Donald Campbell
Project Manager

May 24, 2014

Mr. William Wu
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
625 Broadway
Albany, New York 12233-7014

Subject: **Final Remedial Investigation Work Plan**

Former Jamaica Gas Light Manufactured Gas Plant Site, Queens, NY
NYSDEC Site No.: 241063, Order on Consent Index #: A2-0552-0606

Dear Mr. Wu:

National Grid is submitting this Remedial Investigation (RI) Work Plan for the former Jamaica Gas Light Manufactured Gas Plant (MGP) site (the Site), located at 18 Beaver Road in Queens, New York. This RI Work Plan has been prepared by AECOM, and the RI is being conducted by National Grid pursuant to a Multi-site Order on Consent and Administrative Settlement between the Brooklyn Union Gas Company (now d/b/a National Grid) and the New York State Department of Environmental Conservation (NYSDEC) and in accordance with applicable guidelines of the NYSDEC and the New York State Department of Health (NYSDOH).

A Site Characterization (SC) was conducted on the Site in 2012 according to the approved SC Work Plan (AECOM, 2010). A summary of the site characterization activities and results were submitted to NYSDEC in October 2012 and presented to the NYSDEC on February 11, 2013. The SC results identified minor MGP impacts encountered in the overburden in the center and along the southern boundary of the Site. A review of the SC results also identified data gaps that will be addressed by this RI Work Plan.

Site Description and History

The Site is situated within a single parcel, Block 10099 Lot 1, located between 158th Street and (former) 159th Street and includes portion of Beaver Road. The Site consists of 33,170 square feet of a relatively flat property that is currently fenced and contains numerous roll off containers and trash compactors and adjoins the Long Island Rail Road (L.I.R.R) Right of Way to the North, 158th Street and commercial business to the west, the Prospect Cemetery to the south, and vacant land and the City University of New York campus to the East. Figures 1 and 2 provide the Site location and parcel information for the Site.

The Site was operated by the Jamaica Gas Light Company and later the Brooklyn Union Gas Company, a predecessor company to National Grid, from prior to 1873 to approximately 1938. A review of historical documents indicates that the Site was operated by the Jamaica Gas Light Company as a manufactured gas plant for at least 25 years in the late 1800s before being converted to a gas storage and distribution facility around 1900 when two smaller holders and structures associated with the MGP were demolished. The remaining large gas holder and associated gas storage and distribution structures were demolished in 1938. Figure 3 provides a layout of the historical MGP structures. A detailed summary of the Site history is provided in Table 1.

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Site Characterization Summary

A SC (Figure 4) was conducted on the Site from February 2012 through April 2012 in accordance with the approved SC Work Plan (AECOM, 2010). The SC activities included community air monitoring, underground utility clearance, completion of 16 soil borings via direct push technology, conversion of six soil borings to monitoring wells using hollow stem augers, collection of five surface soil and 52 subsurface soil analytical samples, one round of groundwater monitoring, and a Site survey. A summary of the sample identification, depth, dates collected, location rationale, and laboratory analysis is provided on Table 2.

Key findings of the SC are as follows:

- The Site geology consists of four unconsolidated units varying in thickness and distribution across the Site (Figure 5):
  - Fill: upper unit consisting of poorly graded sand and gravel with varying amounts of debris was observed to be present in all areas of the Site in thicknesses typically ranging from 5 to 19 feet.
  - Sand: a native unit that is which consists of subunits of well graded sand and poorly graded sand. The well graded sand is composed of light to dark brown, medium to fine sand, and less than 15% coarse subangular gravel, with a few thin layers of fine sand or rounded gravel. Well graded sands were typically encountered directly below the fill unit, and generally range in thickness from 18.5 to 35 feet. The poorly graded sand is composed of predominately fine sand in a 2.5 to 5 foot thickness within the well graded sand unit. The maximum boring penetration depth was 45 feet bgs, and the bottom of the well graded sand was not encountered.
  - Silty Sand: observed intermittently across the Site of varying thickness.
  - Clay and silty clay of low plasticity: observed intermittently across the Site of varying thickness.
- No confining units or bedrock surface were encountered during the SC.
- Groundwater beneath the Site is present in the overburden at depths ranging from approximately 20 to 24 feet bgs. Groundwater flow is predominantly from the northeast to the southwest beneath the Site (Figure 6). Table 3 summarizes the screen intervals for each well and the depths to groundwater measured in the wells on April 4, 2012.
- Historic structures related to the former MGP operations including the three holders, the Purifier and Meter house, and the Retort and Generator room were identified and delineated during the SC.
- Residual MGP-related impacts (Table 4 and Figure 7) were observed during the SC and included:
  - Tar-like odors and staining in five soil borings located in and adjacent to the three former holders and the Purifier and Meter room.
  - Tar-coated grains in four soil borings located in and adjacent to the two smaller former holders and the Purifier and Meter room.
  - The shallowest observance of tar coating and odors occurred from 5 to 7.5 ft bgs at SB-12 located within the footprint of the former Purifier and Meter House.
  - Tar saturated lenses were not observed anywhere beneath the Site.

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  - Tar coating was not observed below the water table.
  - No tar coatings, sheens or staining were observed at the eastern, northern, and western property boundaries.

- The City of New York Department of City Planning has listed the zone classification for the Site as R6, which indicates the Site is zoned as residential with medium density. However the Site is currently owned by the Dormitory Authority of the State of New York (DASNY) and is leased out to a waste management company for storage of roll-off bins, waste containers, and trash compactors. Based on preliminary discussions it is believed that DASNY has no plans in the immediate future to develop the Site or change its use from commercial to residential. Since the current and future Site use will be commercial, the Soil Cleanup Objectives (SCOs) for the Site soils will include the NYSDEC Division of Environmental Remediation, 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 Restricted Residential Use SCOs, as well as NYSDEC's alternative poly-nuclear aromatic hydrocarbons (PAH) criterion for non-residential sites, total PAH of 500 mg/Kg, specified in NYSDEC Policy CP-51 Soil Cleanup Guidance, October 2010. The discussion of SC soil sample results in this document is limited to Restricted Commercial Use SCOs, though for reference purposes, all soil analytical data are also compared to Unrestricted Use SCOs in the relevant tables and figures. The Remedial Investigation Report (RIR) will compare all soil analytical data to the Restricted Residential Use SCOs and the 500 mg/Kg total PAH soil cleanup criterion for non-residential sites, though for reference purposes, the soil analytical data will also be compared to Unrestricted Use and Restricted Commercial Use SCOs in the relevant tables and figures.
- Constituent concentrations in surface soil were compared against NYSDEC Division of Environmental Remediation, 6 NYCRR Part 375 Unrestricted Use and Restricted Commercial Use SCOs (Table 5 and Figure 8). Results were in compliance with commercial scenarios.
- Constituent concentrations in subsurface soil were compared against NYSDEC Division of Environmental Remediation, 6 NYCRR Part 375 Unrestricted Use and Restricted Commercial Use SCOs (Table 6 and Figure 9). Results were in compliance with commercial scenarios, with the following exceptions:
  - Results for five samples exceeded for Restricted Commercial Use SCOs for benzo(a)pyrene only.
  - Results for five samples exceeded Restricted Commercial Use SCOs for one (1) or more PAHs.
  - NYSDEC's alternative PAH criterion for non-residential sites, total PAH of 500 mg/Kg, was exceeded in only three samples.
- Constituent concentrations in groundwater were compared to the New York State Ambient Groundwater Standards and Guidance Values (AGWSGVs). Exceedances were limited to metals – iron and sodium (generally not related to former Site operations) as shown in Table 7 and Figure 10.
- Residual MGP-related impacts are very limited as visually observed and confirmed by low level soil and groundwater analytical detections. The weathered aspect of the impacts is consistent with the Site history which indicates that gas manufacturing ceased in the early 1900s and the Site was subsequently used for storage and distribution purposes. The migration of this material was likely limited based in part on the volume and duration of the release and has been vertically delineated.

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Proposed Remedial Investigation Activities

A RI will be implemented on the Site to investigate and delineate MGP-related impacts encountered during the SC in the overburden in the center and along the southern boundary of the Site. The objectives of the RI are:

- To determine the horizontal and vertical extent of the two smaller former holders and the former Purifier and Meter room structure
- To delineate the extent of MGP residuals observed in the center and along the southern boundary of the Site
- To characterize groundwater quality horizontally downgradient of the Site.

To accomplish these objectives, National Grid proposes to implement the following scope of work:

- Property access agreement
- Utility clearance including a geophysical survey
- Mobilization
- Test pit excavation
- Borehole advancement and overburden monitoring well installation
- Collection and analysis of subsurface soil samples
- Groundwater monitoring
- Investigation derived waste management
- Community air monitoring
- Site survey

The proposed RI locations are shown on Figure 11, and the rationale, anticipated depth, number of samples, and analyses to be performed are included on Table 8. Some of the locations and details of the investigation sample points may be revised in the field based on conditions encountered by the supervising geologist or environmental scientist during the investigation. All work will be performed in accordance with the procedures specified in the 2010 NYSDEC-approved SC Work Plan. A description of the proposed activities is presented in the following sections.

Property Access Agreement

National Grid is working with the owner of the Site and off-Site property to extend existing access agreements. Verbal agreement with the owner of the Site and off-Site property has already been obtained by National Grid for the implementation of this RI Work Plan with the target timeframe being summer 2013.

Utility Clearance

A code 753 mark-out will be completed to identify subsurface utilities on and adjacent to the Site prior to intrusive activities. Copies of available city sewer and water maps from the Site vicinity will also be obtained and reviewed during underground utility clearance procedures. Following review of the utilities in the Site area, AECOM will contract a private company to locate all underground electric and gas utilities in the vicinity of each proposed subsurface sampling location using geophysical methods. Outlying areas,

where information is required to confirm the location of suspected utilities that may act as preferential migration pathways, may also be surveyed using geophysical methods. Lastly, all boring/well locations will be soft excavated, by hand and/or vacuum methods, to a depth of five feet to check for potential utilities. Once clear, drilling and excavation activities will proceed slowly and carefully for the top ten feet of each investigation location. Proposed sampling locations may be shifted to avoid subsurface and overhead utilities as appropriate.

Mobilization

Following procurement of appropriate agreements and permits, AECOM will mobilize to the Site and set up a decontamination area, drum storage area, and heavy equipment laydown area for the RI activities. These areas will be placed within the Site in a centrally located area. AECOM will coordinate field activities with the Site owner and the Site tenant to avoid or minimize disruptions, to the extent practicable.

Test Pits

Three test pits (TP-1, TP-2, and TP-3) will be excavated along and around the former holders, No. 1 and No. 2, and the former purifier/meter house as shown in Figure 11. The test pits will be excavated to investigate the condition of remnants of the former MGP structures. The condition of the soil will be logged to aid in the delineation of observations from nearby borings.

The asphalt in each test pit area will be saw cut to the extent possible prior to excavation. A backhoe will be used to excavate the test pits, which will be approximately 20 feet in length as shown in Figure 11 and will extend down to 10 to 15 feet below ground surface. If possible the backhoe will expose the base of each structure or foundation. The bottom of any structure suspected to contain non-aqueous phase liquid (NAPL) will not be penetrated. The final length and depth of test pit excavation will be based on field observations and professional judgment of the supervising geologist or environmental scientist. Additional test pits will be excavated as needed to further visually delineate any source areas.

The materials uncovered in the test pits will be logged by the supervising geologist or environmental scientist in the field using the most appropriate and current guidelines provided by American Society for Testing and Materials (ASTM) and the Unified Soil Classification System (USCS). Soil will be screened for the presence of volatile organics using a PID. Analytical soil samples may be collected from each test pit if conditions within the test pit are observed to be very different from those previously observed in completed soil borings. These soil samples will be analyzed according to the Soil Sampling section below. Analytical soil samples, to determine soil quality, may be collected from the bottom of the test pit if clean soil conditions are encountered while only waste characterization samples, to characterize for disposal at a thermal facility, may be collected if heavily impacted conditions are encountered.

The corners of each test pit will be flagged for location by survey. Excavation spoils removed from the test pit will be temporarily stored on a sheet of plastic for return to the excavation. To the extent possible, clean soil will be segregated from impacted soil. Upon completion of each test pit, impacted soil and debris will be returned to the excavation first, followed by clean soil and any additional clean backfill needed to return the excavation to original grade. The top 2 feet will be clean soil from the excavation. Any remaining investigation derived waste (IDW) will be handled in accordance with procedures in the SC Work Plan. Between the completion of each test pit and following the completion of all work, the backhoe will be decontaminated (e.g., brush and steam-clean) as deemed appropriate by the supervising geologist or environmental scientist overseeing the work. An asphalt cover will be placed over each area disturbed as a result of the test pit activities.

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If necessary, odor control foam and plastic sheeting will be used to minimize odors generated during test pitting. In the event that the CAMP or worker protection air monitoring criteria is exceeded, soil handling and excavation activities will be temporarily suspended and additional odor control measures will be evaluated

The geologist will complete a subsurface test pit log which will describe the type of soil encountered; the presence of visible evidence of MGP residuals; the presence of hydrocarbon-like odors; a description of each subsurface structure encountered; and a sketch and photograph of the sidewalls of the excavations showing locations of impacted soil, soil structures, and remnants of MGP structures encountered, if any.

Borehole Advancement and Monitoring Well Installation

Following or simultaneously with the test pit excavations, one soil boring (SB-16) will be completed within the former purifier and meter house north of SB-12, two soil borings (SB-17 and SB-19) will be completed northeast and southeast, respectively, of the former holder No. 1, one soil boring (SB-18) will be completed north of SB-08, one soil boring (SB-20) will be completed between the former holders No. 1 and No. 2, and three soil borings (SB-21, SB-22, and SB-23) will be completed downgradient of the Site on the FDA parking lot to horizontally delineate any residual MGP materials. The three downgradient soil borings (SB-21, SB-22, and SB-23) will be completed following the completion of on-site soil borings SB-19 and SB-20. This sequence of soil boring completion will ensure that, in the absence of observed contamination, the analytical samples collected in the three downgradient soil borings are at depths that correspond to observations noted during the completion of on-site soil borings SB-19 and SB-20. A step-out soil boring (SB-24) will be completed on 158th Street if impacts are observed in soil boring SB-23. Soil boring locations may be modified based on the observations from the test pit excavations or already completed borings. The borings will be advanced to a maximum depth of 50 feet bgs. However, as stated in the footnotes of Table 8, completion depths may be adjusted shallower in instances where 10 feet of clean soils are encountered below apparently contaminated soils. Soil borings will be advanced a minimum of 40 feet bgs. In the event that impacts are observed above an apparent confining layer, borings will be terminated at the top of the confining layer.

A total of four soil borings will be converted to groundwater monitoring wells (MW-7 through MW-10) as shown in Table 9 and Figure 11 to determine the presence or absence of dissolved phase MGP residuals downgradient of observed impacts. The monitoring wells will be constructed and developed in accordance with the SC Work Plan. Following completion, the borings not converted to monitoring wells will be tremie-grouted to the ground surface and the surface restored to match pre-existing conditions.

Soil Sampling

Soil samples for observation and volatile organic compound (VOC) screening by PID will be collected and logged continuously from the ground surface to boring completion. A minimum of three (3) soil samples will be collected from each boring for laboratory analysis. The first sample will be collected at the depth of greatest apparent contamination from the 0 to 5 feet bgs interval. It is anticipated that two subsurface soil samples will be collected from depths greater than 5 feet bgs in each soil boring. One sample will be collected from the zone of worst case impacts. If no impacts are encountered, this sample will be collected from a depth that corresponds horizontally to the impact interval sampled observed in adjacent, completed soil borings. The second sample will be collected from the first clean interval below any observed impacts or the base of the boring. Sample rationale and analysis details are included in Table 8.

Soil samples will be submitted to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) Certified laboratory for the following analyses:

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- Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) compounds using EPA Method 8260B,
- Polycyclic aromatic hydrocarbons (PAH) compounds using EPA Method 8270B,
- Resource Conservation and Recovery Act (RCRA) Metals using EPA Method 6000-7000 Series; and
- Free Cyanide using EPA Method 9014A and 9012B.

Groundwater Gauging and Sampling

A comprehensive round of groundwater sampling will be performed at least two weeks after the development of newly installed wells. All Site wells will be gauged and sampled following the United States Environmental Protection Agency's low-flow groundwater sampling procedures and in accordance with the SC Work Plan. Field measurements will be collected during the sampling of each monitoring well. The following parameters will be monitored: pH, specific conductance, dissolved oxygen (DO), oxidation reduction potential (ORP), temperature, and turbidity.

Groundwater samples will be analyzed for:

- Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) compounds using EPA Method 8260B,
- Polycyclic aromatic hydrocarbons (PAH) compounds using EPA Method 8270B,
- Resource Conservation and Recovery Act (RCRA) Metals using USEPA Method 6000-7000 Series; and
- Total cyanide by EPA Method 9012B.

Investigation Derived Waste Management

All Investigation Derived Waste (IDW) will be collected in properly labeled 55-gallon drums and grouped by environmental matrix. Subsequently, the drums will be characterized with laboratory analyses and properly disposed in accordance with current site management procedures for IDW.

Community Air Monitoring

The Community air monitoring plan (CAMP) provided in Appendix D of the SC Work Plan will be implemented during the investigative activities.

Site Survey

Following completion of the investigation, all sampling and investigation locations will be surveyed for elevation and location using a licensed New York surveyor.

As mentioned above, all RI activities will be conducted as per the NYSDEC approved SC Work Plan.

The data from the SC and the RI field efforts will be combined into a draft RI Report. Appendices to the report will include all pertinent data used to support the SC and RI efforts, including validated laboratory analytical results, boring logs, and all field sampling sheets.

If you have any questions, comments, or require any additional information, please do not hesitate to contact me (718) 963-5453 or via electronic mail (e-mail) at donald.campbell@nationalgrid.com

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Sincerely,

Donald Campbell

Ec: G. Cross, NYSDEC (w/o enclosure)
S. Selmer, NYSDOH (1 compact disc)
S. Pandya, (1 hard copy and 1 compact disc)
A. Sullivan, AECOM (w/o enclosure)
J. Pfeiffer, AECOM (w/o enclosure)

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Tables

Table 1 Historical Documents Observations
Former Jamaica Gas Light Company MGP Site
Queens, New York

Year and Media	Observations:
1856 Pages from History of Queens County	The Jamaica Gas Light Company was incorporated June 3rd, 1856; capital $20,000. George Skidmore was president, Isaac Amberman treasurer, L.M. Jagger secretary, J. Tyler Watts superintendent.
1873 Atlas Map	The Site is identified as the Jamaica Gas Company. Structures shown include the two smaller gas holders and 5 buildings/structures. The two structures to the northwest are assumed dwellings and one structure on the northeast boundary also assumed a dwelling. The larger building north of the gas holder is assumed the purifier, retorts, boiler, and coal house. The fifth building to the east of the gas holder is assumed the coal shed. None of the structures are identified and assumed based on the 1886 Sandborn.
1874 Historic Photograph	The photograph shows the very edge of a building on the Jamaica Gas Light property. This photograph is the "oldest known photo of the LIRR's original depot at Jamaica - view looking west from the Beaver St. overpass - 1874. In 1877, the South Side Rail Road's 1871-era depot in place south of this location at Beaver Street was moved to a spot adjacent to the west side of this structure and both were utilized by the LIRR".
1886 Sanborn Map	The Site is identified as the Gas Works. One gas holder (size unknown) is illustrated in the center of the property along the south-eastern property line (presumed smaller western gas holder). Structures consisting of purifiers, retorts, and a coal house are located on the northeastern portion of the property, a coal shed is illustrated on the eastern portion of the Site, and an unknown building is shown adjacent to the gas holder. Three residential dwellings on the northwest and one on the northeast boundary are also illustrated. There is no listing as to the name of the Site operator.
1890 Atlas Map	No structures identified on the entire atlas.
1891 Sanborn Map	The Site is identified as the Gas Works. The structures from the 1886 Sanborn remain. Additional structures illustrated on the map consist of a second gas holder (size unknown, the smaller eastern gas holder) located southwest of the coal shed, and building labeled as the engine room/dynamos is located on the northeast portion of the property where a former residential dwelling was previously illustrated.
1895 - 1897 Historic Newspaper Article	Between 1895 and 1897 BUG purchased the Jamaica Gas Light Co., which was operated as a subsidiary until finally integrated in 1927.
1897 Sanborn Map	The Site is identified as the Jamaica Gas Light Company. The structures from the 1891 Sanborn remain with some modifications. The building previously labeled as the engine room/dynamos is now labeled as vacant. The retort building is now labeled as the generator room. The purifier building is now labeled as containing both purifiers and storage. Additional structures illustrated include an iron shed immediately adjacent to the purifier and storage building, a storage building located adjacent to the coal shed on the eastern portion of the Site, and a governor room located between the two smaller gas holders.
February 1899 Property Plan	The Property Plan is titled "Property Plan on Jamaica Gas Works". The structures identified are - Holder No. 1 (smaller eastern holder) diameter 34 ft, brick tank 36 ft diameter - Holder No. 2 (smaller western holder) diameter 40 ft, brick tank 42 ft diameter - Holder No. 3 (larger holder) diameter 97 ft 6 in, iron tank 100 ft diameter - There are three "ghost" footprints around the larger holder footprint, possible footprint of dwellings identified in 1897 Sanborn - Governor house present between the two smaller holders - Northeast of the smaller western holder is a building consisting of the meter and governor room, exhauster room, and the boiler room. - Northeast of the smaller eastern holder is a building consisting of the purifying and meter house, retort house with a boiler and benches, a generator house, a coal shed, and an electric light and engine room. - To the east of the smaller eastern holder is a "ghost" footprint of a boiler, a coal shed, and an unidentified structure.
1901 Sanborn Map	The structures from the 1897 Sanborn remain with some modifications. The building that contained the purifiers, retorts, and generator is labeled as not in use. The two holders, which are now identified as being 38 feet in diameter are also labeled as not in use. The governor building located between the two gas holders is labeled as a work shop. A 100 foot diameter gas holder is located on the southwestern portion of the property where residential dwellings were previously located. A new building labeled as a meter room and engine room is illustrated southwest of the former retort and purifier building. This indicates that the Site is no longer producing gas and is only used for gas storage.
1903-1908 LIRR Drawing	The Long Island Rail Road (LIRR) Drawing shows two structures within the Site and labeled as the Brooklyn Union Gas Company (BUG).
1905 Historical Photograph	The photograph is showing the old Jamaica Station facilities looking west from the street overpass with the Holder present in the background.
December 19, 1908 Historical Photograph	The photograph is showing the Jamaica Station tower looking east from the end of the old Jamaica Station platform with the large Holder present in the background.
1911 Sanborn Map	The property is now identified as the Brooklyn Union Gas Company. The abandoned 38-foot diameter gas holders and purifier/retort building are no longer illustrated. The 100 foot diameter gas holder is labeled as having a capacity of 500,000 cubic feet. The meter and engine building is also labeled as containing boilers. The coal sheds located on the northeastern portion of the Site are still illustrated, but are not identified as to their use at the Site. The work shop formerly located between the two removed gas holders is identified as storage.
March 1911 Property Survey	The Survey (map # 1-E-87) is titled the Jamaica Gaslight Co., survey showing property to be sold, shaded areas to be sold. There is a detail of the northeast corner of the exhauster and boiler house.
November 8, 1911 Monument Drawing	The drawing is titled "sketch showing suggested location of monuments at Site of Jamaica Gas Light Co. Office Building. No other buildings or structures provided. The drawing is for the Jamaical Gas Light Office located at the intersection of Union and Fulton Street, Queens, N.Y. and not a drawing related to the MGP.

Table 1 Historical Documents Observations
Former Jamaica Gas Light Company MGP Site
Queens, New York

Year and Media	Observations:
Januray 30, 1912 Photograph	The photograph (#2846-Jamaica Station) titled "Now Cornice and Roof On Garage".
March 12, 1913 Photograph	LIRR grading construction looking east from upper level of new Jamaica station general offices towards old Jamaica station across from gas tanks.
December 22, 1913 Drawing	The December 22, 1913 BUG drawing is titled "Diagram of Holders Sheet 3 Showing Heights and Relations to Building Limits". The Jamaica Station Holder is identified as a 500,000 cu ft, with Beaver Street on the left side of it and a depth of 12-12'6" below grade surface to the holder bottom. The diameter of the holder is 100 ft with three lifts. In the notes column, the drawing # 2-G-86 is referenced.
December 31, 1915 Table - Holders	The December 31, 1915 table provides holder information. One holder in use on December 31, 1914 and December 31, 1915 with a capacity of 500 m.cu.ft, open, steel, built by Bartlett, Hayward, and Co. in 1998.
June 26, 1916 Holder details	The June 26, 1916 provides information that there was one holder available on December 31, 1915 with 3 lifts.
1925 Sanborn Map	The Site is similar to the 1911 Sanborn Map. The former coal sheds located on the northeastern portion of the Site are labeled as storage. A pipe shed is shown northeast of the former work shop/storage building.
September 23, 1938 Historical Photograph #35666	The photograph (#35666) titled "Jamaica Station. Filled in holder site: looking west" provides a view from the southern boundary looking northwest towards the area of the former 500,000 cu ft gas holder with the railroad track and underpass in the background. The area is shown as filled in with soil to grade and a wooden picket fence around the property.
September 23, 1938 Historical Photograph #356667	The photograph (#35667) titled "Jamaica Station. Filled in holder site: looking east" provides a view from the northwest corner looking to the southeast of the site. There is level soil area in the footprint of the former holder with some one story and a multiple story brick building present in the background.
1942 Sanborn Map	The 500,000 cubic foot gas holder is no longer illustrated. The only structures shown on the map consists of the meter/engine room/boiler building, the storage area located on the northeastern portion of the Site, and a storage building located along the southeastern property boundary.
1951 Sanborn Map	The Site is now identified as the Brooklyn Union Gas Company, Queens Service Station. The former meter/engine room/boiler building is labeled as offices. A new office building is illustrated along the southeastern property boundary of the Site. The two storage buildings are still illustrated in the northeast portion of the property.
1954 Aerial Photograph	The property is the same as illustrated in the 1951 Sanborn Map.
1963 Sanborn Map	The property is the same as illustrated in the 1951 Sanborn Map.
1966 Aerial Photograph	The property is the same as illustrated in the 1951 Sanborn Map.
1967 Sanborn Map	The property is the same as illustrated in the 1951 Sanborn Map.
1975, 1984, 1985, and 1994 Aerial Photographs	The property is vacant on all aerial photographs. No structures are visible in the photograph. Note – The 1985 aerial photograph is unreadable.
1981, 1982, 1985-1988, 1990-1993, 1995, 1996, 1999, 2001-2006 Sanborns	The property is illustrated as vacant property on all Sanborn Maps listed.

Table 2 Summary of SC Surface Soil, Soil Boring, and Monitoring Well Locations, Rationale, and Analyses
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location	Sample IDs	Sample Interval Rationale	Date Collected	Sample Method	Sample Location Rationale	Completion Depth (ft bgs)	Soil Sample Laboratory Analysis+E4
Soil Borings and Surface Soil Samples							
SS-5	SS-5	surface soil	2/29/2012	Grab		2*	TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SS-5A	SS-5A	surface soil	3/8/2012	Grab	Evaluate surface soil within former building operations	2*	TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SS-11	SS-11	surface soil	2/28/2012	Grab	Evaluate surface soil from potential environmental impacts from the former MGP operations	2*	TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SS-12	SS-12	surface soil	2/28/2012	Grab	Evaluate surface soil from potential environmental impacts from the former Purifier and Storage House	2*	TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SS-14	SS-14	surface soil	2/27/2012	Grab	Evaluate surface soil from potential environmental impacts from within the former Engine Room, Dynamos, and Storage building	2*	TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-1	SB-1 (2.5-5)	zero to five feet	3/5/2012	Grab			
SB-1	SB-1 (17-19)	water table	3/5/2012	Grab	Evaluate the portion of the Site where historical information indicates no significant operations associated with the MGP in the western corner of the Site		TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-1	SB-1 (37.5-40)	bottom	3/5/2012	Grab		40	
SB-2	SB-2 (0-2.5)	zero to five feet	3/6/2012	Grab			
SB-2	SB-2 (17.5-20)	water table	3/6/2012	Grab	Evaluate the portion of the Site where historical information indicates no significant operations associated with the MGP in the western corner of the site		TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-2	SB-2 (37.5-40)	bottom	3/6/2012	Grab		40	
SB-3	SB-3 (2.5-5)	zero to five feet	2/27/2012	Grab			
SB-3	SB-3 (5-10)	above impacts	2/27/2012	Grab	Evaluate the center of the large gas holder above the holder bottom		TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-3	SB-3 (10-11.75)	impacts and bottom	2/27/2012	Grab		11.75	
SB-4	SB-4 (3-5)	zero to five feet	2/27/2012	Grab			
SB-4	SB-4 (5-8.5)	above impacts	2/27/2012	Grab			TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-4	SB-4 (8.5-10)	impacts	2/27/2012	Grab	Evaluate the interior of the large gas holder above the holder bottom		
SB-4	SB-4 (10-13)	impacts and bottom	2/27/2012	Grab		13	
SB-5	SB-5 (2.5-5)	zero to five feet	3/8/12, 3/9/12	Grab			
SB-5	SB-5 (22-24)*[1]	water table	3/8/12, 3/9/12	Grab	Evaluate any potential impact material from the former Engine Room		TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-5	SB-5 (37.5-40)	bottom	3/8/12, 3/9/12	Grab		40	
SB-6	SB-6 (1-3.5)*[1]	zero to five feet	2/22/2012	Grab			
SB-6	SB-6 (22-27)	water table	2/22/2012	Grab	Evaluate the interior of the smaller eastern gas holder above the holder bottom		TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-6	SB-6 (37.5-40)	bottom	2/22/2012	Grab		40	
SB-7	SB-7 (0-2.5)	zero to five feet	2/22/2012	Grab			
SB-7	SB-7 (21.5-24)	water table	2/22/2012	Grab			TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-7	SB-7 (37.5-40)	bottom	2/22/2012	Grab	Evaluate the smaller eastern gas holder	40	
SB-8	SB-8 (2.5-5)	zero to five feet	3/1/2012	Grab			
SB-8	SB-8 (15-17)	visible and olfactory impacts	3/1/2012	Grab			TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-8	SB-8 (20-25)	first clean	3/1/2012	Grab	Evaluate the area between the two smaller gas holders and northwest of the governor room		
SB-8	SB-8 (42.5-45)	bottom	3/1/2012	Grab		45	
SB-9	SB-9 (2-2.5)	zero to five feet	2/23/2012	Grab			TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-9	SB-9 (10-13.5)	water table	2/23/2012	Grab			
SB-9	SB-9 (37.5-40)	bottom	2/23/2012	Grab	Evaluate the interior of the smaller western gas holder	40	
SB-10	SB-10 (1-2.5)	zero to five feet	2/23/2012	Grab			
SB-10	SB-10 (12.5-15)	visible and olfactory impacts	2/23/2012	Grab			TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-10	SB-10 (26-27.5)	first clean	2/23/2012	Grab			
SB-10	SB-10 (37.5-40)	bottom	2/23/2012	Grab	Evaluate the perimeter of the smaller western gas holder	40	
SB-11	SB-11 (0-2.5)	zero to five feet	2/28/2012	Grab			
SB-11	SB-11 (25-27)	water table	2/28/2012	Grab	Evaluate surface soil from potential environmental impacts from the former MGP operations		TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-11	SB-11 (35-40)	bottom	2/28/2012	Grab		40	
SB-12	SB-12 (2.5-5)	zero to five feet	2/28/2012	Grab			
SB-12	SB-12 (5-7.5)	impacts	2/28/2012	Grab			TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-12	SB-12 (10-12.5)	first clean	2/28/2012	Grab	Evaluate any potential impacts from the former Purifier and Storage Room		
SB-12	SB-12 (37.5-40)	bottom	2/28/2012	Grab		12.5	
SB-13	SB-13 (2.5-5)	zero to five feet	2/28/12, 2/29/12	Grab			
SB-13	SB-13 (22.5-24.5	water table	2/28/12, 2/29/12	Grab	Evaluate any potential impacts from the Retorts and Generator Room		TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-13	SB-13 (37.5-40)	bottom	2/28/12, 2/29/12	Grab		40	
SB-14	SB-14 (2-5)*[1]	zero to five feet	2/27/2012	Grab			
SB-14	SB-14 (25-26.5)	water table	2/27/2012	Grab	Evaluate any potential impacts from the former Engine Room and Dynamos		TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-14	SB-14 (37.5-40)	bottom	2/27/2012	Grab		40	
SB-15	SB-15 (2.5-5)	zero to five feet	2/28/12, 3/8/12, 3/9/12	Grab			
SB-15	SB-15 (25-27.5)	water table	2/28/12, 3/8/12, 3/9/12	Grab			TCL VOCs, TCL SVOCs, TAL Metals, PCBs (as Aroclors), TCL Pesticides, TCL Herbicides, and Available Cyanide
SB-15	SB-15 (37.5-40)	bottom	2/28/12, 3/8/12, 3/9/12	Grab	Evaluate the eastern corner of the site in the area of the former coal storage shed	40	
Groundwater							
MW-1	MW-1	middle of screened interval to characterize groundwater quality	4/5/2012	Grab	Coincident with SB-1 to evaluate the downgradient groundwater quality in the western corner of the Site for any offsite sources and within a portion of the site where historical information indicates no significant operations associated with the MGP.	28	VOCs + 10 TICS, SVOCs + 10 TICS, Pesticides/Herbicides, PCBs, TAL Metals, and Total Cyanide
MW-2	MW-2	middle of screened interval to characterize groundwater quality	4/6/2012	Grab	Coincident with SB-2 to evaluate the downgradient groundwater quality in the southern corner of the Site in the vicinity of the former 500,000 cubic foot gas holder.	29	VOCs + 10 TICS, SVOCs + 10 TICS, Pesticides/Herbicides, PCBs, TAL Metals, and Total Cyanide
MW-3	MW-3	middle of screened interval to characterize groundwater quality	4/5/2012	Grab	Coincident with SB-8 to evaluate groundwater quality between the two smaller gas holders adjacent to the former Governor Room.	32.5	VOCs + 10 TICS, SVOCs + 10 TICS, Pesticides/Herbicides, PCBs, TAL Metals, and Total Cyanide
MW-4	MW-4	middle of screened interval to characterize groundwater quality	4/6/2012	Grab	Coincident with SB-15 to evaluate the upgradient groundwater quality in a porton of the eastern corner of the Site where the area for coal storage was located.	36.5	VOCs + 10 TICS, SVOCs + 10 TICS, Pesticides/Herbicides, PCBs, TAL Metals, and Total Cyanide
MW-5	MW-5	middle of screened interval to characterize groundwater quality	4/6/2012	Grab	Coincident with SB-5 to evaluate groundwater quality in the north western area of the Site.	33	VOCs + 10 TICS, SVOCs + 10 TICS, Pesticides/Herbicides, PCBs, TAL Metals, and Total Cyanide
MW-6	MW-6	middle of screened interval to characterize groundwater quality	4/5/2012	Grab	Coincident with SB-13 to evaluate upgradient groundwater quality in the northeastern corner of the Site where the former Coal House and Generator Room was located.	33.5	VOCs + 10 TICS, SVOCs + 10 TICS, Pesticides/Herbicides, PCBs, TAL Metals, and Total Cyanide

Notes:
* Depth colleted in inches below grade surface
*[1] duplicate sample collected

Table 3 SC Monitoring Well Construction, Fluid Gauging, and Groundwater Elevation Summary
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

MW ID	Ground Surface Elevation (ft)	Top of Casing Elevation (ft)	Date Installed	Well Diameter and Material	Screen Slot	Screened Interval (ft bgs)	Date Developed	04-Apr-12			Groundwater Elevation (ft)
								DTW (ft bgs)	DTB (ft bgs)	Additional Comments	4-Apr-12
MW-1	39.02	38.75	5-Mar-12	2-inch Ø PVC	0.010	16 - 26	21-Mar-12	17.81	27.03	soft bottom, no odor	20.94
MW-2	41.38	41.16	6-Mar-12	2-inch Ø PVC	0.010	17 - 27	21-Mar-12	20.34	28.01	hard bottom, no odor	20.82
MW-3	44.56	43.85	7-Mar-12	2-inch Ø PVC	0.010	20.5 - 30.5	21-Mar-12	22.76	31.60	hard bottom, no odor	21.09
MW-4	47.66	47.21	9-Mar-12	2-inch Ø PVC	0.010	24.5 - 34.5	21-Mar-12	26.03	35.98	hard bottom, no odor	21.18
MW-5	43.63	43.25	12-Mar-12	2-inch Ø PVC	0.010	21 - 31	21-Mar-12	22.11	33.22	soft bottom, no odor	21.14
MW-6	46.32	46.05	28-Mar-12	2-inch Ø PVC	0.010	21.5 - 31.5	21-Mar-12	21.81	32.60	soft bottom, no odor	24.24

Notes:

DTW = Depth to water from the top of casing/PVC

DTB = Depth to bottom from the top of casing/PVC

bgs = Below Ground Surface

Ø - Diameter

All wells have 2-foot sumps.

Top of casing elevations, ground surface elevations, and groundwater elevations in feet above North American Vertical Datum of 1988 (NAVD-88).

MW-3 was installed adjacent to SB-8.

Table 4 Summary of Observed Visible and Olfactory Impacts During Site Characterization
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Boring ID	Top (ft bgs)	Bottom (ft bgs)	Impacts
SB-1 / MW -1	0	40	None
SB-2 / MW-2	0	40	None
SB - 3	0	10	None
SB - 3	10	11.75	Slight tar-like odor
SB - 4	0	8.5	None
SB - 4	8.5	13	Slight tar-like odor
SB - 5 / MW - 5	0	40	None
SB - 6	0	40	None
SB - 7	0	40	None
SB - 8 / MW -3	0	16.5	None
SB - 8 / MW -3	16.5	17	Slight tar coating and tar-like odor
SB - 8 / MW -3	17	19	Slight tar-like odor
SB - 8 / MW -3	19	45	None
SB - 9	0	9	None
SB - 9	9	13	Slight tar-like odor
SB - 9	13	13.5	tar coated
SB - 9	13.5	33	Slight tar-like odor
SB - 9	33	40	None
SB - 10	0	12.5	None
SB - 10	12.5	17.5	Tar coated and strong tar-like odor
SB - 10	17.5	26.8	Tar staining and tar-like odor
SB - 10	26.8	40	None
SB - 11	0	40	None
SB - 12	0	5	None
SB - 12	5	7.5	Tar coating and slight tar-like odor
SB - 12	7.5	7.75	None
SB - 12	7.75	8	Tar coating and slight tar-like odor
SB - 12	8	40	None
SB - 13 / MW - 6	0	40	None
SB - 14	0	40	None
SB - 15	0	40	None

Table 5 Summary of SC Analytical Results for Surface Soil
Former Jamaica Gas Light Company MGP Site
Queens, New York

Sample Location Sample Date Sample ID Sample Interval (inches)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial	SS-05 2/29/2012 SS-5 (0-2)022912 0-2"	SS-05A 3/8/2012 SS-5A (0-2)030812 0-2"	SS-11 2/28/2012 SS-11 (0-2)022812 0-2"	SS-12 2/28/2012 SS-12 (0-2)022812 0-2"	SS-14 2/27/2012 SS-14 (0-2)022712 0-2"
BTEX (mg/kg)								
Benzene	71-43-2	0.06	44	<0.00093 U	**0.00019 J**	<0.0011 U	<0.0011 U	<0.0012 U
Ethylbenzene	100-41-4	1	390	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Toluene	108-88-3	0.7	500	<0.00093 U	**0.0014**	<0.0011 U	<0.0011 U	<0.0012 U
Xylenes (total)	1330-20-7	0.26	500	<0.0028 U	<0.0031 U	<0.0033 U	<0.0033 U	<0.0035 U
Total BTEX		NL	NL	*ND*	***0.00159***	*ND*	*ND*	*ND*
Volatile Organic Compounds (VOCs)(mg/Kg)								
1,1,1-Trichloroethane	71-55-6	0.68	500	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
1,1,2-Trichloroethane	79-00-5	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
1,1-Dichloroethane	75-34-3	0.27	240	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
1,1-Dichloroethene	75-35-4	0.33	500	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
1,2-Dichloroethane	107-06-2	0.02	30	<0.00093 U	**0.00053 J**	<0.0011 U	<0.0011 U	<0.0012 U
1,2-Dichloropropane	78-87-5	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
2-Butanone	78-93-3	0.12	500	**0.0024 J**	R	R	R	R
2-Hexanone	591-78-6	NL	NL	<0.0093 UJ	<0.01 U	<0.011 U	<0.011 U	<0.012 U
4-Methyl-2-pentanone	108-10-1	NL	NL	**0.00070 J**	<0.01 U	<0.011 U	<0.011 U	**0.0017 J**
Acetone	67-64-1	0.05	500	<0.011 U	<0.01 U	<0.011 U	<0.011 U	<0.014 U
Bromodichloromethane	75-27-4	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Bromoform	75-25-2	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Bromomethane	74-83-9	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 UJ
Carbon disulfide	75-15-0	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Carbon tetrachloride	56-23-5	0.76	22	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Chlorobenzene	108-90-7	1.1	500	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Chloroethane	75-00-3	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 UJ
Chloroform	67-66-3	0.37	350	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Chloromethane	74-87-3	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
cis-1,2-Dichloroethene	156-59-2	0.25	500	<0.00093 U	**0.00019 J**	<0.0011 U	<0.0011 U	<0.0012 U
cis-1,3-Dichloropropene	10061-01-5	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Dibromochloromethane	124-48-1	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Methylene chloride	75-09-2	0.05	500	**0.0047**	**0.031 J**	**0.0033**	**0.0029**	**0.0014**
Styrene	100-42-5	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Tetrachloroethene	127-18-4	1.3	150	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
trans-1,2-Dichloroethene	156-60-5	0.19	500	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
trans-1,3-Dichloropropene	10061-02-6	NL	NL	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Trichloroethene	79-01-6	0.47	200	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Vinyl chloride	75-01-4	0.02	13	<0.00093 U	<0.0010 U	<0.0011 U	<0.0011 U	<0.0012 U
Total VOCs		NL	NL	***0.0078***	***0.03331***	***0.0033***	***0.0029***	***0.0031***
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)								
2-Methylnaphthalene	91-57-6	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Acenaphthene	83-32-9	20	500	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Acenaphthylene	208-96-8	100	500	**0.085 J**	**0.074 J**	**0.19 J**	**0.23 J**	**0.083 J**
Anthracene	120-12-7	100	500	**0.25 J**	**0.12 J**	**0.28 J**	**0.33 J**	**0.13 J**
Benzo(a)anthracene	56-55-3	1	5.6	**0.40**	**0.44**	**0.89**	**1.1**	**0.68**
Benzo(a)pyrene	50-32-8	1	1	**0.37**	**0.36**	**0.84**	**1.0**	**0.59**
Benzo(b)fluoranthene	205-99-2	1	5.6	**0.55**	**0.45**	**1.3**	**1.4**	**0.66**
Benzo(ghi)perylene	191-24-2	100	500	**0.38 J**	**0.33 J**	**0.57**	**0.79**	**0.44**
Benzo(k)fluoranthene	207-08-9	0.8	56	**0.18**	**0.21**	**0.46**	**0.66**	**0.25**
Chrysene	218-01-9	1	56	**0.51**	**0.45**	**1.2**	**1.4**	**0.61**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	**0.078**	**0.091**	**0.14**	**0.20**	**0.12**
Fluoranthene	206-44-0	100	500	**0.75**	**0.61**	**1.4**	**1.7**	**0.86**
Fluorene	86-73-7	30	500	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	**0.41**	**0.33**	**0.64**	**0.83**	**0.48**
Naphthalene	91-20-3	12	500	<0.4 U	<0.35 U	<0.37 U	**0.046 J**	<0.4 U
Phenanthrene	85-01-8	100	500	**0.36 J**	**0.30 J**	**0.49**	**0.70**	**0.42**
Pyrene	129-00-0	100	500	**0.53**	**0.74**	**1.5**	**1.9**	**1.3**
Total PAHs		NL	NL	***4.853***	***4.505***	***9.9***	***12.286***	***6.623***
Other Semi Volatile Organic Compounds (SVOC) (mg/Kg)								
1,2,4-Trichlorobenzene	120-82-1	NL	NL	<0.04 U	<0.035 U	<0.037 U	<0.039 U	<0.04 U
1,2-Dichlorobenzene	95-50-1	1.1	500	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
1,3-Dichlorobenzene	541-73-1	2.4	280	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
1,4-Dichlorobenzene	106-46-7	1.8	130	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
2,4,5-Trichlorophenol	95-95-4	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
2,4,6-Trichlorophenol	88-06-2	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
2,4-Dichlorophenol	120-83-2	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
2,4-Dimethylphenol	105-67-9	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
2,4-Dinitrophenol	51-28-5	NL	NL	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U
2,4-Dinitrotoluene	121-14-2	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
2,6-Dinitrotoluene	606-20-2	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
2-Chloronaphthalene	91-58-7	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
2-Chlorophenol	95-57-8	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
2-Methylphenol	95-48-7	0.33	500	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
2-Nitroaniline	88-74-4	NL	NL	<0.81 U	<0.72 U	<0.76 U	<0.79 U	<0.81 U
2-Nitrophenol	88-75-5	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
3,3'-Dichlorobenzidine	91-94-1	NL	NL	<0.81 U	<0.72 U	<0.76 UJ	<0.79 UJ	<0.81 UJ
3-Nitroaniline	99-09-2	NL	NL	<0.81 U	<0.72 U	<0.76 U	<0.79 U	<0.81 U
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U
4-Bromophenyl phenyl ether	101-55-3	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
4-Chloro-3-methylphenol	59-50-7	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
4-Chloroaniline	106-47-8	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
4-Methylphenol	106-44-5	0.33	500	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
4-Nitroaniline	100-01-6	NL	NL	<0.81 U	<0.72 U	<0.76 U	<0.79 U	<0.81 U
4-Nitrophenol	100-02-7	NL	NL	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
bis(2-Chloroethyl) ether	111-44-4	NL	NL	<0.04 U	<0.035 U	<0.037 U	<0.039 U	<0.04 U
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	**0.29 J**	<0.35 U	**0.3 J**	**0.27 J**	**0.27 J**
Butyl benzyl phthalate	85-68-7	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Carbazole	86-74-8	NL	NL	**0.073 J**	<0.35 U	**0.15 J**	**0.18 J**	<0.4 U
Dibenzofuran	132-64-9	7	350	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Diethyl phthalate	84-66-2	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Dimethyl phthalate	131-11-3	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Di-n-butyl phthalate	84-74-2	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Di-n-octyl phthalate	117-84-0	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Hexachlorobenzene	118-74-1	0.33	6	<0.04 U	<0.035 U	<0.037 U	<0.039 U	<0.04 U
Hexachlorobutadiene	87-68-3	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Hexachlorocyclopentadiene	77-47-4	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Hexachloroethane	67-72-1	NL	NL	<0.04 U	<0.035 U	<0.037 U	<0.039 U	<0.04 U
Isophorone	78-59-1	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Nitrobenzene	98-95-3	NL	69	<0.04 U	<0.035 U	<0.037 U	<0.039 U	<0.04 U
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	<0.04 U	<0.035 U	<0.037 U	<0.039 U	<0.04 U
N-Nitrosodiphenylamine	86-30-6	NL	NL	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Pentachlorophenol	87-86-5	0.8	6.7	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U
Phenol	108-95-2	0.33	500	<0.4 U	<0.35 U	<0.37 U	<0.39 U	<0.4 U
Total SVOCs		NL	NL	***5.216***	***4.505***	***10.35***	***12.736***	***6.893***

Table 5 Summary of SC Analytical Results for Surface Soil
Former Jamaica Gas Light Company MGP Site
Queens, New York

Sample Location Sample Date Sample ID Sample Interval (inches)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial	SS-05 2/29/2012 SS-5 (0-2)022912 0-2"	SS-05A 3/8/2012 SS-5A (0-2)030812 0-2"	SS-11 2/28/2012 SS-11 (0-2)022812 0-2"	SS-12 2/28/2012 SS-12 (0-2)022812 0-2"	SS-14 2/27/2012 SS-14 (0-2)022712 0-2"
Inorganic Compounds (mg/Kg)								
Aluminum	7429-90-5	NL	NL	**3430**	**3580**	**5120**	**5750**	**5670**
Antimony	7440-36-0	NL	NL	**1.8 J**	**10.5**	**1.8 J**	<2.2 UJ	<2.3 UJ
Arsenic	7440-38-2	13	16	**2.9**	**4.4**	**7.2**	**8.1**	**6.0**
Barium	7440-39-3	350	400	**45.0 J**	**52.4**	**68.7**	**88.4**	**83.8**
Beryllium	7440-41-7		590	<0.46 U	**0.14 J**	**0.19 J**	<0.44 U	**0.23 J**
Cadmium	7440-43-9	2.5	9.3	**0.51 J**	**0.76 J**	**0.78 J**	**0.88 J**	**0.37 J**
Calcium	7440-70-2	NL	NL	**21500**	**12200**	**10500**	**9820**	**16300**
Chromium	7440-47-3	30	1500	**14.9**	**22.9 J**	**59.6**	**29.5**	**16.4**
Cobalt	7440-48-4	NL	NL	**6.5 J**	**5.3 J**	**6.7 J**	**7.9 J**	**6.1 J**
Copper	7440-50-8	50	270	**74.9**	**81.2**	**95**	**126**	**50.3**
Iron	7439-89-6	NL	NL	**25500**	**29800**	**33100**	**38800**	**18800**
Lead	7439-92-1	63	1000	**83.8**	**111**	**280 J**	**211 J**	**137 J**
Magnesium	7439-95-4	NL	NL	**7260**	**4180**	**4220 J**	**3960 J**	**8200 J**
Manganese	7439-96-5	1600	10000	**212**	**292 J**	**338 J**	**338 J**	**291 J**
Mercury	7439-97-6	0.18	2.8	**0.12**	**0.23 J+**	**0.26**	**0.34**	**0.37**
Nickel	7440-02-0	30	310	**13.2**	**16.8**	**21.4**	**24.8**	**12.3**
Potassium	7440-09-7	NL	NL	**617 J**	**467 J**	**480 J**	**584 J**	**644 J**
Selenium	7782-49-2	3.9	1500	<2.3 U	**1.5 J**	<2.2 U	<2.2 U	<2.3 U
Silver	7440-22-4	2	1500	<2.3 U	<2.0 U	<2.2 U	<2.2 U	<2.3 U
Sodium	7440-23-5	NL	NL	<1150 U	<983 U	<1120 U	<1100 U	<1160 U
Thallium	7440-28-0	NL	NL	<2.3 U	<2.0 U	<2.2 U	<2.2 U	<2.3 U
Vanadium	7440-62-2	NL	NL	**50.3**	**21.8**	**28.7**	**31.1**	**30.9**
Zinc	7440-66-6	109	10000	**119**	**128**	**186**	**249**	**149**
Cyanide (mg/Kg)								
Available cyanide	57-12-5-A	NL	NL	**0.073**	<0.043 U	<0.045 U	**0.024 J**	**0.22**
PCBs (mg/Kg)								
Aroclor 1016	12674-11-2	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Aroclor 1221	11104-28-2	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Aroclor 1232	11141-16-5	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Aroclor 1242	53469-21-9	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Aroclor 1248	12672-29-6	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Aroclor 1254	11097-69-1	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Aroclor 1260	11096-82-5	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Aroclor 1262	37324-23-5	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Aroclor 1268	11100-14-4	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Total PCBs		0.1	1	*ND*	*ND*	*ND*	*ND*	*ND*
Pesticides (mg/Kg)								
Aldrin	309-00-2	0.005	0.68	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Alpha-BHC	319-84-6	0.02	3.4	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Beta-BHC	319-85-7	0.036	3	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Chlordane	57-74-9	NL	NL	<0.081 U	**0.038 J**	<0.076 U	<0.079 U	<0.081 U
DDD,4,4-	72-54-8	0.0033	92	<0.0081 U	**0.0061 J**	<0.0076 U	<0.0079 U	<0.0081 U
DDE,4,4-	72-55-9	0.0033	62	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
DDT,4,4-	50-29-3	0.0033	47	<0.0081 UJ	**0.014**	<0.0076 U	<0.0079 U	**0.0089**
Delta-BHC	319-86-8	0.04	500	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Dieldrin	60-57-1	0.005	1.4	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Endosulfan I	959-98-8	2.4	200	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Endosulfan II	33213-65-9	2.4	200	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Endosulfan sulfate	1031-07-8	2.4	200	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Endrin	72-20-8	0.014	89	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Endrin aldehyde	7421-93-4	NL	NL	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Endrin ketone	53494-70-5	NL	NL	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Gamma BHC - Lindane	58-89-9	0.1	9.2	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Heptachlor	76-44-8	0.042	15	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Heptachlor Epoxide	1024-57-3	NL	NL	<0.0081 U	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Methoxychlor	72-43-5	NL	NL	<0.0081 UJ	<0.0072 U	<0.0076 U	<0.0079 U	<0.0081 U
Toxaphene	8001-35-2	NL	NL	<0.081 U	<0.072 U	<0.076 U	<0.079 U	<0.081 U
Herbicides (mg/Kg)								
2,4,5-TP (Silvex)	93-72-1	3.8	500	<0.021 U	<0.018 U	<0.019 U	<0.02 U	<0.021 U
2,4-D	94-75-7	NL	NL	<0.021 U	<0.018 U	<0.019 U	<0.02 U	<0.021 U
T,2,4,5-	93-76-5	NL	NL	<0.021 U	<0.018 U	<0.019 U	<0.02 U	<0.021 U

Notes:

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

Yellow Shaded values exceed NYSDEC PART 375-6.8 (a) Unrestricted Use Soil Cleanup Objective Value

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-01 3/5/2012 SB-1 (2.5-5)030512 2.5-5	SB-01 3/5/2012 SB-1(17-19)030512 17-19	SB-01 3/5/2012 SB-1 (37.5-40)030512 37.5-40	SB-02 3/6/2012 SB-2 (0-2.5)030612 0-2.5	SB-02 3/6/2012 SB-2 (17.5-20)030612 17.5-20	SB-02 3/6/2012 SB-2 (37.5-40)030612 37.5-40	SB-03 2/27/2012 SB-3 (2.5-5)022712 2.5-5	SB-03 2/27/2012 SB-3 (5-10)022712 5-10
BTEX (mg/kg)											
Benzene	71-43-2	0.06	44	**0.00041 J**	<0.0010 U	**0.00024 J**	**0.00015 J**	<0.00096 U	**0.00027 J**	**0.00030 J**	**0.00018 J**
Ethylbenzene	100-41-4	1	390	**0.00087 J**	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	**0.00025 J**	<0.0012 U
Toluene	108-88-3	0.7	500	**0.0013**	**0.00026 J**	**0.00075 J**	**0.00051 J**	**0.00033 J**	**0.00095 J**	**0.0013**	**0.00045 J**
Xylenes (total)	1330-20-7	0.26	500	**0.0045**	<0.0030 U	<0.0033 U	<0.0029 U	<0.0029 U	<0.0039 U	**0.0014 J**	**0.00094 J**
Total BTEX		NL	NL	***0.00708***	***0.00026***	***0.00099***	***0.00066***	***0.00033***	***0.00122***	***0.00325***	***0.00157***
Volatile Organic Compounds (VOCs)(mg/Kg)											
1,1,1-Trichloroethane	71-55-6	0.68	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
1,1,2-Trichloroethane	79-00-5	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
1,1-Dichloroethane	75-34-3	0.27	240	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
1,1-Dichloroethene	75-35-4	0.33	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
1,2-Dichloroethane	107-06-2	0.02	30	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
1,2-Dichloropropane	78-87-5	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
2-Butanone	78-93-3	0.12	500	R	R	R	R	R	R	**0.0096 J**	**0.0045 J**
2-Hexanone	591-78-6	NL	NL	<0.01 UJ	<0.01 UJ	<0.011 UJ	<0.0097 UJ	<0.0096 UJ	<0.013 UJ	<0.011 U	<0.012 U
4-Methyl-2-pentanone	108-10-1	NL	NL	<0.01 U	<0.01 U	<0.011 U	<0.0097 U	<0.0096 U	<0.013 U	<0.011 U	<0.012 U
Acetone	67-64-1	0.05	500	<0.01 U	<0.0010 U	0.020 U	<0.0097 U	0.013 U	<0.013 U	**0.049 J**	<0.022 U
Bromodichloromethane	75-27-4	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Bromoform	75-25-2	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Bromomethane	74-83-9	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 UJ	<0.0012 U
Carbon disulfide	75-15-0	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	**0.00053 J**	**0.0019**
Carbon tetrachloride	56-23-5	0.76	22	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Chlorobenzene	108-90-7	1.1	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Chloroethane	75-00-3	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 UJ	<0.0012 U
Chloroform	67-66-3	0.37	350	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	**0.00093 J**	<0.0011 U	<0.0012 U
Chloromethane	74-87-3	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
cis-1,2-Dichloroethene	156-59-2	0.25	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
cis-1,3-Dichloropropene	10061-01-5	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Dibromochloromethane	124-48-1	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Methylene chloride	75-09-2	0.05	500	**0.0059**	**0.0023**	**0.013**	**0.0075**	**0.0021**	**0.0051**	**0.0028**	**0.0061**
Styrene	100-42-5	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Tetrachloroethene	127-18-4	1.3	150	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
trans-1,2-Dichloroethene	156-60-5	0.19	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
trans-1,3-Dichloropropene	10061-02-6	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Trichloroethene	79-01-6	0.47	200	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Vinyl chloride	75-01-4	0.02	13	<0.0010 U	<0.0010 U	<0.0011 U	<0.00097 U	<0.00096 U	<0.0013 U	<0.0011 U	<0.0012 U
Total VOCs		NL	NL	***0.01298***	***0.01046***	***0.03399***	***0.01656***	***0.01543***	***0.01925***	***0.06518***	***0.01407***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-03 2/27/2012 SB-3 (10-11.75)022712 10-11.75	SB-04 2/27/2012 SB-4 (3-5)022712 3-5	SB-04 2/27/2012 SB-4 (5-8.5)022712 5-8.5	SB-04 2/27/2012 SB-4 (8.5-10)022712 8.5-10	SB-04 2/27/2012 SB-4 (10-13)022712 10-13	SB-05 3/8/2012 SB-5 (2.5-5)030812 2.5-5	SB-05 3/9/2012 DUP-3-030912 22-24	SB-05 3/9/2012 SB-5 (22-24)030912 22-24
BTEX (mg/kg)											
Benzene	71-43-2	0.06	44	**0.0093**	<0.0011 U	**0.00026 J**	<0.12 U	**0.00081 J**	<0.00091 U	<0.00095 U	**0.00017 J**
Ethylbenzene	100-41-4	1	390	**0.02**	**0.00031 J**	<0.0012 U	**0.017 J**	**0.0034**	<0.00091 U	**0.00017 J**	**0.00017 J**
Toluene	108-88-3	0.7	500	**0.011**	**0.00066 J**	**0.00070 J**	**0.026 J**	**0.0016**	**0.00086 J**	**0.00087 J**	**0.0013**
Xylenes (total)	1330-20-7	0.26	500	**0.013**	**0.0019 J**	**0.0013 J**	<0.35 U	**0.0053**	<0.0027 U	<0.0029 U	<0.0027 U
Total BTEX		NL	NL	***0.0533***	***0.00287***	***0.00226***	***0.043***	***0.01111***	***0.00086***	***0.00104***	***0.00164***
Volatile Organic Compounds (VOCs)(mg/Kg)											
1,1,1-Trichloroethane	71-55-6	0.68	500	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
1,1,2-Trichloroethane	79-00-5	NL	NL	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
1,1-Dichloroethane	75-34-3	0.27	240	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
1,1-Dichloroethene	75-35-4	0.33	500	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
1,2-Dichloroethane	107-06-2	0.02	30	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	**0.00020 J**	**0.00023 J**	**0.00029 J**
1,2-Dichloropropane	78-87-5	NL	NL	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
2-Butanone	78-93-3	0.12	500	**0.0035 J**	R	**0.014 J**	R	**0.0099 J**	R	R	**0.0015 J**
2-Hexanone	591-78-6	NL	NL	<0.01 U	<0.011 U	<0.012 U	<0.58 U	<0.012 U	<0.0091 U	<0.0095 U	<0.0091 U
4-Methyl-2-pentanone	108-10-1	NL	NL	<0.01 U	<0.011 U	<0.012 U	<0.58 U	<0.012 U	<0.0091 U	<0.0095 U	<0.0091 U
Acetone	67-64-1	0.05	500	**0.025 J**	<0.011 U	**0.090**	<0.58 U	**0.056 J**	**0.042 J**	**0.042 J**	**0.070 J**
Bromodichloromethane	75-27-4	NL	NL	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Bromoform	75-25-2	NL	NL	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Bromomethane	74-83-9	NL	NL	<0.0010 UJ	<0.0011 U	<0.0012 U	<0.12 UJ	<0.0012 UJ	<0.00091 U	<0.00095 U	<0.00091 U
Carbon disulfide	75-15-0	NL	NL	**0.003**	<0.0011 U	**0.00067 J**	<0.12 U	**0.00066 J**	<0.00091 U	<0.00095 U	<0.00091 U
Carbon tetrachloride	56-23-5	0.76	22	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Chlorobenzene	108-90-7	1.1	500	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Chloroethane	75-00-3	NL	NL	<0.0010 UJ	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 UJ	<0.00091 U	<0.00095 U	<0.00091 U
Chloroform	67-66-3	0.37	350	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Chloromethane	74-87-3	NL	NL	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
cis-1,2-Dichloroethene	156-59-2	0.25	500	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	**0.00013 J**
cis-1,3-Dichloropropene	10061-01-5	NL	NL	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Dibromochloromethane	124-48-1	NL	NL	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Methylene chloride	75-09-2	0.05	500	**0.00094 J**	<0.0011 U	**0.0058**	<0.12 U	**0.0013**	**0.0083 J**	**0.0088 J**	**0.014 J**
Styrene	100-42-5	NL	NL	**0.0013**	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Tetrachloroethene	127-18-4	1.3	150	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
trans-1,2-Dichloroethene	156-60-5	0.19	500	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
trans-1,3-Dichloropropene	10061-02-6	NL	NL	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Trichloroethene	79-01-6	0.47	200	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Vinyl chloride	75-01-4	0.02	13	<0.0010 U	<0.0011 U	<0.0012 U	<0.12 U	<0.0012 U	<0.00091 U	<0.00095 U	<0.00091 U
Total VOCs		NL	NL	***0.08704***	***0.00287***	***0.11273***	***0.043***	***0.07897***	***0.05136***	***0.05207***	***0.08756***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location / Sample Date / Sample ID / Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-05 3/9/2012 SB-5 (37.5-40)030912 37.5-40	SB-06 2/22/2012 DUP-1-022212 1-3.5	SB-06 2/22/2012 SB-6 (1-3.5)022212 1-3.5	SB-06 2/22/2012 SB-6 (22-24)022212 22-24	SB-06 2/22/2012 SB-6 (37.5-40)022212 37.5-40	SB-07 2/22/2012 SB-7 (0-2.5)-22212 0-2.5	SB-07 2/22/2012 SB-7 (21.5-24)022212 21.5-24	SB-07 2/22/2012 SB-7 (37.5-40)022212 37.5-40
BTEX (mg/kg)											
Benzene	71-43-2	0.06	44	<0.0010 U	<0.0010 U	**0.00036 J**	<0.0010 U	<0.0010 U	**0.00043 J**	<0.00098 U	<0.0011 U
Ethylbenzene	100-41-4	1	390	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	**0.00046 J**	<0.00098 U	<0.0011 UJ
Toluene	108-88-3	0.7	500	**0.00076 J**	<0.0010 U	**0.00074 J**	<0.0010 U	<0.0010 U	**0.0032**	<0.00098 U	<0.0011 U
Xylenes (total)	1330-20-7	0.26	500	<0.0031 U	<0.0030 U	<0.0032 U	<0.0030 U	<0.0031 U	**0.0018 J**	<0.0029 U	<0.0032 UJ
Total BTEX		NL	NL	***0.00076***	*ND*	***0.0011***	*ND*	*ND*	***0.00589***	*ND*	*ND*
Volatile Organic Compounds (VOCs)(mg/Kg)											
1,1,1-Trichloroethane	71-55-6	0.68	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	<0.0010 UJ	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 UJ
1,1,2-Trichloroethane	79-00-5	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
1,1-Dichloroethane	75-34-3	0.27	240	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
1,1-Dichloroethene	75-35-4	0.33	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
1,2-Dichloroethane	107-06-2	0.02	30	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	**0.00019 J**	<0.00098 U	<0.0011 U
1,2-Dichloropropane	78-87-5	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
2-Butanone	78-93-3	0.12	500	**0.0024 J**	**0.0026 J**	R	R	**0.0023 J**	R	R	**0.0032 J**
2-Hexanone	591-78-6	NL	NL	<0.01 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.01 U	<0.0098 U	<0.011 UJ
4-Methyl-2-pentanone	108-10-1	NL	NL	<0.01 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.01 U	<0.0098 U	<0.011 UJ
Acetone	67-64-1	0.05	500	**0.10 J**	**0.091 J**	**0.041 J**	**0.029 J**	**0.067 J**	**0.042 J**	**0.023 J**	**0.11 J**
Bromodichloromethane	75-27-4	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 UJ
Bromoform	75-25-2	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Bromomethane	74-83-9	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Carbon disulfide	75-15-0	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Carbon tetrachloride	56-23-5	0.76	22	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Chlorobenzene	108-90-7	1.1	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 UJ
Chloroethane	75-00-3	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Chloroform	67-66-3	0.37	350	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Chloromethane	74-87-3	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
cis-1,2-Dichloroethene	156-59-2	0.25	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
cis-1,3-Dichloropropene	10061-01-5	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 UJ
Dibromochloromethane	124-48-1	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Methylene chloride	75-09-2	0.05	500	**0.0074 J**	**0.0067**	**0.024**	<0.0038 U	**0.0082**	**0.03**	<0.0021 U	**0.0058**
Styrene	100-42-5	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 UJ
Tetrachloroethene	127-18-4	1.3	150	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
trans-1,2-Dichloroethene	156-60-5	0.19	500	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
trans-1,3-Dichloropropene	10061-02-6	NL	NL	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Trichloroethene	79-01-6	0.47	200	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Vinyl chloride	75-01-4	0.02	13	<0.0010 U	<0.0010 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.0010 U	<0.00098 U	<0.0011 U
Total VOCs		NL	NL	***0.11056***	***0.1003***	***0.0661***	***0.029***	***0.0775***	***0.07808***	***0.023***	***0.119***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-08 3/1/2012 SB-8 (2.5-5)030112 2.5-5	SB-08 3/1/2012 SB-8 (15-17)030112 15-17	SB-08 3/1/2012 SB-8 (20-25)030112 20-25	SB-08 3/1/2012 SB-8 (42.5-45)030112 42.5-45	SB-09 2/23/2012 SB-9 (2.5-5)022312 2.5-5	SB-09 2/23/2012 SB-9 (10-13.5)022312 10-13.5	SB-09 2/23/2012 SB-9 (37.5-40)022312 37.5-40	SB-10 2/23/2012 SB-10 (1-2.5)022312 1-2.5
BTEX (mg/kg)											
Benzene	71-43-2	0.06	44	**0.0039**	**0.0079**	**0.00026 J**	**0.00029 J**	**0.00090 J**	<1.1 U	<0.0011 U	**0.00032 J**
Ethylbenzene	100-41-4	1	390	**0.00057 J**	**0.0036**	<0.0010 U	**0.00019 J**	**0.00029 J**	**4.9**	<0.0011 U	**0.00033 J**
Toluene	108-88-3	0.7	500	**0.00029 J**	**0.0014**	**0.00033 J**	**0.00050 J**	**0.0012**	**0.33 J**	**0.00038 J**	**0.0014**
Xylenes (total)	1330-20-7	0.26	500	<0.0036 U	**0.0023 J**	<0.0030 U	<0.0032 U	**0.0023 J**	**7**	<0.0033 U	**0.0055**
Total BTEX		NL	NL	***0.00476***	***0.0152***	***0.00059***	***0.00098***	***0.00469***	***12.23***	***0.00038***	***0.00755***
Volatile Organic Compounds (VOCs)(mg/Kg)											
1,1,1-Trichloroethane	71-55-6	0.68	500	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
1,1,2-Trichloroethane	79-00-5	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
1,1-Dichloroethane	75-34-3	0.27	240	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
1,1-Dichloroethene	75-35-4	0.33	500	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
1,2-Dichloroethane	107-06-2	0.02	30	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
1,2-Dichloropropane	78-87-5	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
2-Butanone	78-93-3	0.12	500	R	R	R	R	R	R	**0.0023 J**	R
2-Hexanone	591-78-6	NL	NL	<0.012 UJ	<0.011 UJ	<0.01 UJ	<0.011 UJ	<0.01 U	<5.3 U	<0.011 U	<0.01 U
4-Methyl-2-pentanone	108-10-1	NL	NL	<0.012 UJ	<0.011 UJ	<0.01 UJ	<0.011 UJ	<0.01 U	<5.3 U	<0.011 U	<0.01 U
Acetone	67-64-1	0.05	500	<0.012 U	<0.016 U	**0.025 J**	**0.034 J**	<0.01 U	R	<0.028 U	<0.01 U
Bromodichloromethane	75-27-4	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Bromoform	75-25-2	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Bromomethane	74-83-9	NL	NL	<0.0012 UJ	<0.0011 UJ	<0.0010 UJ	<0.0011 UJ	<0.0010 UJ	<1.1 U	<0.0011 U	<0.0010 UJ
Carbon disulfide	75-15-0	NL	NL	<0.0012 U	**0.00066 J**	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 UJ	<0.0011 U	<0.0010 U
Carbon tetrachloride	56-23-5	0.76	22	<0.0012 UJ	<0.0011 UJ	<0.0010 UJ	<0.0011 UJ	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Chlorobenzene	108-90-7	1.1	500	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Chloroethane	75-00-3	NL	NL	<0.0012 UJ	<0.0011 UJ	<0.0010 UJ	<0.0011 UJ	<0.0010 UJ	<1.1 U	<0.0011 U	<0.0010 UJ
Chloroform	67-66-3	0.37	350	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Chloromethane	74-87-3	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
cis-1,2-Dichloroethene	156-59-2	0.25	500	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
cis-1,3-Dichloropropene	10061-01-5	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Dibromochloromethane	124-48-1	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Methylene chloride	75-09-2	0.05	500	**0.0072**	**0.0052**	**0.0045**	**0.0044**	**0.0037**	<1.1 U	**0.0093**	**0.0043**
Styrene	100-42-5	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Tetrachloroethene	127-18-4	1.3	150	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
trans-1,2-Dichloroethene	156-60-5	0.19	500	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
trans-1,3-Dichloropropene	10061-02-6	NL	NL	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Trichloroethene	79-01-6	0.47	200	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Vinyl chloride	75-01-4	0.02	13	<0.0012 U	<0.0011 U	<0.0010 U	<0.0011 U	<0.0010 U	<1.1 U	<0.0011 U	<0.0010 U
Total VOCs		NL	NL	***0.01196***	***0.02106***	***0.03009***	***0.03938***	***0.00839***	***12.23***	***0.01198***	***0.01185***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-10 2/23/2012 SB-10 (12.5-15)022312 12.5-15	SB-10 2/23/2012 SB-10 (26-27.5)022312 26-27.5	SB-10 2/23/2012 SB-10 (37.5-40)022312 37.5-40	SB-11 2/28/2012 SB-11 (0-2.5)022812 0-2.5	SB-11 2/28/2012 SB-11 (25-27)022812 25-27	SB-11 2/28/2012 SB-11 (35-40)022812 35-40	SB-12 2/28/2012 SB-12 (2.5-5)022812 2.5-5	SB-12 2/28/2012 SB-12 (5-7.5)022812 5-7.5
BTEX (mg/kg)											
Benzene	71-43-2	0.06	44	**0.24**	**0.00038 J**	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	**0.00029 J**	**0.0014**
Ethylbenzene	100-41-4	1	390	**0.19**	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	**0.00021 J**
Toluene	108-88-3	0.7	500	**1.2**	**0.0018**	**0.00047 J**	**0.00014 J**	**0.00015 J**	**0.00014 J**	**0.00068 J**	**0.0025**
Xylenes (total)	1330-20-7	0.26	500	**16**	**0.024**	**0.0033**	<0.0031 U	<0.0027 U	<0.0030 U	<0.0032 U	**0.0013 J**
Total BTEX		NL	NL	***17.63***	***0.02618***	***0.00377***	***0.00014***	***0.00015***	***0.00014***	***0.00097***	***0.00541***
Volatile Organic Compounds (VOCs)(mg/Kg)											
1,1,1-Trichloroethane	71-55-6	0.68	500	**0.022 J**	**0.00056 J**	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	**0.00015 J**	**0.00047 J**
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
1,1,2-Trichloroethane	79-00-5	NL	NL	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
1,1-Dichloroethane	75-34-3	0.27	240	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
1,1-Dichloroethene	75-35-4	0.33	500	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
1,2-Dichloroethane	107-06-2	0.02	30	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
1,2-Dichloropropane	78-87-5	NL	NL	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
2-Butanone	78-93-3	0.12	500	R	**0.0025 J**	R	R	R	R	R	R
2-Hexanone	591-78-6	NL	NL	<0.55 U	<0.011 U	<0.01 U	<0.01 U	<0.0090 U	<0.01 U	<0.011 U	<0.01 U
4-Methyl-2-pentanone	108-10-1	NL	NL	<0.55 U	<0.011 U	<0.01 U	<0.01 U	<0.0090 U	<0.01 U	<0.011 U	<0.01 U
Acetone	67-64-1	0.05	500	R	**0.029 J**	<0.016 U	<0.01 U	<0.0090 U	<0.01 U	<0.012 U	<0.01 U
Bromodichloromethane	75-27-4	NL	NL	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Bromoform	75-25-2	NL	NL	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Bromomethane	74-83-9	NL	NL	<0.11 U	<0.0011 UJ	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Carbon disulfide	75-15-0	NL	NL	<0.11 UJ	**0.00038 J**	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Carbon tetrachloride	56-23-5	0.76	22	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Chlorobenzene	108-90-7	1.1	500	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Chloroethane	75-00-3	NL	NL	<0.11 U	<0.0011 UJ	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Chloroform	67-66-3	0.37	350	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Chloromethane	74-87-3	NL	NL	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
cis-1,2-Dichloroethene	156-59-2	0.25	500	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
cis-1,3-Dichloropropene	10061-01-5	NL	NL	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Dibromochloromethane	124-48-1	NL	NL	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Methylene chloride	75-09-2	0.05	500	<0.11 U	**0.0072**	**0.005**	<0.0010 U	<0.00090 U	<0.0010 U	**0.0034**	**0.0039**
Styrene	100-42-5	NL	NL	**0.7**	**0.0027**	**0.00031 J**	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	**0.00029 J**
Tetrachloroethene	127-18-4	1.3	150	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
trans-1,2-Dichloroethene	156-60-5	0.19	500	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
trans-1,3-Dichloropropene	10061-02-6	NL	NL	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Trichloroethene	79-01-6	0.47	200	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Vinyl chloride	75-01-4	0.02	13	<0.11 U	<0.0011 U	<0.0010 U	<0.0010 U	<0.00090 U	<0.0010 U	<0.0011 U	<0.0010 U
Total VOCs		NL	NL	***18.352***	***0.06852***	***0.00908***	***0.00014***	***0.00015***	***0.00014***	***0.00452***	***0.01007***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

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Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-12 2/28/2012 SB-12 (10-12.5)022812 10-12.5	SB-12 2/28/2012 SB-12 (37.5-40)022812 37.5-40	SB-13 2/28/2012 SB-13 (2.5-5)022812 2.5-5	SB-13 2/29/2012 SB-13 (22.5-24.5)022912 22.5-24.5	SB-13 2/29/2012 SB-13 (37.5-40)022912 37.5-40	SB-14 2/27/2012 DUP-2-022712 2-5	SB-14 2/27/2012 SB-14 (2-5)022712 2-5	SB-14 2/27/2012 SB-14 (25-26.5)022712 25-26.5
BTEX (mg/kg)											
Benzene	71-43-2	0.06	44	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	**0.00021 J**
Ethylbenzene	100-41-4	1	390	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Toluene	108-88-3	0.7	500	<0.0010 U	**0.00016 J**	**0.00029 J**	<0.0010 U	**0.00014 J**	**0.00030 J**	<0.0011 U	**0.00036 J**
Xylenes (total)	1330-20-7	0.26	500	<0.0031 U	<0.0029 U	<0.0029 U	<0.0030 U	<0.0029 U	<0.0033 U	<0.0033 U	<0.0028 U
Total BTEX		NL	NL	*ND*	***0.00016***	***0.00029***	*ND*	***0.00014***	***0.0003***	*ND*	***0.00057***
Volatile Organic Compounds (VOCs)(mg/Kg)											
1,1,1-Trichloroethane	71-55-6	0.68	500	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	**0.00050 J**	**0.00090 J**	**0.00016 J**
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
1,1,2-Trichloroethane	79-00-5	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
1,1-Dichloroethane	75-34-3	0.27	240	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
1,1-Dichloroethene	75-35-4	0.33	500	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
1,2-Dichloroethane	107-06-2	0.02	30	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
1,2-Dichloropropane	78-87-5	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
2-Butanone	78-93-3	0.12	500	<0.01 U	R	R	R	R	R	R	**0.0015 J**
2-Hexanone	591-78-6	NL	NL	<0.01 UJ	<0.0098 U	<0.0097 U	<0.01 U	<0.0098 U	<0.011 U	<0.011 U	<0.0095 U
4-Methyl-2-pentanone	108-10-1	NL	NL	<0.01 UJ	<0.0098 U	<0.0097 U	<0.01 U	<0.0098 U	<0.011 U	<0.011 U	<0.0095 U
Acetone	67-64-1	0.05	500	<0.01 U	<0.017 U	<0.0097 U	<0.013 U	<0.013 U	<0.011 U	<0.011 U	<0.015 U
Bromodichloromethane	75-27-4	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Bromoform	75-25-2	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Bromomethane	74-83-9	NL	NL	<0.0010 UJ	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 UJ	<0.0011 U	<0.00095 U
Carbon disulfide	75-15-0	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Carbon tetrachloride	56-23-5	0.76	22	<0.0010 UJ	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Chlorobenzene	108-90-7	1.1	500	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Chloroethane	75-00-3	NL	NL	<0.0010 UJ	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 UJ	<0.0011 U	<0.00095 U
Chloroform	67-66-3	0.37	350	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Chloromethane	74-87-3	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
cis-1,2-Dichloroethene	156-59-2	0.25	500	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
cis-1,3-Dichloropropene	10061-01-5	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Dibromochloromethane	124-48-1	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Methylene chloride	75-09-2	0.05	500	**0.0012**	**0.0029**	**0.0063**	**0.0021**	**0.003**	**0.0043**	**0.0031**	**0.0024**
Styrene	100-42-5	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Tetrachloroethene	127-18-4	1.3	150	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
trans-1,2-Dichloroethene	156-60-5	0.19	500	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
trans-1,3-Dichloropropene	10061-02-6	NL	NL	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Trichloroethene	79-01-6	0.47	200	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Vinyl chloride	75-01-4	0.02	13	<0.0010 U	<0.00098 U	<0.00097 U	<0.0010 U	<0.00098 U	<0.0011 U	<0.0011 U	<0.00095 U
Total VOCs		NL	NL	***0.0012***	***0.00306***	***0.00659***	***0.0021***	***0.00314***	***0.0051***	***0.004***	***0.00463***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

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Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-14 2/27/2012 SB-14 (37.5-40)022712 37.5-40	SB-15 2/28/2012 SB-15 (2.5-5)022812 2.5-5	SB-15 3/8/2012 SB-15 (25-27.5)030812 25-27.5	SB-15 3/9/2012 SB-15 (37.5-40)030912 37.5-40
BTEX (mg/kg)							
Benzene	71-43-2	0.06	44	<0.0010 U	<0.0011 U	**0.00015 J**	**0.00033 J**
Ethylbenzene	100-41-4	1	390	<0.0010 U	<0.0011 U	**0.00022 J**	<0.00097 U
Toluene	108-88-3	0.7	500	<0.0010 U	**0.00051 J**	**0.0015**	**0.00094 J**
Xylenes (total)	1330-20-7	0.26	500	<0.0031 U	<0.0034 U	**0.00075 J**	<0.0029 U
Total BTEX		NL	NL	*ND*	***0.00051***	***0.00262***	***0.00127***
Volatile Organic Compounds (VOCs)(mg/Kg)							
1,1,1-Trichloroethane	71-55-6	0.68	500	<0.0010 U	**0.00033 J**	<0.00093 U	<0.00097 U
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
1,1,2-Trichloroethane	79-00-5	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
1,1-Dichloroethane	75-34-3	0.27	240	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
1,1-Dichloroethene	75-35-4	0.33	500	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
1,2-Dichloroethane	107-06-2	0.02	30	<0.0010 U	<0.0011 U	**0.00024 J**	**0.00039 J**
1,2-Dichloropropane	78-87-5	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
2-Butanone	78-93-3	0.12	500	R	R	R	**0.0038 J**
2-Hexanone	591-78-6	NL	NL	<0.01 U	<0.011 UJ	<0.0093 U	<0.0097 U
4-Methyl-2-pentanone	108-10-1	NL	NL	<0.01 U	<0.011 UJ	<0.0093 U	<0.0097 U
Acetone	67-64-1	0.05	500	<0.019 U	<0.011 U	**0.053 J**	**0.14 J**
Bromodichloromethane	75-27-4	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Bromoform	75-25-2	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Bromomethane	74-83-9	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Carbon disulfide	75-15-0	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Carbon tetrachloride	56-23-5	0.76	22	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Chlorobenzene	108-90-7	1.1	500	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Chloroethane	75-00-3	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Chloroform	67-66-3	0.37	350	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Chloromethane	74-87-3	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
cis-1,2-Dichloroethene	156-59-2	0.25	500	<0.0010 U	<0.0011 U	**0.00011 J**	<0.00097 U
cis-1,3-Dichloropropene	10061-01-5	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Dibromochloromethane	124-48-1	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Methylene chloride	75-09-2	0.05	500	**0.0033**	**0.012**	**0.0085 J**	**0.022 J**
Styrene	100-42-5	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Tetrachloroethene	127-18-4	1.3	150	<0.0010 U	**0.00014 J**	<0.00093 U	<0.00097 U
trans-1,2-Dichloroethene	156-60-5	0.19	500	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
trans-1,3-Dichloropropene	10061-02-6	NL	NL	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Trichloroethene	79-01-6	0.47	200	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Vinyl chloride	75-01-4	0.02	13	<0.0010 U	<0.0011 U	<0.00093 U	<0.00097 U
Total VOCs		NL	NL	***0.0033***	***0.01298***	***0.06447***	***0.16746***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-01 3/5/2012 SB-1 (2.5-5)030512 2.5-5	SB-01 3/5/2012 SB-1(17-19)030512 17-19	SB-01 3/5/2012 SB-1 (37.5-40)030512 37.5-40	SB-02 3/6/2012 SB-2 (0-2.5)030612 0-2.5	SB-02 3/6/2012 SB-2 (17.5-20)030612 17.5-20	SB-02 3/6/2012 SB-2 (37.5-40)030612 37.5-40	SB-03 2/27/2012 SB-3 (2.5-5)022712 2.5-5	SB-03 2/27/2012 SB-3 (5-10)022712 5-10	SB-03 2/27/2012 SB-3 (10-11.75)022712 10-11.75	SB-04 2/27/2012 SB-4 (3-5)022712 3-5
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)													
2-Methylnaphthalene	91-57-6	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	**0.27 J**	<0.37 U
Acenaphthene	83-32-9	20	500	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	**0.53**	<0.37 U
Acenaphthylene	208-96-8	100	500	<0.36 U	<0.35 U	<0.42 U	**0.14 J**	<0.35 U	<0.44 U	<0.37 U	<0.41 U	**0.091 J**	<0.37 U
Anthracene	120-12-7	100	500	**0.049 J**	<0.35 U	<0.42 U	**0.18 J**	<0.35 U	<0.44 U	<0.37 U	<0.41 U	**1.5**	<0.37 U
Benzo(a)anthracene	56-55-3	1	5.6	**0.28**	<0.035 U	<0.042 U	**1.3**	<0.035 U	<0.044 U	**0.15**	**0.021 J**	**1.9**	**0.23**
Benzo(a)pyrene	50-32-8	1	1	**0.33**	<0.035 U	<0.042 U	**1.3**	<0.035 U	<0.044 U	**0.15**	<0.041 U	**1.3**	**0.22**
Benzo(b)fluoranthene	205-99-2	1	5.6	**0.36**	<0.035 U	<0.042 U	**1.4**	<0.035 U	<0.044 U	**0.17**	<0.041 U	**1.7**	**0.28**
Benzo(ghi)perylene	191-24-2	100	500	**0.15 J**	<0.35 U	<0.42 U	**0.93**	<0.35 U	<0.44 U	**0.12 J**	<0.41 U	**0.87**	**0.17 J**
Benzo(k)fluoranthene	207-08-9	0.8	56	**0.14**	<0.035 U	<0.042 U	**0.56**	<0.035 U	<0.044 U	**0.072**	<0.041 U	**0.57**	**0.10**
Chrysene	218-01-9	1	56	**0.31 J**	<0.35 U	<0.42 U	**1.3**	<0.35 U	<0.44 U	**0.15 J**	<0.41 U	**1.9**	**0.27 J**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	**0.042**	<0.035 U	<0.042 U	**0.19**	<0.035 U	<0.044 U	<0.037 U	<0.041 U	**0.23**	**0.042**
Fluoranthene	206-44-0	100	500	**0.44**	<0.35 U	<0.42 U	**2.0**	<0.35 U	<0.44 U	**0.23 J**	<0.41 U	**3.5**	**0.36 J**
Fluorene	86-73-7	30	500	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	**1.0**	<0.37 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	**0.19**	<0.035 U	<0.042 U	**1.0**	<0.035 U	<0.044 U	**0.11**	<0.041 U	**1.0**	**0.19**
Naphthalene	91-20-3	12	500	<0.36 U	<0.35 U	<0.42 U	**0.13 J**	<0.35 U	<0.44 U	<0.37 U	<0.41 U	**0.83**	<0.37 U
Phenanthrene	85-01-8	100	500	**0.14 J**	<0.35 U	<0.42 U	**0.54 J**	<0.35 U	<0.44 U	**0.12 J**	<0.41 U	**4.3**	**0.11 J**
Pyrene	129-00-0	100	500	**0.31 J**	<0.35 U	<0.42 U	**1.8**	<0.35 U	<0.44 U	**0.31 J**	<0.41 U	**3.6**	**0.40**
Total PAHs		NL	NL	***2.741***	*ND*	*ND*	***12.77***	*ND*	*ND*	***1.582***	***0.021***	***25.091***	***2.372***
Other Semi Volatile Organic Compounds (SVOC) (mg/Kg)													
1,2,4-Trichlorobenzene	120-82-1	NL	NL	<0.036 U	<0.035 U	<0.042 U	<0.072 U	<0.035 U	<0.044 U	<0.037 U	<0.041 U	<0.038 U	<0.037 U
1,2-Dichlorobenzene	95-50-1	1.1	500	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
1,3-Dichlorobenzene	541-73-1	2.4	280	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
1,4-Dichlorobenzene	106-46-7	1.8	130	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
2,4,5-Trichlorophenol	95-95-4	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
2,4,6-Trichlorophenol	88-06-2	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
2,4-Dichlorophenol	120-83-2	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
2,4-Dimethylphenol	105-67-9	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
2,4-Dinitrophenol	51-28-5	NL	NL	<1.1 U	<1.1 U	<1.3 U	<2.2 U	<1.1 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U
2,4-Dinitrotoluene	121-14-2	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.15 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U	<0.077 U	<0.075 U
2,6-Dinitrotoluene	606-20-2	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.15 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U	<0.077 U	<0.075 U
2-Chloronaphthalene	91-58-7	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
2-Chlorophenol	95-57-8	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
2-Methylphenol	95-48-7	0.33	500	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 UJ	<0.38 U	<0.37 U
2-Nitroaniline	88-74-4	NL	NL	<0.73 U	<0.71 U	<0.85 U	<1.5 U	<0.72 U	<0.89 U	<0.75 U	<0.83 U	<0.77 U	<0.75 U
2-Nitrophenol	88-75-5	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
3,3'-Dichlorobenzidine	91-94-1	NL	NL	<0.73 U	<0.71 U	<0.85 U	<1.5 U	<0.72 U	<0.89 U	<0.75 UJ	<0.83 U	<0.77 U	<0.75 U
3-Nitroaniline	99-09-2	NL	NL	<0.73 U	<0.71 U	<0.85 U	<1.5 U	<0.72 U	<0.89 U	<0.75 U	<0.83 U	<0.77 U	<0.75 U
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	<1.1 U	<1.1 U	<1.3 U	<2.2 U	<1.1 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U
4-Bromophenyl phenyl ether	101-55-3	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
4-Chloro-3-methylphenol	59-50-7	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
4-Chloroaniline	106-47-8	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
4-Methylphenol	106-44-5	0.33	500	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
4-Nitroaniline	100-01-6	NL	NL	<0.73 U	<0.71 U	<0.85 U	<1.5 U	<0.72 U	<0.89 U	<0.75 U	<0.83 U	<0.77 U	<0.75 U
4-Nitrophenol	100-02-7	NL	NL	<1.1 U	<1.1 U	<1.3 U	<2.2 U	<1.1 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
bis(2-Chloroethyl) ether	111-44-4	NL	NL	<0.036 U	<0.035 U	<0.042 U	<0.072 U	<0.035 U	<0.044 U	<0.037 U	<0.041 U	<0.038 U	<0.037 U
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	**0.26 J**	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
Butyl benzyl phthalate	85-68-7	NL	NL	**0.11 J**	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
Carbazole	86-74-8	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	**0.58**	<0.37 U
Dibenzofuran	132-64-9	7	350	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	**0.58**	<0.37 U
Diethyl phthalate	84-66-2	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
Dimethyl phthalate	131-11-3	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
Di-n-butyl phthalate	84-74-2	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
Di-n-octyl phthalate	117-84-0	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
Hexachlorobenzene	118-74-1	0.33	6	<0.036 U	<0.035 U	<0.042 U	<0.072 U	<0.035 U	<0.044 U	<0.037 U	<0.041 U	<0.038 U	<0.037 U
Hexachlorobutadiene	87-68-3	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.15 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U	<0.077 U	<0.075 U
Hexachlorocyclopentadiene	77-47-4	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 UJ	<0.38 U	<0.37 U
Hexachloroethane	67-72-1	NL	NL	<0.036 U	<0.035 U	<0.042 U	<0.072 U	<0.035 U	<0.044 U	<0.037 U	<0.041 U	<0.038 U	<0.037 U
Isophorone	78-59-1	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
Nitrobenzene	98-95-3	NL	69	<0.036 U	<0.035 U	<0.042 U	<0.072 U	<0.035 U	<0.044 U	<0.037 U	<0.041 U	<0.038 U	<0.037 U
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	<0.036 U	<0.035 U	<0.042 U	<0.072 U	<0.035 U	<0.044 U	<0.037 U	<0.041 UJ	<0.038 U	<0.037 U
N-Nitrosodiphenylamine	86-30-6	NL	NL	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
Pentachlorophenol	87-86-5	0.8	6.7	<1.1 U	<1.1 U	<1.3 U	<2.2 U	<1.1 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U
Phenol	108-95-2	0.33	500	<0.36 U	<0.35 U	<0.42 U	<0.72 U	<0.35 U	<0.44 U	<0.37 U	<0.41 U	<0.38 U	<0.37 U
Total SVOCs		NL	NL	***3.111***	*ND*	*ND*	***12.77***	*ND*	*ND*	***1.582***	***0.021***	***26.251***	***2.372***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-04	SB-04	SB-04	SB-05	SB-05	SB-05	SB-05	SB-06	SB-06	SB-06
Sample Date				2/27/2012	2/27/2012	2/27/2012	3/8/2012	3/9/2012	3/9/2012	3/9/2012	2/22/2012	2/22/2012	2/22/2012
Sample ID				SB-4 (5-8.5)022712	SB-4 (8.5-10)022712	SB-4 (10-13)022712	SB-5 (2.5-5)030812	DUP-3-030912	SB-5 (22-24)030912	SB-5 (37.5-40)030912	DUP-1-022212	SB-6 (1-3.5)022212	SB-6 (22-24)022212
Sample Interval (feet)				5-8.5	8.5-10	10-13	2.5-5	22-24	22-24	37.5-40	1-3.5	1-3.5	22-24
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)													
2-Methylnaphthalene	91-57-6	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Acenaphthene	83-32-9	20	500	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Acenaphthylene	208-96-8	100	500	<0.41 U	<0.33 U	<0.42 U	<0.34 U	**0.076 J**	<0.34 U	<0.36 U	<0.37 U	**0.4 J**	<0.35 U
Anthracene	120-12-7	100	500	**0.063 J**	<0.33 U	<0.42 U	**0.13 J**	**0.16 J**	<0.34 U	<0.36 U	<0.37 U	**0.93**	<0.35 U
Benzo(a)anthracene	56-55-3	1	5.6	**0.33**	**0.037**	**0.12**	**0.48**	**0.67**	<0.034 U	<0.036 U	<0.037 U	**6.0**	<0.035 U
Benzo(a)pyrene	50-32-8	1	1	**0.29**	**0.024 J**	**0.10**	**0.31**	**0.37**	<0.034 U	<0.036 U	<0.037 U	**6.0**	<0.035 U
Benzo(b)fluoranthene	205-99-2	1	5.6	**0.32**	**0.033**	**0.12**	**0.32**	**0.40**	<0.034 U	<0.036 U	<0.037 U	**5.8**	<0.035 U
Benzo(ghi)perylene	191-24-2	100	500	**0.18 J**	<0.33 U	**0.077 J**	**0.16 J**	**0.18 J**	<0.34 U	<0.36 U	<0.37 U	**3.5**	<0.35 U
Benzo(k)fluoranthene	207-08-9	0.8	56	**0.14**	**0.016 J**	**0.044**	**0.13**	**0.16**	<0.034 U	<0.036 U	<0.037 U	**2.8**	<0.035 U
Chrysene	218-01-9	1	56	**0.34 J**	<0.33 U	**0.13 J**	**0.46**	**0.56**	<0.34 U	<0.36 U	<0.37 U	**5.5**	<0.35 U
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	**0.035 J**	<0.033 U	<0.042 U	**0.063**	**0.077**	<0.034 U	<0.036 U	<0.037 U	**1.3**	<0.035 U
Fluoranthene	206-44-0	100	500	**0.54**	**0.056 J**	**0.16 J**	**0.67**	**0.81**	<0.34 U	<0.36 U	<0.37 U	**7.3**	<0.35 U
Fluorene	86-73-7	30	500	<0.41 U	<0.33 U	<0.42 U	**0.045 J**	**0.046 J**	<0.34 U	<0.36 U	<0.37 U	**0.12 J**	<0.35 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	**0.20**	**0.022 J**	**0.084**	**0.19**	**0.20**	<0.034 U	<0.036 U	<0.037 U	**4.1**	<0.035 U
Naphthalene	91-20-3	12	500	<0.41 U	**0.24 J**	**0.052 J**	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	**0.24 J**	<0.35 U
Phenanthrene	85-01-8	100	500	**0.28 J**	<0.33 U	**0.077 J**	**0.34**	**0.32 J**	<0.34 U	<0.36 U	<0.37 U	**1.5**	<0.35 U
Pyrene	129-00-0	100	500	**0.55**	**0.046 J**	**0.18 J**	**0.80**	**1.0**	**0.042 J**	<0.36 U	<0.37 U	**5.2**	<0.35 U
Total PAHs		NL	NL	***3.268***	***0.474***	***1.144***	***4.098***	***5.029***	***0.042***	*ND*	*ND*	***50.69***	*ND*
Other Semi Volatile Organic Compounds (SVOC) (mg/Kg)													
1,2,4-Trichlorobenzene	120-82-1	NL	NL	<0.041 U	<0.033 U	<0.042 U	<0.034 U	<0.036 U	<0.034 U	<0.036 U	<0.037 U	<0.073 U	<0.035 U
1,2-Dichlorobenzene	95-50-1	1.1	500	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
1,3-Dichlorobenzene	541-73-1	2.4	280	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
1,4-Dichlorobenzene	106-46-7	1.8	130	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
2,4,5-Trichlorophenol	95-95-4	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
2,4,6-Trichlorophenol	88-06-2	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
2,4-Dichlorophenol	120-83-2	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
2,4-Dimethylphenol	105-67-9	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
2,4-Dinitrophenol	51-28-5	NL	NL	<1.2 U	<1 U	<1.3 U	<1 U	<1.1 U	<1 U	R	<1.1 U	<2.2 U	<1 U
2,4-Dinitrotoluene	121-14-2	NL	NL	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U	<0.073 U	<0.075 U	<0.15 U	<0.07 U
2,6-Dinitrotoluene	606-20-2	NL	NL	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U	<0.073 U	<0.075 U	<0.15 U	<0.07 U
2-Chloronaphthalene	91-58-7	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
2-Chlorophenol	95-57-8	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
2-Methylphenol	95-48-7	0.33	500	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
2-Nitroaniline	88-74-4	NL	NL	<0.82 U	<0.67 U	<0.85 U	<0.69 U	<0.72 U	<0.69 U	<0.73 U	<0.75 U	<1.5 U	<0.7 U
2-Nitrophenol	88-75-5	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
3,3'-Dichlorobenzidine	91-94-1	NL	NL	<0.82 U	<0.67 U	<0.85 U	<0.69 U	<0.72 U	<0.69 U	<0.73 U	<0.75 U	<1.5 U	<0.7 U
3-Nitroaniline	99-09-2	NL	NL	<0.82 U	<0.67 U	<0.85 U	<0.69 U	<0.72 U	<0.69 U	<0.73 U	<0.75 U	<1.5 U	<0.7 U
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	<1.2 U	<1 U	<1.3 U	<1 U	<1.1 U	<1 U	<1.1 U	<1.1 U	<2.2 U	<1 U
4-Bromophenyl phenyl ether	101-55-3	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
4-Chloro-3-methylphenol	59-50-7	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
4-Chloroaniline	106-47-8	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
4-Methylphenol	106-44-5	0.33	500	<0.41 U	**1.8**	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
4-Nitroaniline	100-01-6	NL	NL	<0.82 U	<0.67 U	<0.85 U	<0.69 U	<0.72 U	<0.69 U	<0.73 U	<0.75 U	<1.5 U	<0.7 UJ
4-Nitrophenol	100-02-7	NL	NL	<1.2 U	<1 U	<1.3 U	<1 U	<1.1 U	<1 U	<1.1 U	<1.1 U	<2.2 U	<1 U
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
bis(2-Chloroethyl) ether	111-44-4	NL	NL	<0.041 U	<0.033 U	<0.042 U	<0.034 U	<0.036 U	<0.034 U	<0.036 U	<0.037 U	<0.073 U	<0.035 U
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Butyl benzyl phthalate	85-68-7	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Carbazole	86-74-8	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	**0.21 J**	<0.35 U
Dibenzofuran	132-64-9	7	350	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Diethyl phthalate	84-66-2	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Dimethyl phthalate	131-11-3	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Di-n-butyl phthalate	84-74-2	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Di-n-octyl phthalate	117-84-0	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Hexachlorobenzene	118-74-1	0.33	6	<0.041 U	<0.033 U	<0.042 U	<0.034 U	<0.036 U	<0.034 U	<0.036 U	<0.037 U	<0.073 U	<0.035 U
Hexachlorobutadiene	87-68-3	NL	NL	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U	<0.073 U	<0.075 U	<0.15 U	<0.07 U
Hexachlorocyclopentadiene	77-47-4	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Hexachloroethane	67-72-1	NL	NL	<0.041 U	<0.033 U	<0.042 U	<0.034 U	<0.036 U	<0.034 U	<0.036 U	<0.037 U	<0.073 U	<0.035 U
Isophorone	78-59-1	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Nitrobenzene	98-95-3	NL	69	<0.041 U	<0.033 U	<0.042 U	<0.034 U	<0.036 U	<0.034 U	<0.036 U	<0.037 U	<0.073 U	<0.035 U
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	<0.041 U	<0.033 U	<0.042 U	<0.034 U	<0.036 U	<0.034 U	<0.036 U	<0.037 U	<0.073 U	<0.035 U
N-Nitrosodiphenylamine	86-30-6	NL	NL	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Pentachlorophenol	87-86-5	0.8	6.7	<1.2 U	<1 U	<1.3 U	<1 U	<1.1 U	<1 U	<1.1 U	<1.1 U	<2.2 U	<1 U
Phenol	108-95-2	0.33	500	<0.41 U	<0.33 U	<0.42 U	<0.34 U	<0.36 U	<0.34 U	<0.36 U	<0.37 U	<0.73 U	<0.35 U
Total SVOCs		NL	NL	***3.268***	***2.274***	***1.144***	***4.098***	***5.029***	***0.042***	*ND*	*ND*	***50.9***	*ND*

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-06 2/22/2012 SB-6 (37.5-40)022212 37.5-40	SB-07 2/22/2012 SB-7 (0-2.5)-22212 0-2.5	SB-07 2/22/2012 SB-7 (21.5-24)022212 21.5-24	SB-07 2/22/2012 SB-7 (37.5-40)022212 37.5-40	SB-08 3/1/2012 SB-8 (2.5-5)030112 2.5-5	SB-08 3/1/2012 SB-8 (15-17)030112 15-17	SB-08 3/1/2012 SB-8 (20-25)030112 20-25	SB-08 3/1/2012 SB-8 (42.5-45)030112 42.5-45	SB-09 2/23/2012 SB-9 (2.5-5)022312 2.5-5	SB-09 2/23/2012 SB-9 (10-13.5)022312 10-13.5
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)													
2-Methylnaphthalene	91-57-6	NL	NL	<0.36 U	**0.05 J**	<0.34 U	<0.36 U	<0.41 U	**0.076 J**	<0.35 U	<0.41 U	**0.073 J**	**69**
Acenaphthene	83-32-9	20	500	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	**0.16 J**	<0.35 U	<0.41 U	**0.068 J**	**36**
Acenaphthylene	208-96-8	100	500	<0.36 U	**0.15 J**	<0.34 U	<0.36 U	**0.048 J**	**0.12 J**	<0.35 U	<0.41 U	**0.26 J**	**83**
Anthracene	120-12-7	100	500	<0.36 U	**0.25 J**	<0.34 U	<0.36 U	**0.14 J**	**0.30 J**	<0.35 U	<0.41 U	**0.36**	**30**
Benzo(a)anthracene	56-55-3	1	5.6	<0.036 U	**1.1**	<0.034 U	<0.036 U	**0.76**	**0.76**	<0.035 U	<0.041 U	**1.6**	**19**
Benzo(a)pyrene	50-32-8	1	1	<0.036 U	**1.0**	<0.034 U	<0.036 U	**0.67**	**0.74**	<0.035 U	<0.041 U	**1.8**	**24**
Benzo(b)fluoranthene	205-99-2	1	5.6	<0.036 U	**1.1**	<0.034 U	<0.036 U	**0.75**	**0.77**	<0.035 U	<0.041 U	**1.9**	**17**
Benzo(ghi)perylene	191-24-2	100	500	<0.36 U	**0.44**	<0.34 U	<0.36 U	**0.38 J**	**0.47**	<0.35 U	<0.41 U	**1.2**	**25**
Benzo(k)fluoranthene	207-08-9	0.8	56	<0.036 U	**0.44**	<0.034 U	<0.036 U	**0.31**	**0.29**	<0.035 U	<0.041 U	**0.69**	**6.6**
Chrysene	218-01-9	1	56	<0.36 U	**1.1**	<0.34 U	<0.36 U	**0.70**	**0.77**	<0.35 U	<0.41 U	**1.5**	**19**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	<0.036 U	**0.16**	<0.034 U	<0.036 U	**0.084**	**0.11**	<0.035 U	<0.041 U	**0.31**	**2**
Fluoranthene	206-44-0	100	500	<0.36 U	**2.0**	<0.34 U	<0.36 U	**1.1**	**1.4**	<0.35 U	<0.41 U	**2.2**	**60**
Fluorene	86-73-7	30	500	<0.36 U	**0.079 J**	<0.34 U	<0.36 U	<0.41 U	**0.25 J**	<0.35 U	<0.41 U	**0.13 J**	**58**
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	<0.036 U	**0.53**	<0.034 U	<0.036 U	**0.48**	**0.51**	<0.035 U	<0.041 U	**1.2**	**18**
Naphthalene	91-20-3	12	500	<0.36 U	**0.10 J**	<0.34 U	<0.36 U	**0.072 J**	**0.32 J**	<0.35 U	<0.41 U	**0.12 J**	**190**
Phenanthrene	85-01-8	100	500	<0.36 U	**0.87**	<0.34 U	<0.36 U	**0.48**	**1.2**	<0.35 U	<0.41 U	**1.6**	**130**
Pyrene	129-00-0	100	500	<0.36 U	**1.3**	<0.34 U	<0.36 U	**1.1**	**1.3**	<0.35 U	<0.41 U	**2.6**	**98**
Total PAHs		NL	NL	*ND*	***10.669***	*ND*	*ND*	***7.074***	***9.546***	*ND*	*ND*	***17.611***	***884.6***
Other Semi Volatile Organic Compounds (SVOC) (mg/Kg)													
1,2,4-Trichlorobenzene	120-82-1	NL	NL	<0.036 U	<0.036 U	<0.034 U	<0.036 U	<0.041 U	<0.038 U	<0.035 U	<0.041 U	<0.036 U	<0.98 U
1,2-Dichlorobenzene	95-50-1	1.1	500	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
1,3-Dichlorobenzene	541-73-1	2.4	280	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
1,4-Dichlorobenzene	106-46-7	1.8	130	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
2,4,5-Trichlorophenol	95-95-4	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
2,4,6-Trichlorophenol	88-06-2	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
2,4-Dichlorophenol	120-83-2	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
2,4-Dimethylphenol	105-67-9	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
2,4-Dinitrophenol	51-28-5	NL	NL	<1.1 U	<1.1 U	R	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.3 U	<1.1 U	<30 U
2,4-Dinitrotoluene	121-14-2	NL	NL	<0.073 U	<0.074 U	<0.069 U	<0.073 U	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<2 U
2,6-Dinitrotoluene	606-20-2	NL	NL	<0.073 U	<0.074 U	<0.069 U	<0.073 U	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<2 U
2-Chloronaphthalene	91-58-7	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
2-Chlorophenol	95-57-8	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
2-Methylphenol	95-48-7	0.33	500	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
2-Nitroaniline	88-74-4	NL	NL	<0.73 U	<0.74 U	<0.69 U	<0.73 U	<0.82 U	<0.78 U	<0.72 U	<0.84 U	<0.73 U	<20 U
2-Nitrophenol	88-75-5	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
3,3'-Dichlorobenzidine	91-94-1	NL	NL	<0.73 U	<0.74 U	<0.69 U	<0.73 U	<0.82 U	<0.78 U	<0.72 U	<0.84 U	<0.73 U	<20 UJ
3-Nitroaniline	99-09-2	NL	NL	<0.73 U	<0.74 U	<0.69 U	<0.73 U	<0.82 U	<0.78 U	<0.72 U	<0.84 U	<0.73 U	<20 U
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	<1.1 U	<1.1 U	<1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.3 U	<1.1 U	<30 U
4-Bromophenyl phenyl ether	101-55-3	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
4-Chloro-3-methylphenol	59-50-7	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
4-Chloroaniline	106-47-8	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
4-Methylphenol	106-44-5	0.33	500	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
4-Nitroaniline	100-01-6	NL	NL	<0.73 U	<0.74 U	<0.69 U	<0.73 UJ	<0.82 U	<0.78 U	<0.72 U	<0.84 U	<0.73 U	<20 U
4-Nitrophenol	100-02-7	NL	NL	<1.1 U	<1.1 U	<1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.3 U	<1.1 U	<30 U
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
bis(2-Chloroethyl) ether	111-44-4	NL	NL	<0.036 U	<0.036 U	<0.034 U	<0.036 U	<0.041 U	<0.038 U	<0.035 U	<0.041 U	<0.036 U	<0.98 U
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Butyl benzyl phthalate	85-68-7	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Carbazole	86-74-8	NL	NL	<0.36 U	**0.076 J**	<0.34 U	<0.36 U	<0.41 U	**0.08 J**	<0.35 U	<0.41 U	**0.085 J**	<9.8 U
Dibenzofuran	132-64-9	7	350	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	**0.1 J**	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Diethyl phthalate	84-66-2	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Dimethyl phthalate	131-11-3	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Di-n-butyl phthalate	84-74-2	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Di-n-octyl phthalate	117-84-0	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Hexachlorobenzene	118-74-1	0.33	6	<0.036 U	<0.036 U	<0.034 U	<0.036 U	<0.041 U	<0.038 U	<0.035 U	<0.041 U	<0.036 U	<0.98 U
Hexachlorobutadiene	87-68-3	NL	NL	<0.073 U	<0.074 U	<0.069 U	<0.073 U	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<2 U
Hexachlorocyclopentadiene	77-47-4	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Hexachloroethane	67-72-1	NL	NL	<0.036 U	<0.036 U	<0.034 U	<0.036 U	<0.041 U	<0.038 U	<0.035 U	<0.041 U	<0.036 U	<0.98 U
Isophorone	78-59-1	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Nitrobenzene	98-95-3	NL	69	<0.036 U	<0.036 U	<0.034 U	<0.036 U	<0.041 U	<0.038 U	<0.035 U	<0.041 U	<0.036 U	<0.98 U
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	<0.036 U	<0.036 U	<0.034 U	<0.036 U	<0.041 U	<0.038 U	<0.035 U	<0.041 U	<0.036 U	<0.98 U
N-Nitrosodiphenylamine	86-30-6	NL	NL	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Pentachlorophenol	87-86-5	0.8	6.7	<1.1 U	<1.1 U	<1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.3 U	<1.1 U	<30 U
Phenol	108-95-2	0.33	500	<0.36 U	<0.36 U	<0.34 U	<0.36 U	<0.41 U	<0.38 U	<0.35 U	<0.41 U	<0.36 U	<9.8 U
Total SVOCs		NL	NL	*ND*	***10.745***	*ND*	*ND*	***7.074***	***9.726***	*ND*	*ND*	***17.696***	***884.6***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-09 2/23/2012 SB-9 (37.5-40)022312 37.5-40	SB-10 2/23/2012 SB-10 (1-2.5)022312 1-2.5	SB-10 2/23/2012 SB-10 (12.5-15)022312 12.5-15	SB-10 2/23/2012 SB-10 (26-27.5)022312 26-27.5	SB-10 2/23/2012 SB-10 (37.5-40)022312 37.5-40	SB-11 2/28/2012 SB-11 (0-2.5)022812 0-2.5	SB-11 2/28/2012 SB-11 (25-27)022812 25-27	SB-11 2/28/2012 SB-11 (35-40)022812 35-40	SB-12 2/28/2012 SB-12 (2.5-5)022812 2.5-5	SB-12 2/28/2012 SB-12 (5-7.5)022812 5-7.5
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)													
2-Methylnaphthalene	91-57-6	NL	NL	<0.39 U	<0.35 U	**41**	**1.2**	<0.36 U	<0.34 U	**0.043 J**	<0.35 U	**0.46 J**	**2 J**
Acenaphthene	83-32-9	20	500	<0.39 U	<0.35 U	**13**	**0.42 J**	<0.36 U	<0.34 U	<0.33 U	<0.35 U	**1.4 J**	**2.5 J**
Acenaphthylene	208-96-8	100	500	<0.39 U	<0.35 U	**36**	**1.5**	<0.36 U	**0.22 J**	**0.24 J**	<0.35 U	**2.3**	**12**
Anthracene	120-12-7	100	500	<0.39 U	<0.35 U	**63**	**2.0**	<0.36 U	**0.19 J**	**0.14 J**	<0.35 U	**7.5**	**28**
Benzo(a)anthracene	56-55-3	1	5.6	<0.039 U	**0.17**	**82**	**3.4**	<0.036 U	**0.58**	**0.35**	**0.045**	**24**	**69**
Benzo(a)pyrene	50-32-8	1	1	<0.039 U	**0.17**	**37**	**1.8**	<0.036 U	**0.81**	**0.56 J**	**0.055**	**18**	**37**
Benzo(b)fluoranthene	205-99-2	1	5.6	<0.039 U	**0.2**	**47**	**1.9**	<0.036 U	**0.78**	**0.47 J**	**0.051**	**19**	**41**
Benzo(ghi)perylene	191-24-2	100	500	<0.39 U	**0.075 J**	**8.6**	**1.0**	<0.36 U	**0.75**	**0.53 J**	**0.052 J**	**11**	**8.6**
Benzo(k)fluoranthene	207-08-9	0.8	56	<0.039 U	**0.087**	**17**	**0.56**	<0.036 U	**0.33**	**0.16**	**0.018 J**	**8.4**	**22**
Chrysene	218-01-9	1	56	<0.39 U	**0.17 J**	**71**	**3.4**	<0.36 U	**0.65**	**0.39**	**0.05 J**	**21**	**54**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	<0.039 U	<0.035 U	**5.2**	**0.47**	<0.036 U	**0.08**	**0.054**	<0.035 U	**3.4**	**5.1**
Fluoranthene	206-44-0	100	500	<0.39 U	**0.21 J**	**110**	**4.4**	<0.36 U	**1.6**	**1.4 J**	**0.14 J**	**37**	**100**
Fluorene	86-73-7	30	500	<0.39 U	<0.35 U	**61**	**2.8**	<0.36 U	**0.091 J**	**0.16 J**	<0.35 U	**2.3**	**12**
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	<0.039 U	**0.082**	**11**	**1.0**	<0.036 U	**0.61**	**0.41**	**0.032 J**	**13**	**13**
Naphthalene	91-20-3	12	500	<0.39 U	<0.35 U	**27**	**0.47 J**	<0.36 U	**0.071 J**	**0.063 J**	<0.35 U	**0.73 J**	**1.8 J**
Phenanthrene	85-01-8	100	500	<0.39 U	**0.093 J**	**140**	**6.2**	<0.36 U	**1.0**	**1.6**	**0.14 J**	**24**	**47**
Pyrene	129-00-0	100	500	<0.39 U	**0.17 J**	**85**	**3.6**	<0.36 U	**1.9**	**1.8 J**	**0.19 J**	**35**	**73**
Total PAHs		NL	NL	*ND*	***1.427***	***854.8***	***36.12***	*ND*	***9.662***	***8.37***	***0.773***	***228.49***	***528***
Other Semi Volatile Organic Compounds (SVOC) (mg/Kg)													
1,2,4-Trichlorobenzene	120-82-1	NL	NL	<0.039 U	<0.035 U	<0.74 U	<0.074 U	<0.036 U	<0.034 U	<0.033 U	<0.035 U	<0.19 U	<0.72 U
1,2-Dichlorobenzene	95-50-1	1.1	500	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
1,3-Dichlorobenzene	541-73-1	2.4	280	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
1,4-Dichlorobenzene	106-46-7	1.8	130	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
2,4,5-Trichlorophenol	95-95-4	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
2,4,6-Trichlorophenol	88-06-2	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
2,4-Dichlorophenol	120-83-2	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
2,4-Dimethylphenol	105-67-9	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
2,4-Dinitrophenol	51-28-5	NL	NL	<1.2 U	<1.1 U	<22 U	<2.3 U	<1.1 U	<1 U	R	<1.1 U	<5.7 U	<22 U
2,4-Dinitrotoluene	121-14-2	NL	NL	<0.08 U	<0.071 U	<1.5 U	<0.15 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.38 U	<1.5 U
2,6-Dinitrotoluene	606-20-2	NL	NL	<0.08 U	<0.071 U	<1.5 U	<0.15 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.38 U	<1.5 U
2-Chloronaphthalene	91-58-7	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
2-Chlorophenol	95-57-8	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
2-Methylphenol	95-48-7	0.33	500	<0.39 UJ	<0.35 U	<7.4 U	<0.74 U	<0.36 UJ	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
2-Nitroaniline	88-74-4	NL	NL	<0.8 U	<0.71 U	<15 U	<1.5 U	<0.74 U	<0.69 U	<0.68 U	<0.71 U	<3.8 U	<15 U
2-Nitrophenol	88-75-5	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
3,3'-Dichlorobenzidine	91-94-1	NL	NL	<0.8 U	<0.71 U	<15 UJ	<1.5 U	<0.74 U	<0.69 U	<0.68 U	<0.71 U	<3.8 UJ	<15 UJ
3-Nitroaniline	99-09-2	NL	NL	<0.8 U	<0.71 U	<15 U	<1.5 U	<0.74 U	<0.69 U	<0.68 U	<0.71 U	<3.8 U	<15 U
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	<1.2 U	<1.1 U	<22 U	<2.3 U	<1.1 U	<1 U	<1 U	<1.1 U	<5.7 U	<22 U
4-Bromophenyl phenyl ether	101-55-3	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
4-Chloro-3-methylphenol	59-50-7	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
4-Chloroaniline	106-47-8	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
4-Methylphenol	106-44-5	0.33	500	<0.39 U	<0.35 U	**2.2 J**	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	**2 J**
4-Nitroaniline	100-01-6	NL	NL	<0.8 U	<0.71 U	<15 U	<1.5 U	<0.74 U	<0.69 U	<0.68 U	<0.71 U	<3.8 U	<15 U
4-Nitrophenol	100-02-7	NL	NL	<1.2 U	<1.1 U	<22 U	<2.3 U	<1.1 U	<1 U	<1 U	<1.1 U	<5.7 U	<22 U
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
bis(2-Chloroethyl) ether	111-44-4	NL	NL	<0.039 U	<0.035 U	<0.74 U	<0.074 U	<0.036 U	<0.034 U	<0.033 U	<0.035 U	<0.19 U	<0.72 U
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	**0.6**	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
Butyl benzyl phthalate	85-68-7	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
Carbazole	86-74-8	NL	NL	<0.39 U	<0.35 U	**20**	**0.88**	<0.36 U	<0.34 U	<0.33 U	<0.35 U	**1.6 J**	**2.6 J**
Dibenzofuran	132-64-9	7	350	<0.39 U	<0.35 U	**30**	**1.3**	<0.36 U	<0.34 U	<0.33 U	<0.35 U	**1.3 J**	**4.7 J**
Diethyl phthalate	84-66-2	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
Dimethyl phthalate	131-11-3	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
Di-n-butyl phthalate	84-74-2	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
Di-n-octyl phthalate	117-84-0	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
Hexachlorobenzene	118-74-1	0.33	6	<0.039 U	<0.035 U	<0.74 U	<0.074 U	<0.036 U	<0.034 U	<0.033 U	<0.035 U	<0.19 U	<0.72 U
Hexachlorobutadiene	87-68-3	NL	NL	<0.08 U	<0.071 U	<1.5 U	<0.15 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.38 U	<1.5 U
Hexachlorocyclopentadiene	77-47-4	NL	NL	<0.39 UJ	<0.35 U	<7.4 U	<0.74 U	<0.36 UJ	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
Hexachloroethane	67-72-1	NL	NL	<0.039 U	<0.035 U	<0.74 U	<0.074 U	<0.036 U	<0.034 U	<0.033 U	<0.035 U	<0.19 U	<0.72 U
Isophorone	78-59-1	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
Nitrobenzene	98-95-3	NL	69	<0.039 U	<0.035 U	<0.74 U	<0.074 U	<0.036 U	<0.034 U	<0.033 U	<0.035 U	<0.19 U	<0.72 U
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	<0.039 UJ	<0.035 U	<0.74 U	<0.074 U	<0.036 UJ	<0.034 U	<0.033 U	<0.035 U	<0.19 U	<0.72 U
N-Nitrosodiphenylamine	86-30-6	NL	NL	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	<7.2 U
Pentachlorophenol	87-86-5	0.8	6.7	<1.2 U	<1.1 U	<22 U	<2.3 U	<1.1 U	<1 U	<1 U	<1.1 U	<5.7 U	<22 U
Phenol	108-95-2	0.33	500	<0.39 U	<0.35 U	<7.4 U	<0.74 U	<0.36 U	<0.34 U	<0.33 U	<0.35 U	<1.9 U	**1.4 J**
Total SVOCs		NL	NL	***0.6***	***1.427***	***907***	***38.3***	*ND*	***9.662***	***8.37***	***0.773***	***231.39***	***538.7***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-12 2/28/2012 SB-12 (10-12.5)022812 10-12.5	SB-12 2/28/2012 SB-12 (37.5-40)022812 37.5-40	SB-13 2/28/2012 SB-13 (2.5-5)022812 2.5-5	SB-13 2/29/2012 SB-13 (22.5-24.5)022912 22.5-24.5	SB-13 2/29/2012 SB-13 (37.5-40)022912 37.5-40	SB-14 2/27/2012 DUP-2-022712 2-5	SB-14 2/27/2012 SB-14 (2-5)022712 2-5	SB-14 2/27/2012 SB-14 (25-26.5)022712 25-26.5	SB-14 2/27/2012 SB-14 (37.5-40)022712 37.5-40	SB-15 2/28/2012 SB-15 (2.5-5)022812 2.5-5
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)													
2-Methylnaphthalene	91-57-6	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	**0.17 J**	**0.17 J**	<0.35 U	<0.37 U	<0.38 U
Acenaphthene	83-32-9	20	500	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	**0.13 J**	**0.15 J**	<0.35 U	<0.37 U	<0.38 U
Acenaphthylene	208-96-8	100	500	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	**0.15 J**	**0.076 J**	<0.35 U	<0.37 U	<0.38 U
Anthracene	120-12-7	100	500	**0.057 J**	<0.36 U	<0.35 U	<0.35 U	<0.38 U	**0.56**	**0.46**	**0.10 J**	<0.37 U	<0.38 U
Benzo(a)anthracene	56-55-3	1	5.6	**0.21**	<0.036 U	**0.064**	<0.035 U	<0.038 U	**3.1**	**2.7**	**0.36**	<0.037 U	**0.31**
Benzo(a)pyrene	50-32-8	1	1	**0.12**	<0.036 U	**0.051**	<0.035 U	<0.038 U	**2.8**	**2.3**	**0.33**	<0.037 U	**0.32**
Benzo(b)fluoranthene	205-99-2	1	5.6	**0.17**	<0.036 U	**0.054**	<0.035 U	<0.038 U	**2.5**	**2.1**	**0.3**	<0.037 U	**0.33**
Benzo(ghi)perylene	191-24-2	100	500	<0.35 U	<0.36 U	**0.03 J**	<0.35 U	<0.38 U	**0.79**	**1.0**	**0.23 J**	<0.37 U	**0.21 J**
Benzo(k)fluoranthene	207-08-9	0.8	56	**0.05**	<0.036 U	**0.022 J**	<0.035 U	<0.038 U	**0.83**	**0.61**	**0.11**	<0.037 U	**0.15**
Chrysene	218-01-9	1	56	**0.2 J**	<0.36 U	**0.064 J**	<0.35 U	<0.38 U	**2.9**	**2.6**	**0.34 J**	<0.37 U	**0.30 J**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	<0.035 U	<0.036 U	<0.035 U	<0.035 U	<0.038 U	**0.38**	**0.41**	**0.079**	<0.037 U	**0.072**
Fluoranthene	206-44-0	100	500	**0.39**	<0.36 U	**0.085 J**	<0.35 U	<0.38 U	**1.6**	**1.3**	**0.35**	<0.37 U	**0.40**
Fluorene	86-73-7	30	500	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	**0.20 J**	**0.17 J**	<0.35 U	<0.37 U	<0.38 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	<0.035 U	<0.036 U	**0.031 J**	<0.035 U	<0.038 U	**0.84**	**1.0**	**0.22**	<0.037 U	**0.24**
Naphthalene	91-20-3	12	500	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	**0.11 J**	**0.10 J**	<0.35 U	<0.37 U	<0.38 U
Phenanthrene	85-01-8	100	500	**0.12 J**	<0.36 U	<0.35 U	<0.35 U	<0.38 U	**1.2**	**0.99**	**0.34 J**	<0.37 U	**0.14 J**
Pyrene	129-00-0	100	500	**0.29 J**	<0.36 U	**0.091 J**	<0.35 U	<0.38 U	**1.7**	**1.7**	**0.47**	<0.37 U	**0.36 J**
Total PAHs		NL	NL	***1.607***	*ND*	***0.492***	*ND*	*ND*	***19.96***	***17.836***	***3.229***	*ND*	***2.832***
Other Semi Volatile Organic Compounds (SVOC) (mg/Kg)													
1,2,4-Trichlorobenzene	120-82-1	NL	NL	<0.035 U	<0.036 U	<0.035 U	<0.035 U	<0.038 U	<0.037 U	<0.037 U	<0.035 U	<0.037 U	<0.038 U
1,2-Dichlorobenzene	95-50-1	1.1	500	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
1,3-Dichlorobenzene	541-73-1	2.4	280	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
1,4-Dichlorobenzene	106-46-7	1.8	130	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
2,4,5-Trichlorophenol	95-95-4	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
2,4,6-Trichlorophenol	88-06-2	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
2,4-Dichlorophenol	120-83-2	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
2,4-Dimethylphenol	105-67-9	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
2,4-Dinitrophenol	51-28-5	NL	NL	<1 U	<1.1 U	<1.1 U	R	<1.1 U	<1.1 U	<1.1 U	<1.1 U	R	<1.1 U
2,4-Dinitrotoluene	121-14-2	NL	NL	<0.07 U	<0.073 U	<0.07 U	<0.07 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U	<0.075 U	<0.077 U
2,6-Dinitrotoluene	606-20-2	NL	NL	<0.07 U	<0.073 U	<0.07 U	<0.07 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U	<0.075 U	<0.077 U
2-Chloronaphthalene	91-58-7	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
2-Chlorophenol	95-57-8	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
2-Methylphenol	95-48-7	0.33	500	<0.35 U	<0.36 U	<0.35 UJ	<0.35 UJ	<0.38 UJ	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
2-Nitroaniline	88-74-4	NL	NL	<0.7 U	<0.73 U	<0.7 U	<0.7 U	<0.76 U	<0.75 U	<0.76 U	<0.72 U	<0.75 U	<0.77 U
2-Nitrophenol	88-75-5	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
3,3'-Dichlorobenzidine	91-94-1	NL	NL	<0.7 U	<0.73 U	<0.7 U	<0.7 U	<0.76 U	<0.75 UJ	<0.76 UJ	<0.72 U	<0.75 U	<0.77 U
3-Nitroaniline	99-09-2	NL	NL	<0.7 U	<0.73 U	<0.7 U	<0.7 U	<0.76 U	<0.75 U	<0.76 U	<0.72 U	<0.75 U	<0.77 U
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	<1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
4-Bromophenyl phenyl ether	101-55-3	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
4-Chloro-3-methylphenol	59-50-7	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
4-Chloroaniline	106-47-8	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
4-Methylphenol	106-44-5	0.33	500	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
4-Nitroaniline	100-01-6	NL	NL	<0.7 U	<0.73 U	<0.7 U	<0.7 U	<0.76 U	<0.75 U	<0.76 U	<0.72 U	<0.75 U	<0.77 U
4-Nitrophenol	100-02-7	NL	NL	<1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
bis(2-Chloroethyl) ether	111-44-4	NL	NL	<0.035 U	<0.036 U	<0.035 U	<0.035 U	<0.038 U	<0.037 U	<0.037 U	<0.035 U	<0.037 U	<0.038 U
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	**0.13 J**
Butyl benzyl phthalate	85-68-7	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	**0.093 J**
Carbazole	86-74-8	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	**0.24 J**	**0.22 J**	<0.35 U	<0.37 U	<0.38 U
Dibenzofuran	132-64-9	7	350	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	**0.14 J**	**0.12 J**	<0.35 U	<0.37 U	<0.38 U
Diethyl phthalate	84-66-2	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
Dimethyl phthalate	131-11-3	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
Di-n-butyl phthalate	84-74-2	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
Di-n-octyl phthalate	117-84-0	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
Hexachlorobenzene	118-74-1	0.33	6	<0.035 U	<0.036 U	<0.035 U	<0.035 U	<0.038 U	<0.037 U	<0.037 U	<0.035 U	<0.037 U	<0.038 U
Hexachlorobutadiene	87-68-3	NL	NL	<0.07 U	<0.073 U	<0.07 U	<0.07 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U	<0.075 U	<0.077 U
Hexachlorocyclopentadiene	77-47-4	NL	NL	<0.35 U	<0.36 U	<0.35 UJ	<0.35 UJ	<0.38 UJ	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
Hexachloroethane	67-72-1	NL	NL	<0.035 U	<0.036 U	<0.035 U	<0.035 U	<0.038 U	<0.037 U	<0.037 U	<0.035 U	<0.037 U	<0.038 U
Isophorone	78-59-1	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
Nitrobenzene	98-95-3	NL	69	<0.035 U	<0.036 U	<0.035 U	<0.035 U	<0.038 U	<0.037 U	<0.037 U	<0.035 U	<0.037 U	<0.038 U
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	<0.035 U	<0.036 U	<0.035 UJ	<0.035 UJ	<0.038 UJ	<0.037 U	<0.037 U	<0.035 U	<0.037 U	<0.038 U
N-Nitrosodiphenylamine	86-30-6	NL	NL	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
Pentachlorophenol	87-86-5	0.8	6.7	<1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
Phenol	108-95-2	0.33	500	<0.35 U	<0.36 U	<0.35 U	<0.35 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U
Total SVOCs		NL	NL	***1.607***	*ND*	***0.492***	*ND*	*ND*	***20.34***	***18.176***	***3.229***	*ND*	***3.055***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-15 3/8/2012 SB-15 (25-27.5)030812 25-27.5	SB-15 3/9/2012 SB-15 (37.5-40)030912 37.5-40
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)					
2-Methylnaphthalene	91-57-6	NL	NL	<0.34 U	<0.38 U
Acenaphthene	83-32-9	20	500	<0.34 U	<0.38 U
Acenaphthylene	208-96-8	100	500	<0.34 U	<0.38 U
Anthracene	120-12-7	100	500	<0.34 U	<0.38 U
Benzo(a)anthracene	56-55-3	1	5.6	<0.034 U	<0.038 U
Benzo(a)pyrene	50-32-8	1	1	<0.034 U	<0.038 U
Benzo(b)fluoranthene	205-99-2	1	5.6	<0.034 U	<0.038 U
Benzo(ghi)perylene	191-24-2	100	500	<0.34 U	<0.38 U
Benzo(k)fluoranthene	207-08-9	0.8	56	<0.034 U	<0.038 U
Chrysene	218-01-9	1	56	<0.34 U	<0.38 U
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	<0.034 U	<0.038 U
Fluoranthene	206-44-0	100	500	<0.34 U	<0.38 U
Fluorene	86-73-7	30	500	<0.34 U	<0.38 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	<0.034 U	<0.038 U
Naphthalene	91-20-3	12	500	<0.34 U	<0.38 U
Phenanthrene	85-01-8	100	500	<0.34 U	<0.38 U
Pyrene	129-00-0	100	500	<0.34 U	**0.04 J**
Total PAHs		NL	NL	*ND*	***0.04***
Other Semi Volatile Organic Compounds (SVOC) (mg/Kg)					
1,2,4-Trichlorobenzene	120-82-1	NL	NL	<0.034 U	<0.038 U
1,2-Dichlorobenzene	95-50-1	1.1	500	<0.34 U	<0.38 U
1,3-Dichlorobenzene	541-73-1	2.4	280	<0.34 U	<0.38 U
1,4-Dichlorobenzene	106-46-7	1.8	130	<0.34 U	<0.38 U
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	<0.34 U	<0.38 U
2,4,5-Trichlorophenol	95-95-4	NL	NL	<0.34 U	<0.38 U
2,4,6-Trichlorophenol	88-06-2	NL	NL	<0.34 U	<0.38 U
2,4-Dichlorophenol	120-83-2	NL	NL	<0.34 U	<0.38 U
2,4-Dimethylphenol	105-67-9	NL	NL	<0.34 U	<0.38 U
2,4-Dinitrophenol	51-28-5	NL	NL	<1 U	<1.1 U
2,4-Dinitrotoluene	121-14-2	NL	NL	<0.07 U	<0.076 U
2,6-Dinitrotoluene	606-20-2	NL	NL	<0.07 U	<0.076 U
2-Chloronaphthalene	91-58-7	NL	NL	<0.34 U	<0.38 U
2-Chlorophenol	95-57-8	NL	NL	<0.34 U	<0.38 U
2-Methylphenol	95-48-7	0.33	500	<0.34 U	<0.38 U
2-Nitroaniline	88-74-4	NL	NL	<0.7 U	<0.76 U
2-Nitrophenol	88-75-5	NL	NL	<0.34 U	<0.38 U
3,3'-Dichlorobenzidine	91-94-1	NL	NL	<0.7 U	<0.76 U
3-Nitroaniline	99-09-2	NL	NL	<0.7 U	<0.76 U
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	<1 U	<1.1 U
4-Bromophenyl phenyl ether	101-55-3	NL	NL	<0.34 U	<0.38 U
4-Chloro-3-methylphenol	59-50-7	NL	NL	<0.34 U	<0.38 U
4-Chloroaniline	106-47-8	NL	NL	<0.34 U	<0.38 U
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	<0.34 U	<0.38 U
4-Methylphenol	106-44-5	0.33	500	<0.34 U	<0.38 U
4-Nitroaniline	100-01-6	NL	NL	<0.7 U	<0.76 U
4-Nitrophenol	100-02-7	NL	NL	<1 U	<1.1 U
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	<0.34 U	<0.38 U
bis(2-Chloroethyl) ether	111-44-4	NL	NL	<0.034 U	<0.038 U
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	<0.34 U	<0.38 U
Butyl benzyl phthalate	85-68-7	NL	NL	<0.34 U	<0.38 U
Carbazole	86-74-8	NL	NL	<0.34 U	<0.38 U
Dibenzofuran	132-64-9	7	350	<0.34 U	<0.38 U
Diethyl phthalate	84-66-2	NL	NL	<0.34 U	<0.38 U
Dimethyl phthalate	131-11-3	NL	NL	<0.34 U	<0.38 U
Di-n-butyl phthalate	84-74-2	NL	NL	<0.34 U	<0.38 U
Di-n-octyl phthalate	117-84-0	NL	NL	<0.34 U	<0.38 U
Hexachlorobenzene	118-74-1	0.33	6	<0.034 U	<0.038 U
Hexachlorobutadiene	87-68-3	NL	NL	<0.07 U	<0.076 U
Hexachlorocyclopentadiene	77-47-4	NL	NL	<0.34 U	<0.38 U
Hexachloroethane	67-72-1	NL	NL	<0.034 U	<0.038 U
Isophorone	78-59-1	NL	NL	<0.34 U	<0.38 U
Nitrobenzene	98-95-3	NL	69	<0.034 U	<0.038 U
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	<0.034 U	<0.038 U
N-Nitrosodiphenylamine	86-30-6	NL	NL	<0.34 U	<0.38 U
Pentachlorophenol	87-86-5	0.8	6.7	<1 U	<1.1 U
Phenol	108-95-2	0.33	500	<0.34 U	<0.38 U
Total SVOCs		NL	NL	*ND*	***0.04***

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location / Sample Date / Sample ID / Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-01 3/5/2012 SB-1 (2.5-5)030512 2.5-5	SB-01 3/5/2012 SB-1(17-19)030512 17-19	SB-01 3/5/2012 SB-1 (37.5-40)030512 37.5-40	SB-02 3/6/2012 SB-2 (0-2.5)030612 0-2.5	SB-02 3/6/2012 SB-2 (17.5-20)030612 17.5-20	SB-02 3/6/2012 SB-2 (37.5-40)030612 37.5-40	SB-03 2/27/2012 SB-3 (2.5-5)022712 2.5-5	SB-03 2/27/2012 SB-3 (5-10)022712 5-10
Inorganic Compounds (mg/Kg)											
Aluminum	7429-90-5	NL	NL	**5720**	**2400**	**1430**	**3840**	**4930**	**1690**	**7300**	**5420**
Antimony	7440-36-0	NL	NL	<2.0 U	<2.1 U	<2.4 U	**1.6 J**	<2.0 U	<2.6 U	<2.0 UJ	<2.2 U
Arsenic	7440-38-2	13	16	**3.0**	**0.97 J**	**1.2**	**5.2**	**2.0**	<1.3 U	**3.9**	**1.8**
Barium	7440-39-3	350	400	**62.2**	**18.1 J**	**10.8 J**	**86.7**	**21.5 J**	**14.0 J**	**54.7**	**53.7**
Beryllium	7440-41-7		590	**0.64**	<0.41 U	<0.47 U	**0.27 J**	**0.17 J**	<0.52 U	**0.28 J**	**0.23 J**
Cadmium	7440-43-9	2.5	9.3	**0.60 J**	<1.0 U	<1.2 U	**0.83 J**	<1.0 U	<1.3 U	<0.99 U	<1.1 U
Calcium	7440-70-2	NL	NL	**10200**	**377 J**	**456 J**	**13000**	**528 J**	**390 J**	**4800**	**16300**
Chromium	7440-47-3	30	1500	**15.6**	**6.9**	**6.2**	**11.3**	**16.9**	**5.2**	**16.1**	**12.1**
Cobalt	7440-48-4	NL	NL	**5.1 J**	**3.9 J**	**2.4 J**	**3.9 J**	**3.4 J**	**1.8 J**	**5.8 J**	**3.8 J**
Copper	7440-50-8	50	270	**67.5**	**10.3**	**4.6 J**	**33.6**	**7.7**	**5.5 J**	**25.3**	**12.2**
Iron	7439-89-6	NL	NL	**16900**	**12300**	**7900**	**14100**	**15600**	**6760**	**17000**	**12900**
Lead	7439-92-1	63	1000	**220**	**3.0**	**2.3**	**596**	**5.0**	**1.7**	**54.7 J**	**31.4**
Magnesium	7439-95-4	NL	NL	**5600**	**802 J**	**623 J**	**6170**	**881 J**	**745 J**	**2700 J**	**1860**
Manganese	7439-96-5	1600	10000	**310**	**237**	**137**	**237**	**235**	**56.5**	**269 J**	**233**
Mercury	7439-97-6	0.18	2.8	**0.19**	<0.032 U	<0.040 U	**0.38**	<0.033 U	<0.044 U	**0.15**	**0.045**
Nickel	7440-02-0	30	310	**13.5**	**7.0 J**	**5.6 J**	**10.4**	**8.5**	**5.2 J**	**12.8**	**8.1 J**
Potassium	7440-09-7	NL	NL	**290 J**	**436 J**	**209 J**	**268 J**	**248 J**	**339 J**	**679 J**	**515 J**
Selenium	7782-49-2	3.9	1500	**1.3 J**	<2.1 U	<2.4 U	<2.1 U	<2.0 U	<2.6 U	<2.0 U	<2.2 U
Silver	7440-22-4	2	1500	<2.0 U	<2.1 U	<2.4 U	<2.1 U	<2.0 U	<2.6 U	<2.0 U	<2.2 U
Sodium	7440-23-5	NL	NL	<1010 U	<1030 U	<1180 U	<1040 U	<1010 U	<1310 U	<993 U	<1120 U
Thallium	7440-28-0	NL	NL	<2.0 U	<2.1 U	<2.4 U	<2.1 U	<2.0 U	<2.6 U	<2.0 U	<2.2 U
Vanadium	7440-62-2	NL	NL	**24.1**	**18.5**	**10.4 J**	**21.3**	**15.7**	**10.1 J**	**24.3**	**14.6**
Zinc	7440-66-6	109	10000	**555**	**13**	**8.8**	**167**	**14**	**51.6**	**90.9**	**32.4**
Cyanide (mg/Kg)											
Available cyanide	57-12-5-A	NL	NL	<0.043 U	<0.042 U	<0.050 U	<0.043 U	<0.043 U	<0.053 U	**0.045**	<0.050 U
PCBs (mg/Kg)											
Aroclor 1016	12674-11-2	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Aroclor 1221	11104-28-2	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Aroclor 1232	11141-16-5	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Aroclor 1242	53469-21-9	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Aroclor 1248	12672-29-6	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Aroclor 1254	11097-69-1	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Aroclor 1260	11096-82-5	NL	NL	**0.073**	<0.071 U	<0.085 U	**0.029 J**	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Aroclor 1262	37324-23-5	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Aroclor 1268	11100-14-4	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Total PCBs		0.1	1	***0.073***	*ND*	*ND*	***0.029***	*ND*	*ND*	*ND*	*ND*
Pesticides (mg/Kg)											
Aldrin	309-00-2	0.005	0.68	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Alpha-BHC	319-84-6	0.02	3.4	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Beta-BHC	319-85-7	0.036	3	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Chlordane	57-74-9	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
DDD,4,4-	72-54-8	0.0033	92	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
DDE,4,4-	72-55-9	0.0033	62	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
DDT,4,4-	50-29-3	0.0033	47	**0.0073**	<0.0071 U	<0.0085 U	**0.0063 J**	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 UJ
Delta-BHC	319-86-8	0.04	500	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Dieldrin	60-57-1	0.005	1.4	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Endosulfan I	959-98-8	2.4	200	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Endosulfan II	33213-65-9	2.4	200	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Endosulfan sulfate	1031-07-8	2.4	200	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Endrin	72-20-8	0.014	89	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Endrin aldehyde	7421-93-4	NL	NL	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Endrin ketone	53494-70-5	NL	NL	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Gamma BHC - Lindane	58-89-9	0.1	9.2	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Heptachlor	76-44-8	0.042	15	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Heptachlor Epoxide	1024-57-3	NL	NL	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 U
Methoxychlor	72-43-5	NL	NL	<0.0073 U	<0.0071 U	<0.0085 U	<0.0073 U	<0.0072 U	<0.0089 U	<0.0075 U	<0.0083 UJ
Toxaphene	8001-35-2	NL	NL	<0.073 U	<0.071 U	<0.085 U	<0.073 U	<0.072 U	<0.089 U	<0.075 U	<0.083 U
Herbicides (mg/Kg)											
2,4,5-TP (Silvex)	93-72-1	3.8	500	<0.018 U	<0.018 U	<0.021 U	<0.018 U	<0.018 U	<0.023 U	<0.019 U	<0.021 U
2,4-D	94-75-7	NL	NL	<0.018 U	<0.018 U	<0.021 U	<0.018 U	<0.018 U	<0.023 U	<0.019 U	<0.021 U
T,2,4,5-	93-76-5	NL	NL	<0.018 U	<0.018 U	<0.021 U	<0.018 U	<0.018 U	<0.023 U	<0.019 U	<0.021 U

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location / Sample Date / Sample ID / Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-03 2/27/2012 SB-3 (10-11.75)022712 10-11.75	SB-04 2/27/2012 SB-4 (3-5)022712 3-5	SB-04 2/27/2012 SB-4 (5-8.5)022712 5-8.5	SB-04 2/27/2012 SB-4 (8.5-10)022712 8.5-10	SB-04 2/27/2012 SB-4 (10-13)022712 10-13	SB-05 3/8/2012 SB-5 (2.5-5)030812 2.5-5	SB-05 3/9/2012 DUP-3-030912 22-24	SB-05 3/9/2012 SB-5 (22-24)030912 22-24
Inorganic Compounds (mg/Kg)											
Aluminum	7429-90-5	NL	NL	**3980**	**8750**	**9680**	**5110**	**11200**	**2220**	**2500**	**1910**
Antimony	7440-36-0	NL	NL	<2.1 UJ	<2.1 UJ	<2.3 U	<1.8 U	<2.3 UJ	<2.1 U	<2.1 U	<2.0 U
Arsenic	7440-38-2	13	16	**2.3**	**4.4**	**4.2**	**2.4**	**4.7**	**1.6**	**1.8**	**1.3**
Barium	7440-39-3	350	400	**85.1**	**89.7**	**62.5**	**43.2**	**80.5**	**20.8 J**	**19.2 J**	**19.4 J**
Beryllium	7440-41-7		590	**0.20 J**	**0.34 J**	**0.43 J**	**0.20 J**	**0.47**	<0.41 U	<0.43 U	<0.39 U
Cadmium	7440-43-9	2.5	9.3	**0.92 J**	<1.0 U	**0.23 J**	**0.16 J**	<1.2 U	<1.0 U	<1.1 U	<0.98 U
Calcium	7440-70-2	NL	NL	**27600**	**2630**	**2080**	**1930**	**9640**	**519 J**	**698 J**	**506 J**
Chromium	7440-47-3	30	1500	**10.8**	**17.5**	**19**	**11.4**	**17**	**7.1 J**	**8.8 J**	**7.6 J**
Cobalt	7440-48-4	NL	NL	**3.3 J**	**4.9 J**	**6.6 J**	**3.5 J**	**5.8 J**	**2.9 J**	**3.1 J**	**3.5 J**
Copper	7440-50-8	50	270	**13.1**	**29.9**	**16.7**	**13.3**	**24.7**	**10.9**	**10.6**	**9.8**
Iron	7439-89-6	NL	NL	**18600**	**16100**	**21800**	**12200**	**18800**	**13600**	**13500**	**14000**
Lead	7439-92-1	63	1000	**83.2 J**	**223 J**	**55.3**	**58.5**	**89.0 J**	**12.9 J**	**22.9**	**45**
Magnesium	7439-95-4	NL	NL	**1720 J**	**1530 J**	**1590**	**1040**	**5640 J**	**707 J**	**785 J**	**713 J**
Manganese	7439-96-5	1600	10000	**247 J**	**308 J**	**364**	**274**	**433 J**	**250 J**	**195 J**	**348 J**
Mercury	7439-97-6	0.18	2.8	**0.029 J**	**0.59**	**0.09**	**0.077**	<0.041 U	**0.036**	**0.043**	<0.028 U
Nickel	7440-02-0	30	310	**8.6**	**9.6**	**12.1**	**6.7 J**	**13**	**5.4 J**	**5.9 J**	**10.7**
Potassium	7440-09-7	NL	NL	**346 J**	**329 J**	**323 J**	**192 J**	**401 J**	**221 J**	**239 J**	**334 J**
Selenium	7782-49-2	3.9	1500	<2.1 U	<2.1 U	<2.3 U	<1.8 U	<2.3 U	<2.1 U	<2.1 U	<2.0 U
Silver	7440-22-4	2	1500	<2.1 U	<2.1 U	<2.3 U	<1.8 U	<2.3 U	<2.1 U	<2.1 U	<2.0 U
Sodium	7440-23-5	NL	NL	<1030 U	<1040 U	<1170 U	<901 U	<1160 U	<1040 U	<1070 U	<977 U
Thallium	7440-28-0	NL	NL	<2.1 U	<2.1 U	<2.3 U	<1.8 U	<2.3 U	<2.1 U	<2.1 U	<2.0 U
Vanadium	7440-62-2	NL	NL	**14.6**	**19.7**	**26.7**	**14.3**	**24.5**	**11.1**	**10.6 J**	**11**
Zinc	7440-66-6	109	10000	**294**	**92.7**	**65.2**	**43.4**	**79.3**	**15.1**	**20.2**	**14.6**
Cyanide (mg/Kg)											
Available cyanide	57-12-5-A	NL	NL	**0.35**	**0.022 J**	**0.049**	**3.4**	**22.8**	<0.042 U	<0.043 U	<0.041 U
PCBs (mg/Kg)											
Aroclor 1016	12674-11-2	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U
Aroclor 1221	11104-28-2	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U
Aroclor 1232	11141-16-5	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U
Aroclor 1242	53469-21-9	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U
Aroclor 1248	12672-29-6	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U
Aroclor 1254	11097-69-1	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U
Aroclor 1260	11096-82-5	NL	NL	<0.077 U	<0.075 U	<0.082 U	**0.012 J**	<0.085 U	<0.069 U	<0.072 U	<0.069 U
Aroclor 1262	37324-23-5	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U
Aroclor 1268	11100-14-4	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.069 U	<0.072 U	<0.069 U
Total PCBs		0.1	1	*ND*	*ND*	*ND*	***0.012***	*ND*	*ND*	*ND*	*ND*
Pesticides (mg/Kg)											
Aldrin	309-00-2	0.005	0.68	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Alpha-BHC	319-84-6	0.02	3.4	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Beta-BHC	319-85-7	0.036	3	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Chlordane	57-74-9	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.07 U	<0.072 U	<0.069 U
DDD,4,4-	72-54-8	0.0033	92	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
DDE,4,4-	72-55-9	0.0033	62	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
DDT,4,4-	50-29-3	0.0033	47	<0.0077 U	<0.0075 U	<0.0082 UJ	<0.0067 UJ	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Delta-BHC	319-86-8	0.04	500	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Dieldrin	60-57-1	0.005	1.4	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Endosulfan I	959-98-8	2.4	200	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Endosulfan II	33213-65-9	2.4	200	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Endosulfan sulfate	1031-07-8	2.4	200	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Endrin	72-20-8	0.014	89	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Endrin aldehyde	7421-93-4	NL	NL	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Endrin ketone	53494-70-5	NL	NL	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Gamma BHC - Lindane	58-89-9	0.1	9.2	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Heptachlor	76-44-8	0.042	15	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Heptachlor Epoxide	1024-57-3	NL	NL	<0.0077 U	<0.0075 U	<0.0082 U	<0.0067 U	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Methoxychlor	72-43-5	NL	NL	<0.0077 U	<0.0075 U	<0.0082 UJ	<0.0067 UJ	<0.0085 U	<0.0070 U	<0.0072 U	<0.0069 U
Toxaphene	8001-35-2	NL	NL	<0.077 U	<0.075 U	<0.082 U	<0.067 U	<0.085 U	<0.07 U	<0.072 U	<0.069 U
Herbicides (mg/Kg)											
2,4,5-TP (Silvex)	93-72-1	3.8	500	<0.02 U	<0.019 U	<0.021 U	<0.017 U	<0.022 U	<0.018 U	<0.018 U	<0.018 U
2,4-D	94-75-7	NL	NL	<0.02 U	<0.019 U	<0.021 U	<0.017 U	<0.022 U	<0.018 U	<0.018 U	<0.018 U
T,2,4,5-	93-76-5	NL	NL	<0.02 U	<0.019 U	<0.021 U	<0.017 U	<0.022 U	<0.018 U	<0.018 U	<0.018 U

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location / Sample Date / Sample ID / Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-05 3/9/2012 SB-5 (37.5-40)030912 37.5-40	SB-06 2/22/2012 DUP-1-022212 1-3.5	SB-06 2/22/2012 SB-6 (1-3.5)022212 1-3.5	SB-06 2/22/2012 SB-6 (22-24)022212 22-24	SB-06 2/22/2012 SB-6 (37.5-40)022212 37.5-40	SB-07 2/22/2012 SB-7 (0-2.5)-22212 0-2.5	SB-07 2/22/2012 SB-7 (21.5-24)022212 21.5-24	SB-07 2/22/2012 SB-7 (37.5-40)022212 37.5-40
Inorganic Compounds (mg/Kg)											
Aluminum	7429-90-5	NL	NL	**1880**	**1580**	**6930**	**2360**	**2020**	**5500**	**2670**	**1890**
Antimony	7440-36-0	NL	NL	<2.2 U	<2.1 U	<2.1 U	<2.0 U	<1.9 U	<2.1 U	<1.9 U	<2.2 U
Arsenic	7440-38-2	13	16	<1.1 U	<1.1 U	**4.6**	<1.0 U	<0.97 U	**5.4**	<0.97 U	<1.1 U
Barium	7440-39-3	350	400	**58.4**	**23.8 J**	**86.3**	**13.1 J**	**25.4 J**	**65.4**	**14.0 J**	**24.7 J**
Beryllium	7440-41-7		590	<0.44 U	<0.43 U	**0.49**	<0.41 U	<0.39 U	**0.24 J**	**0.17 J**	<0.43 U
Cadmium	7440-43-9	2.5	9.3	<1.1 U	<1.1 U	**0.28 J**	<1.0 U	<0.97 U	**0.68 J**	<0.97 U	<1.1 U
Calcium	7440-70-2	NL	NL	**338 J**	**240 J**	**5340**	**419 J**	**381 J**	**28800**	**296 J**	**446 J**
Chromium	7440-47-3	30	1500	**7.4 J**	**5.1**	**14**	**13.7**	**6.7**	**12.8**	**8.3**	**7.8**
Cobalt	7440-48-4	NL	NL	**2.4 J**	**2.4 J**	**5.6 J**	**2.3 J**	**2.8 J**	**4.2 J**	**3.0 J**	**2.4 J**
Copper	7440-50-8	50	270	**6.5**	**4.1 J**	**26.2**	**5.8**	**6.1**	**33.7**	**3.4 J**	**5.7**
Iron	7439-89-6	NL	NL	**7870**	**5530 J**	**20000**	**7510**	**8410 J**	**13800**	**8900**	**7450**
Lead	7439-92-1	63	1000	**2.6**	**1.1**	**62.9**	**2.5**	**1.4**	**144**	**1.9**	**1.6**
Magnesium	7439-95-4	NL	NL	**902 J**	**693 J**	**2270**	**652 J**	**919 J**	**14700**	**866 J**	**815 J**
Manganese	7439-96-5	1600	10000	**332 J**	**282 J**	**283 J**	**81.2 J**	**306 J**	**232 J**	**80.1 J**	**268 J**
Mercury	7439-97-6	0.18	2.8	<0.036 U	<0.034 U	**0.24**	<0.033 U	<0.035 U	**0.36**	**0.092**	<0.036 U
Nickel	7440-02-0	30	310	**8.2 J**	**7.7 J**	**13.6**	**6.0 J**	**9.7**	**10.4**	**5.8 J**	**9.5**
Potassium	7440-09-7	NL	NL	**503 J**	**505 J**	**454 J**	**190 J**	**757 J**	**379 J**	**165 J**	**473 J**
Selenium	7782-49-2	3.9	1500	<2.2 U	<2.1 U	**1.5 J**	<2.0 U	<1.9 U	<2.1 U	<1.9 U	<2.2 U
Silver	7440-22-4	2	1500	<2.2 U	<2.1 U	<2.1 U	<2.0 U	<1.9 U	<2.1 U	<1.9 U	<2.2 U
Sodium	7440-23-5	NL	NL	<1090 U	<1070 U	<1050 U	<1020 U	<972 U	<1030 U	<972 U	<1080 U
Thallium	7440-28-0	NL	NL	<2.2 U	<2.1 U	<2.1 U	<2.0 U	<1.9 U	<2.1 U	<1.9 U	<2.2 U
Vanadium	7440-62-2	NL	NL	**9.0 J**	**5.8 J**	**33.6**	**9.0 J**	**9.0 J**	**24.3**	**8.7 J**	**9.4 J**
Zinc	7440-66-6	109	10000	**9.2**	**7.9**	**40.1**	**9.9**	**9.8**	**106**	**15.7**	**10**
Cyanide (mg/Kg)											
Available cyanide	57-12-5-A	NL	NL	<0.044 U	<0.044 U	<0.044 U	<0.042 U	<0.044 U	<0.044 U	<0.041 U	<0.044 U
PCBs (mg/Kg)											
Aroclor 1016	12674-11-2	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Aroclor 1221	11104-28-2	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Aroclor 1232	11141-16-5	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Aroclor 1242	53469-21-9	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Aroclor 1248	12672-29-6	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Aroclor 1254	11097-69-1	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Aroclor 1260	11096-82-5	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Aroclor 1262	37324-23-5	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Aroclor 1268	11100-14-4	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Total PCBs		0.1	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Pesticides (mg/Kg)											
Aldrin	309-00-2	0.005	0.68	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Alpha-BHC	319-84-6	0.02	3.4	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Beta-BHC	319-85-7	0.036	3	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Chlordane	57-74-9	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
DDD,4,4-	72-54-8	0.0033	92	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
DDE,4,4-	72-55-9	0.0033	62	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
DDT,4,4-	50-29-3	0.0033	47	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Delta-BHC	319-86-8	0.04	500	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Dieldrin	60-57-1	0.005	1.4	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Endosulfan I	959-98-8	2.4	200	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Endosulfan II	33213-65-9	2.4	200	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Endosulfan sulfate	1031-07-8	2.4	200	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Endrin	72-20-8	0.014	89	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Endrin aldehyde	7421-93-4	NL	NL	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Endrin ketone	53494-70-5	NL	NL	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Gamma BHC - Lindane	58-89-9	0.1	9.2	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Heptachlor	76-44-8	0.042	15	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Heptachlor Epoxide	1024-57-3	NL	NL	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Methoxychlor	72-43-5	NL	NL	<0.0073 U	<0.0075 U	<0.0074 U	<0.0070 U	<0.0074 U	<0.0074 U	<0.0069 U	<0.0073 U
Toxaphene	8001-35-2	NL	NL	<0.073 U	<0.075 U	<0.074 U	<0.07 U	<0.074 U	<0.074 U	<0.069 U	<0.073 U
Herbicides (mg/Kg)											
2,4,5-TP (Silvex)	93-72-1	3.8	500	<0.019 U	<0.0042 U	**0.00099 J**	<0.0039 U	<0.0042 U	**0.00071 J**	**0.0017 J**	<0.0041 U
2,4-D	94-75-7	NL	NL	<0.019 UJ	**0.0099 J**	<0.042 U	<0.039 U	<0.042 U	<0.042 U	**0.0077 J**	**0.036 J**
T,2,4,5-	93-76-5	NL	NL	<0.019 U	**0.0017 J**	**0.0020 J**	<0.0097 U	<0.01 U	<0.01 U	<0.0097 U	**0.0098 J**

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

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UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location / Sample Date / Sample ID / Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-08 3/1/2012 SB-8 (2.5-5)030112 2.5-5	SB-08 3/1/2012 SB-8 (15-17)030112 15-17	SB-08 3/1/2012 SB-8 (20-25)030112 20-25	SB-08 3/1/2012 SB-8 (42.5-45)030112 42.5-45	SB-09 2/23/2012 SB-9 (2.5-5)022312 2.5-5	SB-09 2/23/2012 SB-9 (10-13.5)022312 10-13.5	SB-09 2/23/2012 SB-9 (37.5-40)022312 37.5-40	SB-10 2/23/2012 SB-10 (1-2.5)022312 1-2.5
Inorganic Compounds (mg/Kg)											
Aluminum	7429-90-5	NL	NL	**2440**	**2180**	**2580**	**2110**	**3530**	**2820**	**1860**	**5780**
Antimony	7440-36-0	NL	NL	<2.3 U	<2.3 U	<2.1 U	<2.3 U	<2.1 UJ	<2.4 UJ	<2.2 U	<1.9 UJ
Arsenic	7440-38-2	13	16	**9.7**	**4.1**	**1.1**	**2.1**	**5.2**	**4.9**	<1.1 U	**2.4**
Barium	7440-39-3	350	400	**55.3**	**37.8 J**	**13.2 J**	**21.1 J**	**56.6**	**29.8 J**	**13.3 J**	**30.6 J**
Beryllium	7440-41-7		590	**0.17 J**	**0.20 J**	<0.42 U	<0.46 U	**0.20 J**	<0.47 U	<0.43 U	**0.25 J**
Cadmium	7440-43-9	2.5	9.3	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.0 U	**0.24 J**	<1.1 U	<0.96 U
Calcium	7440-70-2	NL	NL	**2930**	**4540**	**408 J**	**386 J**	**8240**	**6800**	**239 J**	**3610**
Chromium	7440-47-3	30	1500	**12.7**	**8.4**	**6.5**	**8.6**	**8.1**	**6.8**	**5.3**	**13.6**
Cobalt	7440-48-4	NL	NL	**3.5 J**	**2.5 J**	**4.8 J**	**3.1 J**	**4.5 J**	**2.6 J**	**2.6 J**	**4.0 J**
Copper	7440-50-8	50	270	**199**	**85.7**	**8.8**	**8.1**	**43.4**	**17.9**	**3.9 J**	**11.6**
Iron	7439-89-6	NL	NL	**9790**	**6360**	**8370**	**10100**	**13100**	**11600**	**7970**	**17100**
Lead	7439-92-1	63	1000	**87.7**	**103**	**2.0**	**2.5**	**162 J**	**115 J**	**1.5**	**26.4 J**
Magnesium	7439-95-4	NL	NL	**607 J**	**1540**	**793 J**	**940 J**	**3230 J**	**3160 J**	**859 J**	**2900 J**
Manganese	7439-96-5	1600	10000	**50.7**	**77.9**	**125**	**234**	**181 J**	**151 J**	**149**	**305 J**
Mercury	7439-97-6	0.18	2.8	**0.11**	**0.08**	<0.033 U	<0.040 U	**3.8**	**0.25**	<0.039 U	**0.056**
Nickel	7440-02-0	30	310	**11.6**	**7.6 J**	**9.3**	**8.0 J**	**11**	**5.3 J**	**6.5 J**	**8.6**
Potassium	7440-09-7	NL	NL	**671 J**	**400 J**	**341 J**	**797 J**	**350 J**	**270 J**	**518 J**	**253 J**
Selenium	7782-49-2	3.9	1500	**3.5**	<2.3 U	<2.1 U	<2.3 U	<2.1 U	<2.4 U	<2.2 U	<1.9 U
Silver	7440-22-4	2	1500	<2.3 U	<2.3 U	<2.1 U	<2.3 U	<2.1 U	<2.4 U	<2.2 U	<1.9 U
Sodium	7440-23-5	NL	NL	**226 J**	<1140 U	<1060 U	<1150 U	<1040 U	<1180 U	<1080 U	<956 U
Thallium	7440-28-0	NL	NL	<2.3 U	<2.3 U	<2.1 U	<2.3 U	<2.1 U	<2.4 U	<2.2 U	<1.9 U
Vanadium	7440-62-2	NL	NL	**18**	**14.4**	**8.0 J**	**8.8 J**	**13.5**	**10.4 J**	**7.1 J**	**19**
Zinc	7440-66-6	109	10000	**58.2**	**39.9**	**14.5**	**10.6**	**93.5**	**84.4**	**9.0**	**31.6**
Cyanide (mg/Kg)											
Available cyanide	57-12-5-A	NL	NL	<0.049 U	<0.046 U	<0.043 U	<0.050 U	<0.044 U	**1.7**	<0.048 U	<0.042 U
PCBs (mg/Kg)											
Aroclor 1016	12674-11-2	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Aroclor 1221	11104-28-2	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Aroclor 1232	11141-16-5	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Aroclor 1242	53469-21-9	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Aroclor 1248	12672-29-6	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Aroclor 1254	11097-69-1	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Aroclor 1260	11096-82-5	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Aroclor 1262	37324-23-5	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Aroclor 1268	11100-14-4	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Total PCBs		0.1	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Pesticides (mg/Kg)											
Aldrin	309-00-2	0.005	0.68	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Alpha-BHC	319-84-6	0.02	3.4	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	**0.0064 J**	<0.0080 U	<0.0071 U
Beta-BHC	319-85-7	0.036	3	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Chlordane	57-74-9	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
DDD,4,4-	72-54-8	0.0033	92	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
DDE,4,4-	72-55-9	0.0033	62	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
DDT,4,4-	50-29-3	0.0033	47	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	**0.012**	<0.0080 UJ	<0.0071 U
Delta-BHC	319-86-8	0.04	500	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Dieldrin	60-57-1	0.005	1.4	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Endosulfan I	959-98-8	2.4	200	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Endosulfan II	33213-65-9	2.4	200	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Endosulfan sulfate	1031-07-8	2.4	200	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Endrin	72-20-8	0.014	89	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Endrin aldehyde	7421-93-4	NL	NL	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Endrin ketone	53494-70-5	NL	NL	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Gamma BHC - Lindane	58-89-9	0.1	9.2	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Heptachlor	76-44-8	0.042	15	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Heptachlor Epoxide	1024-57-3	NL	NL	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	<0.0079 U	<0.0080 U	<0.0071 U
Methoxychlor	72-43-5	NL	NL	<0.0082 U	<0.0078 U	<0.0072 U	<0.0084 U	<0.0073 U	**0.0070 J**	<0.0080 UJ	<0.0071 U
Toxaphene	8001-35-2	NL	NL	<0.082 U	<0.078 U	<0.072 U	<0.084 U	<0.073 U	<0.079 U	<0.08 U	<0.071 U
Herbicides (mg/Kg)											
2,4,5-TP (Silvex)	93-72-1	3.8	500	<0.021 U	<0.02 U	<0.018 U	<0.021 U	<0.019 U	<0.02 U	<0.02 U	<0.018 U
2,4-D	94-75-7	NL	NL	<0.021 U	<0.02 U	<0.018 U	<0.021 U	<0.019 U	<0.02 U	<0.02 U	<0.018 U
T,2,4,5-	93-76-5	NL	NL	<0.021 U	<0.02 U	<0.018 U	<0.021 U	<0.019 U	<0.02 U	<0.02 U	<0.018 U

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-10 2/23/2012 SB-10 (12.5-15)022312 12.5-15	SB-10 2/23/2012 SB-10 (26-27.5)022312 26-27.5	SB-10 2/23/2012 SB-10 (37.5-40)022312 37.5-40	SB-11 2/28/2012 SB-11 (0-2.5)022812 0-2.5	SB-11 2/28/2012 SB-11 (25-27)022812 25-27	SB-11 2/28/2012 SB-11 (35-40)022812 35-40	SB-12 2/28/2012 SB-12 (2.5-5)022812 2.5-5	SB-12 2/28/2012 SB-12 (5-7.5)022812 5-7.5
Inorganic Compounds (mg/Kg)											
Aluminum	7429-90-5	NL	NL	**2740**	**2580**	**1600**	**2510**	**1950**	**1800**	**5060**	**3650**
Antimony	7440-36-0	NL	NL	<2.2 UJ	<2.0 UJ	<2.0 U	<1.9 UJ	<1.9 UJ	<2.1 UJ	**1.2 J**	<1.9 UJ
Arsenic	7440-38-2	13	16	**1.5**	**1.5**	<0.99 U	**1.3**	<0.93 U	<1.0 U	**6.1**	**2.5**
Barium	7440-39-3	350	400	**13.9 J**	**15.3 J**	**11.1 J**	**27.3 J**	**18.8 J**	**16.9 J**	**155**	**38**
Beryllium	7440-41-7		590	<0.44 U	<0.40 U	<0.40 U	<0.38 U	<0.37 U	<0.41 U	**0.25 J**	<0.38 U
Cadmium	7440-43-9	2.5	9.3	<1.1 U	<1.0 U	<0.99 U	<0.94 U	<0.93 U	<1.0 U	**0.36 J**	<0.95 U
Calcium	7440-70-2	NL	NL	**688 J**	**703 J**	**284 J**	**1650**	**396 J**	**348 J**	**38300**	**5710**
Chromium	7440-47-3	30	1500	**8.3**	**7.8**	**7.6**	**8.5**	**8.7**	**10**	**16.8**	**11.5**
Cobalt	7440-48-4	NL	NL	**1.8 J**	**2.6 J**	**2.6 J**	**2.2 J**	**1.3 J**	**1.8 J**	**5.7 J**	**3.1 J**
Copper	7440-50-8	50	270	**7.3**	**6.9**	**5.2**	**9.1**	**6.4**	**4.8 J**	**33.2**	**12.7**
Iron	7439-89-6	NL	NL	**11500**	**10700**	**6740**	**14600**	**13800**	**10500**	**18900**	**13700**
Lead	7439-92-1	63	1000	**2.7 J**	**4.9 J**	**1.2**	**31.8 J**	**5.3 J**	**3.1 J**	**320 J**	**151 J**
Magnesium	7439-95-4	NL	NL	**841 J**	**870 J**	**634 J**	**871 J**	**614 J**	**659 J**	**7450 J**	**1480 J**
Manganese	7439-96-5	1600	10000	**108 J**	**127 J**	**122**	**138 J**	**84.0 J**	**115 J**	**327 J**	**197 J**
Mercury	7439-97-6	0.18	2.8	<0.034 U	<0.033 U	<0.033 U	**0.19**	<0.031 U	<0.033 U	**0.67**	**0.15**
Nickel	7440-02-0	30	310	**4.9 J**	**9.7**	**6.5 J**	**5.8 J**	**4.5 J**	**5.9 J**	**13.9**	**9.5**
Potassium	7440-09-7	NL	NL	**230 J**	**308 J**	**368 J**	**280 J**	**315 J**	**352 J**	**486 J**	**297 J**
Selenium	7782-49-2	3.9	1500	<2.2 U	<2.0 U	<2.0 U	<1.9 U	<1.9 U	<2.1 U	<1.9 U	<1.9 U
Silver	7440-22-4	2	1500	<2.2 U	<2.0 U	<2.0 U	<1.9 U	<1.9 U	<2.1 U	<1.9 U	<1.9 U
Sodium	7440-23-5	NL	NL	<1090 U	<1010 U	<991 U	<941 U	<935 U	<1030 U	<973 U	<948 U
Thallium	7440-28-0	NL	NL	<2.2 U	<2.0 U	<2.0 U	<1.9 U	<1.9 U	<2.1 U	<1.9 U	<1.9 U
Vanadium	7440-62-2	NL	NL	**12.5**	**12**	**6.9 J**	**11.6**	**11.2**	**9.3 J**	**18.8**	**15.2**
Zinc	7440-66-6	109	10000	**12.2**	**13.9**	**7.3**	**20.9**	**10.3**	**9.3**	**232**	**64.3**
Cyanide (mg/Kg)											
Available cyanide	57-12-5-A	NL	NL	**3.3**	**0.32**	<0.044 U	<0.041 U	<0.040 U	<0.042 U	<0.045 U	<0.044 U
PCBs (mg/Kg)											
Aroclor 1016	12674-11-2	NL	NL	<0.075 U	<0.076 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
Aroclor 1221	11104-28-2	NL	NL	<0.075 U	<0.076 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
Aroclor 1232	11141-16-5	NL	NL	<0.075 U	<0.076 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
Aroclor 1242	53469-21-9	NL	NL	<0.075 U	<0.076 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
Aroclor 1248	12672-29-6	NL	NL	<0.075 U	<0.076 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
Aroclor 1254	11097-69-1	NL	NL	<0.075 U	<0.076 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	**0.13 J**	<0.073 U
Aroclor 1260	11096-82-5	NL	NL	<0.075 U	<0.076 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
Aroclor 1262	37324-23-5	NL	NL	<0.075 U	<0.076 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
Aroclor 1268	11100-14-4	NL	NL	<0.075 U	<0.076 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
Total PCBs		0.1	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	***0.13***	*ND*
Pesticides (mg/Kg)											
Aldrin	309-00-2	0.005	0.68	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Alpha-BHC	319-84-6	0.02	3.4	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Beta-BHC	319-85-7	0.036	3	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Chlordane	57-74-9	NL	NL	<0.075 U	<0.075 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
DDD,4,4-	72-54-8	0.0033	92	**0.18 J**	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	**0.018 NJ**	**0.043 J**
DDE,4,4-	72-55-9	0.0033	62	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
DDT,4,4-	50-29-3	0.0033	47	<0.0075 U	<0.0075 U	<0.0074 UJ	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Delta-BHC	319-86-8	0.04	500	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Dieldrin	60-57-1	0.005	1.4	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Endosulfan I	959-98-8	2.4	200	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Endosulfan II	33213-65-9	2.4	200	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Endosulfan sulfate	1031-07-8	2.4	200	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Endrin	72-20-8	0.014	89	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Endrin aldehyde	7421-93-4	NL	NL	<0.0075 U	**0.020**	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	**0.012 NJ**
Endrin ketone	53494-70-5	NL	NL	**0.14 J**	**0.019**	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	**0.026 NJ**	**0.11 NJ**
Gamma BHC - Lindane	58-89-9	0.1	9.2	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Heptachlor	76-44-8	0.042	15	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Heptachlor Epoxide	1024-57-3	NL	NL	<0.0075 U	<0.0075 U	<0.0074 U	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Methoxychlor	72-43-5	NL	NL	<0.0075 U	<0.0075 U	<0.0074 UJ	<0.0069 U	<0.0068 U	<0.0071 U	<0.0076 U	<0.0073 U
Toxaphene	8001-35-2	NL	NL	<0.075 U	<0.075 U	<0.074 U	<0.069 U	<0.068 U	<0.071 U	<0.076 U	<0.073 U
Herbicides (mg/Kg)											
2,4,5-TP (Silvex)	93-72-1	3.8	500	<0.019 U	<0.019 U	<0.019 U	<0.018 U	<0.017 U	<0.018 U	<0.019 U	<0.019 U
2,4-D	94-75-7	NL	NL	<0.019 U	<0.019 U	<0.019 U	<0.018 U	<0.017 U	<0.018 U	<0.019 U	<0.019 U
T,2,4,5-	93-76-5	NL	NL	<0.019 U	<0.019 U	<0.019 U	<0.018 U	<0.017 U	<0.018 U	<0.019 U	<0.019 U

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-12 2/28/2012 SB-12 (10-12.5)022812 10-12.5	SB-12 2/28/2012 SB-12 (37.5-40)022812 37.5-40	SB-13 2/28/2012 SB-13 (2.5-5)022812 2.5-5	SB-13 2/29/2012 SB-13 (22.5-24.5)022912 22.5-24.5	SB-13 2/29/2012 SB-13 (37.5-40)022912 37.5-40	SB-14 2/27/2012 DUP-2-022712 2-5	SB-14 2/27/2012 SB-14 (2-5)022712 2-5	SB-14 2/27/2012 SB-14 (25-26.5)022712 25-26.5
Inorganic Compounds (mg/Kg)											
Aluminum	7429-90-5	NL	NL	**3300**	**1710**	**4210**	**2350**	**2010**	**6430**	**5500**	**3380**
Antimony	7440-36-0	NL	NL	<2.0 UJ	<2.1 UJ	<2.0 U	<2.0 U	<2.1 U	<2.0 UJ	<2.2 UJ	<2.0 UJ
Arsenic	7440-38-2	13	16	**1.3**	<1.1 U	**1.7**	<0.98 U	<1.0 U	**6.2**	**6.5**	**2.5**
Barium	7440-39-3	350	400	**23.4 J**	**12.8 J**	**33.8 J**	**18.3 J**	**24.9 J**	**109**	**100**	**26.2 J**
Beryllium	7440-41-7		590	**0.17 J**	<0.43 U	**0.17 J**	<0.39 U	<0.41 U	**0.38 J**	**0.50**	<0.39 U
Cadmium	7440-43-9	2.5	9.3	<1.0 U	<1.1 U	<0.99 U	<0.98 U	<1.0 U	<0.98 U	<1.1 U	<0.98 U
Calcium	7440-70-2	NL	NL	**630 J**	**324 J**	**880 J**	**550 J**	**283 J**	**4720**	**3290**	**1700**
Chromium	7440-47-3	30	1500	**12.3**	**7.0**	**16.4**	**8.0**	**6.5**	**12.9**	**14**	**13.8**
Cobalt	7440-48-4	NL	NL	**4.4 J**	**2.1 J**	**4.0 J**	**3.4 J**	**2.3 J**	**5.0 J**	**5.0 J**	**2.7 J**
Copper	7440-50-8	50	270	**9.3**	**3.3 J**	**11.2**	**7.7**	**4.3 J**	**40.9**	**34.7**	**13.5**
Iron	7439-89-6	NL	NL	**15600**	**7020**	**19900**	**12000**	**8800**	**19200**	**15500**	**9920**
Lead	7439-92-1	63	1000	**6.1 J**	**1.8 J**	**26**	**2.3**	**1.6**	**143 J**	**115 J**	**45.8 J**
Magnesium	7439-95-4	NL	NL	**988 J**	**736 J**	**1520**	**746 J**	**886 J**	**2280 J**	**1550 J**	**1280 J**
Manganese	7439-96-5	1600	10000	**182 J**	**136 J**	**333**	**245**	**306**	**326 J**	**302 J**	**147 J**
Mercury	7439-97-6	0.18	2.8	<0.033 U	<0.033 U	**0.052**	<0.035 U	<0.037 U	**0.24**	**0.24**	**0.061**
Nickel	7440-02-0	30	310	**9.1**	**6.0 J**	**11.4**	**9.9**	**9.5**	**12.5**	**12.6**	**7.5 J**
Potassium	7440-09-7	NL	NL	**361 J**	**545 J**	**641 J**	**388 J**	**530 J**	**515 J**	**447 J**	**270 J**
Selenium	7782-49-2	3.9	1500	<2.0 U	<2.1 U	<2.0 U	<2.0 U	<2.1 U	<2.0 U	<2.2 U	<2.0 U
Silver	7440-22-4	2	1500	<2.0 U	<2.1 U	<2.0 U	<2.0 U	<2.1 U	<2.0 U	<2.2 U	<2.0 U
Sodium	7440-23-5	NL	NL	<1000 U	<1060 U	<986 U	<984 U	<1030 U	<977 U	<1120 U	<976 U
Thallium	7440-28-0	NL	NL	<2.0 U	<2.1 U	<2.0 U	<2.0 U	<2.1 U	<2.0 U	<2.2 U	<2.0 U
Vanadium	7440-62-2	NL	NL	**21.4**	**6.2 J**	**16**	**13.6**	**9.6 J**	**23.5**	**22.3**	**11.8**
Zinc	7440-66-6	109	10000	**23.7**	**8.0**	**24.5**	**11.6**	**9.8**	**101**	**97.4**	**35.8**
Cyanide (mg/Kg)											
Available cyanide	57-12-5-A	NL	NL	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.045 U	<0.045 U	<0.046 U	<0.043 U
PCBs (mg/Kg)											
Aroclor 1016	12674-11-2	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Aroclor 1221	11104-28-2	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Aroclor 1232	11141-16-5	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Aroclor 1242	53469-21-9	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Aroclor 1248	12672-29-6	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Aroclor 1254	11097-69-1	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Aroclor 1260	11096-82-5	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Aroclor 1262	37324-23-5	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Aroclor 1268	11100-14-4	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Total PCBs		0.1	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Pesticides (mg/Kg)											
Aldrin	309-00-2	0.005	0.68	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Alpha-BHC	319-84-6	0.02	3.4	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Beta-BHC	319-85-7	0.036	3	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Chlordane	57-74-9	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
DDD,4,4-	72-54-8	0.0033	92	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
DDE,4,4-	72-55-9	0.0033	62	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
DDT,4,4-	50-29-3	0.0033	47	<0.0070 U	<0.0073 U	<0.0071 UJ	<0.0071 UJ	<0.0076 UJ	<0.0075 U	<0.0076 U	<0.0072 U
Delta-BHC	319-86-8	0.04	500	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Dieldrin	60-57-1	0.005	1.4	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Endosulfan I	959-98-8	2.4	200	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Endosulfan II	33213-65-9	2.4	200	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Endosulfan sulfate	1031-07-8	2.4	200	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Endrin	72-20-8	0.014	89	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Endrin aldehyde	7421-93-4	NL	NL	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Endrin ketone	53494-70-5	NL	NL	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Gamma BHC - Lindane	58-89-9	0.1	9.2	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Heptachlor	76-44-8	0.042	15	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Heptachlor Epoxide	1024-57-3	NL	NL	<0.0070 U	<0.0073 U	<0.0071 U	<0.0071 U	<0.0076 U	<0.0075 U	<0.0076 U	<0.0072 U
Methoxychlor	72-43-5	NL	NL	<0.0070 U	<0.0073 U	<0.0071 UJ	<0.0071 UJ	<0.0076 UJ	<0.0075 U	<0.0076 U	<0.0072 U
Toxaphene	8001-35-2	NL	NL	<0.07 U	<0.073 U	<0.071 U	<0.071 U	<0.076 U	<0.075 U	<0.076 U	<0.072 U
Herbicides (mg/Kg)											
2,4,5-TP (Silvex)	93-72-1	3.8	500	<0.018 U	<0.019 U	<0.018 U	<0.018 U	<0.019 U	<0.019 U	<0.019 U	<0.018 U
2,4-D	94-75-7	NL	NL	<0.018 U	<0.019 U	<0.018 U	<0.018 U	<0.019 U	<0.019 U	<0.019 U	<0.018 U
T,2,4,5-	93-76-5	NL	NL	<0.018 U	<0.019 U	<0.018 U	<0.018 U	<0.019 U	<0.019 U	<0.019 U	<0.018 U

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 6 Summary of SC Analytical Results in Subsurface Soils
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location Sample Date Sample ID Sample Interval (feet)	CAS #	NYSDEC Part 375-6 Unrestricted Use	NYSDEC Part 375-6 Commercial Use	SB-14 2/27/2012 SB-14 (37.5-40)022712 37.5-40	SB-15 2/28/2012 SB-15 (2.5-5)022812 2.5-5	SB-15 3/8/2012 SB-15 (25-27.5)030812 25-27.5	SB-15 3/9/2012 SB-15 (37.5-40)030912 37.5-40
Inorganic Compounds (mg/Kg)							
Aluminum	7429-90-5	NL	NL	**1840**	**4300**	**2470**	**1520**
Antimony	7440-36-0	NL	NL	<2.1 U	<2.3 U	<2.0 U	<2.1 U
Arsenic	7440-38-2	13	16	**0.99 J**	**7.9**	**1.0**	<1.1 U
Barium	7440-39-3	350	400	**13.8 J**	**81.7**	**21.1 J**	**14.3 J**
Beryllium	7440-41-7		590	<0.42 U	**0.27 J**	**0.14 J**	<0.42 U
Cadmium	7440-43-9	2.5	9.3	<1.1 U	**0.18 J**	<1.0 U	<1.1 U
Calcium	7440-70-2	NL	NL	**340 J**	**2990**	**516 J**	**469 J**
Chromium	7440-47-3	30	1500	**7.2**	**12.9**	**14.2 J**	**6.8 J**
Cobalt	7440-48-4	NL	NL	**2.7 J**	**5.2 J**	**3.9 J**	**2.5 J**
Copper	7440-50-8	50	270	**7.6**	**24.9**	**9.4**	**5.0 J**
Iron	7439-89-6	NL	NL	**9610**	**22400**	**13400**	**12000**
Lead	7439-92-1	63	1000	**2.2**	**309**	**15.7**	**3.4**
Magnesium	7439-95-4	NL	NL	**748 J**	**1620**	**856 J**	**671 J**
Manganese	7439-96-5	1600	10000	**147**	**235**	**259 J**	**142 J**
Mercury	7439-97-6	0.18	2.8	<0.037 U	**0.52**	**0.024 J**	<0.036 U
Nickel	7440-02-0	30	310	**6.7 J**	**13.6**	**7.7 J**	**6.1 J**
Potassium	7440-09-7	NL	NL	**469 J**	**396 J**	**504 J**	**352 J**
Selenium	7782-49-2	3.9	1500	<2.1 U	**3.8**	<2.0 U	<2.1 U
Silver	7440-22-4	2	1500	<2.1 U	<2.3 U	<2.0 U	<2.1 U
Sodium	7440-23-5	NL	NL	<1050 U	<1130 U	<1000 U	<1060 U
Thallium	7440-28-0	NL	NL	<2.1 U	<2.3 U	<2.0 U	<2.1 U
Vanadium	7440-62-2	NL	NL	**7.7 J**	**17.9**	**13**	**9.1 J**
Zinc	7440-66-6	109	10000	**11**	**73.9**	**16.9**	**10.8**
Cyanide (mg/Kg)							
Available cyanide	57-12-5-A	NL	NL	<0.045 U	<0.046 U	<0.042 U	<0.046 U
PCBs (mg/Kg)							
Aroclor 1016	12674-11-2	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Aroclor 1221	11104-28-2	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Aroclor 1232	11141-16-5	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Aroclor 1242	53469-21-9	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Aroclor 1248	12672-29-6	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Aroclor 1254	11097-69-1	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Aroclor 1260	11096-82-5	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Aroclor 1262	37324-23-5	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Aroclor 1268	11100-14-4	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Total PCBs		0.1	1	*ND*	*ND*	*ND*	*ND*
Pesticides (mg/Kg)							
Aldrin	309-00-2	0.005	0.68	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Alpha-BHC	319-84-6	0.02	3.4	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Beta-BHC	319-85-7	0.036	3	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Chlordane	57-74-9	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
DDD,4,4-	72-54-8	0.0033	92	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
DDE,4,4-	72-55-9	0.0033	62	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
DDT,4,4-	50-29-3	0.0033	47	<0.0075 U	<0.0076 UJ	<0.0070 U	<0.0076 U
Delta-BHC	319-86-8	0.04	500	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Dieldrin	60-57-1	0.005	1.4	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Endosulfan I	959-98-8	2.4	200	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Endosulfan II	33213-65-9	2.4	200	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Endosulfan sulfate	1031-07-8	2.4	200	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Endrin	72-20-8	0.014	89	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Endrin aldehyde	7421-93-4	NL	NL	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Endrin ketone	53494-70-5	NL	NL	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Gamma BHC - Lindane	58-89-9	0.1	9.2	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Heptachlor	76-44-8	0.042	15	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Heptachlor Epoxide	1024-57-3	NL	NL	<0.0075 U	<0.0076 U	<0.0070 U	<0.0076 U
Methoxychlor	72-43-5	NL	NL	<0.0075 U	<0.0076 UJ	<0.0070 U	<0.0076 U
Toxaphene	8001-35-2	NL	NL	<0.075 U	<0.076 U	<0.07 U	<0.076 U
Herbicides (mg/Kg)							
2,4,5-TP (Silvex)	93-72-1	3.8	500	<0.019 U	<0.019 U	<0.018 U	<0.019 U
2,4-D	94-75-7	NL	NL	<0.019 U	<0.019 U	<0.018 U	<0.019 U
T,2,4,5-	93-76-5	NL	NL	<0.019 U	<0.019 U	<0.018 U	<0.019 U

Notes:

Green Shaded values exceed NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(b) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

ND = calculated totals are not detected

NL = Not Listed

mg/Kg = milligram per kilogram

Bold indicates compound was detected

U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence of absence of the analyte cannot be verified.

Table 7 Summary of SC Analytical Results in Groundwater
Former Jamaica Gas Light Company MGP Site
Queens, New York

Sample Location / Sample Date / Sample ID	CAS Number	NYSDEC Groundwater Guidance or Standard Value[1]	MW-01 4/4/2012 MW-1-040412	MW-01 4/4/2012 DUP-1-040412	MW-02 4/4/2012 MW-2-040412	MW-03 4/4/2012 MW-3-040412	MW-04 4/5/2012 MW-4-040512	MW-05 4/4/2012 MW-5-040412	MW-06 4/5/2012 MW-6-040512
BTEX (ug/L)									
Benzene	71-43-2	1	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Ethylbenzene	100-41-4	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Toluene	108-88-3	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Xylenes (total)	1330-20-7	5	<3.0 U	<3.0 U	<3.0 U	<3.0 U	<3.0 U	<3.0 U	<3.0 U
Volatile Organic Compounds (VOCs)(ug/L)									
1,1,1-Trichloroethane	71-55-6	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	**0.12 J**	<1.0 U	<1.0 U
1,1,2,2-Tetrachloroethane	79-34-5	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
1,1,2-Trichloroethane	79-00-5	1	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
1,1-Dichloroethane	75-34-3	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
1,1-Dichloroethene	75-35-4	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
1,2-Dichloroethane	107-06-2	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
1,2-Dichloropropane	78-87-5	1	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
2-Butanone	78-93-3	50	R	R	R	R	R	R	R
2-Hexanone	591-78-6	50	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U
4-Methyl-2-pentanone	108-10-1	NL	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U
Acetone	67-64-1	50	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U
Bromodichloromethane	75-27-4	50	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Bromoform	75-25-2	50	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Bromomethane	74-83-9	5	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 U	<1.0 U	<1.0 U
Carbon disulfide	75-15-0	60	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Carbon tetrachloride	56-23-5	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Chlorobenzene	108-90-7	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Chloroethane	75-00-3	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Chloroform	67-66-3	7	**0.96 J**	**0.98 J**	**0.82 J**	**2.6**	<1.0 U	**3.8**	<1.0 U
Chloromethane	74-87-3	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
cis-1,2-Dichloroethene	156-59-2	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
cis-1,3-Dichloropropene	10061-01-5	0.4	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Dibromochloromethane	124-48-1	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Methylene chloride	75-09-2	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Styrene	100-42-5	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Tetrachloroethene	127-18-4	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
trans-1,2-Dichloroethene	156-60-5	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
trans-1,3-Dichloropropene	10061-02-6	0.4	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Trichloroethene	79-01-6	5	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Vinyl chloride	75-01-4	2	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U

Notes:

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ug/L - micrograms per liter

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J = The associated numerical value is an estimated quantity.

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Bold indicates compound detected at a concentration greater than the reporting limit.

Yellow highlight indicates exceedance of the NYSDEC Groundwater Guidance or Standard Value.

Table 7 Summary of SC Analytical Results in Groundwater
Former Jamaica Gas Light Company MGP Site
Queens, New York

Sample Location / Sample Date / Sample ID	CAS Number	NYSDEC Groundwater Guidance or Standard Value[1]	MW-01 4/4/2012 MW-1-040412	MW-01 4/4/2012 DUP-1-040412	MW-02 4/4/2012 MW-2-040412	MW-03 4/4/2012 MW-3-040412	MW-04 4/5/2012 MW-4-040512	MW-05 4/4/2012 MW-5-040412	MW-06 4/5/2012 MW-6-040512
Polynuclear Aromatic Hydrocarbons (PAHs) (ug/L)									
2-Methylnaphthalene	91-57-6	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Acenaphthene	83-32-9	20	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Acenaphthylene	208-96-8	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Anthracene	120-12-7	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Benzo(a)anthracene	56-55-3	0.002	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
Benzo(a)pyrene	50-32-8	NL	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
Benzo(b)fluoranthene	205-99-2	0.002	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
Benzo(ghi)perylene	191-24-2	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Benzo(k)fluoranthene	207-08-9	0.002	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
Chrysene	218-01-9	0.002	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Dibenz(a,h)anthracene	53-70-3	NL	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
Fluoranthene	206-44-0	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Fluorene	86-73-7	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
Naphthalene	91-20-3	10	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Phenanthrene	85-01-8	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Pyrene	129-00-0	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Other Semi Volatile Organic Compounds (SVOC) (ug/L)									
1,2,4-Trichlorobenzene	120-82-1	5	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
1,2-Dichlorobenzene	95-50-1	3	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
1,3-Dichlorobenzene	541-73-1	3	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
1,4-Dichlorobenzene	106-46-7	3	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
2,4,5-Trichlorophenol	95-95-4	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
2,4,6-Trichlorophenol	88-06-2	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
2,4-Dichlorophenol	120-83-2	5	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
2,4-Dimethylphenol	105-67-9	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
2,4-Dinitrophenol	51-28-5	10	<33 U	<33 U	<31 UJ	<33 U	<31 U	<31 U	<31 U
2,4-Dinitrotoluene	121-14-2	5	<2.2 U	<2.2 U	<2.0 U	<2.2 U	<2.1 U	<2.1 U	<2.1 U
2,6-Dinitrotoluene	606-20-2	5	<2.2 U	<2.2 U	<2.0 U	<2.2 U	<2.1 U	<2.1 U	<2.1 U
2-Chloronaphthalene	91-58-7	10	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
2-Chlorophenol	95-57-8	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
2-Methylphenol	95-48-7	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
2-Nitroaniline	88-74-4	5	<22 U	<22 U	<20 U	<22 U	<21 U	<21 U	<21 U
2-Nitrophenol	88-75-5	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
3,3'-Dichlorobenzidine	91-94-1	5	<22 U	<22 U	<20 U	<22 U	<21 U	<21 U	<21 U
3-Nitroaniline	99-09-2	5	<22 U	<22 U	<20 U	<22 U	<21 U	<21 U	<21 U
4,6-Dinitro-2-methylphenol	534-52-1	NL	<33 U	<33 U	<31 U	<33 U	<31 U	<31 U	<31 U
4-Bromophenyl phenyl ether	101-55-3	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
4-Chloro-3-methylphenol	59-50-7	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
4-Chloroaniline	106-47-8	5	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
4-Chlorophenyl phenyl ether	7005-72-3	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
4-Methylphenol	106-44-5	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
4-Nitroaniline	100-01-6	5	<22 U	<22 U	<20 U	<22 U	<21 U	<21 U	<21 U
4-Nitrophenol	100-02-7	NL	<33 U	<33 U	<31 U	<33 U	<31 U	<31 U	<31 U
bis(2-Chloroethoxy)methane	111-91-1	5	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
bis(2-Chloroethyl) ether	111-44-4	1	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
bis(2-Ethylhexyl) phthalate	117-81-7	5	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Butyl benzyl phthalate	85-68-7	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Carbazole	86-74-8	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Dibenzofuran	132-64-9	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Diethyl phthalate	84-66-2	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Dimethyl phthalate	131-11-3	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Di-n-butyl phthalate	84-74-2	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Di-n-octyl phthalate	117-84-0	NL	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Hexachlorobenzene	118-74-1	0.4	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
Hexachlorobutadiene	87-68-3	0.5	<2.2 U	<2.2 U	<2.0 U	<2.2 U	<2.1 U	<2.1 U	<2.1 U
Hexachlorocyclopentadiene	77-47-4	5	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Hexachloroethane	67-72-1	5	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
Isophorone	78-59-1	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Nitrobenzene	98-95-3	0.4	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
N-Nitrosodi-n-propylamine	621-64-7	50	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
N-Nitrosodiphenylamine	86-30-6	50	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U
Pentachlorophenol	87-86-5	1	<33 U	<33 U	<31 U	<33 U	<31 U	<31 U	<31 U
Phenol	108-95-2	1	<11 U	<11 U	<10 U	<11 U	<10 U	<10 U	<10 U

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Table 7 Summary of SC Analytical Results in Groundwater
Former Jamaica Gas Light Company MGP Site
Queens, New York

AECOM

Sample Location / Sample Date / Sample ID	CAS Number	NYSDEC Groundwater Guidance or Standard Value[1]	MW-01 4/4/2012 MW-1-040412	MW-01 4/4/2012 DUP-1-040412	MW-02 4/4/2012 MW-2-040412	MW-03 4/4/2012 MW-3-040412	MW-04 4/5/2012 MW-4-040512	MW-05 4/4/2012 MW-5-040412	MW-06 4/5/2012 MW-6-040512
Inorganic Compounds (ug/L)									
Aluminum	7429-90-5	NL	<200 U	<200 U	<200 U	**303**	**423**	**717**	**626**
Antimony	7440-36-0	3	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U
Arsenic	7440-38-2	25	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U
Barium	7440-39-3	1000	**85.0 J**	**85.6 J**	**63.7 J**	**74.3 J**	**73.0 J**	**83.5 J**	**45.7 J**
Beryllium	7440-41-7	3	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U
Cadmium	7440-43-9	5	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U
Calcium	7440-70-2	NL	**34200**	**35000**	**24300**	**38000**	**47000**	**25300**	**40600**
Chromium	7440-47-3	50	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U
Cobalt	7440-48-4	NL	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<50.0 U
Copper	7440-50-8	200	<25.0 U	<25.0 U	<25.0 U	<25.0 U	<25.0 U	<25.0 U	**9.6 J**
Iron	7439-89-6	300	<150 U	**139 J**	**216**	**655**	**807**	**1440**	**1300**
Lead	7439-92-1	25	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U
Magnesium	7439-95-4	35000	**9040**	**8950**	**4530 J**	**11000**	**9610**	**7060**	**10500**
Manganese	7439-96-5	300	**128**	**130**	<15.0 U	**75.2**	**57.4**	**73.2**	**39.4**
Mercury	7439-97-6	0.7	<0.20 U	<0.20 U	<0.20 U	<0.20 U	<0.20 U	<0.20 U	<0.20 U
Nickel	7440-02-0	100	<40.0 U	<40.0 U	<40.0 U	<40.0 U	<40.0 U	<40.0 U	**5.5 J**
Potassium	7440-09-7	NL	**5190**	**5250**	**6400**	**9210**	**8320**	**7390**	**6310**
Selenium	7782-49-2	10	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U
Silver	7440-22-4	50	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U
Sodium	7440-23-5	20000	**21200**	**21300**	**71300**	**75400**	**41400**	**73600**	**21800**
Thallium	7440-28-0	0.5	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0 U
Vanadium	7440-62-2	NL	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<50.0 U
Zinc	7440-66-6	2000	<30.0 U	<30.0 U	<30.0 U	<30.0 U	<30.0 U	<30.0 U	<30.0 U
Cyanide (ug/L)									
Total Cyanide	57-12-5	200	<10. U	<10. U	**100**	**3.0 J**	<10. U	<10. U	<10. U
Available Cyanide		NL	NS	NS	NS	NS	NS	NS	NS
PCBs (ug/L)									
Aroclor 1016	12674-11-2	NL	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 U	<0.51 U	<0.51 U
Aroclor 1221	11104-28-2	NL	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 U	<0.51 U	<0.51 U
Aroclor 1232	11141-16-5	NL	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 U	<0.51 U	<0.51 U
Aroclor 1242	53469-21-9	NL	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 U	<0.51 U	<0.51 U
Aroclor 1248	12672-29-6	NL	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 U	<0.51 U	<0.51 U
Aroclor 1254	11097-69-1	NL	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 U	<0.51 U	<0.51 U
Aroclor 1260	11096-82-5	NL	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 U	<0.51 U	<0.51 U
Aroclor 1262	37324-23-5	NL	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 U	<0.51 U	<0.51 U
Aroclor 1268	11100-14-4	NL	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 UJ	<0.51 U	<0.51 U	<0.51 U
Pesticides (ug/L)									
Aldrin	309-00-2	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Alpha-BHC	319-84-6	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Beta-BHC	319-85-7	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Chlordane	57-74-9	NL	<0.51 U	<0.51 U	<0.51 U	<0.51 U	<0.51 U	<0.51 U	<0.51 U
DDD,4,4-	72-54-8	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
DDE,4,4-	72-55-9	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
DDT,4,4-	50-29-3	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Delta-BHC	319-86-8	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Dieldrin	60-57-1	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Endosulfan I	959-98-8	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Endosulfan II	33213-65-9	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Endosulfan sulfate	1031-07-8	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Endrin	72-20-8	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Endrin aldehyde	7421-93-4	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Endrin ketone	53494-70-5	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Gamma BHC - Lindane	58-89-9	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Heptachlor	76-44-8	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Heptachlor Epoxide	1024-57-3	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Methoxychlor	72-43-5	NL	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Toxaphene	8001-35-2	NL	<0.51 U	<0.51 U	<0.51 U	<0.51 U	<0.51 U	<0.51 U	<0.51 U
Herbicides (ug/L))									
2,4,5-TP (Silvex)	93-72-1	NL	<0.56 U	<0.56 U	<0.53 U	<0.56 U	<0.51 U	<0.52 U	<0.51 U
2,4-D	94-75-7	NL	<0.56 U	<0.56 U	<0.53 U	<0.56 U	<0.51 U	<0.52 U	<0.51 U
T,2,4,5-	93-76-5	NL	<0.56 U	<0.56 U	<0.53 U	<0.56 U	<0.51 U	<0.52 U	<0.51 U

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Table 8 Proposed RI Soil Boring Locations, Rationale, and Analytical Sample Summary
Former Jamaica Gas Light Company MGP Site, Queens, New York

Location ID	Sample Location Rationale	Sample Depth* Interval (ft bgs)	Proposed Laboratory Analysis
SB-16	North and upgradient from SB-12 to delineate the extent of tar coating observed from 5 to 7.5 and 7.75 to 8 feet bgs and the elevated PAH concentrations detected in samples from 2.5 to 7.5 ft bgs in SB-12.	2.5 - 5 5 - 8	BTEX, PAHs, RCRA Metals, Free CN
SB-17	North of Holder No. 1, east of SB-12, and north of SB-9 to delineate the extent of tar coating observed from 5 to 7.5 and 7.75 to 8 ft bgs and the elevated PAH concentrations detected in samples from 2.5 to 7.5 ft bgs in SB-12. To also delineate the extent of tar coating from 13 to 13.5 and PAH exceedances from 10-13.5 ft bgs in SB-9.	2.5 - 5 5 - 8 11 - 14	BTEX, PAHs, RCRA Metals, Free CN
SB-18	North-northwest of Holder No. 2 and SB-8 to delineate the extent of tar coating observed from 16.5-17 ft bgs in SB-8.	15 - 17	BTEX, PAHs, RCRA Metals, Free CN
SB-19	Northeast of SB-10 and east of Holder No. 1 to delineate the extent of tar coating observed from 12.5 to 17.5 ft bgs and elevated PAH concentrations in the sample collected from 12.5 to 15 ft bgs in SB-10.	12 - 15	BTEX, PAHs, RCRA Metals, Free CN
SB-20	Southwest of SB-10 and Holder No. 1 to delineate the extent of tar coating observed from 12.5 to 17.5 ft bgs and elevated PAH concentrations in the sample collected from 12.5 to 15 ft bgs in SB-10.	12 - 15	BTEX, PAHs, RCRA Metals, Free CN
SB-21+	Located within the FDA Property southeast of Holders No.1 and 2 and Prospect Cemetery to delineate the extent of tar coating observed from 12.5 to 17.5 ft bgs and elevated PAH concentrations in the sample collected from 12 to 15 ft bgs in SB-10 and the tar coating noted from 16.5 to 17 ft bgs in SB-8.	Observations from SB-19 & SB-20 OR 2 - 5 5 - 7	BTEX, PAHs, RCRA Metals, Free CN
SB-22+	Located within the FDA Property south of Holders No.1 and 2 and Prospect Cemetery to delineate the extent of tar coating observed from 12.5 to 17.5 ft bgs and elevated PAH concentrations in the sample collected from 12 to 15 ft bgs in SB-10 and the tar coating noted from 16.5 to 17 ft bgs in SB-8.	Observations from SB-19 & SB-20 OR 2 - 5 5 - 8	BTEX, PAHs, RCRA Metals, Free CN
SB-23+	Located within the FDA Property south of Holders No.1 and 2 and Prospect Cemetery to delineate the extent of tar coating observed from 12.5 to 17.5 ft bgs and elevated PAH concentrations in the sample collected from 12 to 15 ft bgs in SB-10 and the tar coating noted from 16.5 to 17 ft bgs in SB-8.	Observations from SB-19 & SB-20 OR 2 - 5 5 - 9	BTEX, PAHs, RCRA Metals, Free CN
SB-24	Step-out borehole located within the sidewalk on the western edge of Prospect Cemetery to delineate any observed impacts possibly observed from SB-23 located southwest of Holders No.1 and 2 and Prospect Cemetery to delineate the extent of tar coating observed from 12.5 to 17.5 ft bgs and elevated PAH concentrations in the sample collected from 12 to 15 ft bgs in SB-10 and the tar coating noted from 16.5 to 17 ft bgs in SB-8.	Observations from SB-23 OR 2 - 5 5 - 10	BTEX, PAHs, RCRA Metals, Free CN
TP-1	Across the southwest edge of Holder No. 1 perpendicular to the footprint to determine the bottom of the foundation and delineate the extent of tar coating observed from 12.5 to 17.5 ft bgs and elevated PAH concentrations in the sample collected from 12.5 to 15 ft bgs in SB-10.	12 - 15	BTEX, PAHs, RCRA Metals, Free CN
TP-2	Across the northeast edge of Holder No. 2 perpendicular to the footprint to determine the bottom of the foundation and delineate the extent of tar coating observed from 16.5 to 17 ft bgs in SB-8.	15 - 17	BTEX, PAHs, RCRA Metals, Free CN
TP-3	South of and overlaying the location SB-12 to determine the bottom of the former Purifier House and delineate the extent of tar coating observed from 5 to 7.5 and 7.75 to 8 feet bgs and the elevated PAH concentrations detected in samples from 2.5 to 7.5 ft bgs in SB-12.	2.5 - 5 5 - 8	BTEX, PAHs, RCRA Metals, Free CN

Notes:

ft bgs - feet below ground surface

* - Samples will be collected from the depths indicated IF visible impacts are not noted to delineate the extent of previously identified adjacent impacts. If impacts are noted at this location, samples for laboratory analyses will be collected from the upper 5 feet, the most impacted interval, and below the most impacted interval for vertical extent. If visible impacts are noted an additional step out boring will be completed and samples for laboratory analyses will be collected from adjacent impacted intervals as appropriate for horizontal delineation purposes.

+ - Samples collected from SB-21, SB-22, SB-23 will be based on impacts observed in borings SB-19 and SB-20 IF visible impacts are not noted. IF visible impacts are not noted in the boring and in SB-19 and SB-20, samples will be collected from the depths indicated to delineate the extent of previously identified adjacent impacts. If impacts are noted at this location, samples for laboratory analyses will be collected from the upper 5 feet, the most impacted interval, and below the most impacted interval for vertical extent. If visible impacts are noted an additional step out boring will be completed and samples for laboratory analyses will be collected from adjacent impacted intervals as appropriate for horizontal delineation purposes.

FDA - United States Food and Drug Administration

RCRA - Resource Conservation and Recovery Act

CN - Cyanide

BTEX - EPA Method 8260B

PAHs - EPA Method 8270C

RCRA Metals - EPA Method 6000-7000 Series

Free CN - EPA Method 9014A and 9012B

Completion depths of the borings may be adjusted shallower in instances where 10 feet of clean soils are encountered below apparently contaminated soils. Soil borings will be advanced a minimum of 40 feet bgs. In the event that impacts are observed above an apparent confining layer, borings will be terminated at the top of the confining layer.

Table 9 Proposed RI Monitoring Well Locations, Rationale, and Analytical Sample Summary
Former Jamaica Gas Light Company MGP Site,
Queens, New York

AECOM

Location ID	Sample Location Rationale	Screened Interval Depth (bgs)	Proposed Laboratory Analysis
MW-7	Evaluate groundwater quality between the two smaller gas holders and along the southern site boundary. Location coincides with boring SB-20	TBD	BTEX, PAHs, RCRA Metals, Total CN
MW-8	Evaluate groundwater quality south from the Site and along southern boundary of Prospect Cemetery. Located within the FDA Property. Location coincides with boring SB-21.	TBD	BTEX, PAHs, RCRA Metals, Total CN
MW-9	Evaluate groundwater quality south from the Site and along southern boundary of Prospect Cemetery. Located within the FDA Property. Location coincides with boring SB-22.	TBD	BTEX, PAHs, RCRA Metals, Total CN
MW-10	Evaluate groundwater quality south from the Site and along southern boundary of Prospect Cemetery. Located within the FDA Property. Location coincides with boring SB-23.	TBD	BTEX, PAHs, RCRA Metals, Total CN

Notes:

FDA - United States Food and Drug Administration

TBD - to be determined - 10 foot screened interval will be set to intersect the water table, likely 20 to 30 feet below ground surface.

BTEX - EPA Method 8260B

PAHs - EPA Method 8270C

RCRA Metals - EPA Method 6000 and 7000 Series.

Total CN - EPA Method 9012B

Figures

AECOM

153rd ST

ARCHER AVE

Long Island Railroad Property

Asphalt

Grass

Asphalt

BEAVER RD

ACCESS RD

NYS Dormitory Authority

Prospect Cemetery

159th ST

BEAVER RD

158th ST

NYS Dormitory Authority

157th ST

Legend

- Gate
- Project Site
- Approximate Property Boundary Not Surveyed
- Fence
- Retaining Wall
- Present Curb Line
- Railroad

N W E S

0 20 40 80 Feet

1 in = 80 ft

NAD 83 New York Long Island
NAVD 88 North American Vertical Datum

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
3. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013 | DRWN: XW | JOB #: 60144468

SITE LAYOUT

FIGURE 1

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 1 Site Layout.mxd (National Grid on USNYCS01\Environment\ (Y))

Legend

- Project Site
- Building

Land Use

- One & Two Family Buildings
- Multi Family Walk Up Buildings
- Commercial and Office Building
- Industrial and Manufacturing
- Public Facilities and Institutions
- Transportation and Utility
- Open Space and Outdoor Recreation
- Parking Facilities
- Vacant Land
- Unknown
- Block Boundary
- 10099 Block Number
- 1 Lot Number

Note: Tax Block & Tax Lot files are copyrighted by the New York City Department of City Planning

AECOM Environment
20 Exchange Place
New York, NY 10005
(212) 798-8500
www.aecom.com

Parcel Locations
National Grid
Former Jamaica Gas Light Company MGP Site
Queens, New York

Scale:	Date:	Project Number:
1 in = 200 ft	03/20/2013	60144468

Figure Number:

2

J:\Rem_Eng\Project Files\P600 (60000 - 60999)\60144-412 Flatbush Station A&B Gas Holder\8.0 Project Documents\8.1 Scope of Work\8.11 SC Scope of Work - 2009\Misc\Figures\MXD\Figure_2-1_Parcel_Map.mxd

AECOM

Long Island Railroad Property

Asphalt

Grass

Asphalt

Light Engine Room
(1873 - 1901)

Coal Shed
(1873 - 1897)

Generator House
(1897 - 1901)

Retort House
(1873 - 1901)

Purifiers and Meter House
(1873 - 1901)

Iron Shed
(1897 - 1901)

Coal Shed
(1873 - 1901)

BEAVER RD

ACCESS RD

Ripeshed
(1925 - 1967)

Boilers
(1899-1942)
Office
(1951-1967)

Exhauster Room
(1899-1942)
Office
(1951-1967)

Meter & Governor
Room
(1899-1942)
Office
(1951-1967)

NYS Dormitory Authority

Storage
(1886 - 1901)

Holder No. 1
Holder 34 ft diam.
Brick Tank 38 ft diam.
10,000 cu ft
(1873 - 1901)

Governor Room/Workshop
(1886 - 1901)

Storage
(1942 - 1951)

Holder No. 2
Holder 40 ft diam.
Brick Tank 42 ft diam.
18,000 cu ft
(1873 - 1901)

Holder No. 3
Holder 97.5 ft diam.
Iron Tank 100 ft diam.
500,000 cu ft
(1898 - 1938)

Pavement

Prospect Cemetery

BEAVER RD

158th ST

NYS Dormitory
Authority

Legend

- Gate
- Project Site
- Approximate Property Boundary Not Surveyed
- Historical Feature
- Fence
- Retaining Wall
- Present Curb Line
- Railroad

N W E S

0 10 20 40 Feet

1 in = 40 ft

NAD 83 New York Long Island
NAVD 88 North American Vertical Datum

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS, HISTORIC AERIAL PHOTOGRAPHY, AND SC RESULTS.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013 | DRWN: XW | JOB #: 60144468

HISTORICAL STRUCTURE LOCATIONS AND SITE BOUNDARY

FIGURE 3

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 3 Historical Structure Locations and Site Boundary.mxd (National Grid on USNYCS011\Environment\ (Y))

AECOM

Long Island Railroad Property

Asphalt

Grass

Asphalt

Light Engine Room (1873 - 1901)

Coal Shed (1873 - 1897)

Generator House (1897 - 1901)

Retort House (1873 - 1901)

Purifiers and Meter House (1873 - 1901)

Iron Shed (1897 - 1901)

BEAVER RD

ACCESS RD

Coal Shed (1873 - 1901)

Boilers (1899-1942) Office (1951-1967)

Exhauster Room (1899-1942) Office (1951-1967)

Meter & Governor Room (1899-1942) Office (1951-1967)

Tripeshed (1925 - 1967)

Storage (1886 - 1901)

Holder No. 1 Holder 34 ft diam. Brick Tank 38 ft diam. 10,000 cu ft (1873 - 1901)

Governor Room/Workshop (1886 - 1901)

Storage (1942 - 1951)

Holder No. 2 Holder 40 ft diam. Brick Tank 42 ft diam. 18,000 cu ft (1873 - 1901)

Holder No. 3 Holder 97.5 ft diam. Iron Tank 100 ft diam. 500,000 cu ft (1898 - 1938)

NYS Dormitory Authority

Pavement

Prospect Cemetery

NYS Dormitory Authority

BEAVER RD

158th ST

SB-13/MW-6
SB-14
SS-14
SB-15/MW-4
SB-12
SS-12
SB-11
SS-11
SB-5/MW-5
SS-5
SS-5A
SB-8A/MW-3
SB-8
SB-9
SB-10
SB-6
SB-7
SB-3
SB-4
SB-1/MW-1
SB-2/MW-2

Legend

- Monitoring Well Locaiton
- Soil Boring
- Surface Soil Sample
- Gate
- Project Site
- Approximate Property Boundary Not Surveyed
- Historical Feature
- Fence
- Retaining Wall
- Present Curb Line
- Railroad

N W E S

0 10 20 40 Feet

1 in = 40 ft

NAD 83 New York Long Island
NAVD 88 North American Vertical Datum

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS, HISTORIC AERIAL PHOTOGRAPHY, AND SC RESULTS.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

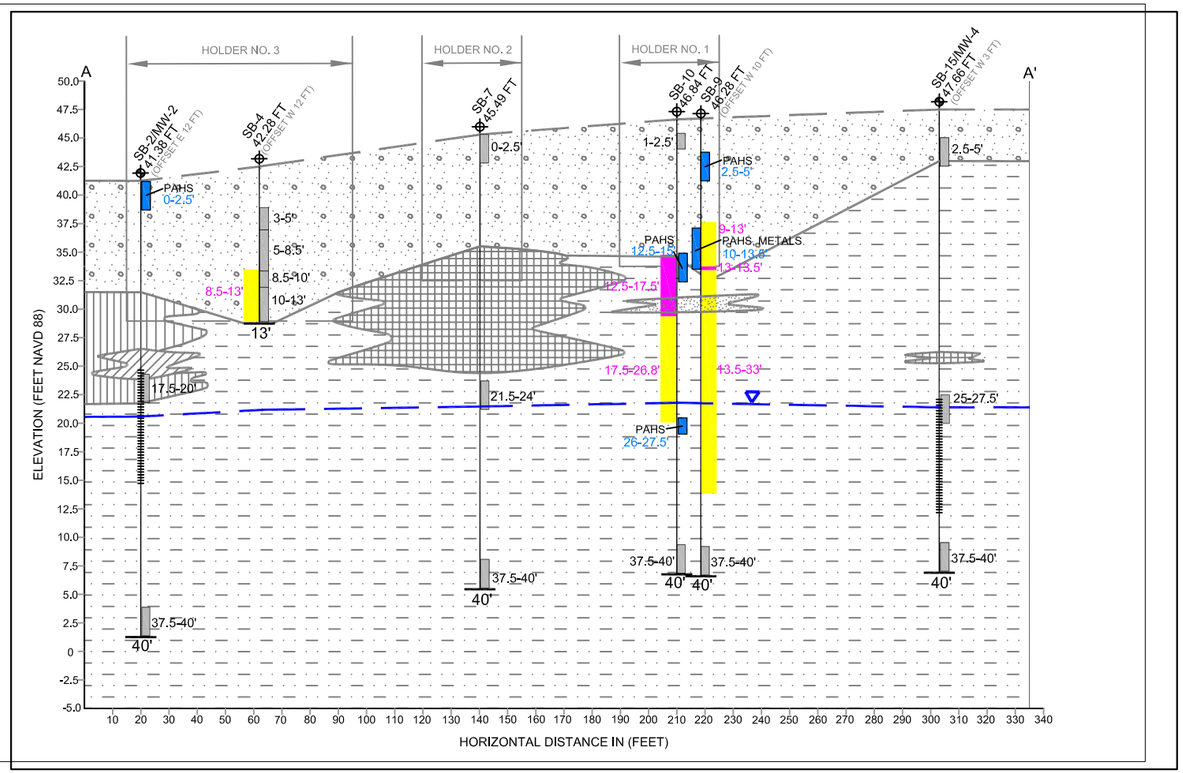
NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013 | DRWN: XW | JOB #: 60144468

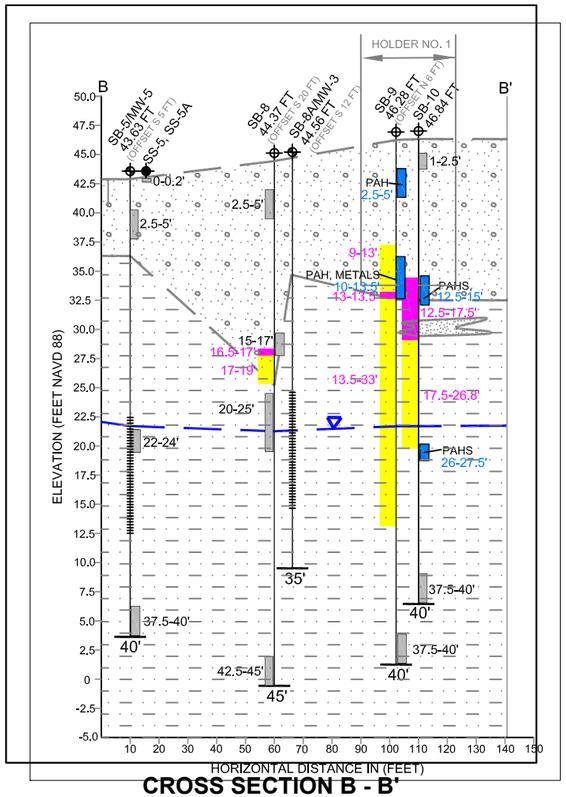
SITE CHARACTERIZATION LOCATIONS

FIGURE 4

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 4 Site Characterization Locations.mxd (National Grid on USNYCS01\Environmenti (Y))



CROSS SECTION A - A'



CROSS SECTION B - B'

LEGEND

VISUAL AND OLFACTORY IMPACTS

- COATED MATERIAL, LENSES
- STAINING, ODOR

17.5-33' DEPTH RANGE OF VISUAL OLFACTORY IMPACTS (BGS)

STRATIGRAPHY

- FILL
- SILTY SAND
- WELL GRADED SAND
- POORLY GRADED SAND
- SANDY SILTY
- CLAY AND SILTY CLAY OF LOW PLASTICITY
- GROUNDWATER

40' BORING COMPLETION DEPTH (BGS)

EXCEEDANCES PER THE NYSDEC PART 375-6.8(b) COMMERCIAL USE SOIL CLEANUP OBJECTIVE VALUE

- SAMPLE INTERVAL

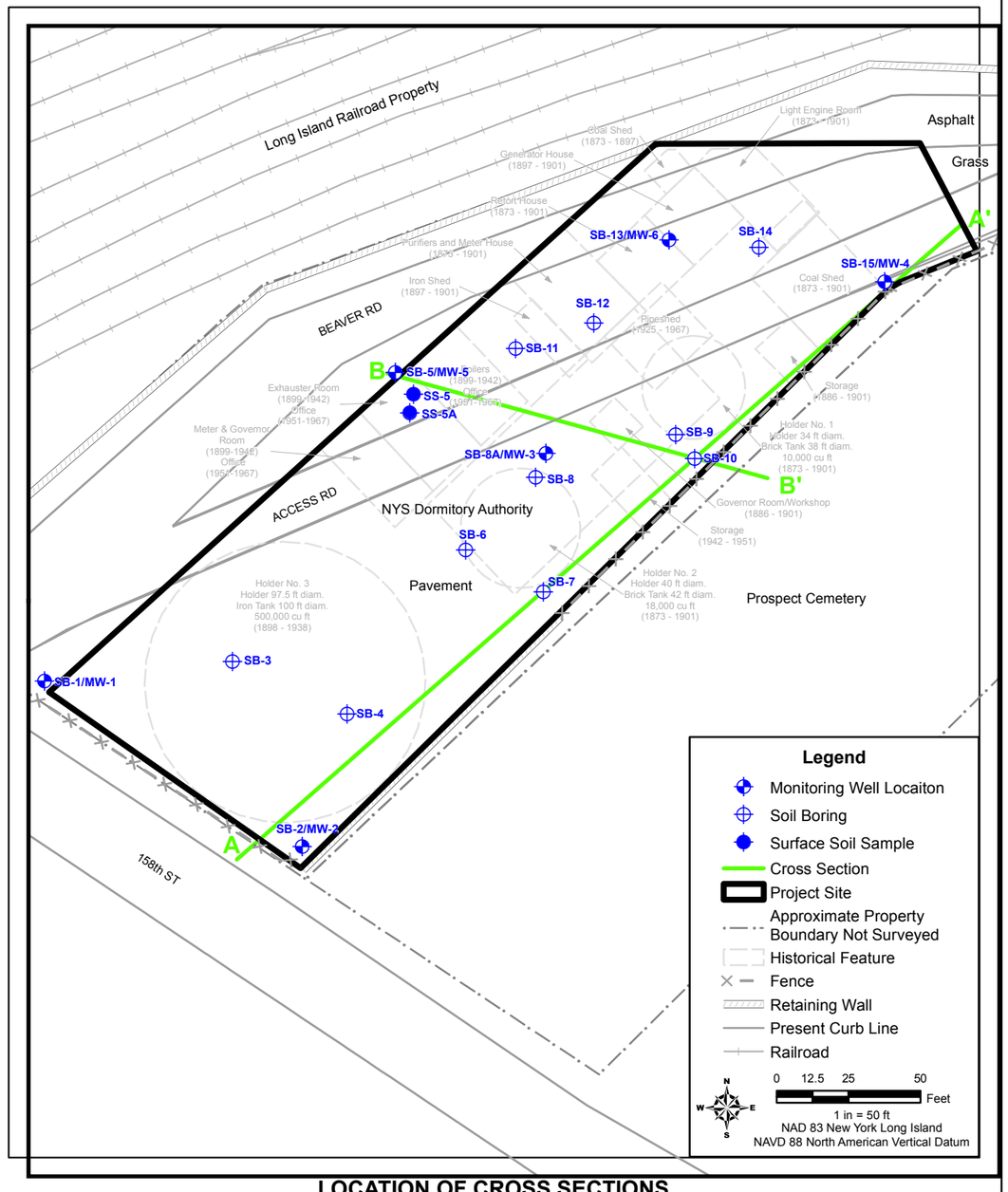
BGS BELOW GROUND SURFACE

0-2.5' SAMPLE COMPLETION DEPTH (INCHES BGS)

- SCREEN INTERVAL

NOTE:

1. VERTICAL EXAGGERATION 1:4.



LOCATION OF CROSS SECTIONS

NOTES:

1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS, HISTORIC AERIAL PHOTOGRAPHY, AND SC RESULTS.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013 | DRWN: XW | JOB #: 60144468

GEOLOGIC CROSS SECTIONS

FIGURE 5

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 5 Geologic Cross Sections.mxd (National Grid on USNYCS01\Environment\ (Y:))

AECOM

Long Island Railroad Property

Asphalt
Grass
Asphalt

MW-6 (24.24)
MW-4 (21.18)
MW-5 (21.14)
MW-3 (21.09)
MW-1 (20.94)
MW-2 (20.82)

BEAVER RD
ACCESS RD
Pavement
NYS Dormitory Authority
Prospect Cemetery
City University of New York Building
NYS Dormitory Authority
159th ST
158th ST
157th ST
LIBERTY AVE

21.15
21.10
21.05
21.00
20.95
20.90
20.85
20.80
20.75
20.70
20.65
20.60
20.55
20.50
20.45
20.40
20.35
20.30
20.30

MW-2 (20.98)
MW-1 (20.39)
MW-3 (20.69)
MW-6 (20.54)
MW-5 (20.33)
MW-4 (20.34)

Legend

- Monitoring Well Locaiton
- Gate
- 20.60 Groundwater Elevation Contour
- Groundwater Flow Direction
- MW-1 (20.39) Groundwater Elevation (Feet NAVD 88)
- Project Site
- Approximate Property Boundary Not Surveyed
- Historical Feature
- Fence
- Retaining Wall
- Present Curb Line
- Railroad

N W E S

0 20 40 80 Feet

1 in = 80 ft

NAD 83 New York Long Island
NAVD 88 North American Vertical Datum

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS, HISTORIC AERIAL PHOTOGRAPHY, AND SC RESULTS.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).
5. MW-6 GROUNDWATER ELEVATION DATA IS NOT INCLUDED IN THE GROUNDWATER CONTOUR DUE TO A 1.65 FEET GROUNDWATER ELEVATION SHIFT.

NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013	DRWN: XW	JOB #: 60144411

GROUNDWATER ELEVATION CONTOUR MAP APRIL 4, 2012

FIGURE 6

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 6 Groundwater Elevation Contour Map April 4 2012.mxd (National Grid on USNYCS01\Environmental (Y))

AECOM

Long Island Railroad Property

Asphalt

Grass

Asphalt

Light Engine Room
(1873 - 1901)

Coal Shed
(1873 - 1897)

Generator House
(1897 - 1901)

Retort House
(1873 - 1901)

Purifiers and Meter House
(1873 - 1901)

Iron Shed
(1897 - 1901)

BEAVER RD

ACCESS RD

Coal Shed
(1873 - 1901)

Pipeshed
(1925 - 1967)

Boilers
(1899-1942)
Office
(1951-1967)

Exhauster Room
(1899-1942)
Office
(1951-1967)

Meter & Governor
Room
(1899-1942)
Office
(1951-1967)

Storage
(1886 - 1901)

Holder No. 1
Holder 34 ft diam.
Brick Tank 38 ft diam.
10,000 cu ft
(1873 - 1901)

Governor Room/Workshop
(1886 - 1901)

Storage
(1942 - 1951)

NYS Dormitory Authority

Holder No. 3
Holder 97.5 ft diam.
Iron Tank 100 ft diam.
500,000 cu ft
(1898 - 1938)

Holder No. 2
Holder 40 ft diam.
Brick Tank 42 ft diam.
18,000 cu ft
(1873 - 1901)

Pavement

Prospect Cemetery

158th ST

SB-13/MW-6 (0'-40')

SB-14 (0'-40')

SB-15/MW-4 (0'-40')

SB-12 (5'-7.5', 7.75'-8') (0'-5', 7.5'-7.75' 8'-40')

SB-11 (0'-40')

SB-5/MW-5 (0'-40')

SB-9 (9'-13', 13.5'-33') (13'-13.5') (0'-9', 33'-40')

SB-10 (17.5'-26.8') (12.5'-17.5') (0'-12.5', 26.8'-40')

SB-8A/MW-3 (0'-45') (17'-19')

SB-8 (16.5'-17') (0'-16.5', 19'-40')

SB-6 (0'-40')

SB-7 (0'-40')

SB-1/MW-1 (0'-40')

SB-3 (10'-11.75') (0'-10')

SB-4 (0'-8.5') (8.5'-13')

SB-2/MW-2 (0'-40')

Legend

- Monitoring Well Locaiton
- Soil Boring
- Gate
- Project Site
- Approximate Property Boundary Not Surveyed
- Historical Feature
- No Impacts
- Staining, Odor
- Coated Material, Lenses
- (10'-13') Depth of Impacts Observed in Feet Below Ground Surface (BGS)
- Fence
- Retaining Wall
- Present Curb Line
- Railroad

N W E S

0 7.5 15 30 Feet

1 in = 30 ft

NAD 83 New York Long Island
NAVD 88 North American Vertical Datum

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS, HISTORIC AERIAL PHOTOGRAPHY, AND SC RESULTS.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013 | DRWN: XW | JOB #: 60144468

VISUAL AND OLFACTORY IMPACTS

FIGURE 7

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 7 Visual and Olfactory Impacts.mxd (National Grid on USNYCS01\Environment\ (Y))

AECOM

Sample Location	SS-11
Sample Date	2/28/2012
Sample ID	SS-11 (0-2)022812
Sample Interval (inches)	0-2"
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)	
Benzo(b)fluoranthene	1.3
Chrysene	1.2
Indeno(1,2,3-cd)pyrene	0.64
Total PAHs	*9.9*
Inorganic Compounds (mg/Kg)	
Chromium	59.6
Copper	95
Lead	280
Mercury	0.26
Zinc	186

Sample Location	SS-14
Sample Date	2/27/2012
Sample ID	SS-14 (0-2)022712
Sample Interval (inches)	0-2"
Inorganic Compounds (mg/Kg)	
Copper	50.3
Lead	137J
Mercury	0.37
Zinc	149
Pesticides (mg/Kg)	
DDT,4,4-	0.0089

Sample Location	SS-05
Sample Date	2/29/2012
Sample ID	SS-5 (0-2)022912
Sample Interval (inches)	0-2"
Inorganic Compounds (mg/Kg)	
Copper	74.9
Lead	83.8
Zinc	119

Sample Location	SS-05A
Sample Date	3/8/2012
Sample ID	SS-5A (0-2)030812
Sample Interval (inches)	0-2"
Inorganic Compounds (mg/Kg)	
Copper	81.2
Lead	111
Mercury	0.23J+
Zinc	128
Pesticides (mg/Kg)	
DDD,4,4-	0.0061 J
DDT,4,4-	0.014

Sample Location	SS-12
Sample Date	2/28/2012
Sample ID	SS-12 (0-2)022812
Sample Interval (inches)	0-2"
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)	
Benzo(a)anthracene	1.1
Benzo(b)fluoranthene	1.4
Chrysene	1.4
Indeno(1,2,3-cd)pyrene	0.83
Total PAHs	*12.286*
Inorganic Compounds (mg/Kg)	
Copper	126
Lead	211J
Mercury	0.34
Zinc	249

Legend

- Surface Soil Sample
- Gate
- Project Site
- Approximate Property Boundary Not Surveyed
- Historical Feature
- Fence
- Retaining Wall
- Present Curb Line
- Railroad

0 10 20 40 Feet

1 in = 40 ft

NAD 83 New York Long Island
NAVD 88 North American Vertical Datum

J = The associated numerical value is an estimated quantity.
Exceedance of the NYSDEC Part 375-6.8(a) Unrestricted Use Soil Cleanup Objective value.
J+ = The result is an estimated numerical quantity, likely to be biased high. The associated numerical result is the approximate concentration of the analyte in the sample (inorganics).
A = NYSDEC CP-51 alternate criteria of 500 mg/Kg for total PAHs.

Long Island Railroad Property
Asphalt
Grass
Asphalt
Light Engine Room (1873 - 1901)
Coal Shed (1873 - 1897)
Generator House (1897 - 1901)
Retort House (1873 - 1901)
Purifiers and Meter House (1873 - 1901)
Iron Shed (1897 - 1901)
Coal Shed (1873 - 1901)
Piperied (1925 - 1967)
Boilers (1899-1942) Office (1951-1967)
Exhauster Room (1899-1942) Office (1951-1967)
Meter & Governor Room (1899-1942) Office (1951-1967)
Storage (1886 - 1901)
Holder No. 1 Holder 34 ft diam. Brick Tank 38 ft diam. 10,000 cu ft (1873 - 1901)
Governor Room/Workshop (1886 - 1901)
Storage (1942 - 1951)
Holder No. 2 Holder 40 ft diam. Brick Tank 42 ft diam. 18,000 cu ft (1873 - 1901)
Holder No. 3 Holder 97.5 ft diam. Iron Tank 100 ft diam. 500,000 cu ft (1898 - 1938)
NYS Dormitory Authority
Pavement
Prospect Cemetery
NYS Dormitory Authority
BEAVER RD
ACCESS RD
BEAVER RD
158th ST
SS-14
SS-12
SS-11
SS-5
SS-5A

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS, HISTORIC AERIAL PHOTOGRAPHY, AND SC RESULTS.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

	NYSDEC Part 375-6.8 (a) Unrestricted Use	NYSDEC Part 375-6.8 (b) Commercial Use
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)		
Benzo(a)anthracene	1	5.6
Benzo(b)fluoranthene	1	5.6
Chrysene	1	56
Indeno(1,2,3-cd)pyrene	0.5	5.6
Total PAHs	*500[A]*	*500[A]*
Inorganic Compounds (mg/Kg)		
Chromium	30	1500
Copper	50	270
Lead	63	1000
Mercury	0.18	2.8
Zinc	109	10000
Pesticides (mg/Kg)		
DDD,4,4-	0.0033	92
DDT,4,4-	0.0033	47

NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013 | DRWN: XW | JOB #: 60144468

SURFACE SOIL ANALYTICAL EXCEEDANCES

FIGURE 8

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 8 Surface Soil Analytical Exceedances.mxd (National Grid on USNYCS01\Environment\ (Y))

AECOM

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS AND HISTORIC AERIAL PHOTOGRAPHY.
3. HORIZON DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

Sample Location	SB-12	SB-12	SB-12	SB-12
Sample Date	2/28/2012	2/28/2012	2/28/2012	2/28/2012
Sample ID	SB-12 (2.5-5)022812	SB-12 (5-7.5)022812	SB-12 (10-12.5)022812	SB-12 (37.5-40)022812
Sample Interval (feet)	2.5-5	5-7.5	10-12.5	37.5-40
PAHs (mg/Kg)				
Benzo(a)anthracene	24	69	0.21	<0.036 U
Benzo(a)pyrene	18	37	0.12	<0.036 U
Benzo(b)fluoranthene	19	41	0.17	<0.036 U
Benzo(k)fluoranthene	8.4	22	0.05	<0.036 U
Chrysene	21	54	0.2 J	<0.36 U
Dibenz(a,h)anthracene	3.4	5.1	<0.035 U	<0.036 U
Fluoranthene	37	100	0.39	<0.36 U
Indeno(1,2,3-cd)pyrene	13	13	<0.035 U	<0.036 U
Total PAHs	*228.49*	*528*	*1.607*	*ND*
SVOC (mg/Kg)				
4-Methylphenol	<1.9 U	2 J	<0.35 U	<0.36 U
Phenol	<1.9 U	1.4 J	<0.35 U	<0.36 U
Inorganic Compounds (mg/Kg)				
Lead	320 J	151 J	6.1	1.8
Mercury	0.67	0.15	<0.033 U	<0.033 U
Zinc	232	64.3	23.7	8.0
Pesticides (mg/Kg)				
DDD,4,4-	0.018 NJ	0.043 J	<0.0070 U	<0.0073 U

Sample Location	SB-14	SB-14	SB-14	SB-14
Sample Date	2/27/2012	2/27/2012	2/27/2012	2/27/2012
Sample ID	DUP-2-022712	SB-14 (2-5)022712	SB-14 (25-26.5)022712	SB-14 (37.5-40)022712
Sample Interval (feet)	2-5	2-5	25-26.5	37.5-40
PAHs (mg/Kg)				
Benzo(a)anthracene	3.1	2.7	0.36	<0.037 U
Benzo(a)pyrene	2.8	2.3	0.33	<0.037 U
Benzo(b)fluoranthene	2.5	2.1	0.3	<0.037 U
Benzo(k)fluoranthene	0.83	0.61	0.11	<0.037 U
Chrysene	2.9	2.6	0.34 J	<0.37 U
Dibenz(a,h)anthracene	0.38	0.41	0.079	<0.037 U
Indeno(1,2,3-cd)pyrene	0.84	1.0	0.22	<0.037 U
Total PAHs	*19.96*	*17.836*	*3.229*	*ND*
Inorganic Compounds (mg/Kg)				
Lead	143 J	115 J	45.8	2.2
Mercury	0.24	0.24	0.061	<0.037 U

Sample Location	SB-15	SB-15	SB-15
Sample Date	2/28/2012	3/8/2012	3/9/2012
Sample ID	SB-15 (2.5-5)022812	SB-15 (25-27.5)030812	SB-15 (37.5-40)030912
Sample Interval (feet)	2.5-5	25-27.5	37.5-40
VOCs (mg/Kg)			
Acetone	0.055	0.053 J	0.14 J
Inorganic Compounds (mg/Kg)			
Lead	309	15.7	3.4
Mercury	0.52	0.024 J	<0.036 U

Sample Location	SB-11	SB-11	SB-11
Sample Date	2/28/2012	2/28/2012	2/28/2012
Sample ID	SB-11 (0-2.5)022812	SB-11 (25-27)022812	SB-11 (35-40)022812
Sample Interval (inches)	0-2.5	25-27	35-40
PAHs (mg/Kg)			
Indeno(1,2,3-cd)pyrene	0.61	0.41	0.032 J
Total PAHs	*9.662*		
Inorganic Compounds (mg/Kg)			
Mercury	0.19	<0.031 U	<0.033 U

Sample Location	SB-05	SB-05	SB-05
Sample Date	3/8/2012	3/9/2012	3/9/2012
Sample ID	SB-5 (2.5-5)030812	SB-5 (22-24)030912	SB-5 (37.5-40)030912
Sample Interval (inches)	2.5-5	22-24	37.5-40
VOCs (mg/Kg)			
Acetone	0.042	0.07 J	0.10 J

Sample Location	SB-08	SB-08	SB-08	SB-08
Sample Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Sample ID	SB-8 (2.5-5)030112	SB-8 (15-17)030112	SB-8 (20-25)030112	SB-8 (42.5-45)030112
Sample Interval (feet)	2.5-5	15-17	20-25	42.5-45
PAHs (mg/Kg)				
Indeno(1,2,3-cd)pyrene	0.48	0.51	<0.035 U	<0.041 U
Total PAHs	*7.074*	*9.546*	*ND*	*ND*
Inorganic Compounds (mg/Kg)				
Copper	199	85.7	8.8	8.1
Lead	87.7	103	2.0	2.5

Sample Location	SB-06	SB-06	SB-06	SB-06
Sample Date	2/22/2012	2/22/2012	2/22/2012	2/22/2012
Sample ID	DUP-1-022212	SB-6 (1-3.5)022212	SB-6 (22-24)022212	SB-6 (37.5-40)022212
Sample Interval (inches)	1-3.5	1-3.5	22-24	37.5-40
VOCs (mg/Kg)				
Acetone	0.091 J	0.041 J	0.029 J	0.067 J
PAHs (mg/Kg)				
Benzo(a)anthracene	<0.037 U	6.0	<0.035 U	<0.036 U
Benzo(a)pyrene	<0.037 U	6.0	<0.035 U	<0.036 U
Benzo(b)fluoranthene	<0.037 U	5.8	<0.035 U	<0.036 U
Benzo(k)fluoranthene	<0.037 U	2.8	<0.035 U	<0.036 U
Chrysene	<0.37 U	5.5	<0.35 U	<0.36 U
Dibenz(a,h)anthracene	<0.037 U	1.3	<0.035 U	<0.036 U
Indeno(1,2,3-cd)pyrene	<0.037 U	4.1	<0.035 U	<0.036 U
Total PAHs	*ND*	*50.69*	*ND*	*ND*
Inorganic Compounds (mg/Kg)				
Mercury	<0.034 U	0.24	<0.033 U	<0.035 U

Sample Location	SB-01
Sample Date	3/5/2012
Sample ID	SB-1 (2.5-5)030512
Sample Interval (feet)	2.5-5
Inorganic Compounds (mg/Kg)	
Copper	67.5
Lead	220
Mercury	0.19
Zinc	555
Pesticides (mg/Kg)	
DDT,4,4-	0.0073

Sample Location	SB-03	SB-03
Sample Date	2/27/2012	2/27/2012
Sample ID	SB-3 (5-10)022712	SB-3 (10-11.75)022712
Sample Interval (feet)	5-10	10-11.75
PAHs (mg/Kg)		
Benzo(a)anthracene	0.021 J	1.9
Benzo(a)pyrene	<0.041 U	1.3
Benzo(b)fluoranthene	<0.041 U	1.7
Chrysene	<0.41 U	1.9
Indeno(1,2,3-cd)pyrene	<0.041 U	1.0
Total PAHs	*0.021*	*25.091*
Inorganic Compounds (mg/Kg)		
Lead	31.4	83.2
Zinc	32.4	294

Sample Location	SB-04	SB-04	SB-04	SB-04
Sample Date	2/27/2012	2/27/2012	2/27/2012	2/27/2012
Sample ID	SB-4 (3-5)022712	SB-4 (5-8.5)022712	SB-4 (8.5-10)022712	SB-4 (10-13)022712
Sample Interval (feet)	3-5	5-8.5	8.5-10	10-13
VOCs (mg/Kg)				
Acetone	0.0046J	0.090	<0.58 U	0.056 J
SVOCs (mg/Kg)				
4-Methylphenol	<0.37 U	<0.41 U	1.8	<0.42 U
Inorganic Compounds (mg/Kg)				
Lead	223	55.3	58.5	89.0 J
Mercury	0.59	0.09	0.077	<0.041 U

Sample Location	SB-09	SB-09	SB-09
Sample Date	2/23/2012	2/23/2012	2/23/2012
Sample ID	SB-9 (2.5-5)022312	SB-9 (10-13.5)022312	SB-9 (37.5-40)022312
Sample Interval (feet)	2.5-5	10-13.5	37.5-40
BTEX (mg/kg)			
Ethylbenzene	0.00029 J	4.9	<0.0011 U
Xylenes (total)	0.0023 J	7	<0.0033 U
PAHs (mg/Kg)			
Acenaphthene	0.068 J	36	<0.39 U
Benzo(a)anthracene	1.6	19	<0.039 U
Benzo(a)pyrene	1.8	24	<0.039 U
Benzo(b)fluoranthene	1.9	17	<0.039 U
Benzo(k)fluoranthene	0.69	6.6	<0.039 U
Chrysene	1.5	19	<0.39 U
Dibenz(a,h)anthracene	0.31	2	<0.039 U
Fluorene	0.13 J	58	<0.39 U
Indeno(1,2,3-cd)pyrene	1.2	18	<0.039 U
Naphthalene	0.12 J	190	<0.39 U
Phenanthrene	1.6	130	<0.39 U
Total PAHs	*17.611*	*884.6*	*ND*
Inorganic Compounds (mg/Kg)			
Lead	2.5	162	115
Mercury	<0.040 U	3.8	0.25
Pesticides (mg/Kg)			
DDT,4,4-	<0.0073 U	0.012	<0.0080 UJ

Sample Location	SB-10	SB-10	SB-10	SB-10
Sample Date	2/23/2012	2/23/2012	2/23/2012	2/23/2012
Sample ID	SB-10 (1-2.5)022312	SB-10 (12.5-15)022312	SB-10 (26-27.5)022312	SB-10 (37.5-40)022312
Sample Interval (inches)	1-2.5	12.5-15	26-27.5	37.5-40
BTEX (mg/kg)				
Benzene	0.00032 J	0.24	0.00038 J	<0.0010 U
Toluene	0.0014	1.2	0.0018	0.00047 J
Xylenes (total)	0.0055	16	0.024	0.0033
PAHs (mg/Kg)				
Benzo(a)anthracene	0.17	82	3.4	<0.036 U
Benzo(a)pyrene	0.17	37	1.8	<0.036 U
Benzo(b)fluoranthene	0.2	47	1.9	<0.036 U
Benzo(k)fluoranthene	0.087	17	0.56	<0.036 U
Chrysene	0.17 J	71	3.4	<0.36 U
Dibenz(a,h)anthracene	<0.035 U	5.2	0.47	<0.036 U
Fluoranthene	0.21 J	110	4.4	<0.36 U
Fluorene	<0.35 U	61	2.8	<0.36 U
Indeno(1,2,3-cd)pyrene	0.082	11	1.0	<0.036 U
Naphthalene	<0.35 U	27	0.47 J	<0.36 U
Phenanthrene	0.093 J	140	6.2	<0.36 U
Total PAHs	*1.427*	*854.8*	*36.12*	*ND*
SVOCs (mg/Kg)				
4-Methylphenol	<0.35 U	2.2 J	<0.74 U	<0.36 U
Dibenzofuran	<0.35 U	30	1.3	<0.36 U
Pesticides (mg/Kg)				
DDD,4,4-	<0.0071 U	0.18	<0.0075 U	<0.0074 U

Sample Location	SB-07	SB-07	SB-07
Sample Date	2/22/2012	2/22/2012	2/22/2012
Sample ID	SB-7 (0-2.5)-22212	SB-7 (21.5-24)022212	SB-7 (37.5-40)022212
Sample Interval (inches)	0-2.5	21.5-24	37.5-40
VOCs (mg/Kg)			
Acetone	0.042 J	0.023 J	0.11 J
PAHs (mg/Kg)			
Benzo(a)anthracene	1.1	<0.034 U	<0.036 U
Benzo(b)fluoranthene	1.1	<0.034 U	<0.036 U
Chrysene	1.1	<0.34 U	<0.36 U
Indeno(1,2,3-cd)pyrene	0.53	<0.034 U	<0.036 U
Total PAHs	*10.669*		
Inorganic Compounds (mg/Kg)			
Lead	144	1.9	1.6
Mercury	0.36	0.092	<0.036 U

Sample Location	SB-02
Sample Date	3/6/2012
Sample ID	SB-2 (0-2.5)030612
Sample Interval (feet)	0-2.5
PAHs (mg/Kg)	
Benzo(a)anthracene	1.3
Benzo(a)pyrene	1.3
Benzo(b)fluoranthene	1.4
Chrysene	1.3
Indeno(1,2,3-cd)pyrene	1.0
Total PAHs	*12.77*
Inorganic Compounds (mg/Kg)	
Lead	596
Mercury	0.38
Zinc	167
Pesticides (mg/Kg)	
DDT,4,4-	0.0063 J

Long Island Railroad Property

Asphalt

Grass

Asphalt

Pavement

NYS Dormitory Authority

NYS Dormitory Authority

BEAVER RD

BEAVER RD

158th ST

ACCESS RD

SB-1 SB-2 SB-3 SB-4 SB-5 SB-6 SB-7 SB-8 SB-8A SB-9 SB-10 SB-11 SB-12 SB-13 SB-14 SB-15

Legend

- Soil Boring
- Gate
- Project Site
- Approximate Property Boundary Not Surveyed
- Historical Feature
- Fence
- Retaining Wall
- Present Curb Line
- Railroad

N W E S

0 10 20 40 Feet

1 in = 40 ft

NAD 83 New York Long Island

NAVD 88 North American Vertical Datum

J = The associated numerical value is an estimated quantity.

Exceedance of the NYSDEC Part 375-6.8(a) Unrestricted Use Soil Cleanup Objective value.

Exceedance of the NYSDEC Part 375-6.8(b) Commercial Use Soil Cleanup Objective value.

Exceedance of the NYSDEC CP-51 Alternate Criteria of 500 mg/Kg for Total PAHs.

	NYSDEC Part 375-6.8 (a) Unrestricted Use	NYSDEC Part 375-6.8 (b) Commercial Use
BTEX (mg/kg)		
Benzene	0.06	44
Ethylbenzene	1	390
Toluene	0.7	500
Xylenes (total)	0.26	500
Volatile Organic Compounds (VOCs)(mg/Kg)		
Acetone	0.05	500
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/Kg)		
Acenaphthene	20	500
Benzo(a)anthracene	1	5.6
Benzo(a)pyrene	1	1
Benzo(b)fluoranthene	1	5.6
Benzo(k)fluoranthene	0.8	56
Chrysene	1	56
Dibenz(a,h)anthracene	0.33	0.56
Fluoranthene	100	500
Fluorene	30	500
Indeno(1,2,3-cd)pyrene	0.5	5.6
Naphthalene	12	500
Phenanthrene	100	500
Total PAHs	500[A]	500[A]
Other Semi Volatile Organic Compounds (SVOC) (mg/Kg)		
4-Methylphenol	0.33	500
Dibenzofuran	7	350
Inorganic Compounds (mg/Kg)		
Copper	50	270
Lead	63	1000
Mercury	0.18	2.8
Zinc	109	10000
Pesticides (mg/Kg)		
DDD,4,4-	0.0033	92
DDT,4,4-	0.0033	47

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS, HISTORIC AERIAL PHOTOGRAPHY, AND SC RESULTS.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013 | DRWN: XW | JOB #: 60144468

SUBSURFACE SOIL ANALYTICAL EXCEEDANCES

FIGURE 9

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 9 Subsurface Soil Analytical Exceedances.mxd (National Grid on USNYCS01\Environment (Y))

AECOM

Sample Location	MW-06
Sample Date	4/5/2012
Sample ID	MW-6-040512
Inorganic Compounds (ug/L)	
Iron	1300
Sodium	21800

Sample Location	MW-05
Sample Date	4/4/2012
Sample ID	MW-5-040412
Inorganic Compounds (ug/L)	
Iron	1440
Sodium	73600

Sample Location	MW-01	MW-01
Sample Date	4/4/2012	4/4/2012
Sample ID	MW-1-040412	DUP-1-040412
Inorganic Compounds (ug/L)		
Sodium	21200	21300

Sample Location	MW-04
Sample Date	4/5/2012
Sample ID	MW-4-040512
Inorganic Compounds (ug/L)	
Iron	807
Sodium	41400

Sample Location	MW-03
Sample Date	4/4/2012
Sample ID	MW-3-040412
Inorganic Compounds (ug/L)	
Iron	655
Sodium	75400

Sample Location	MW-02
Sample Date	4/4/2012
Sample ID	MW-2-040412
Inorganic Compounds (ug/L)	
Sodium	71300

	NYSDEC Groundwater Guidance or Standard Value[1]
Inorganic Compounds (ug/L)	
Iron	300
Sodium	20000

Legend

- Monitoring Well Locaiton
- Gate
- Project Site
- Approximate Property Boundary Not Surveyed
- Historical Feature
- Fence
- Retaining Wall
- Present Curb Line
- Railroad

0 10 20 40 Feet

1 in = 40 ft

NAD 83 New York Long Island
NAVD 88 North American Vertical Datum

Exceedance of the NYSDEC Groundwater Guidance or Standard Value.

[1]Guidance or standard values - NYSDEC, Division of Water TOGS (1.1.1) - 6 NYCRR 703.5 [NYSDEC, 1998]

Long Island Railroad Property
Asphalt
Grass
Asphalt
Coal Shed (1873 - 1897)
Light Engine Room (1873 - 1901)
Generator House (1897 - 1901)
Retort House (1873 - 1901)
Purifiers and Meter House (1873 - 1901)
Iron Shed (1897 - 1901)
Coal Shed (1873 - 1901)
Pipeshed (1925 - 1967)
BEAVER RD
ACCESS RD
MW-6
MW-5
MW-4
MW-3
MW-1
MW-2
Exhaustor Room (1899-1942) Office (1951-1967)
Boilers (1899-1942) Office (1951-1967)
Meter & Governor Room (1899-1942) Office (1951-1967)
Storage (1886 - 1901)
Holder No. 1 Holder 34 ft diam. Brick Tank 38 ft diam. 10,000 cu ft (1873 - 1901)
Governor Room/Workshop (1886 - 1901)
Storage (1942 - 1951)
NYS Dormitory Authority
Holder No. 3 Holder 97.5 ft diam. Iron Tank 100 ft diam. 500,000 cu ft (1898 - 1938)
Holder No. 2 Holder 40 ft diam. Brick Tank 42 ft diam. 18,000 cu ft (1873 - 1901)
Pavement
Prospect Cemetery
BEAVER RD
158th ST
FDA Property

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS, HISTORIC AERIAL PHOTOGRAPHY, AND SC RESULTS.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013 | DRWN: XW | JOB #: 60144468

GROUNDWATER ANALYTICAL EXCEEDANCES

FIGURE 10

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 10 Groundwater Analytical Exceedances.mxd (National Grid on USNYCS01\Environment (Y))

AECOM

Long Island Railroad Property

Asphalt

Grass

Asphalt

Light Engine Room (1873 - 1901)

Coal Shed (1873 - 1897)

Generator House (1897 - 1901)

Retort House (1873 - 1901)

Purifiers and Meter House (1873 - 1901)

Iron Shed (1897 - 1901)

BEAVER RD

ACCESS RD

Coal Shed (1873 - 1901)

Pipeshed (1925 - 1967)

Boilers (1899-1942) Office (1951-1967)

Exhauster Room (1899-1942) Office (1951-1967)

Meter & Governor Room (1899-1942) Office (1951-1967)

Storage (1886 - 1901)

Holder No. 1 Holder 34 ft diam. Brick Tank 38 ft diam. 10,000 cu ft (1873 - 1901)

Governor Room/Workshop (1886 - 1901)

Storage (1942 - 1951)

Holder No. 2 Holder 40 ft diam. Brick Tank 42 ft diam. 18,000 cu ft (1873 - 1901)

Holder No. 3 Holder 97.5 ft diam. Iron Tank 100 ft diam. 500,000 cu ft (1898 - 1938)

NYS Dormitory Authority

Pavement

SB-13/MW-6 (0'-40') (46.32')

SB-14 (0'-40') (46.99')

(47.66') SB-15/MW-4 (0'-40')

SB-16

(45.65') SB-12 (5'-7.5', 7.75'-8')

SB-11 (0'-40') (45.13')

(0'-5', 7.5'-7.75' 8'-40')

TP-3

SB-17

(43.63') SB-5/MW-5 (0'-40')

TP-1

(46.28') SB-9 (9'-13', 13.5'-33') (13'-13.5')

SB-19

SB-18

SB-8A/MW-3 (0'-45') (44.56')

(0'-9', 33'-40')

SB-10 (46.84') (17.5'-26.8') (12.5'-17.5')

(17'-19')

SB-8 (16.5'-17')

(0'-16.5', 19'-40')

(0'-12.5', 26.8'-40')

TP-2

SB-20/MW-7

SB-6 (0'-40') (43.79')

SB-7 (0'-40') (45.49')

(10'-11.75')

SB-3 (40.78')

(0'-10')

SB-1/MW-1 (0'-40') (39.02')

SB-4 (42.28')

(0'-8.5')

(8.5'-13')

(41.38')

SB-2/MW-2 (0'-40')

BEAVER RD

158th ST

Prospect Cemetery

SB-21/MW-8

NYS Dormitory Authority

SB-22/MW-9

SB-24

SB-23/MW-10

Legend

- Monitoring Well Locaiton
- Soil Boring
- Proposed Soil Boring/Monitoring Well
- Proposed Step Out Soil Boring/Monitoring Well
- Proposed Test Pit
- Gate
- Project Site
- Approximate Property Boundary Not Surveyed
- Historical Feature
- No Impacts
- Staining, Odor
- Coated Material, Lenses
- (10'-13') Depth of Impacts Observed in Feet Below Ground Surface (BGS)
- (39.02') Surveyed Ground Elevation
- Fence
- Retaining Wall
- Present Curb Line
- Railroad

N W E S

0 10 20 40 Feet

1 in = 40 ft

NAD 83 New York Long Island
NAVD 88 North American Vertical Datum

NOTES:
1. SITE FEATURES (FENCE, RETAINING WALL, ETC.) TAKEN FROM GEOD CORPORATION SURVEY, DATED APRIL 2012.
2. LOCATIONS OF HISTORIC MGP STRUCTURES BASED ON SANBORN FIRE INSURANCE MAPS, BUG DRAWINGS, HISTORIC AERIAL PHOTOGRAPHY, AND SC RESULTS.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD 83-CORS NEW YORK LONG ISLAND).
4. VERTICAL DATUM IS NORTH AMERICAN DATUM OF 1988 (NAVD 88).

NATIONAL GRID
FORMER JAMAICA GAS LIGHT COMPANY MGP SITE
QUEENS, NEW YORK

DATE: 03/20/2013 | DRWN: XW | JOB #: 60144468

VISUAL AND OLFACTORY IMPACTS AND PROPOSED REMEDIAL INVESTIGATION LOCATIONS

FIGURE 11

V:\Jamaica MGP Site\GIS\Mxd\Updated_20130320\Figure 11 Visual and Olfactory Impacts and Proposed Remedial Investigation Locations.mxd (National Grid on USNYCS01\Environment\ (Y))