/2004	B-22 42.5 44.5 ft 12/7/2004	B-22 45 47 ft 12/7/2004	B-22 99.5 100 ft 12/7/2004	B-23 23 24 ft 12/9/2004	B-23 51.5 52 ft 12/9/2004	B-23 110 110.5 ft 12/9/2004	B-24 34.5 35 ft 12/7/2004	B-24 38.5 39 ft 12/7/2004	B-24 101.5 102.5 ft 12/8/2004	B-25 5 7 ft 12/8/2004	B-25 35 36 ft 12/8/2004	B-25 98 99 ft 12/8/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
Benzene	mg/kg	0.06	44	89	2 J	2 J	1.6 J	0.0075 U	0.23 J	2.9 J	0.0057 U	4.2 J	0.32 J	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Toluene	mg/kg	0.7	500	1000	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Ethylbenzene	mg/kg	1	390	780	64	68	56	0.0075 U	0.48 J	54	0.0057 U	93	6.6	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Total Xylene	mg/kg	0.26	500	1000	65 J	74 J	58 J	0.0075 U	0.26 J	55 J	0.0057 U	100 J	6.7 J	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Total BTEX (ND=0)	mg/kg		NE	NE	131	144	115.6		0.97	111.9		197.2	13.62				
1.12 Other VOCs																	
Acetone	mg/kg	0.05000	500.0	1000	32 U	32 U	18 U	0.015 U	1.8 U	17 U	0.011 U	41 U	3.1 U	0.012 U	0.013 U	0.012 U	0.012 U
Bromodichloromethane	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Bromoform	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 UJ	0.0061 U	0.0062 U
Bromomethane	mg/kg	NE	NE	NE	13 UJ	13 UJ	7.3 UJ	0.0075 U	0.7 UJ	6.7 UJ	0.0057 U	17 UJ	1.3 U	0.0061 U	0.0066 UJ	0.0061 UJ	0.0062 U
Carbon disulfide	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0026 J	0.7 U	6.7 U	0.0029 J	17 U	1.3 U	0.0061 U	0.0032 J	0.0061 U	0.0062 U
Carbon tetrachloride	mg/kg	0.7600	22.00	44.00	13 U	13 U	7.3 U	0.0075 UJ	0.7 U	6.7 U	0.0057 UJ	17 U	1.3 U	0.0061 UJ	0.0066 U	0.0061 U	0.0062 UJ
Chlorobenzene	mg/kg	1.100	500.0	1000	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Chloroethane	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 UJ	0.7 U	6.7 U	0.0057 UJ	17 U	1.3 U	0.0061 UJ	0.0066 UJ	0.0061 UJR	0.0062 UJ
Chloroform (Trichloromethane)	mg/kg	0.3700	350.0	700.0	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Chloromethane	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 UJ	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Dibromochloromethane	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
1,1-Dichloroethane	mg/kg	0.2700	240.0	480.0	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
1,2-Dichloroethane	mg/kg	0.02000	30.00	60.00	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
1,1-Dichloroethene	mg/kg	0.3300	500.0	1000	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
cis-1,2-Dichloroethene	mg/kg	0.2500	500.0	1000	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
trans-1,2-Dichloroethene	mg/kg	0.1900	500.0	1000	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
1,2-Dichloropropane	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
cis-1,3-Dichloropropene	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
trans-1,3-Dichloropropene	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
2-Hexanone	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.015 U	0.7 U	6.7 U	0.011 U	17 U	1.3 U	0.012 U	0.013 U	0.012 U	0.012 U
Methyl ethyl ketone (2-Butanone)	mg/kg	0.1200	500.0	1000	13 U	13 U	7.3 U	0.015 UJ	0.7 U	6.7 U	0.011 UJ	17 U	1.3 U	0.012 UJ	0.013 U	0.012 U	0.012 UJ
4-Methyl-2-pentanone (MIBK)	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.015 U	0.7 U	6.7 U	0.011 U	17 U	1.3 U	0.012 U	0.013 U	0.012 U	0.012 U
Methylene chloride	mg/kg	0.05000	500.0	1000	13 U	13 U	7.3 U	0.0075 U	0.08 J	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 UB	0.0062 U
Styrene	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
1,1,2,2-Tetrachloroethane	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Tetrachloroethene (PCE)	mg/kg	1.300	150.0	300.0	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
1,1,1-Trichloroethane (TCA)	mg/kg	0.6800	500.0	1000	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
1,1,2-Trichloroethane	mg/kg	NE	NE	NE	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
Trichloroethene (TCE)	mg/kg	0.4700	200.0	400.0	13 U	13 U	7.3 U	0.0075 U	0.21 J	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0034 J
Vinyl chloride	mg/kg	0.02000	13.00	27.00	13 U	13 U	7.3 U	0.0075 U	0.7 U	6.7 U	0.0057 U	17 U	1.3 U	0.0061 U	0.0066 U	0.0061 U	0.0062 U
2.33 NYSDEC PAH17																	
Acenaphthene	mg/kg	20.00	500.0	1000	250 J	660 J	430	0.66	3.5	1100 J	0.36 U	1300 J	120 J	0.39 U	0.29 J	0.39 U	0.4 U
Acenaphthylene	mg/kg	100.0	500.0	1000	22 J	54 J	31 J	0.095 J	0.92 J	91 J	0.36 U	100 J	18 J	0.39 U	0.36 J	0.39 U	0.4 U
Anthracene	mg/kg	100.0	500.0	1000	130 J	330 J	240	0.59	3.3	480	0.36 U	690	59 J	0.39 U	0.36 J	0.39 U	0.4 U
Benzo(a)anthracene	mg/kg	1.000	5.600	11.00	55 J	150 J	95 J	0.27 J	3	200 J	0.36 U	340 J	28 J	0.39 U	1.8	0.39 U	0.4 U
Benzo(b)fluoranthene	mg/kg	1.000	5.600	11.00	82 U	320 U	190 U	0.48 U	1.9	430 U	0.36 U	520 U	82 U	0.39 U	2.5 J	0.39 U	0.4 U
Benzo(k)fluoranthene	mg/kg	0.8000	56.00	110.0	21 J	45 J	37 J	0.11 J	1.4 J	64 J	0.36 U	120 J	82 U	0.39 U	1.9	0.39 U	0.4 U
Benzo(g,h,i)perylene	mg/kg	100.0	500.0	1000	13 J	320 U	190 U	0.056 J	1.1 J	430 U	0.36 U	74 J	430 U	0.39 U	2.2	0.39 U	0.4 U
Benzo(a)pyrene	mg/kg	1.000	1.000	1.100	37 J	97 J	61 J	0.18 J	2.3	130 J	0.36 U	200 J	18 J	0.39 U	2.8	0.39 U	0.4 U
Chrysene	mg/kg	1.000	56.00	110.0	58 J	160 J	99 J	0.27 J	3.3	210 J	0.36 U	340 J	30 J	0.39 U	1.7	0.39 U	0.4 U
Dibenz(a,h)anthracene	mg/kg	0.3300	0.5600	1.100	82 U	320 U	190 U	0.48 U	0.39 J	430 U	0.36 U	520 U	82 U	0.39 U	0.97	0.39 U	0.4 U
Fluoranthene	mg/kg	100.0	500.0	1000	99	250 J	180 J	0.51	5.4	370 J	0.36 U	570	51 J	0.065 J	2	0.39 U	0.4 U
Fluorene	mg/kg	30.00	500.0	1000	110 J	310 J	260	0.48	2.6	530	0.36 U	650	71 J	0.39 U	0.28 J	0.39 U	0.4 U
Indeno(1,2,3-cd)pyrene	mg/kg	0.5000	5.600	11.00	9.4 J	320 U	190 U	0.48 U	0.97 J	430 U	0.36 U	55 J	82 U	0.39 U	2.1	0.39 U	0.4 U
2-Methylnaphthalene	mg/kg		NE	NE	440 J	1300 J	870	0.56	7.7	2100 J	0.36 U	2300 J	280 J	0.39 U	1	0.39 U	0.4 U
Naphthalene	mg/kg	12.00	500.0	1000	500 J	1400 J	920	0.31 J	6.7	2800	0.36 U	2500	330	0.39 U	0.5	0.39 U	0.4 U
Phenanthrene	mg/kg	100.0	500.0	1000	420 J	1100 J	690	1.7	10	1700	0.36 U	2300	220	0.17 J	1.2	0.39 U	0.4 U
Pyrene	mg/kg	100.0	500.0	1000	180 J	480 J	330	0.78	7	630	0.36 U	1000	86	0.1 J	2.7	0.39 U	0.4 U
Total cPAH (7 of 17) (ND=0)	mg/kg	NE	NE	NE	180.4	452	292	0.83	13.26	604		1055	76		13.77		
Total ncPAH (10 of 17) (ND=0)	mg/kg	NE	NE	NE	2164	5884	3951	5.741	48.22	9801		11484	1235	0.335	10.89		
Total PAHs	mg/kg	NE	NE	NE	2344.4	6336	4243	6.571	61.48	10405		12539	1311	0.335	24.66		
2.34 NYSDEC PAH17 Other SVOCs																	
Benzyl alcohol	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Bis(2-chloroethoxy)methane	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Bis(2-chloroethyl)ether	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Bis(2-ethylhexyl)phthalate	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.096 J	0.39 U	0.4 U
4-Bromophenyl phenyl ether	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Butyl benzyl phthalate	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Carbazole	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
4-Chloro-3-methylphenol	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
4-Chloroaniline	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
2-Chloronaphthalene	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-22 0 2 ft 12/7/2004	B-22 42.5 44.5 ft 12/7/2004	B-22 45 47 ft 12/7/2004	B-22 99.5 100 ft 12/7/2004	B-23 23 24 ft 12/9/2004	B-23 51.5 52 ft 12/9/2004	B-23 110 110.5 ft 12/9/2004	B-24 34.5 35 ft 12/7/2004	B-24 38.5 39 ft 12/7/2004	B-24 101.5 102.5 ft 12/8/2004	B-25 5 7 ft 12/8/2004	B-25 35 36 ft 12/8/2004	B-25 98 99 ft 12/8/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
2-Chlorophenol	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
4-Chlorophenyl phenyl ether	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Dibenzofuran	mg/kg	7.000	350.0	1000	14 J	320 U	190 U	0.48 U	0.39 J	430 U	0.36 U	520 U	82 U	0.39 U	0.25 J	0.39 U	0.4 U
1,2-Dichlorobenzene (o-DCB)	mg/kg	1.100	500.0	1000	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
1,3-Dichlorobenzene (m-DCB)	mg/kg	2.400	280.0	560.0	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
1,4-Dichlorobenzene (p-DCB)	mg/kg	1.800	130.0	250.0	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.11 J	0.39 U	0.4 U
3,3-Dichlorobenzidine	mg/kg	NE	NE	NE	160 U	650 U	380 U	0.96 U	3.6 U	870 U	0.73 U	1000 U	160 U	0.77 U	0.82 U	0.78 U	0.8 U
2,4-Dichlorophenol	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Diethyl phthalate	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Dimethyl phthalate	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
2,4-Dimethylphenol	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Di-n-butyl phthalate	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
4,6-Dinitro-2-methylphenol	mg/kg	NE	NE	NE	400 U	1600 U	910 U	2.3 U	8.8 U	2100 U	1.8 U	2500 U	400 U	1.9 U	2 U	1.9 U	1.9 U
2,4-Dinitrophenol	mg/kg	NE	NE	NE	400 U	1600 U	910 U	2.3 U	8.8 U	2100 U	1.8 U	2500 U	400 U	1.9 U	2 U	1.9 U	1.9 U
2,4-Dinitrotoluene	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
2,6-Dinitrotoluene	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Di-n-octyl phthalate	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Hexachlorobenzene	mg/kg	0.3300	6.000	12.00	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
1,3-Hexachlorobutadiene (C-46)	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Hexachlorocyclopentadiene	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Hexachloroethane	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Isophorone	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
2-Methylphenol (o-Cresol)	mg/kg	0.3300	500.0	1000	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
4-Methylphenol (p-Cresol)	mg/kg	0.3300	500.0	1000	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
2-Nitroaniline	mg/kg	NE	NE	NE	400 U	1600 U	910 U	2.3 U	8.8 U	2100 U	1.8 U	2500 U	400 U	1.9 U	2 U	1.9 U	1.9 U
3-Nitroaniline	mg/kg	NE	NE	NE	400 U	1600 U	910 U	2.3 U	8.8 U	2100 U	1.8 U	2500 U	400 U	1.9 U	2 U	1.9 U	1.9 U
4-Nitroaniline	mg/kg	NE	NE	NE	160 U	650 U	380 U	0.96 U	3.6 U	870 U	0.73 U	1000 U	160 U	0.77 U	0.82 U	0.78 U	0.8 U
Nitrobenzene	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
2-Nitrophenol	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
4-Nitrophenol	mg/kg	NE	NE	NE	400 U	1600 U	910 U	2.3 U	8.8 U	2100 U	1.8 U	2500 U	400 U	1.9 U	2 U	1.9 U	1.9 U
N-Nitrosodiphenylamine (NDFA)	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
N-Nitrosodi-n-propylamine (NDPA)	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
2,2-oxybis(1-Chloropropane)	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
Pentachlorophenol	mg/kg	0.8000	6.700	55.00	400 U	1600 U	910 U	2.3 U	8.8 U	2100 U	1.8 U	2500 U	400 U	1.9 U	2 U	1.9 U	1.9 U
Phenol	mg/kg	0.3300	500.0	1000	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
1,2,4-Trichlorobenzene	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
2,4,5-Trichlorophenol	mg/kg	NE	NE	NE	400 U	1600 U	910 U	2.3 U	8.8 U	2100 U	1.8 U	2500 U	400 U	1.9 U	2 U	1.9 U	1.9 U
2,4,6-Trichlorophenol	mg/kg	NE	NE	NE	82 U	320 U	190 U	0.48 U	1.8 U	430 U	0.36 U	520 U	82 U	0.39 U	0.41 U	0.39 U	0.4 U
3.10 PCB Aroclors																	
Aroclor 1016	mg/kg	NE	NE	NE	0.022 U	0.022 U	0.024 U	0.025 U	0.024 U	0.022 U	0.019 U	0.056 U	0.021 U	0.021 U	0.022 U	0.02 U	0.021 U
Aroclor 1221	mg/kg	NE	NE	NE	0.043 U	0.042 U	0.047 U	0.049 U	0.046 U	0.043 U	0.037 U	0.11 U	0.041 U	0.04 U	0.043 U	0.04 U	0.04 U
Aroclor 1232	mg/kg	NE	NE	NE	0.022 U	0.022 U	0.024 U	0.025 U	0.024 U	0.022 U	0.019 U	0.056 U	0.021 U	0.021 U	0.022 U	0.02 U	0.021 U
Aroclor 1242	mg/kg	NE	NE	NE	0.022 U	0.022 U	0.024 U	0.025 U	0.024 U	0.022 U	0.019 U	0.056 U	0.021 U	0.021 U	0.022 U	0.02 U	0.021 U
Aroclor 1248	mg/kg	NE	NE	NE	0.067 NJ	0.082 NJ	0.082 NJ	0.025 U	0.024 U	0.058 NJ	0.019 U	0.51 NJ	0.021 U	0.021 U	0.022 U	0.02 U	0.021 U
Aroclor 1254	mg/kg	NE	NE	NE	0.022 U	0.022 U	0.024 U	0.025 U	0.024 U	0.022 U	0.019 U	0.056 U	0.021 U	0.021 U	0.022 U	0.02 U	0.021 U
Aroclor 1260	mg/kg	NE	NE	NE	0.022 U	0.022 U	0.024 U	0.025 U	0.072 J	0.022 U	0.019 U	0.056 U	0.021 U	0.021 U	0.035 J	0.02 U	0.021 U
6.1 Metals																	
Arsenic	mg/kg	13.00	16.00	16.00	10.3	16.7	14.2	13.7 U	11	12.4	3.4 J	43.2	69.2	11.4 U	21.9	3.6	10.1 U
Barium	mg/kg	350.0	400.0	10000	127 J	199 J	248 J	44.4 J	149 J	123 J	27.6 J	636 J	21.9 J	32.7 J	63 J	12.5 J	31 J
Cadmium	mg/kg	2.500	9.300	60.00	2.1	4.2	4.1	5.1 U	2.8	3.2	3.6 U	12.3	4.6 U	4.3 U	4.5 U	3.5 U	3.8 U
Chromium	mg/kg	NE	NE	NE	35.3 J	54.8 J	49.2 J	11.8 J	39.3 J	38.2 J	12.1 J	133 J	12.2 J	12.1 J	29.3 J	11.2 J	10.3 J
Lead	mg/kg	63.00	1000	3900	114	189	305	5.5	180	127	4.9	739	6.3	2.8 J	684	3.7	2.9
Mercury	mg/kg	0.1800	2.800	5.700	3.1	2.7	1.1 J	0.021 U	1.4	1.3 J	0.014 U	3.7	0.014 U	0.013 U	1.1 J	0.012 U	0.014 U
Selenium	mg/kg	3.900	1500	6800	20.1 U	19.9 U	26.2 U	27.4 U	23.7 U	19.6 U	19 U	4.6 J	24.6 U	22.8 U	23.9 U	18.5 U	20.2 U
Silver	mg/kg	2.000	1500	6800	1.3 J	2.5	2.9 J	5.1 U	1.2 J	1.8 J	3.6 U	8.2	4.6 U	4.3 U	0.5 J	3.5 U	3.8 U
7.10 Cyanides																	
Total Cyanide	mg/kg	27.00	27.00	10000	0.507 J	0.0397 J	0.252 J	0.0643 J	0.673 UJ	0.529 J	0.549 UJ	0.487 J	0.602 UJ	0.58 UJ	0.631 UJ	0.609 UJ	0.592 UJ
9.9 Other																	
Percent Moisture	%	NE	NE	NE	23	21.9	31.1	33.1	28.6	25	12.5	39.4	20.2	17.9	23.8	17.9	19.5
Percent Solids	%	NE	NE	NE	77	78.1	68.9	66.9	71.4	75	87.5	60.6	79.8	82.1	76.2	82.1	80.5

Location Name					B-26	B-26	B-26	B-27	B-27	B-27	B-28	B-28	B-28	B-29	B-29	B-29	B-30
Start Depth					5	44	99	6.5	45	101	34.5	39	117	37	41	115	40.5
End Depth					5.5	44.5	100	7.5	46	103	35	40	117.5	38	42	115.5	41
Depth Unit					ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date					12/9/2004	12/9/2004	12/9/2004	12/6/2004	12/6/2004	12/6/2004	12/10/2004	12/10/2004	12/10/2004	12/13/2004	12/13/2004	12/13/2004	12/13/2004
Parent Sample																	
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
1.12 Other VOCs																	
Benzene	mg/kg	0.06	44	89	0.0065 U	0.0067 U	0.011	0.0058 U	0.0066 U	0.0055 U	5.8 U	13 J	0.0059 U	0.19 J	0.56 U	0.0056 U	12
Toluene	mg/kg	0.7	500	1000	0.0065 U	0.0067 U	0.0054 U	0.00063 J	0.0066 U	0.0055 U	5.8 U	110	0.0059 U	1.5 U	0.56 U	0.0056 U	69
Ethylbenzene	mg/kg	1	390	780	0.0065 U	0.0067 U	0.014	0.0058 U	0.0066 U	0.0055 U	13	240	0.0059 U	12	2.1	0.0056 U	180
Total Xylene	mg/kg	0.26	500	1000	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	11 J	260 J	0.0059 U	14	1.5	0.0056 U	270
Total BTEX (ND=0)	mg/kg		NE	NE			0.025	0.00063			24	623		26.19	3.6		531
1.12 Other VOCs																	
Acetone	mg/kg	0.05000	500.0	1000	0.013 U	0.013 U	0.011 U	0.012 U	0.013 U	0.011 U	15 U	70 U	0.012 U	3.7 U	1.4 U	0.011 UJ	28 U
Bromodichloromethane	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
Bromoform	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
Bromomethane	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 UJ	28 UJ	0.0059 U	1.5 U	0.56 U	0.0056 UJ	11 U
Carbon disulfide	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0016 J	5.8 U	28 U	0.0059 U	0.29 J	0.56 U	0.0056 U	11 U
Carbon tetrachloride	mg/kg	0.7600	22.00	44.00	0.0065 UJ	0.0067 UJ	0.0054 UJ	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 UJ	1.5 U	0.56 U	0.0056 U	11 U
Chlorobenzene	mg/kg	1.100	500.0	1000	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
Chloroethane	mg/kg	NE	NE	NE	0.0065 UJ	0.0067 UJ	0.0054 UJ	0.0058 UJ	0.0066 UJ	0.0055 UJ	5.8 U	28 U	0.0059 UJ	1.5 UJ	0.56 UJ	0.0056 UJ	11 U
Chloroform (Trichloromethane)	mg/kg	0.3700	350.0	700.0	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
Chloromethane	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 UJ
Dibromochloromethane	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
1,1-Dichloroethane	mg/kg	0.2700	240.0	480.0	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
1,2-Dichloroethane	mg/kg	0.02000	30.00	60.00	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
1,1-Dichloroethene	mg/kg	0.3300	500.0	1000	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
cis-1,2-Dichloroethene	mg/kg	0.2500	500.0	1000	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
trans-1,2-Dichloroethene	mg/kg	0.1900	500.0	1000	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
1,2-Dichloropropane	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
cis-1,3-Dichloropropene	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
trans-1,3-Dichloropropene	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
2-Hexanone	mg/kg	NE	NE	NE	0.013 U	0.013 U	0.011 U	0.012 U	0.013 U	0.011 U	5.8 U	28 U	0.012 U	1.5 U	0.56 U	0.011 U	11 UJ
Methyl ethyl ketone (2-Butanone)	mg/kg	0.1200	500.0	1000	0.013 UJ	0.013 UJ	0.011 UJ	0.012 U	0.013 U	0.011 U	5.8 U	28 U	0.012 UJ	0.52 J	0.56 U	0.011 UJ	11 UJ
4-Methyl-2-pentanone (MIBK)	mg/kg	NE	NE	NE	0.013 U	0.013 U	0.011 U	0.012 U	0.013 U	0.011 U	5.8 U	28 U	0.012 U	1.5 U	0.56 U	0.011 U	11 U
Methylene chloride	mg/kg	0.05000	500.0	1000	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
Styrene	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	12 J	0.0059 U	1.5 U	0.56 U	0.0056 R	34
1,1,2,2-Tetrachloroethane	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
Tetrachloroethene (PCE)	mg/kg	1.300	150.0	300.0	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
1,1,1-Trichloroethane (TCA)	mg/kg	0.6800	500.0	1000	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
1,1,2-Trichloroethane	mg/kg	NE	NE	NE	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
Trichloroethene (TCE)	mg/kg	0.4700	200.0	400.0	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
Vinyl chloride	mg/kg	0.02000	13.00	27.00	0.0065 U	0.0067 U	0.0054 U	0.0058 U	0.0066 U	0.0055 U	5.8 U	28 U	0.0059 U	1.5 U	0.56 U	0.0056 U	11 U
2.33 NYSDEC PAH17																	
Acenaphthene	mg/kg	20.00	500.0	1000	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	160 J	380 J	0.39 U	300	49	0.37 U	130 J
Acenaphthylene	mg/kg	100.0	500.0	1000	0.21 J	0.44 U	0.053 J	0.37 U	0.43 U	0.36 U	15 J	520 J	0.067 J	24 J	6.1 J	0.37 U	530
Anthracene	mg/kg	100.0	500.0	1000	0.24 J	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	110	370 J	0.39 U	190	28	0.37 U	330
Benzo(a)anthracene	mg/kg	1.000	5.600	11.00	0.77	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	32 J	180 J	0.39 U	99	14 J	0.37 U	130 J

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-26 5 5.5 ft 12/9/2004	B-26 44 44.5 ft 12/9/2004	B-26 99 100 ft 12/9/2004	B-27 6.5 7.5 ft 12/6/2004	B-27 45 46 ft 12/6/2004	B-27 101 103 ft 12/6/2004	B-28 34.5 35 ft 12/10/2004	B-28 39 40 ft 12/10/2004	B-28 117 117.5 ft 12/10/2004	B-29 37 38 ft 12/13/2004	B-29 41 42 ft 12/13/2004	B-29 115 115.5 ft 12/13/2004	B-30 40.5 41 ft 12/13/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
2-Chlorophenol	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
4-Chlorophenyl phenyl ether	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Dibenzofuran	mg/kg	7.000	350.0	1000	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	18 J	18 U	0.37 U	290 U
1,2-Dichlorobenzene (o-DCB)	mg/kg	1.100	500.0	1000	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
1,3-Dichlorobenzene (m-DCB)	mg/kg	2.400	280.0	560.0	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
1,4-Dichlorobenzene (p-DCB)	mg/kg	1.800	130.0	250.0	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
3,3-Dichlorobenzidine	mg/kg	NE	NE	NE	0.84 U	0.88 U	0.7 U	0.74 U	0.86 U	0.72 U	150 U	1100 U	0.78 U	200 U	37 U	0.73 U	580 U
2,4-Dichlorophenol	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Diethyl phthalate	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Dimethyl phthalate	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
2,4-Dimethylphenol	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Di-n-butyl phthalate	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
4,6-Dinitro-2-methylphenol	mg/kg	NE	NE	NE	2 U	2.1 U	1.7 U	1.8 U	2.1 U	1.7 U	360 U	2800 U	1.9 U	470 U	89 U	1.8 U	1400 U
2,4-Dinitrophenol	mg/kg	NE	NE	NE	2 U	2.1 U	1.7 U	1.8 U	2.1 U	1.7 U	360 U	2800 U	1.9 U	470 U	89 U	1.8 U	1400 U
2,4-Dinitrotoluene	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
2,6-Dinitrotoluene	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Di-n-octyl phthalate	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Hexachlorobenzene	mg/kg	0.3300	6.000	12.00	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
1,3-Hexachlorobutadiene (C-46)	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Hexachlorocyclopentadiene	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Hexachloroethane	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Isophorone	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
2-Methylphenol (o-Cresol)	mg/kg	0.3300	500.0	1000	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
4-Methylphenol (p-Cresol)	mg/kg	0.3300	500.0	1000	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
2-Nitroaniline	mg/kg	NE	NE	NE	2 U	2.1 U	1.7 U	1.8 U	2.1 U	1.7 U	360 U	2800 U	1.9 U	470 U	89 U	1.8 U	1400 U
3-Nitroaniline	mg/kg	NE	NE	NE	2 U	2.1 U	1.7 U	1.8 U	2.1 U	1.7 U	360 U	2800 U	1.9 U	470 U	89 U	1.8 U	1400 U
4-Nitroaniline	mg/kg	NE	NE	NE	0.84 U	0.88 U	0.7 U	0.74 U	0.86 U	0.72 U	150 U	1100 U	0.78 U	200 U	37 U	0.73 U	580 U
Nitrobenzene	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
2-Nitrophenol	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
4-Nitrophenol	mg/kg	NE	NE	NE	2 U	2.1 U	1.7 U	1.8 U	2.1 U	1.7 U	360 U	2800 U	1.9 U	470 U	89 U	1.8 U	1400 U
N-Nitrosodiphenylamine (NDFA)	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
N-Nitrosodi-n-propylamine (NDPA)	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
2,2-oxybis(1-Chloropropane)	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
Pentachlorophenol	mg/kg	0.8000	6.700	55.00	2 U	2.1 U	1.7 U	1.8 U	2.1 U	1.7 U	360 U	2800 U	1.9 U	470 U	89 U	1.8 U	1400 U
Phenol	mg/kg	0.3300	500.0	1000	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
1,2,4-Trichlorobenzene	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
2,4,5-Trichlorophenol	mg/kg	NE	NE	NE	2 U	2.1 U	1.7 U	1.8 U	2.1 U	1.7 U	360 U	2800 U	1.9 U	470 U	89 U	1.8 U	1400 U
2,4,6-Trichlorophenol	mg/kg	NE	NE	NE	0.42 U	0.44 U	0.35 U	0.37 U	0.43 U	0.36 U	75 U	570 U	0.39 U	98 U	18 U	0.37 U	290 U
3.10 PCB Aroclors																	
Aroclor 1016	mg/kg	NE	NE	NE	0.022 U	0.023 U	0.018 U	0.019 U	0.022 U	0.019 U	0.019 U	0.019 U	0.02 U	0.025 U	0.019 U	0.019 U	0.019 R
Aroclor 1221	mg/kg	NE	NE	NE	0.043 U	0.044 U	0.035 U	0.038 U	0.043 U	0.037 U	0.038 U	0.037 U	0.039 U	0.049 U	0.037 U	0.037 U	0.037 R
Aroclor 1232	mg/kg	NE	NE	NE	0.022 U	0.023 U	0.018 U	0.019 U	0.022 U	0.019 U	0.019 U	0.019 U	0.02 U	0.025 U	0.019 U	0.019 U	0.019 R
Aroclor 1242	mg/kg	NE	NE	NE	0.022 U	0.023 U	0.018 U	0.019 U	0.022 U	0.019 U	0.019 U	0.019 U	0.02 U	0.025 U	0.019 U	0.019 U	0.019 R
Aroclor 1248	mg/kg	NE	NE	NE	0.022 U	0.023 U	0.018 U	0.019 U	0.022 U	0.019 U	0.019 U	0.019 U	0.02 U	0.025 U	0.019 U	0.019 U	0.019 R
Aroclor 1254	mg/kg	NE	NE	NE	0.022 U	0.023 U	0.018 U	0.019 U	0.022 U	0.019 U	0.019 U	0.019 U	0.02 U	0.025 U	0.019 U	0.019 U	0.019 R
Aroclor 1260	mg/kg	NE	NE	NE	0.022 U	0.023 U	0.018 U	0.019 U	0.022 U	0.019 U	0.019 U	0.019 U	0.02 U	0.025 U	0.019 U	0.019 U	0.019 R
6.1 Metals																	
Arsenic	mg/kg	13.00	16.00	16.00	6.2	2.1 J	1.9 J	1.4 J	10.4 UJ	9.4 UJ	3.9 J	1.7 J	11.1 U	22.4	1.8 J	10.7 U	3.2 J
Barium	mg/kg	350.0	400.0	10000	74.1 J	111 J	18 J	54.2 J	60.3 J	24.6 J	15.3 J	22.1 J	36 J	182	16.7 J	16.4 J	49 J
Cadmium	mg/kg	2.500	9.300	60.00	3.7 U	4.8 U	3.5 U	3.2 U	3.9 U	3.5 U	4 U	3.7 U	4.2 U	5.5 U	3 U	4 U	4 U
Chromium	mg/kg	NE	NE	NE	27.4 J	19.3 J	4.4 J	14.5 J	11 J	12.4	9.4 J	8.2 J	8.6 J	50.5	7.1	7.6	13.8
Lead	mg/kg	63.00	1000	3900	90.8	6.5	38.3	167 J	4.3 J	4.3	4.8	4.1	3.6	351	4.4	2.7	5.5
Mercury	mg/kg	0.1800	2.800	5.700	0.65	0.013 U	0.01 U	0.55	0.017 U	0.015 U	0.049	0.015 U	0.011 U	3.7	0.014	0.039 U	0.046 U
Selenium	mg/kg	3.900	1500	6800	7.4 J	25.6 U	18.8 U	17 U	20.9 U	18.7 U	21.5 U	19.9 U	22.2 U	29.6 U	16 U	21.5 U	21.1 U
Silver	mg/kg	2.000	1500	6800	3.7 U	4.8 U	3.5 U	0.49 J	3.9 UJ	3.5 UJ	4 U	3.7 U	4.2 U	1.1 J	3 U	4 U	4 U
7.10 Cyanides																	
Total Cyanide	mg/kg	27.00	27.00	10000	0.646 UJ	0.672 UJ	0.516 UJ	0.567 UJ	0.658 UJ	0.542 UJ	0.57 UJ	0.545 UJ	0.565 UJ	0.0767 J	0.541 UJ	0.564 UJ	0.554 UJ
9.9 Other																	
Percent Moisture	%	NE	NE	NE	23.4	25.6	6.9	13.5	24	9.6	14	10.1	15.7	33	11.2	11.4	10.7
Percent Solids	%	NE	NE	NE	76.6	74.4	93.1	86.5	76	90.4	86	89.9	84.3	67	88.8	88.6	89.3

		Location Name	B-30	B-30	B-31	B-31	B-31	B-32	B-32	B-33	B-33	B-33	B-33	B-33	B-34	B-34	
		Start Depth	40.5	73.5	41.5	53	74	39	74	11	35.5	102.5	114	28	39.5		
		End Depth	41	74.5	42.5	53.5	74.5	40	74.5	12	36.5	104	114.5	29	40		
		Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft		
		Sample Date	12/13/2004	12/13/2004	12/14/2004	12/14/2004	12/14/2004	12/15/2004	12/15/2004	12/15/2004	12/15/2004	12/15/2004	12/15/2004	12/16/2004	12/16/2004		
		Parent Sample	NGW-B30(40.5-41)														
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
Benzene	mg/kg	0.06	44	89	17 J	0.14	0.0061 U	0.0071 U	0.0065 U	0.14 J	0.0067 U	0.006 U	0.13 J	0.0064 U	0.0055 U	1.7	0.017
Toluene	mg/kg	0.7	500	1000	87	0.019 J	0.0061 U	0.0036 J	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	2.6	0.0071 U
Ethylbenzene	mg/kg	1	390	780	230	0.15 J	0.0061 U	0.022	0.0065 U	2.1	0.0067 U	0.006 U	4.9	0.0064 U	0.0055 U	8.1	0.0071 U
Total Xylene	mg/kg	0.26	500	1000	350	0.1 J	0.0061 U	0.057	0.0065 U	3.5	0.0067 U	0.006 U	6	0.0064 U	0.0055 U	14	0.0071 U
Total BTEX (ND=0)	mg/kg		NE	NE	684	0.409		0.0826		5.74			11.03			26.4	0.017
1.12 Other VOCs																	
Acetone	mg/kg	0.05000	500.0	1000	71 U	0.024 UJ	0.0056 J	0.014 UJ	0.0038 J	1.9 U	0.006 J	0.012 UJ	3 U	0.013 UJ	0.011 U	2.9 U	0.014 UJ
Bromodichloromethane	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
Bromoform	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 R	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
Bromomethane	mg/kg	NE	NE	NE	28 U	0.012 UJ	0.0061 U	0.0071 UJ	0.0065 U	0.77 U	0.0067 U	0.006 UJ	1.2 U	0.0064 UJ	0.0055 UJ	1.2 U	0.0071 UJ
Carbon disulfide	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.25 J	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	0.27 J	0.003 J
Carbon tetrachloride	mg/kg	0.7600	22.00	44.00	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
Chlorobenzene	mg/kg	1.100	500.0	1000	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
Chloroethane	mg/kg	NE	NE	NE	28 UJ	0.012 UJ	0.0061 UJ	0.0071 UJ	0.0065 UJ	0.77 UJ	0.0067 UJ	0.006 UJ	1.2 U	0.0064 UJ	0.0055 UJ	1.2 U	0.0071 UJ
Chloroform (Trichloromethane)	mg/kg	0.3700	350.0	700.0	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
Chloromethane	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 UJ	0.0064 U	0.0055 U	1.2 UJ	0.0071 U
Dibromochloromethane	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
1,1-Dichloroethane	mg/kg	0.2700	240.0	480.0	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
1,2-Dichloroethane	mg/kg	0.02000	30.00	60.00	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
1,1-Dichloroethene	mg/kg	0.3300	500.0	1000	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
cis-1,2-Dichloroethene	mg/kg	0.2500	500.0	1000	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
trans-1,2-Dichloroethene	mg/kg	0.1900	500.0	1000	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
1,2-Dichloropropane	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
cis-1,3-Dichloropropene	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
trans-1,3-Dichloropropene	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
2-Hexanone	mg/kg	NE	NE	NE	28 U	0.024 U	0.012 UJ	0.014 U	0.013 UJ	0.77 U	0.013 UJ	0.012 U	1.2 UJ	0.013 U	0.011 U	1.2 UJ	0.014 U
Methyl ethyl ketone (2-Butanone)	mg/kg	0.1200	500.0	1000	8.7 J	0.024 UJ	0.012 U	0.014 UJ	0.013 U	0.77 U	0.013 U	0.012 UJ	0.4 J	0.013 UJ	0.011 U	1.2 UJ	0.014 UJ
4-Methyl-2-pentanone (MIBK)	mg/kg	NE	NE	NE	28 U	0.024 U	0.012 UJ	0.014 U	0.013 UJ	0.77 U	0.013 UJ	0.012 U	1.2 U	0.013 U	0.011 U	1.2 U	0.014 U
Methylene chloride	mg/kg	0.05000	500.0	1000	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
Styrene	mg/kg	NE	NE	NE	43	0.012 R	0.0061 U	0.0071 R	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 R	0.0055 U	0.55 J	0.0071 R
1,1,2,2-Tetrachloroethane	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 UJ	0.0071 U	0.0065 UJ	0.77 U	0.0067 UJ	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
Tetrachloroethene (PCE)	mg/kg	1.300	150.0	300.0	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
1,1,1-Trichloroethane (TCA)	mg/kg	0.6800	500.0	1000	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
1,1,2-Trichloroethane	mg/kg	NE	NE	NE	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
Trichloroethene (TCE)	mg/kg	0.4700	200.0	400.0	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
Vinyl chloride	mg/kg	0.02000	13.00	27.00	28 U	0.012 U	0.0061 U	0.0071 U	0.0065 U	0.77 U	0.0067 U	0.006 U	1.2 U	0.0064 U	0.0055 U	1.2 U	0.0071 U
2.33 NYSDEC PAH17																	
Acenaphthene	mg/kg	20.00	500.0	1000	100 J	0.4 UJ	0.4 U	13	0.43 U	73	0.43 U	0.39 U	130	0.41 U	0.36 U	79	0.13 J
Acenaphthylene	mg/kg	100.0	500.0	1000	390	0.4 U	0.4 U	3.6 J	0.43 U	15 J	0.43 U	0.39 U	15 J	0.41 U	0.36 U	20 J	0.45 U
Anthracene	mg/kg	100.0	500.0	1000	210	0.4 U	0.4 U	18	0.43 U	71	0.43 U	0.39 U	75	0.41 U	0.36 U	60	0.45 U
Benzo(a)anthracene	mg/kg	1.000	5.600	11.00	91 J												

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-30 40.5 41 ft 12/13/2004 NGW-B30(40.5-41)	B-30 73.5 74.5 ft 12/13/2004	B-31 41.5 42.5 ft 12/14/2004	B-31 53 53.5 ft 12/14/2004	B-31 74 74.5 ft 12/14/2004	B-32 39 40 ft 12/15/2004	B-32 74 74.5 ft 12/15/2004	B-33 11 12 ft 12/15/2004	B-33 35.5 36.5 ft 12/15/2004	B-33 102.5 104 ft 12/15/2004	B-33 114 114.5 ft 12/15/2004	B-34 28 29 ft 12/16/2004	B-34 39.5 40 ft 12/16/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial													
2-Chlorophenol	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
4-Chlorophenyl phenyl ether	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
Dibenzofuran	mg/kg	7.000	350.0	1000	180 U	0.4 U	0.4 U	1.7 J	0.43 U	4.4 J	0.43 U	0.39 U	7.2 J	0.41 U	0.36 U	6.2 J	0.45 U
1,2-Dichlorobenzene (o-DCB)	mg/kg	1.100	500.0	1000	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
1,3-Dichlorobenzene (m-DCB)	mg/kg	2.400	280.0	560.0	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
1,4-Dichlorobenzene (p-DCB)	mg/kg	1.800	130.0	250.0	180 U	0.4 UJ	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
3,3-Dichlorobenzidine	mg/kg	NE	NE	NE	370 U	0.8 U	0.8 U	18 U	0.85 U	50 U	0.85 U	0.78 U	79 U	0.83 U	0.72 U	77 U	0.91 U
2,4-Dichlorophenol	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
Diethyl phthalate	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
Dimethyl phthalate	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
2,4-Dimethylphenol	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
Di-n-butyl phthalate	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
4,6-Dinitro-2-methylphenol	mg/kg	NE	NE	NE	890 U	1.9 U	1.9 U	44 U	2.1 U	120 U	2.1 U	1.9 U	190 U	2 U	1.7 UJ	190 U	2.2 U
2,4-Dinitrophenol	mg/kg	NE	NE	NE	890 U	1.9 U	1.9 U	44 UJ	2.1 U	120 U	2.1 U	1.9 U	190 U	2 U	1.7 UJ	190 UJ	2.2 U
2,4-Dinitrotoluene	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
2,6-Dinitrotoluene	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
Di-n-octyl phthalate	mg/kg	NE	NE	NE	180 U	0.4 R	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
Hexachlorobenzene	mg/kg	0.3300	6.000	12.00	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
1,3-Hexachlorobutadiene (C-46)	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
Hexachlorocyclopentadiene	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 UJ	9.1 U	0.43 UJ	25 UJ	0.43 U	0.39 U	39 U	0.41 U	0.36 UJ	39 U	0.45 U
Hexachloroethane	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
Isophorone	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
2-Methylphenol (o-Cresol)	mg/kg	0.3300	500.0	1000	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
4-Methylphenol (p-Cresol)	mg/kg	0.3300	500.0	1000	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
2-Nitroaniline	mg/kg	NE	NE	NE	890 U	1.9 U	1.9 U	44 U	2.1 U	120 U	2.1 U	1.9 U	190 U	2 U	1.7 U	190 U	2.2 U
3-Nitroaniline	mg/kg	NE	NE	NE	890 U	1.9 U	1.9 U	44 U	2.1 U	120 U	2.1 U	1.9 U	190 U	2 U	1.7 U	190 U	2.2 U
4-Nitroaniline	mg/kg	NE	NE	NE	370 U	0.8 U	0.8 U	18 U	0.85 U	50 U	0.85 U	0.78 U	79 U	0.83 U	0.72 U	77 U	0.91 U
Nitrobenzene	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
2-Nitrophenol	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
4-Nitrophenol	mg/kg	NE	NE	NE	890 U	1.9 U	1.9 U	44 U	2.1 U	120 U	2.1 U	1.9 U	190 U	2 U	1.7 U	190 U	2.2 U
N-Nitrosodiphenylamine (NDFA)	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
N-Nitrosodi-n-propylamine (NDPA)	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
2,2-oxybis(1-Chloropropane)	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
Pentachlorophenol	mg/kg	0.8000	6.700	55.00	890 U	1.9 U	1.9 U	44 U	2.1 U	120 U	2.1 U	1.9 U	190 U	2 U	1.7 U	190 U	2.2 U
Phenol	mg/kg	0.3300	500.0	1000	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
1,2,4-Trichlorobenzene	mg/kg	NE	NE	NE	180 U	0.4 UJ	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
2,4,5-Trichlorophenol	mg/kg	NE	NE	NE	890 U	1.9 U	1.9 U	44 U	2.1 U	120 U	2.1 U	1.9 U	190 U	2 U	1.7 U	190 U	2.2 U
2,4,6-Trichlorophenol	mg/kg	NE	NE	NE	180 U	0.4 U	0.4 U	9.1 U	0.43 U	25 U	0.43 U	0.39 U	39 U	0.41 U	0.36 U	39 U	0.45 U
3.10 PCB Aroclors																	
Aroclor 1016	mg/kg	NE	NE	NE	0.019 U	0.021 U	0.02 U	0.024 U	0.022 U	0.026 U	0.022 U	0.02 U	0.02 U	0.022 U	0.018 U	0.02 U	0.024 U
Aroclor 1221	mg/kg	NE	NE	NE	0.037 U	0.04 U	0.039 U	0.047 U	0.043 U	0.05 U	0.044 U	0.039 U	0.039 U	0.042 U	0.036 U	0.038 U	0.046 U
Aroclor 1232	mg/kg	NE	NE	NE	0.019 U	0.021 U	0.02 U	0.024 U	0.022 U	0.026 U	0.022 U	0.02 U	0.02 U	0.022 U	0.018 U	0.02 U	0.024 U
Aroclor 1242	mg/kg	NE	NE	NE	0.019 U	0.021 U	0.02 U	0.024 U	0.022 U	0.026 U	0.022 U	0.02 U	0.02 U	0.022 U	0.018 U	0.02 U	0.024 U
Aroclor 1248	mg/kg	NE	NE	NE	0.019 U	0.021 U	0.02 U	0.064 J	0.022 U	0.18 J	0.022 U	0.02 U	0.02 U	0.022 U	0.018 U	0.02 U	0.024 U
Aroclor 1254	mg/kg	NE	NE	NE	0.019 U	0.021 U	0.02 U	0.059 J	0.022 U	0.25 J	0.022 U	0.02 U	0.02 U	0.022 U	0.018 U	0.02 U	0.024 U
Aroclor 1260	mg/kg	NE	NE	NE	0.019 U	0.021 U	0.02 U	0.061 J	0.022 U	0.16 NJ	0.022 U	0.02 U	0.02 U	0.022 U	0.018 U	0.02 U	0.024 U
6.1 Metals																	
Arsenic	mg/kg	13.00	16.00	16.00	3.9	1.9 J	10.2 U	20.1	2.3 J	24.6	1.9 J	4.4	5.5	9.2 U	3 J	7.5	2.6 J
Barium	mg/kg	350.0	400.0	10000	32.7 J	66.3	24.4 J	185	55.4	517	70.6	48.8	17.5 J	56.2	119	122	88.4
Cadmium	mg/kg	2.500	9.300	60.00	3 U	4.2 U	3.8 U	4	4.1 U	5 J	4.4 U	3.1 U	3.3 U	3.4 U	3.8 U	4.2 U	3.4 U
Chromium	mg/kg	NE	NE	NE	9.9	14.5	9.2	73.6	13.4	66.6	19.9	23.2	10.7	17.9	27.8	14.8	17
Lead	mg/kg	63.00	1000	3900	3.8	5.6	4.7	200	4.7	882	5.6	63.9	4.4	3.7	3.1	302	5.6
Mercury	mg/kg	0.1800	2.800	5.700	0.037 U	0.038 U	0.039 U	2.8	0.061 U	5.3	0.06 U	0.048	0.019	0.04 U	0.045 U	0.66	0.044 U
Selenium	mg/kg	3.900	1500	6800	15.8 U	22.2 U	20.4 U	24.6 U	22.1 U	30.4 U	23.3 U	2.8 J	17.6 U	18.4 U	3.6 J	22.6 U	18.3 U
Silver	mg/kg	2.000	1500	6800	3 U	4.2 U	3.8 U	3.3	4.1 U	4.1	4.4 U	3.1 U	3.3 U	3.4 U	3.8 U	4.2 U	3.4 U
7.10 Cyanides																	
Total Cyanide	mg/kg	27.00	27.00	10000	0.565 UJ	0.599 UJ	0.602 UJ	0.693 UJ	0.634 UJ	0.164 J	0.658 UJ	0.582 UJ	0.606 UJ	0.618 UJ	0.546 UJ	0.0329 J	0.674 UJ
9.9 Other																	
Percent Moisture	%	NE	NE	NE	11.5	18.2	17.7	29.3	23.4	34.8	25.5	16.6	17.5	22.2	9.3	15	29.3
Percent Solids	%	NE	NE	NE	88.5	81.8	82.3	70.7	76.6	65.2	74.5	83.4	82.5	77.8	90.7	85	70.7

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-34 74 74.5 ft 12/16/2004	TP-201 1.2 2 ft 12/17/2004	TP-202 4.5 5 ft 11/17/2004	TP-202 4.5 5 ft 11/17/2004 NGW-TP-202(4.5-5.0)	TP-203 6.9 7 ft 11/11/2004	TP-204 5.5) 5.5 ft 12/16/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial						
Benzene	mg/kg	0.06	44	89	0.0063 U	0.0059 U	0.0041 J	0.03 U	0.0062 U	1.7
Toluene	mg/kg	0.7	500	1000	0.0063 U	0.0059 U	0.0054 J	0.03 U	0.0062 U	3.5
Ethylbenzene	mg/kg	1	390	780	0.0063 U	0.0059 U	0.018 J	0.079	0.0015 J	6.8
Total Xylene	mg/kg	0.26	500	1000	0.0063 U	0.0059 U	0.076	0.23	0.0021 J	12
Total BTEX (ND=0)	mg/kg		NE	NE			0.1035	0.309	0.0036	24
1.12 Other VOCs										
Acetone	mg/kg	0.05000	500.0	1000	0.013 UJ	0.012 U	0.06 UJ	0.061 UJ	0.012 UJ	3 U
Bromodichloromethane	mg/kg	NE	NE	NE	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
Bromoform	mg/kg	NE	NE	NE	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
Bromomethane	mg/kg	NE	NE	NE	0.0063 UJ	0.0059 UJ	0.03 UJ	0.03 UJ	0.0062 UJ	1.2 U
Carbon disulfide	mg/kg	NE	NE	NE	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
Carbon tetrachloride	mg/kg	0.7600	22.00	44.00	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
Chlorobenzene	mg/kg	1.100	500.0	1000	0.0063 U	0.0059 U	0.03 U	0.03 U	0.00087 J	1.2 U
Chloroethane	mg/kg	NE	NE	NE	0.0063 UJ	0.0059 UJ	0.03 UJ	0.03 UJ	0.0062 UJ	1.2 U
Chloroform (Trichloromethane)	mg/kg	0.3700	350.0	700.0	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
Chloromethane	mg/kg	NE	NE	NE	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 UJ
Dibromochloromethane	mg/kg	NE	NE	NE	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
1,1-Dichloroethane	mg/kg	0.2700	240.0	480.0	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
1,2-Dichloroethane	mg/kg	0.02000	30.00	60.00	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
1,1-Dichloroethene	mg/kg	0.3300	500.0	1000	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
cis-1,2-Dichloroethene	mg/kg	0.2500	500.0	1000	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
trans-1,2-Dichloroethene	mg/kg	0.1900	500.0	1000	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
1,2-Dichloropropane	mg/kg	NE	NE	NE	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
cis-1,3-Dichloropropene	mg/kg	NE	NE	NE	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
trans-1,3-Dichloropropene	mg/kg	NE	NE	NE	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
2-Hexanone	mg/kg	NE	NE	NE	0.013 U	0.012 U	0.06 U	0.061 U	0.012 UJ	1.2 UJ
Methyl ethyl ketone (2-Butanone)	mg/kg	0.1200	500.0	1000	0.013 UJ	0.012 U	0.06 U	0.061 U	0.012 UJ	0.58 J
4-Methyl-2-pentanone (MIBK)	mg/kg	NE	NE	NE	0.013 U	0.012 U	0.06 U	0.061 U	0.012 UJ	1.2 U
Methylene chloride	mg/kg	0.05000	500.0	1000	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 UJ	1.2 U
Styrene	mg/kg	NE	NE	NE	0.0063 R	0.0059 U	0.0066 J	0.0074 J	0.0062 U	1.7
1,1,2,2-Tetrachloroethane	mg/kg	NE	NE	NE	0.0063 U	0.0059 UJ	0.03 U	0.03 U	0.0062 U	1.2 U
Tetrachloroethene (PCE)	mg/kg	1.300	150.0	300.0	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 UJ	1.2 U
1,1,1-Trichloroethane (TCA)	mg/kg	0.6800	500.0	1000	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
1,1,2-Trichloroethane	mg/kg	NE	NE	NE	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
Trichloroethene (TCE)	mg/kg	0.4700	200.0	400.0	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
Vinyl chloride	mg/kg	0.02000	13.00	27.00	0.0063 U	0.0059 U	0.03 U	0.03 U	0.0062 U	1.2 U
2.33 NYSDEC PAH17										
Acenaphthene	mg/kg	20.00	500.0	1000	0.41 U	0.15 J	0.38 J	0.4 J	0.39 U	18 J
Acenaphthylene	mg/kg	100.0	500.0	1000	0.41 U	2.9	3	2.5	0.39 U	67
Anthracene	mg/kg	100.0	500.0	1000	0.41 U	1.4	1.3 J	0.98 J	0.39 U	37 J
Benzo(a)anthracene	mg/kg	1.000	5.600	11.00	0.41 U	1.9	1.6	0.4 J	0.09 J	30 J
Benzo(b)fluoranthene	mg/kg	1.000	5.600	11.00	0.41 U	1.7	0.55 J	0.78 U	0.14 J	38 U
Benzo(k)fluoranthene	mg/kg	0.8000	56.00	110.0	0.41 U	2	0.76 J	0.18 J	0.12 J	18 J
Benzo(g,h,i)perylene	mg/kg	100.0	500.0	1000	0.41 U	2.1	0.48 J	0.14 J	0.11 J	9.8 J
Benzo(a)pyrene	mg/kg	1.000	1.000	1.100	0.41 U	2.9	1.4 J	0.32 J	0.074 J	24 J
Chrysene	mg/kg	1.000	56.00	110.0	0.41 U	2.2	1.5 J	0.44 J	0.13 J	34 J
Dibenz(a,h)anthracene	mg/kg	0.3300	0.5600	1.100	0.41 U	0.69 J	1.5 U	0.78 U	0.39 U	38 U
Fluoranthene	mg/kg	100.0	500.0	1000	0.41 U	2.2	1.6	0.75 J	0.14 J	45
Fluorene	mg/kg	30.00	500.0	1000	0.41 U	0.22 J	1.5 J	1.8	0.39 U	49
Indeno(1,2,3-cd)pyrene	mg/kg	0.5000	5.600	11.00	0.41 U	1.8	0.38 J	0.091 J	0.084 J	8 J
2-Methylnaphthalene	mg/kg		NE	NE	0.41 U	0.61 J	0.83 J	0.43 J	0.39 U	200
Naphthalene	mg/kg	12.00	500.0	1000	0.41 U	0.6 J	2.6	0.78 U	0.39 U	300
Phenanthrene	mg/kg	100.0	500.0	1000	0.41 U	1.5	4.2	3.9 J	0.062 J	130
Pyrene	mg/kg	100.0	500.0	1000	0.41 U	3.5	2.3	0.99	0.12 J	78
Total cPAH (7 of 17) (ND=0)	mg/kg	NE	NE	NE		13.19	6.19	1.431	0.638	114
Total ncPAH (10 of 17) (ND=0)	mg/kg	NE	NE	NE		15.18	18.19	11.89	0.432	933.8
Total PAHs	mg/kg	NE	NE	NE		28.37	24.38	13.321	1.07	1047.8
2.34 NYSDEC PAH17 Other SVOCs										
Benzyl alcohol	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Bis(2-chloroethoxy)methane	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Bis(2-chloroethyl)ether	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Bis(2-ethylhexyl)phthalate	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
4-Bromophenyl phenyl ether	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Butyl benzyl phthalate	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Carbazole	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
4-Chloro-3-methylphenol	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
4-Chloroaniline	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
2-Chloronaphthalene	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U

Location Name Start Depth End Depth Depth Unit Sample Date Parent Sample					B-34 74 74.5 ft 12/16/2004	TP-201 1.2 2 ft 12/17/2004	TP-202 4.5 5 ft 11/17/2004	TP-202 4.5 5 ft 11/17/2004 NGW-TP-202(4.5-5.0)	TP-203 6.9 7 ft 11/11/2004	TP-204 5.5) 5.5 ft 12/16/2004
Analyte	Units	NYCRR 375 SCO Unrestricted	NYCRR 375 SCO Commercial	NYCRR 375 SCO Industrial						
2-Chlorophenol	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
4-Chlorophenyl phenyl ether	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Dibenzofuran	mg/kg	7.000	350.0	1000	0.41 U	0.14 J	1.5 U	0.18 J	0.39 U	38 U
1,2-Dichlorobenzene (o-DCB)	mg/kg	1.100	500.0	1000	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
1,3-Dichlorobenzene (m-DCB)	mg/kg	2.400	280.0	560.0	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
1,4-Dichlorobenzene (p-DCB)	mg/kg	1.800	130.0	250.0	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
3,3-Dichlorobenzidine	mg/kg	NE	NE	NE	0.82 U	1.5 U	3 U	1.6 U	0.77 U	76 U
2,4-Dichlorophenol	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Diethyl phthalate	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Dimethyl phthalate	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
2,4-Dimethylphenol	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Di-n-butyl phthalate	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
4,6-Dinitro-2-methylphenol	mg/kg	NE	NE	NE	2 U	3.7 U	7.4 U	3.8 U	1.9 U	180 U
2,4-Dinitrophenol	mg/kg	NE	NE	NE	2 U	3.7 UJ	7.4 U	3.8 U	1.9 UJ	180 UJ
2,4-Dinitrotoluene	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
2,6-Dinitrotoluene	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Di-n-octyl phthalate	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Hexachlorobenzene	mg/kg	0.3300	6.000	12.00	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
1,3-Hexachlorobutadiene (C-46)	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Hexachlorocyclopentadiene	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Hexachloroethane	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Isophorone	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
2-Methylphenol (o-Cresol)	mg/kg	0.3300	500.0	1000	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
4-Methylphenol (p-Cresol)	mg/kg	0.3300	500.0	1000	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
2-Nitroaniline	mg/kg	NE	NE	NE	2 U	3.7 U	7.4 U	3.8 U	1.9 U	180 U
3-Nitroaniline	mg/kg	NE	NE	NE	2 U	3.7 U	7.4 U	3.8 U	1.9 U	180 U
4-Nitroaniline	mg/kg	NE	NE	NE	0.82 U	1.5 U	3 U	1.6 U	0.77 U	76 U
Nitrobenzene	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
2-Nitrophenol	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
4-Nitrophenol	mg/kg	NE	NE	NE	2 U	3.7 U	7.4 U	3.8 U	1.9 U	180 U
N-Nitrosodiphenylamine (NDFA)	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
N-Nitrosodi-n-propylamine (NDPA)	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
2,2-oxybis(1-Chloropropane)	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
Pentachlorophenol	mg/kg	0.8000	6.700	55.00	2 U	3.7 U	7.4 U	3.8 U	1.9 U	180 U
Phenol	mg/kg	0.3300	500.0	1000	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
1,2,4-Trichlorobenzene	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
2,4,5-Trichlorophenol	mg/kg	NE	NE	NE	2 U	3.7 U	7.4 U	3.8 U	1.9 U	180 U
2,4,6-Trichlorophenol	mg/kg	NE	NE	NE	0.41 U	0.76 U	1.5 U	0.78 U	0.39 U	38 U
3.10 PCB Aroclors										
Aroclor 1016	mg/kg	NE	NE	NE	0.021 U	0.02 U	0.02 U	0.02 U	0.021 UJ	0.02 U
Aroclor 1221	mg/kg	NE	NE	NE	0.041 U	0.038 U	0.039 U	0.04 U	0.04 UJ	0.039 U
Aroclor 1232	mg/kg	NE	NE	NE	0.021 U	0.02 U	0.02 U	0.02 U	0.021 UJ	0.02 U
Aroclor 1242	mg/kg	NE	NE	NE	0.021 U	0.02 U	0.02 U	0.02 U	0.021 UJ	0.02 U
Aroclor 1248	mg/kg	NE	NE	NE	0.021 U	0.012 J	0.02 U	0.02 U	0.021 UJ	0.02 U
Aroclor 1254	mg/kg	NE	NE	NE	0.021 U	0.02 U	0.02 U	0.02 U	0.021 UJ	0.02 U
Aroclor 1260	mg/kg	NE	NE	NE	0.021 U	0.02 U	0.02 U	0.02 U	0.021 UJ	0.047 NJ
6.1 Metals										
Arsenic	mg/kg	13.00	16.00	16.00	1.8 J	10	2.4 J	2.9 J	4.3 J	6.3
Barium	mg/kg	350.0	400.0	10000	108	126	42.4 J	32.1 J	68.2	62.5
Cadmium	mg/kg	2.500	9.300	60.00	3.2 U	4.4 U	4 U	4.4 U	3.7 U	4 U
Chromium	mg/kg	NE	NE	NE	29	16.7	14.8 J	14.8 J	15.5 J	10.6
Lead	mg/kg	63.00	1000	3900	9.4	484	24.7	10.5	154	140
Mercury	mg/kg	0.1800	2.800	5.700	0.047 U	0.38	0.046	0.02	0.055	0.21
Selenium	mg/kg	3.900	1500	6800	16.9 U	23.6 U	21.6 U	23.3 U	19.6 U	21.3 U
Silver	mg/kg	2.000	1500	6800	3.2 U	4.4 U	4 U	4.4 U	3.7 U	4 U
7.10 Cyanides										
Total Cyanide	mg/kg	27.00	27.00	10000	0.618 UJ	0.568 UJ	0.587 UJ	0.594 UJ	0.617 UJ	8.46 J
9.9 Other										
Percent Moisture	%	NE	NE	NE	20.7	15.4	16.5	17.5	19	15.4
Percent Solids	%	NE	NE	NE	79.3	84.6	83.5	82.5	81	84.6

Appendix D

Feasibility Level Cost Estimate (Alternatives 1 and 2)

Table D-1
Feasibility Level Cost Estimate
Remedial Alternative 1: Surface Cap and Institutional Controls
Former Nassau Gas Works
Brooklyn, New York
National Grid USA

GEI Consultants, Inc. (GEI) has prepared this Feasibility Study level cost estimate which estimates costs required to complete the work referenced in the title of this table. GEI's estimate is based on published Vendor Costs, discussions with contractors and on GEI's project experience. In order to prepare this estimate, GEI made basic assumptions as to actual site conditions that should be encountered; specific decisions and costs by other design professionals to be engaged by the contractor; the means, materials, methods of construction, and schedule the contractor will use/determine; and various other factors. The engineer's opinion of cost for this work will differ from this estimate based on final design documents.

	Quantity	Unit	Unit Price	Total Cost
CAPITAL COST				
<i>SMP Development</i>				
1 Development of the SMP	1	LS	\$50,000.00	\$ 50,000
2 Implement Environmental Easement/Survey	1	LS	\$25,000.00	\$ 25,000
3 NYSDEC Oversight FS through SMP development	1	LS	\$31,000.00	\$ 31,000
			Subtotal	\$ 106,000
ANNUAL COST (Present Worth)				
1 Annual Inspection and Reporting	30	Year	\$20,000.00	\$ 392,009
2 NYSDEC Oversight Annual Inspection and Reporting	30	Year	\$1,900.00	\$ 37,241
			Subtotal	\$ 429,250
REMEDIAL COST SUMMARY				
Total Capital Cost				\$ 106,000
Total Annual costs				\$ 429,250
			Subtotal	\$ 535,250
	\$ 535,250	Factor	25%	\$ 133,812
			TOTAL	\$ 669,062

Note: Implementation of the SMP will require environmental oversight and material management during subsurface intrusive activities which will incur one time capital costs during site redevelopment, periodic costs for future site work and additional reporting cost. These costs are not included in the above cost estimate.

Table D-2
Feasibility Level Cost Estimate
Remedial Alternative 2: Surface Cap, Institutional Controls and DNAPL Recovery
Former Nassau Gas Works
Brooklyn, New York
National Grid USA

GEI Consultants, Inc. (GEI) has prepared this Feasibility Study level cost estimate which estimates costs required to complete the work referenced in the title of this table. GEI's estimate is based on published Vendor Costs, discussions with contractors and on GEI's project experience. In order to prepare this estimate, GEI made basic assumptions as to actual site conditions that should be encountered; specific decisions and costs by other design professionals to be engaged by the contractor; the means, materials, methods of construction, and schedule the contractor will use/determine; and various other factors. The engineer's opinion of cost for this work will differ from this estimate based on final design documents.

	Quantity	Unit	Unit Price	Total Cost
CAPITAL COST				
<i>SMP Development</i>				
1 Development of the SMP	1	LS	\$50,000.00	\$ 50,000
2 Implement Environmental Easement/Survey	1	LS	\$25,000.00	\$ 25,000
3 NYSDEC Oversight FS through SMP development	1	LS	\$31,000.00	\$ 31,000
			Subtotal	\$ 106,000
<i>DNAPL Recovery Design/Installation</i>				
1 Preliminary Monitoring/Design Work Plan	1	LS	\$75,000.00	\$ 75,000
2 DNAPL Recovery Well Installation	1	LS	\$250,000.00	\$ 250,000
3 DNAPL Recovery Operation and Maintenance Specifications	1	LS	\$50,000.00	\$ 50,000
4 NYSDEC Oversight DNAPL Recovery Design and Installation	1	LS	\$45,000.00	\$ 45,000
			Subtotal	\$ 420,000
ANNUAL COST (Present Worth)				
1 Annual Inspection and Reporting	30	Year	\$20,000.00	\$ 392,009
2 DNAPL Recovery OMM	10	Year	\$120,000.00	\$ 1,023,624
3 NYSDEC Oversight DNAPL Recovery OMM	10	Year	\$6,500.00	\$ 55,446
4 NYSDEC Oversight Annual Inspection and Reporting	30	Year	\$1,900.00	\$ 37,241
			Subtotal	\$1,508,320
REMEDIAL COST SUMMARY				
Total Capital Cost				\$ 526,000
Total Annual costs				\$ 1,508,320
			Subtotal	\$ 2,034,320
Contingency (25%)	\$ 2,034,320	Factor	25%	\$ 508,580
			TOTAL	\$ 2,542,900

Note: Implementation of the SMP will require environmental oversight and material management during subsurface intrusive activities which will incur one time capital costs during site redevelopment, periodic costs for future site work and additional reporting cost. These costs are not included in the above cost estimate.