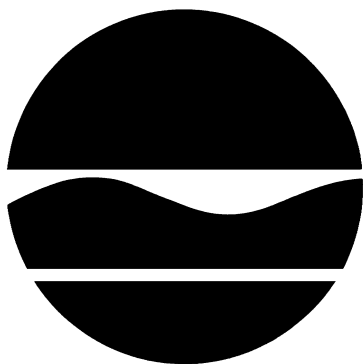


## **Previous Environmental Reports**

# **Site Characterization Report**

## **Fulton Former Manufactured Gas Plant**



**Brooklyn (II), Kings County, N.Y.  
Site No. 2-24-051  
September, 2007**

Prepared by:  
Remedial Bureau C  
Division of Environmental Remediation

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## **Purpose of a Site Characterization**

A Site Characterization is undertaken to identify and investigate any potentially contaminated areas of concern at a site. The site characterization is the initial process to determine whether or not a site requires remediation

The field characterization is intended to determine whether:

1. The applicable standards, criteria and guidelines (SCGs), are contravened;
2. An adverse impact to fish and wildlife resources exists or potentially exists;
3. A public health exposure exists or potentially exists;
4. The identified contamination extends beyond the property boundary of the site being characterized; and
5. Consequential hazardous waste disposal has taken place at the site, which represents a significant threat to public health or the environment.

A field characterization is undertaken to determine if any contaminants are present at the site at levels that indicate the need for a remedial investigation. If no such contaminants are present at the site, then the NYSDEC may determine that no further investigation is required.

Based upon a review of the site characterization report, the NYSDEC will determine whether:

1. No further investigation is required at the site, because no potentially contaminated areas of concern were identified, or no area of concern is determined to require a remedial investigation; or
2. A remedial investigation will be required due to the presence of contamination identified by the site characterization; or
3. A decision regarding remediation for the site can be made based upon the presence of the contamination identified, where the nature and extent was sufficiently defined by the site characterization to determine an appropriate remedy.

## **Background:**

The site is located in the Gowanus neighborhood of Brooklyn, N.Y., approximately one city block east of the Gowanus Canal. The location is shown in Figure 1. Part of the site is occupied by the Thomas Greene Park, the rest is private property. The surrounding neighborhood contains a dense urban mixture of commercial, industrial and residential land uses.

Historical maps included in Appendix A show two manufactured gas plants (MGPs) operating on adjacent city blocks on either side of Degraw St. between Third Ave. and Nevins St. from approximately 1886 to 1933. These plants used coal and petroleum to produce a combustible gas, which was used for lighting, heating and cooking in the community. The historical relationship of these two plants to one another is unclear. Current aerial photos of the site overlain by the outlines of the principal MGP structures and the current real estate parcels are shown in Figure 2.

On April 17, 2007 the New York State Department of Environmental Conservation (NYSDEC) began a Site Characterization Investigation. Since access to private property was not available, the investigation was conducted in the Thomas Greene Park and in the streets surrounding the two former plants.

The principal contamination targeted by the investigation was coal tar, which is the primary byproduct associated with MGP sites. Coal tar, which condensed from the hot gas produced by the plant is a brownish to black liquid with an odor similar to driveway sealer. It contains a variety of environmental contaminants including polycyclic aromatic hydrocarbons (PAHs) and benzene, toluene, ethylbenzene, and xylene (BTEX).

## **Field Characterization Activities**

A Site Characterization investigation was conducted from April 17 to June 7, 2007 including the following activities:

1. Twenty nine (29) soil borings were completed.  
The boring locations are shown in Figure 3. Boring logs detailing the visual observations from each boring are included in Appendix C.  
Continuous soil samples were collected and headspace screening was conducted with a calibrated PID. The results of the screening are presented in Table 1.
2. Thirteen (13) subsurface soil samples were collected.
  - a. These samples were collected to characterize the limits and nature of the contamination.
  - b. No samples of gross contamination were collected.
  - c. The samples were analyzed for volatile organic compounds (VOCs) and semi volatile organic compounds (SVOCs) by the NYSDEC Analytical Facility in Rensselaer, N.Y.
  - d. Analytical results of these samples are summarized in Tables 2 and 3. The laboratory data sheets are included in Appendix D.
3. Seven (7) borings were completed as groundwater monitoring wells and the groundwater

was sampled. Analytical results of the groundwater samples are summarized in Tables 4 and 5 and appended to this report as Appendix D. The locations of the monitoring wells are shown in Figure 4.

## **Findings of the Investigation:**

### **Geological Setting:**

The soils underlying the site consist of fill material overlying native soils. Broadly, this reflects the history of this section of Brooklyn, in which fill materials were deposited in tidal wetlands to raise the ground surface for development.

The fill ranges from approximately eight to twenty feet in thickness across the site and contains varying amounts of silt, sand, gravel, cinders, wood, brick and rock fragments. Native soils lying below the fill consist of silt, sand, gravel and clay. A distinctive layer of silty clay and peat was encountered at an approximate depth of twenty feet in the area within and adjacent to the Thomas Greene Park.

Groundwater was encountered at an approximate depth of 6 to 8 feet across the site with the exception of the easternmost portion of the study area, furthest from the canal, where the water table is approximately 14 feet deep.

Groundwater flow cannot be mapped using the current data, because top of casing elevations for the monitoring wells are not available at this time. However, the site topography, which slopes approximately 10 feet downhill from Third Avenue to the Gowanus Canal, as well as the area wide topographic trend strongly suggest a westward direction of groundwater flow, from the Thomas Greene Park toward the Gowanus Canal.

### **The field investigation yielded eight principal observations:**

1. Heavy coal tar contamination was observed at depth beneath the Thomas Greene Park in the area surrounding the swimming pool and at the edge of the basketball courts adjacent to the pool. This is the area where several MGP structures were located, and is the most likely area for large scale releases to the environment. Soil saturated with coal tar was observed in ten of the thirteen borings within the park. The vertical thickness of the tar-saturated soils within the park ranged from 4 feet (KSF-SB-08) to 11.5 feet (KSF-SB-05). Photographs depicting the coal tar saturated soil are included in Appendix B as Photos #2,4,7,8 and 9. At boring FSF-SB-05, coal tar was observed flowing out of the drill rods prior to retracting the sampler. (See photo #5). Laboratory analytical data from soil samples taken from KSF-SB-01, KSF-SB-04 and KSF-SB-08 exceeded NYSDEC TAGM 4046 soil cleanup objectives for both SVOCs and VOCs.

Within the park, coal tar was not observed in borings KSF-SB-11, KSF-SB-12 and KSF-SB-13, roughly defining the eastern limit of coal tar impact within the park. However KSF-SB-12 and KSF-SB-13 showed significant impact from what appeared to be diesel fuel. Laboratory analytical data from these borings did not exceed the VOC soil cleanup objectives; however, KSF-SB-12 and KSF-SB-13 exceeded the SVOC soil cleanup objectives.

Soil borings could not be advanced at the western end of the park due to the high fence surrounding the handball courts.

2. Coal tar was not observed at or near the ground surface. Consequently, the potential for human exposure to coal tar contaminants by routine users of the park, workers involved in park operations, or people on the surface in the surrounding neighborhood is low. Exposures could take place during intrusive subsurface work such as underground utility construction or repair.
3. Coal tar saturated soils were observed at depth outside the park along both sides of Degraw St. in borings KSF-SB-16, KSF-SB-17, KSF-SB-18, KSF-SB-19, KSF-SB-20, KSF-SB-21, KSF-SB-22 and on Nevins St., across the street from the park in boring KSF-SB-14. The vertical thickness of coal tar saturated soil in these borings ranged from 2.5 feet in KSF-SB-14 and KSF-SB-22 to 8.75 feet in boring KSF-SB-17.

Laboratory analytical data from KSF-SB-14 exceeded the cleanup objectives for VOCs and samples from KSF-SB-20 and KSF-SB-22 exceeded the cleanup objectives for both SVOCs and VOCs.

Representative photographs of these coal tar saturated soils are included as photos 7, 8 and 9 in Appendix B. The soil borings in which coal tar saturated soils were observed are identified in Figure 5.

4. Coal tar saturated soil was not observed in Boring KSF-SB-27, however a sheen and coal tar odor were observed in this boring at depths of 23.5 feet to 26 feet below ground surface (bgs). Laboratory analytical data from this boring exceeded the SVOC cleanup objectives.
5. A clay and peat layer was observed at approximately 20 feet bgs in the Park and on Degraw St. ranging from approximately six inches to four feet in thickness. Where present, it appears to act as a confining layer limiting the downward penetration of coal tar. Photographs of the peat and the attenuation of overlying coal tar impacts by the layer are shown in photos 2 and 3 in Appendix B. Soil samples collected within this layer where it was encountered below visually contaminated soil confirm that this layer appears to limit the downward migration of contamination. (see analytical Tables 2 and 3 (KSF-SB-08, 23'-24')). An aerial photograph showing the approximate area underlain by the peat and clay layer is included as Figure 6.
6. During the development of the monitoring wells, non-aqueous phase liquid (NAPL) exhibiting a strong coal tar odor was observed in monitoring wells MW-6 and MW-7, located in the immediate vicinity of the area of the Thomas Greene Park where coal tar

was observed in subsurface soils.

7. Analytical results from the groundwater in the immediate vicinity of the observed coal tar (MW-2, MW-6 and MW-7) contain site-related contamination at levels above state standards. The groundwater from the well upgradient from the source area (MW-5) does not show evidence of coal tar impact. Groundwater analytical data is summarized in Tables 5 and 6.
8. It is possible that the coal tar contamination observed in this investigation may impact the Gowanus Canal, in which surface sheens and coal tar odors have been observed at low tide. Lateral movement of coal tar at the depths below ground surface observed in this study could intersect the canal. In an area-wide study of the Gowanus Canal by Keyspan Corporation in 2007, a soil boring adjacent to the canal at the end of Degraw Street documented coal tar contamination at depths of 38 to 46 ft. bgs, and sediment cores collected from the canal in this area exhibited coal tar contamination.

### **Recommendations:**

Based on the findings of the Site Characterization, a Remedial Investigation will be required to determine the full nature and extent of contamination at this site, to include at a minimum:

1. Additional subsurface investigation to accurately define:
  - a. the location of the holder foundations and any other subsurface MGP structures which may remain at the site;
  - b. the surface elevation and continuity of the peat and clay layer
  - c. the extent of coal tar contamination, particularly to the south, at the location of the former MGP plant on the block bounded by Degraw, Nevins, and Sackett streets.
  - d. Relationship of the tar contamination to the canal and potential for NAPL migration into canal.
  - e. Impacts to groundwater
2. Investigation of potential for soil vapor intrusion into buildings on site and in surrounding areas.
3. Following completion of the RI, a Feasibility Study will be developed to evaluate remedial alternatives to address the contamination.

## **TABLES**

**TABLE 1 - HEADSPACE SCREENING**  
**KEYSPAN FULTON FORMER MGP, SITE NO. 2-24-051, KINGS COUNTY**

| DEPTH(ft.) | KSF-SB-01 | KSF-SB-02 | KSF-SB-03 | KSF-SB-04 | KSF-SB-05 | KSF-SB-06 | KSF-SB-07 | KSF-SB-08 | KSF-SB-09 | KSF-SB-10 | KSF-SB-11 | KSF-SB-12 | KSF-SB-13 | KSF-SB-14 | KSF-SB-15 |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0 - 2      |           | 3         | 0         | 0         | 0.5       | 0         | 1.2       | 3         | 0         | 0         | 0         | 0         | 6.3       | 1.9       | 18.7      |
| 2 - 4      | 1.4       | 2.2       | 3.9       | 2         | 0         | 0         | 31.2      | 6.9       | 0         | 0         | 0         | 0         | 4.6       | 7.2       | 10.6      |
| 4 - 6      | 1.4       | 1.9       | 1         | 0.7       | 0         | 0         | 16.4      | 116       | 0         | 0         | 0         | 0         | 4.1       | 30.8      | 13.6      |
| 6 - 8      | 33.5      | 1.6       | 16        | 0         | 19.7      | 1.5       | 6.3       | 217       | 0         | 0         | 0         | 0         | 3.3       | 36.2      | 1.4       |
| 8 - 10     | 14.8      | 1.3       | NS        | 29.9      | 48.9      | NA        | 212       | 102       | 0         | 0         | 0         | NA        | NA        | NA        | 22.8      |
| 10 - 12    | 211       | 10.9      | NS        | NA        | 379       | NA        | 334       | 16.5      | 0         | 0         | 0         | 4.9       | 3.1       | NA        | 30.4      |
| 12 - 14    | 91        | 7.5       | NS        | 90.4      | 406       | 107       | 79.1      | 52.7      | 68        | 0         | 0         | 1.7       | 2.5       | 29.3      | 29.9      |
| 14 - 16    | NA        | 43.5      | NS        | 44.1      | 214       | 210       | 85.4      | 40.7      | 414       | 231       | 0         | 83.6      | 2.5       | 151       | 20.1      |
| 16 - 18    | NA        | 43.7      | NS        | NA        | 334       | 122       | 292       | 16.8      | 45.2      | NA        | 0         | 48.3      | 4.1       | NS        | 38.4      |
| 18 - 20    | 255       | 22.3      | NS        | NA        | 172       | 425       | NS        | NA        | 27.8      | 143       | 0         | NS        | NS        | NS        | 10.2      |
| 20 - 22    | NS        | NS        | NS        | 7.2       | 962*      | NS        | NS        | 37.2      | 5.6       | NA        | NA        | NS        | NS        | NS        | NS        |
| 22 - 24    | NS        | NS        | NS        | 4.9       |           | NS        | NS        | 12.6      | 0         | 47.6      | 0         | NS        | NS        | NS        | NS        |
| 24 - 26    | NS        | NS        | NS        | NS        |           | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        |
| 26 - 28    | NS        | NS        | NS        | NS        |           | NS        | NS        | NS        | NS        | NS        | 0         | NS        | NS        | NS        | NS        |

| DEPTH(ft.) | KSF-SB-16 | KSF-SB-17 | KSF-SB-18 | KSF-SB-19 | KSF-SB-20 | KSF-SB-21 | KSF-SB-22 | KSF-SB-23 | KSF-SB-24 | KSF-SB-25 | KSF-SB-26 | KSF-SB-27 | KSF-SB-28 | KSF-SB-29 |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0 - 2      | 0.0       | 15.3      | 12.1      | 55.8      | 0.0       | 0.0       | 0.0       | 18.6      | 5.2       | NS        | 16.4      | 4.2       | 0.0       | 0         |
| 2 - 4      | 6.0       | 19.6      | 45.2      | 51.4      | 0.0       | 0.0       | 0.0       | 2.4       | 8.4       | NS        | 2.8       | 0.0       | 0.0       | 0         |
| 4 - 6      | 17.2      | 57.5      | 79.7      | 51.1      | 0.0       | 19.6      | 6.2       | 2.6       | 6.3       | NS        | 6.2       | 0.0       | 0.0       | 0         |
| 6 - 8      | 59.5      | 56.3      | 186.0     | 15.2      | 0.0       | 165.0     | 41.4      | 0.6       | 3.1       | NS        | 2.2       | 2.6       | 0.0       | 0         |
| 8 - 10     | 58.0      | 58.7      | 101.0     | 38.1      | 5.7       | 28.1      | 44.6      | NA        | 2.4       | NS        | 10.5      | 0.0       | 0.0       | NA        |
| 10 - 12    | 30.0      | 152.0     | 194.0     | 42.8      | 96.7      | 53.0      | 192.0     | 0.0       | 23.5      | NS        | 5.2       | 0.0       | 0.0       | NA        |
| 12 - 14    | 38.8      | 495.0     | NS        | 26.6      | 52.7      | 45.6      | NS        | 10.1      | 16.8      | NS        | 4.0       | 1.2       | 0.0       | NA        |
| 14 - 16    | 31.7      | 71.2      | NS        | 2.1       | 10.4      | 8.4       | NS        | 0.8       | 29.7      | NS        | 33.6      | 0.0       | 0.0       | NA        |
| 16 - 18    | 20.0      | 87.7      | NS        | NS        | NS        | NS        | NS        | 0.0       | 23.9      | NS        | 44.0      | 0.0       | 0.0       | 0         |
| 18 - 20    | 22.1      | 97.6      | NS        | NS        | NS        | NS        | NS        | 54.0      | 13.4      | NS        | 46.7      | 0.0       | NS        | 0         |
| 20 - 22    | NS        | NS        | NS        | NS        | NS        | NS        | NS        | 30.7      | 12.8      | NS        | 11.2      | 0.0       | NS        | NS        |
| 22 - 24    | NS        | NS        | NS        | NS        | NS        | NS        | NS        | 43.7      | 26.9      | NS        | 99.5      | 0.0       | NS        | NS        |
| 24 - 26    | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | 0.5       | NS        | NS        |
| 26 - 28    | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        | NS        |

**Notes:**

\* HIGH READING PROBABLY DUE TO NAPL COATING ON SAMPLE TUBE

NA - Not Available

NS - Not Sampled

Values are in mg/l (ppm)

**TABLE 2 - SOIL VOCs**  
**KEYSPAN FULTON FORMER MGP, SITE NO. 2-24-051, KINGS COUNTY**

| Analyte                   | RSCO <sup>1</sup> | KSF-SB-01<br>6'-8' |   | KSF-SB-01<br>(18'-19') |    | KSF-SB-04<br>(12'-14') |   | KSF-SB-08<br>(15'-16') |   |
|---------------------------|-------------------|--------------------|---|------------------------|----|------------------------|---|------------------------|---|
| Dichlorodifluoromethane   | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Chloromethane             | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Vinyl Chloride            | 200               | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Bromomethane              | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Chloroethane              | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Trichlorofluoromethane    | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,1-Dichloroethene        | 400               | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Carbon Disulfide          | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Acetone                   | 200               | 3200               | U | 3200                   | UJ | 50                     | U | 45                     | J |
| Methylene Chloride        | 100               | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| trans-1,2-Dichloroethene  | 300               | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Methyl tert-butyl ether   | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,1-Dichloroethane        | 200               | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Vinyl acetate             | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| cis-1,2-Dichloroethene    | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 2-Butanone                | nl                | 3200               | U | 3200                   | U  | 50                     | U | 9                      | J |
| Chloroform                | 300               | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,1,1-Trichloroethane     | 800               | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Carbon Tetrachloride      | 600               | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Benzene                   | 60                | 1600               | J | 4400                   |    | 50                     | U | 130                    |   |
| 1,2-Dichloroethane        | 100               | 3200               | U | 3200                   |    | 50                     | U | 65                     | U |
| Trichloroethene           | 700               | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,2-Dichloropropane       | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Bromodichloromethane      | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| cis-1,3-Dichloropropene   | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 4-Methyl-2-pentanone      | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Toluene                   | 1500              | 8200               |   | 3200                   | U  | 50                     | U | 10                     | J |
| trans-1,3-Dichloropropene | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,1,2-Trichloroethane     | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Tetrachloroethene         | 1400              | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 2-Hexanone                | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Dibromochloromethane      | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Chlorobenzene             | 1700              | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| Ethylbenzene              | 5500              | 32000              |   | 45000                  |    | 300                    | U | 1100                   |   |
| m,p-Xylenes               | nl                | 45000              |   | 24000                  |    | 210                    |   | 230                    |   |
| o-Xylenes                 | nl                | 32000              |   | 14000                  |    | 140                    |   | 440                    |   |
| Styrene                   | nl                | 10000              |   | 3200                   | U  | 50                     | U | 65                     | U |
| Bromoform                 | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,1,2,2-Tetrachloroethane | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 2-Chlorotoluene           | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 4-Chlorotoluene           | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,3-Dichlorobenzene       | 1600              | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,4-Dichlorobenzene       | 8500              | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,2-Dichlorobenzene       | 7900              | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,2,4-Trichlorobenzene    | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
| 1,2,3-Trichlorobenzene    | nl                | 3200               | U | 3200                   | U  | 50                     | U | 65                     | U |
|                           |                   |                    |   |                        |    |                        |   |                        |   |

**Notes:**

All data presented in parts per billion (ppb or ug/kg).

<sup>1</sup> Recommended soil clean-up objective from NYSDEC Technical Administrative Guidance Memorandum (TAGM 4046).

na - Sample not analyzed for that analyte

nl - Compound not listed in TAGM 4046

ns - Compound listed in TAGM 4046 but no RSCO has been established

U - Compound not detected at or above the instrument detection limit (IDL) value shown is the USEPA Contract Required Detection Limit (CRDL).

N - Presumptive evidence of a compound

J - Estimated concentration above the IDL but less than the CRDL, or due to some QC issue determined during validation. Field Duplicate is a generic sample collected simultaneously with another sample at the same location and analyzed by the laboratory. Field Duplicate data demonstrates field sampling and laboratory precision.

**BOLD** indicates exceedences of RSCO.

**TABLE 2 - SOIL VOCs**  
**KEYSPAN FULTON FORMER MGP, SITE NO. 2-24-051, KINGS COUNTY**

| Analyte                   | RSCO <sup>1</sup> | KSF-SB-08<br>(23'-24') |    | KSF-SB-11<br>(22'-24') |   | KSF-SB-12<br>(16'-18') |   | KSF-SB-13<br>(14'-16') |   |
|---------------------------|-------------------|------------------------|----|------------------------|---|------------------------|---|------------------------|---|
| Dichlorodifluoromethane   | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Chloromethane             | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Vinyl Chloride            | 200               | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Bromomethane              | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Chloroethane              | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Trichlorofluoromethane    | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,1-Dichloroethene        | 400               | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Carbon Disulfide          | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Acetone                   | 200               | 13                     | J  | 44                     | J | 31                     | J | 65                     | U |
| Methylene Chloride        | 100               | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| trans-1,2-Dichloroethene  | 300               | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Methyl tert-butyl ether   | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,1-Dichloroethane        | 200               | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Vinyl acetate             | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| cis-1,2-Dichloroethene    | nl                | 55                     | 55 | 75                     | U | 36                     | U | 65                     | U |
| 2-Butanone                | nl                | 55                     | U  | 75                     | U | 6                      | J | 65                     | U |
| Chloroform                | 300               | 55                     | 55 | 75                     | U | 36                     | U | 65                     | U |
| 1,1,1-Trichloroethane     | 800               | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Carbon Tetrachloride      | 600               | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Benzene                   | 60                | <b>230</b>             |    | 75                     | U | 36                     | U | 65                     | U |
| 1,2-Dichloroethane        | 100               | 55                     | 55 | 75                     | U | 36                     | U | 65                     | U |
| Trichloroethene           | 700               | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,2-Dichloropropane       | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Bromodichloromethane      | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| cis-1,3-Dichloropropene   | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 4-Methyl-2-pentanone      | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Toluene                   | 1500              | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| trans-1,3-Dichloropropene | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,1,2-Trichloroethane     | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Tetrachloroethene         | 1400              | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 2-Hexanone                | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Dibromochloromethane      | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Chlorobenzene             | 1700              | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Ethylbenzene              | 5500              | 210                    |    | 75                     | U | 36                     | U | 65                     | U |
| m,p-Xylenes               | nl                | 130                    |    | 75                     | U | 36                     | U | 65                     | U |
| o-Xylenes                 | nl                | 63                     |    | 75                     | U | 36                     | U | 65                     | U |
| Styrene                   | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| Bromoform                 | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,1,2,2-Tetrachloroethane | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 2-Chlorotoluene           | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 4-Chlorotoluene           | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,3-Dichlorobenzene       | 1600              | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,4-Dichlorobenzene       | 8500              | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,2-Dichlorobenzene       | 7900              | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,2,4-Trichlorobenzene    | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |
| 1,2,3-Trichlorobenzene    | nl                | 55                     | U  | 75                     | U | 36                     | U | 65                     | U |

**Notes:**

All data presented in parts per billion (ppb or ug/kg).

<sup>1</sup> Recommended soil clean-up objective from NYSDEC Technical Administrative Guidance Memorandum (TAGM 4046).

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**TABLE 2 - SOIL VOCs**  
**KEYSPAN FULTON FORMER MGP, SITE NO. 2-24-051, KINGS COUNTY**

| Analyte                   | RSCO <sup>1</sup> | KSF-SB-14<br>(19') |    | KSF-SB-20<br>(14'-16') |   | KSF-SB-20<br>(14'-16') |   | KSF-SB-22<br>(11'-12') |    |
|---------------------------|-------------------|--------------------|----|------------------------|---|------------------------|---|------------------------|----|
| Dichlorodifluoromethane   | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Chloromethane             | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Vinyl Chloride            | 200               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Bromomethane              | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Chloroethane              | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Trichlorofluoromethane    | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,1-Dichloroethene        | 400               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Carbon Disulfide          | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Acetone                   | 200               | 9                  | JB | 27                     | B | 70                     | U | 17                     | JB |
| Methylene Chloride        | 100               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| trans-1,2-Dichloroethene  | 300               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Methyl tert-butyl ether   | nl                | 16                 | U  | 7                      | J | 70                     | U | 29                     | U  |
| 1,1-Dichloroethane        | 200               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Vinyl acetate             | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| cis-1,2-Dichloroethene    | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 2-Butanone                | nl                | 16                 | U  | 7                      | J | 70                     | U | 7                      | JB |
| Chloroform                | 300               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,1,1-Trichloroethane     | 800               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Carbon Tetrachloride      | 600               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Benzene                   | 60                | <b>91</b>          |    | <b>1200</b>            | E | <b>1700</b>            | E | <b>310</b>             |    |
| 1,2-Dichloroethane        | 100               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Trichloroethene           | 700               | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,2-Dichloropropane       | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Bromodichloromethane      | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| cis-1,3-Dichloropropene   | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 4-Methyl-2-pentanone      | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Toluene                   | 1500              | 16                 | U  | 17                     | J | 70                     | U | 29                     | U  |
| trans-1,3-Dichloropropene | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,1,2-Trichloroethane     | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Tetrachloroethene         | 1400              | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 2-Hexanone                | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Dibromochloromethane      | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Chlorobenzene             | 1700              | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Ethylbenzene              | 5500              | 34                 |    | 590                    | E | 1100                   |   | 2500                   | E  |
| m,p-Xylenes               | nl                | 11                 | J  | 260                    |   | 70                     | U | 410                    |    |
| o-Xylenes                 | nl                | 9                  | J  | 190                    |   | 70                     | U | 570                    |    |
| Styrene                   | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| Bromoform                 | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,1,2,2-Tetrachloroethane | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 2-Chlorotoluene           | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 4-Chlorotoluene           | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,3-Dichlorobenzene       | 1600              | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,4-Dichlorobenzene       | 8500              | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,2-Dichlorobenzene       | 7900              | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,2,4-Trichlorobenzene    | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |
| 1,2,3-Trichlorobenzene    | nl                | 16                 | U  | 19                     | U | 70                     | U | 29                     | U  |

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**TABLE 2 - SOIL VOCs**  
**KEYSPAN FULTON FORMER MGP, SITE NO. 2-24-051, KINGS COUNTY**

| Analyte                   | RSCO <sup>1</sup> | KSF-SB-22<br>(11'-12') |   | KSF-SB-26<br>(16'-20') |   | KSF-SB-26<br>(16'-20') |   | KSF-SB-26<br>(24'-26') |    |
|---------------------------|-------------------|------------------------|---|------------------------|---|------------------------|---|------------------------|----|
| Dichlorodifluoromethane   | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Chloromethane             | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Vinyl Chloride            | 200               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Bromomethane              | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Chloroethane              | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Trichlorofluoromethane    | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,1-Dichloroethene        | 400               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Carbon Disulfide          | nl                | 2900                   | U | 2                      | J | 60                     | U | 14                     | U  |
| Acetone                   | 200               | 2900                   | U | 18                     | B | 60                     | U | 5                      | JB |
| Methylene Chloride        | 100               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| trans-1,2-Dichloroethene  | 300               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Methyl tert-butyl ether   | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,1-Dichloroethane        | 200               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Vinyl acetate             | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| cis-1,2-Dichloroethene    | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 2-Butanone                | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Chloroform                | 300               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,1,1-Trichloroethane     | 800               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Carbon Tetrachloride      | 600               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Benzene                   | 60                | 2900                   | U | 450                    | E | 490                    |   | 14                     | U  |
| 1,2-Dichloroethane        | 100               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Trichloroethene           | 700               | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,2-Dichloropropane       | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Bromodichloromethane      | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| cis-1,3-Dichloropropene   | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 4-Methyl-2-pentanone      | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Toluene                   | 1500              | 2900                   | U | 15                     | J | 60                     | U | 14                     | U  |
| trans-1,3-Dichloropropene | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,1,2-Trichloroethane     | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Tetrachloroethene         | 1400              | 2900                   | U | 16                     | U | 60                     | U | 170                    |    |
| 2-Hexanone                | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Dibromochloromethane      | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Chlorobenzene             | 1700              | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Ethylbenzene              | 5500              | 10000                  |   | 16                     | U | 60                     | U | 14                     | U  |
| m,p-Xylenes               | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| o-Xylenes                 | nl                | 2900                   | U | 110                    | U | 60                     | U | 14                     | U  |
| Styrene                   | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| Bromoform                 | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,1,2,2-Tetrachloroethane | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 2-Chlorotoluene           | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 4-Chlorotoluene           | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,3-Dichlorobenzene       | 1600              | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,4-Dichlorobenzene       | 8500              | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,2-Dichlorobenzene       | 7900              | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,2,4-Trichlorobenzene    | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
| 1,2,3-Trichlorobenzene    | nl                | 2900                   | U | 16                     | U | 60                     | U | 14                     | U  |
|                           |                   |                        |   |                        |   |                        |   |                        |    |

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**TABLE 3**  
**KEYSPAN FULTON FORMER MGP**  
**SITE# 2-24-051, KINGS COUNTY**  
**SOIL: SVOCs**

| Analyte                     | RSCO <sup>1</sup> | KSF-SB-01<br>6'-8' |    | KSF-SB-01<br>(18'-19') |    | KSF-SB-04<br>(12'-14") |    | KSF-SB-08<br>(15'-16') |    | KSF-SB-08<br>(23'-24') |    | KSF-SB-11<br>(22'-24') |    | KSF-SB-12<br>(16'-18') |    |
|-----------------------------|-------------------|--------------------|----|------------------------|----|------------------------|----|------------------------|----|------------------------|----|------------------------|----|------------------------|----|
| Phenol                      | 30 or MDL         | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 2-Chlorophenol              | 800               | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| bis(2-Chloroethyl)Ether     | nl                | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 1,3-Dichlorobenzene         | 1,600             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 1,4-Dichlorobenzene         | 8,500             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 1,2-Dichlorobenzene         | 7,900             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Benzyl Alcohol              |                   | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| bis(2-Chloroisopropyl)ether |                   | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 2-Methylphenol              | 100 or MDL        | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Hexachloroethane            |                   | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| N-Nitroso-di-n-propylamine  | nl                | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 4-Methylphenol              | 900               | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Nitrobenzene                | 200 or MDL        | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Isophorone                  | 4,400             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 2-Nitrophenol               | 330 or MDL        | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 2,4-Dimethylphenol          | nl                | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| bis(2-Chloroethoxy)methane  |                   | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 2,4-Dichlorophenol          | 400               | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 1,2,4-Trichlorobenzene      | 3,400             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Naphthalene                 | 13,000            | 1900000            | BD | 2900000                | BD | 40000                  | BD | 800000                 | BD | 1500                   | U  | 240                    | JB | 1600                   | U  |
| 4-Chloroaniline             | 220 or MDL        | 42000              | U  | 87000                  | U  | 42000                  | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Hexachlorobutadiene         | nl                | 42000              | U  | 87000                  | U  | 42000                  | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 4-Chloro-3-Methylphenol     | 240 or MDL        | 42000              | U  | 87000                  | U  | 42000                  | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 2-Methylnaphthalene         | 36,400            | 2100000            | BD | 820000                 | BD | 46000                  | BD | 290000                 | BD | 530                    | U  | 1900                   | U  | 500                    | JB |
| Hexachlorocyclopentadiene   | nl                | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 2400                   | U  |
| 2,4,6-Trichlorophenol       | nl                | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 2400                   | U  |
| 2,4,5-Trichlorophenol       | 100               | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 4900                   | U  |
| 2-Chloronaphthalene         | nl                | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 2400                   | U  |
| 2-Nitroaniline              | 430 or MDL        | 85000              | U  | 170000                 | U  | 16000                  | U  | 75000                  | U  | 3000                   | U  | 3900                   | U  | 3100                   | U  |
| Acenaphthylene              | 41,000            | 1200000            | BD | 28000                  | JD | 8200                   | U  | 37000                  | U  | 120                    | JB | 1900                   | U  | 1600                   | U  |
| Dimethylphthalate           | 2,000             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 2,6-Dinitrotoluene          | 1,000             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Acenaphthene                | 50,000            | 220000             | D  | 410000                 | D  | 24000                  | D  | 160000                 | D  | 1500                   | U  | 1900                   | U  | 700                    | J  |
| 3-Nitroaniline              | 500 or MDL        | 85000              | U  | 170000                 | U  | 16000                  | U  | 75000                  | U  | 3000                   | U  | 3900                   | U  | 3100                   | U  |
| 2,4-Dinitrophenol           | 200 or MDL        | 85000              | U  | 170000                 | U  | 16000                  | U  | 37000                  | U  | 3000                   | U  | 3900                   | U  | 3100                   | U  |
| Dibenzofuran                | 6,200             | 130000             | D  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 240                    | J  |
| 4-Nitrophenol               | 100 or MDL        | 8500               | U  | 170000                 | U  | 16000                  | U  | 75000                  | U  | 3000                   | U  | 3900                   | U  | 3100                   | U  |
| 2,4-Dinitrotoluene          | 1,000             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Fluorene                    | 50,000            | 1400000            | D  | 130000                 | D  | 9200                   | D  | 52000                  | D  | 1500                   | U  | 1900                   | U  | 490                    | J  |
| 4-Chlorophenyl-phenyl ether |                   | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Diethylphthalate            | 7,100             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 4-Nitroaniline              | nl                | 85000              | U  | 170000                 | U  | 16000                  | U  | 75000                  | U  | 3000                   | U  | 3900                   | U  | 3100                   | U  |
| 2-methyl-4,6-dinitrophenol  | nl                | 85000              | U  | 170000                 | U  | 16000                  | U  | 75000                  | U  | 3000                   | U  | 3900                   | U  | 3100                   | U  |
| N-Nitrosodiphenylamine (1)  | nl                | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| 4-Bromophenyl-phenyl ether  | nl                | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Hexachlorobenzene           | 410               | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Pentachlorophenol           | 1000 or MDL       | 85000              | U  | 170000                 | U  | 16000                  | U  | 94000                  | U  | 3000                   | U  | 3900                   | U  | 3100                   | U  |
| Phenanthrene                | 50,000            | 1500000            | D  | 430000                 | D  | 38000                  | U  | 210000                 | D  | 210                    | J  | 240                    | J  | 580                    | J  |
| Anthracene                  | 50,000            | 480000             | D  | 100000                 | D  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 440                    | U  | 590                    | J  |
| Carbazole                   | nl                | 36000              | JD | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | J  | 440                    | U  | 1600                   | J  |
| Di-n-butylphthalate         | 8,100             | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 440                    | U  | 1600                   | U  |
| Fluoranthene                | 50,000            | 810000             | D  | 130000                 | D  | 13000                  | D  | 60000                  | D  | 1500                   | U  | 220                    | J  | 870                    | J  |
| Pyrene                      | 50,000            | 810000             | D  | 200000                 | D  | 20000                  | D  | 100000                 | D  | 190                    | J  | 200                    | J  | 1100                   | J  |
| Butylbenzylphthalate        | 50,000            | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Benzo(a)anthracene          | 224 or MDL        | 510000             | D  | 60000                  | JD | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 310                    | J  |
| Chrysene                    | 400               | 450000             | D  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 410                    | J  |
| 3,3-Dichlorobenzidine       | N/A               | 42000              | U  | 87000                  | J  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| bis(2-Ethylhexyl)phthalate  | 50,000            | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Di-n-octylphthalate         | 50,000            | 42000              | U  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Benzo(b)fluoranthene        | 1,100             | 590000             | D  | 35000                  | JD | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 240                    | J  |
| Benzo(k)fluoranthene        | 1,100             | 170000             | D  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Benzo(a)pyrene              | 61 or MDL         | 390000             | D  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 190                    | J  |
| Indeno(1,2,3-cd)pyrene      | 3,200             | 300000             | D  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Dibenzo(a,h)anthracene      | 14 or MDL         | 28000              | JD | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |
| Benzo(g,h,i)perylene        | 50,000            | 280000             | D  | 87000                  | U  | 8200                   | U  | 37000                  | U  | 1500                   | U  | 1900                   | U  | 1600                   | U  |

**Notes:**

All data presented in parts per billion (ppb or ug/kg).

1 Recommended soil clean-up objective from NYSDEC Technical Administrative Guidance Memorandum (TAGM 4046).

na - Sample not analyzed for that analyte

nl - Compound not listed in TAGM 4046

ns - Compound listed in TAGM 4046 but no RSCO has been established

U - Compound not detected at or above the instrument detection limit (IDL) value shown is the USEPA Contract Required Detection Limit (CRDL).

N - Presumptive evidence of a compound

J - Estimated concentration above the IDL but less than the CRDL, or due to some QC issue determined during validation.

Field Duplicate is a generic sample collected simultaneously with another sample at the same location and analyzed by the laboratory. Field Duplicate data demonstrates field sampling and laboratory precision.

BOLD indicates exceedences of RSCO.

**TABLE 3**  
**KEYSPAN FULTON FORMER MGP**  
**SITE# 2-24-051, KINGS COUNTY**  
**SOIL: SVOCs**

| Analyte                     | RSCO <sup>1</sup> | KSF-SB-13<br>(14'-16') |   | KSF-SB-14<br>(19') |   | KSF-SB-20<br>(14'-16') |    | KSF-SB-22<br>(11'-12') |    | KSF-SB-26<br>(16'-20') |   | KSF-SB-27<br>(24'-26') |    |
|-----------------------------|-------------------|------------------------|---|--------------------|---|------------------------|----|------------------------|----|------------------------|---|------------------------|----|
| Phenol                      | 30 or MDL         | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2-Chlorophenol              | 800               | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| bis(2-Chloroethyl)Ether     | nl                | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 1,3-Dichlorobenzene         | 1,600             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 1,4-Dichlorobenzene         | 8,500             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 1,2-Dichlorobenzene         | 7,900             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Benzyl Alcohol              |                   | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| bis(2-Chloroisopropyl)ether |                   | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2-Methylphenol              | 100 or MDL        | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Hexachloroethane            |                   | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| N-Nitroso-di-n-propylamine  | nl                | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 4-Methylphenol              | 900               | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Nitrobenzene                | 200 or MDL        | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Isophorone                  | 4,400             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2-Nitrophenol               | 330 or MDL        | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2,4-Dimethylphenol          | nl                | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| bis(2-Chloroethoxy)methane  |                   | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2,4-Dichlorophenol          | 400               | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 1,2,4-Trichlorobenzene      | 3,400             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Naphthalene                 | 13,000            | 3800                   | U | 320                | J | 24000                  | D  | 69000                  | D  | 1600                   | U | 3000                   | U  |
| 4-Chloroaniline             | 220 or MDL        | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Hexachlorobutadiene         | nl                | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 4-Chloro-3-Methylphenol     | 240 or MDL        | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2-Methylnaphthalene         | 36,400            | 3800                   | U | 740                | J | 21000                  | D  | 110000                 | D  | 1600                   | U | 3000                   | U  |
| Hexachlorocyclopentadiene   | nl                | 3800                   | U | 1500               | U | 120000                 | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2,4,6-Trichlorophenol       | nl                | 3800                   | U | 1500               | U | 120000                 | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2,4,5-Trichlorophenol       | 100               | 3800                   | U | 1500               | U | 240000                 | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2-Chloronaphthalene         | nl                | 3800                   | U | 1500               | U | 120000                 | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2-Nitroaniline              | 430 or MDL        | 7700                   | U | 3100               | U | 7300                   | U  | 12000                  | U  | 3200                   | U | 6000                   | U  |
| Acenaphthylene              | 41,000            | 3800                   | U | 1500               | U | 690                    | JD | 8500                   | D  | 1600                   | U | 1800                   | JD |
| Dimethylphthalate           | 2,000             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 2,6-Dinitrotoluene          | 1,000             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Acenaphthene                | 50,000            | 3800                   | U | 220                | U | 18000                  | D  | 17000                  | D  | 2100                   | U | 3000                   | U  |
| 3-Nitroaniline              | 500 or MDL        | 7700                   | U | 3100               | U | 7300                   | U  | 12000                  | U  | 3200                   | U | 6000                   | U  |
| 2,4-Dinitrophenol           | 200 or MDL        | 7700                   | U | 3100               | U | 7300                   | U  | 12000                  | U  | 3200                   | U | 6000                   | U  |
| Dibenzofuran                | 6,200             | 3800                   | J | 1500               | U | 950                    | JD | 3300                   | JD | 1600                   | U | 3000                   | U  |
| 4-Nitrophenol               | 100 or MDL        | 7700                   | U | 3100               | U | 7300                   | U  | 12000                  | U  | 3200                   | U | 6000                   | U  |
| 2,4-Dinitrotoluene          | 1,000             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Fluorene                    | 50,000            | 3800                   | U | 1500               | U | 6800                   | D  | 38000                  | D  | 690                    | J | 3000                   | U  |
| 4-Chlorophenyl-phenyl ether |                   | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Diethylphthalate            | 7,100             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| 4-Nitroaniline              | nl                | 7700                   | U | 3100               | U | 7300                   | U  | 12000                  | U  | 3200                   | U | 6000                   | U  |
| 2-methyl-4,6-dinitrophenol  | nl                | 7700                   | U | 3100               | U | 7300                   | U  | 12000                  | U  | 3200                   | U | 6000                   | U  |
| N-Nitrosodiphenylamine (1)  | nl                | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1200                   | U | 3000                   | U  |
| 4-Bromophenyl-phenyl ether  | nl                | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Hexachlorobenzene           | 410               | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Pentachlorophenol           | 1000 or MDL       | 7700                   | U | 3100               | U | 7300                   | U  | 12000                  | U  | 3200                   | U | 6000                   | U  |
| Phenanthrene                | 50,000            | 11000                  | D | 1500               | U | 24000                  | D  | 62000                  | D  | 1800                   | U | 3000                   | U  |
| Anthracene                  | 50,000            | 3800                   | U | 1500               | U | 6000                   | U  | 15000                  | D  | 1300                   | J | 330                    | JD |
| Carbazole                   | nl                | 3800                   | U | 1500               | U | 780                    | JD | 700                    | JD | 180                    | J | 3000                   | U  |
| Di-n-butylphthalate         | 8,100             | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Fluoranthene                | 50,000            | 23000                  | D | 1500               | U | 19000                  | D  | 38000                  | D  | 1300                   | J | 8200                   | D  |
| Pyrene                      | 50,000            | 16000                  | D | 1500               | U | 19000                  | D  | 46000                  | D  | 3100                   |   | 19000                  | D  |
| Butylbenzylphthalate        | 50,000            | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Benzo(a)anthracene          | 224 or MDL        | 3800                   | U | 1500               | U | 7500                   | D  | 26000                  | D  | 800                    | J | 4200                   | D  |
| Chrysene                    | 400               | 3800                   | U | 1500               | U | 7800                   | D  | 28000                  | D  | 850                    | J | 3900                   | D  |
| 3,3-Dichlorobenzidine       | N/A               | 3800                   | U | 1500               | U | 56000                  | J  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| bis(2-Ethylhexyl)phthalate  | 50,000            | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Di-n-octylphthalate         | 50,000            | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Benzo(b)fluoranthene        | 1,100             | 3800                   | U | 1500               | U | 7200                   | D  | 13000                  | D  | 450                    | J | 2400                   | JD |
| Benzo(k)fluoranthene        | 1,100             | 3800                   | U | 1500               | U | 2200                   | JD | 3800                   | JD | 1600                   | U | 630                    | JD |
| Benzo(a)pyrene              | 61 or MDL         | 3800                   | U | 1500               | U | 6700                   | D  | 17000                  | D  | 570                    | J | 3300                   | D  |
| Indeno(1,2,3-cd)pyrene      | 3,200             | 3800                   | U | 1500               | U | 3100                   | JD | 4900                   | JD | 220                    | J | 1200                   | JD |
| Dibenzo(a,h)anthracene      | 14 or MDL         | 3800                   | U | 1500               | U | 3700                   | U  | 6100                   | U  | 1600                   | U | 3000                   | U  |
| Benzo(g,h,i)perylene        | 50,000            | 3800                   | U | 1500               | U | 3000                   | JD | 5000                   | JD | 300                    | J | 1800                   | JD |

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**TABLE 4**  
**KEYSPAN FULTON FORMER MGP**  
**SITE # 2-24-051, KINGS COUNTY**  
**WATER: VOCs**

| ANALYTE                   | NYS<br>TOGS 1.1.1<br>1 | MW-1 |   | MW-2 |   | MW-3 |   | MW-4 |   | MW-5 |   | MW-6 |   | MW-6 |   | MW-7 |   | MW-7 |   | TRIP BLANK |   |
|---------------------------|------------------------|------|---|------|---|------|---|------|---|------|---|------|---|------|---|------|---|------|---|------------|---|
| Dichlorodifluoromethane   | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Chloromethane             |                        | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Vinyl Chloride            | 2                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Bromomethane              | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Chloroethane              | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Trichlorofluoromethane    | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,1-Dichloroethene        | 0.7                    | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Carbon Disulfide          | nl                     | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Acetone                   | 50                     | 30   |   | 10   | U | 3    | J | 10   | U | 3    | J | 4    | J | 20   | U | 5    | J | 20   | U | 10         | U |
| Methylene Chloride        | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| trans-1,2-Dichloroethene  | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Methyl tert-Butyl Ether   | nl                     | 5    | J | 10   | U | 3    | J | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,1-Dichloroethane        | 0.6                    | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Vinyl acetate             | nl                     | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| cis-1,2-Dichloroethene    | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 2-Butanone                | nl                     | 3    | J | 10   | U | 10   | U | 10   | U | 10   | U | 2    | J | 20   | U | 10   | U | 20   | U | 10         | U |
| Chloroform                | 7                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,1,1-Trichloroethane     | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Carbon Tetrachloride      | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Benzene                   | 1                      | 8    | J | 1100 | E | 10   | U | 10   | U | 10   | U | 95   | U | 20   | U | 230  | E | 360  | D | 10         | U |
| 1,2-Dichloroethane        | 0.6                    | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Trichloroethene           | 5                      | 10   | U | 10   | U | 10   | U | 3    | J | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,2-Dichloropropane       | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Bromodichloromethane      | 50                     | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| cis-1,3-Dichloropropene   | 0.4*                   | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 4-Methyl-2-Pentanone      | nl                     | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Toluene                   | 5                      | 10   | U | 110  |   | 10   | U | 10   | U | 10   | U | 54   | U | 20   | U | 2    | J | 20   | U | 10         | U |
| trans-1,3-Dichloropropene | 0.4*                   | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,1,2-Trichloroethane     | 1                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Tetrachloroethene         | 0.7                    | 10   | U | 10   | U | 10   | U | 2    | J | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 2-Hexanone                | nl                     | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Dibromochloromethane      | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Chlorobenzene             | nl                     | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| Ethylbenzene              | 5                      | 1    | J | 300  | E | 10   | U | 10   | U | 10   | U | 290  | E | 490  | D | 39   |   | 20   | U | 10         | U |
| m,p-Xylene                | nl                     | 10   | U | 270  |   | 10   | U | 10   | U | 10   | U | 190  | U | 20   | U | 8    | J | 20   | U | 10         | U |
| o-Xylene                  | nl                     | 10   | U | 260  | E | 10   | U | 10   | U | 10   | U | 170  | U | 20   | U | 6    | J | 20   | U | 10         | U |
| Styrene                   | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 5    | J | 20   | U | 10   | U | 20   | U | 10         | U |
| Bromoform                 | 50                     | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,1,2,2-Tetrachloroethane | 0.2                    | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 2-Chlorotoluene           | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 4-Chlorotoluene           | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,3-Dichlorobenzene       | 3                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,4-Dichlorobenzene       | 3                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,2-Dichlorobenzene       | 3                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,2,4-Trichlorobenzene    | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |
| 1,2,3-Trichlorobenzene    | 5                      | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 10   | U | 20   | U | 10   | U | 20   | U | 10         | U |

**Notes:**

All data presented in parts per billion (ppb or ug/kg).

1 Recommended soil clean-up objective from NYSDEC Technical Administrative Guidance Memorandum (TAGM 4046).

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Field Duplicate is a generic sample collected simultaneously with another sample at the same location and analyzed by the laboratory. Field Duplicate data demonstrates field sampling and laboratory precision.

**BOLD** indicates exceedences of RSCO.

**TABLE 5  
KEYSPAN FULTON FORMER MGP  
SITE # 2-24-051**

**SVOCs: WATER**

| ANALYTE                     | NYS<br>TOGS 1.1.1<br>1 | MW-1 |    | MW-2 |     | MW-2 |    | MW-3 |    | MW-4 |    |
|-----------------------------|------------------------|------|----|------|-----|------|----|------|----|------|----|
| Phenol                      | 1                      | 43   |    | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2-Chlorophenol              | 1                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| bis(2-Chloroethyl)Ether     | 1                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 1,3-Dichlorobenzene         | 3                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 1,4-Dichlorobenzene         | 3                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 1,2-Dichlorobenzene         | 3                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| benzyl alcohol              |                        | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| bis(2-chloroisopropyl)ether |                        | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2-Methylphenol              | 1                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Hexachloroethane            | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| N-Nitroso-di-n-propylamine  | nl                     | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 4-Methylphenol              | 1                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Nitrobenzene                | 0.4                    | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Isophorone                  | 50                     | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2-Nitrophenol               | 1                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2,4-Dimethylphenol          | 50                     | 15   | U  | 4    | JD  | 220  | U  | 11   | U  | 11   | U  |
| bis(2-Chloroethoxy)methane  | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2,4-Dichlorophenol          | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 1,2,4-Trichlorobenzene      | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Naphthalene                 | 10                     | 7    | JB | 490  | EBD | 4800 | BD | 5    | JB | 2    | JB |
| 4-Chloroaniline             | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Hexachlorobutadiene         | 0.5                    | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 4-Chloro-3-Methylphenol     | 1                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2-Methylnaphthalene         | nl                     | 4    | JB | 200  | D   | 220  | U  | 11   | U  | 11   | U  |
| Hexachlorocyclopentadiene   | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2,4,6-Trichlorophenol       | 1                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2,4,5-Trichlorophenol       | 1                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2-Chloronaphthalene         | 10                     | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2-Nitroaniline              | 5                      | 30   | U  | 44   | U   | 440  | U  | 22   | U  | 22   | U  |
| Acenaphthylene              | nl                     | 15   | U  | 9    | JD  | 220  | U  | 2    | JB | 11   | U  |
| Dimethylphthalate           | 50                     | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 2,6-Dinitrotoluene          | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Acenaphthene                | 20                     | 6    | JB | 140  | D   | 220  | U  | 11   | U  | 11   | U  |
| 3-Nitroaniline              | 5                      | 30   | U  | 44   | U   | 440  | U  | 22   | U  | 22   | U  |
| 2,4-Dinitrophenol           | 10                     | 30   | U  | 44   | U   | 440  | U  | 22   | U  | 22   | U  |
| Dibenzofuran                | nl                     | 15   | U  | 5    | JD  | 220  | U  | 11   | U  | 11   | U  |
| 4-Nitrophenol               | 1                      | 30   | U  | 44   | U   | 440  | U  | 22   | U  | 22   | U  |
| 2,4-Dinitrotoluene          | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Fluorene                    | 50                     | 3    | J  | 33   | D   | 220  | U  | 11   | U  | 11   | U  |
| 4-Chlorophenyl-phenylether  | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Diethylphthalate            | 50                     | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 4-Nitroaniline              | 5                      | 30   | U  | 44   | U   | 440  | U  | 22   | U  | 22   | U  |
| 2-methyl-4,6-dinitrophenol  |                        | 30   | U  | 44   | U   | 440  | U  | 22   | U  | 22   | U  |
| N-Nitrosodiphenylamine      | 50                     | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 4-Bromophenyl-phenylether   | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Hexachlorobenzene           | 0.04                   | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Pentachlorophenol           | 1                      | 30   | U  | 44   | U   | 440  | U  | 22   | U  | 22   | U  |
| Phenanthrene                | 50                     | 4    | J  | 37   | D   | 220  | U  | 11   | U  | 11   | U  |
| Anthracene                  | 50                     | 15   | U  | 6    | JD  | 220  | U  | 11   | U  | 11   | U  |
| Carbazole                   | nl                     | 15   | U  | 20   | JD  | 220  | U  | 11   | U  | 11   | U  |
| Di-n-butylphthalate         | 50                     | 15   | U  | 22   | U   | 220  | U  | 1    | J  | 11   | U  |
| Fluoranthene                | 50*                    | 15   | U  | 3    | JD  | 220  | U  | 11   | U  | 11   | U  |
| Pyrene                      | 50                     | 15   | U  | 5    | JD  | 220  | U  | 11   | U  | 11   | U  |
| Butylbenzylphthalate        | 50*                    | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Benzo(a)anthracene          | 0.002                  | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Chrysene                    | 0.002                  | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| 3,3-Dichlorobenzidine       | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| bis(2-Ethylhexyl)phthalate  | 5                      | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Di-n-octylphthalate         | 50                     | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Benzo(b)fluoranthene        | 0.002                  | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Benzo(k)fluoranthene        | 0.002                  | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Benzo(a)pyrene              | nd                     | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Indeno(1,2,3-cd)pyrene      | 0.002                  | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Dibenzo(a,h)anthracene      | nl                     | 15   | U  | 22   | U   | 220  | U  | 11   | U  | 11   | U  |
| Benzo(g,h,i)perylene        | nl                     | 15   | U  | 22   | U   | 220  | U  | 2    | J  | 11   | U  |

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**TABLE 5  
KEYSPAN FULTON FORMER MGP  
SITE # 2-24-051**

**SVOCs: WATER**

| ANALYTE                     | NYS<br>TOGS 1.1.1<br>1 | MW-5 |    | MW-6 |     | MW-6 |    | MW-7 |     | MW-7 |    |
|-----------------------------|------------------------|------|----|------|-----|------|----|------|-----|------|----|
| Phenol                      | 1                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2-Chlorophenol              | 1                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| bis(2-Chloroethyl)Ether     | 1                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 1,3-Dichlorobenzene         | 3                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 1,4-Dichlorobenzene         | 3                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 1,2-Dichlorobenzene         | 3                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| benzyl alcohol              |                        | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| bis(2-chloroisopropyl)ether |                        | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2-Methylphenol              | 1                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Hexachloroethane            | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| N-Nitroso-di-n-propylamine  | nl                     | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 4-Methylphenol              | 1                      | 11   | U  | 4    | JD  | 110  | U  | 4    | JD  | 56   | U  |
| Nitrobenzene                | 0.4                    | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Isophorone                  | 50                     | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2-Nitrophenol               | 1                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2,4-Dimethylphenol          | 50                     | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| bis(2-Chloroethoxy)methane  | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2,4-Dichlorophenol          | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 1,2,4-Trichlorobenzene      | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Naphthalene                 | 10                     | 6    | JB | 660  | EBD | 3500 | BD | 230  | EBD | 500  | BD |
| 4-Chloroaniline             | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Hexachlorobutadiene         | 0.5                    | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 4-Chloro-3-Methylphenol     | 1                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2-Methylnaphthalene         | nl                     | 11   | U  | 320  | ED  | 960  | D  | 53   | D   | 56   | U  |
| Hexachlorocyclopentadiene   | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2,4,6-Trichlorophenol       | 1                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2,4,5-Trichlorophenol       | 1                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2-Chloronaphthalene         | 10                     | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2-Nitroaniline              | 5                      | 22   | U  | 44   | U   | 220  | U  | 44   | U   | 110  | U  |
| Acenaphthylene              | nl                     | 11   | U  | 30   | D   | 110  | U  | 19   | JD  | 56   | U  |
| Dimethylphthalate           | 50                     | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 2,6-Dinitrotoluene          | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Acenaphthene                | 20                     | 11   | U  | 180  | D   | 110  | U  | 200  | D   | 56   | U  |
| 3-Nitroaniline              | 5                      | 22   | U  | 44   | U   | 220  | U  | 44   | U   | 110  | U  |
| 2,4-Dinitrophenol           | 10                     | 22   | U  | 44   | U   | 220  | U  | 44   | U   | 110  | U  |
| Dibenzofuran                | nl                     | 11   | U  | 7    | JD  | 110  | U  | 8    | JD  | 56   | U  |
| 4-Nitrophenol               | 1                      | 22   | U  | 44   | U   | 220  | U  | 44   | U   | 110  | U  |
| 2,4-Dinitrotoluene          | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Fluorene                    | 50                     | 11   | U  | 58   | D   | 110  | U  | 110  | JD  | 56   | U  |
| 4-Chlorophenyl-phenylether  | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Diethylphthalate            | 50                     | 11   | U  | 22   | U   |      | U  | 22   | U   | 56   | U  |
| 4-Nitroaniline              | 5                      | 22   | U  | 44   | U   | 220  | U  | 44   | U   | 110  | U  |
| 2-methyl-4,6-dinitrophenol  |                        | 22   | U  | 44   | U   | 220  | U  | 44   | U   | 110  | U  |
| N-Nitrosodiphenylamine      | 50                     | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| 4-Bromophenyl-phenylether   | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Hexachlorobenzene           | 0.04                   | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Pentachlorophenol           | 1                      | 22   | U  | 44   | U   | 220  | U  | 44   | U   | 110  | U  |
| Phenanthrene                | 50                     | 11   | U  | 64   | D   | 110  | U  | 170  | D   | 56   | U  |
| Anthracene                  | 50                     | 11   | U  | 11   | JD  | 110  | U  | 74   | D   | 56   | U  |
| Carbazole                   | nl                     | 11   | U  | 39   | D   | 110  | U  | 4    | JD  | 56   | U  |
| Di-n-butylphthalate         | 50                     | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Fluoranthene                | 50*                    | 11   | U  | 7    | JD  | 110  | U  | 96   | D   | 56   | U  |
| Pyrene                      | 50                     | 11   | U  | 11   | JD  | 110  | U  | 130  | D   | 56   | U  |
| Butylbenzylphthalate        | 50*                    | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Benzo(a)anthracene          | 0.002                  | 11   | U  | 2    | JD  | 110  | U  | 47   | D   | 56   | U  |
| Chrysene                    | 0.002                  | 11   | U  | 2    | JD  | 110  | U  | 42   | D   | 56   | U  |
| 3,3-Dichlorobenzidine       | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| bis(2-Ethylhexyl)phthalate  | 5                      | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Di-n-octylphthalate         | 50                     | 11   | U  | 22   | U   | 110  | U  | 22   | U   | 56   | U  |
| Benzo(b)fluoranthene        | 0.002                  | 11   | U  | 22   | U   | 110  | U  | 27   | D   | 56   | U  |
| Benzo(k)fluoranthene        | 0.002                  | 11   | U  | 22   | U   | 110  | U  | 8    | JD  | 56   | U  |
| Benzo(a)pyrene              | nd                     | 11   | U  | 22   | U   | 110  | U  | 39   | D   | 56   | U  |
| Indeno(1,2,3-cd)pyrene      | 0.002                  | 11   | U  | 22   | U   | 110  | U  | 12   | JD  | 56   | U  |
| Dibenzo(a,h)anthracene      | nl                     | 11   | U  | 22   | U   | 110  | U  | 3    | JD  | 56   | U  |
| Benzo(g,h,i)perylene        | nl                     | 11   | U  | 22   | U   | 110  | U  | 12   | JD  | 56   | U  |

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## **FIGURES**



**Figure 1**  
Keyspan Fulton MGP  
Site Location

## Historic MGP Structures and Real Estate Parcels

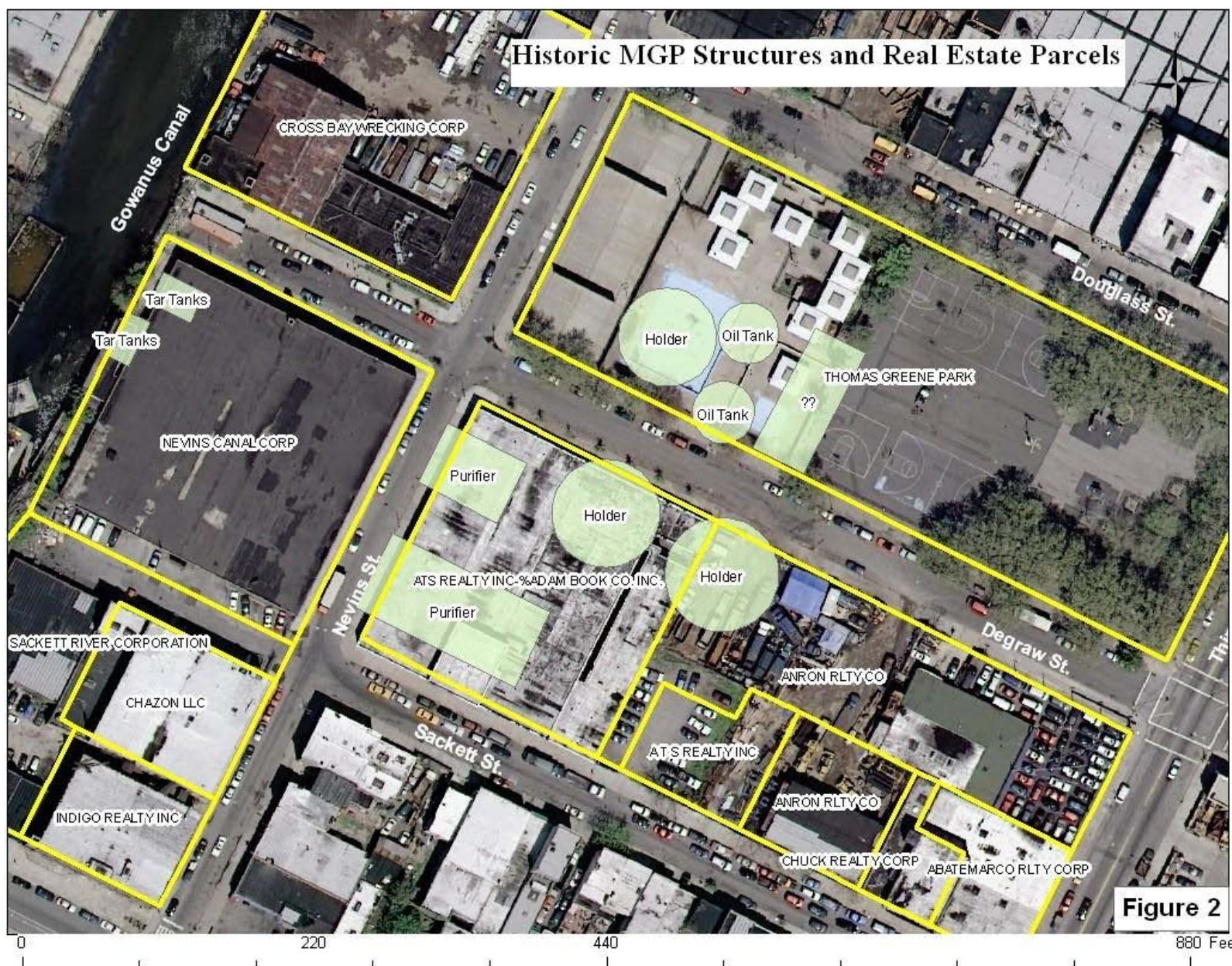
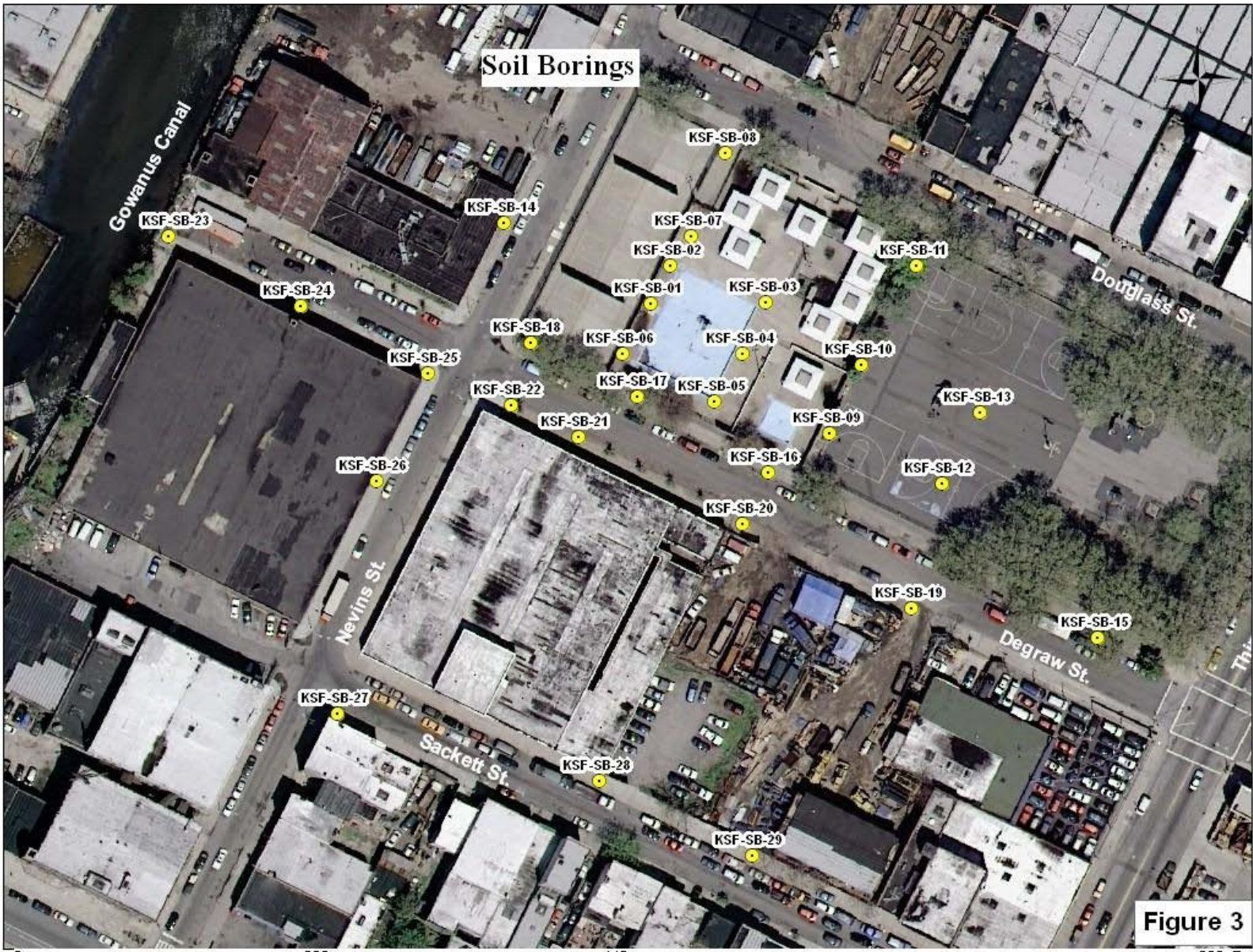


Figure 2



**Figure 3**





Figure 5

Borings in which the peat layer was observed, and the depths to the peat layer in feet below ground surface

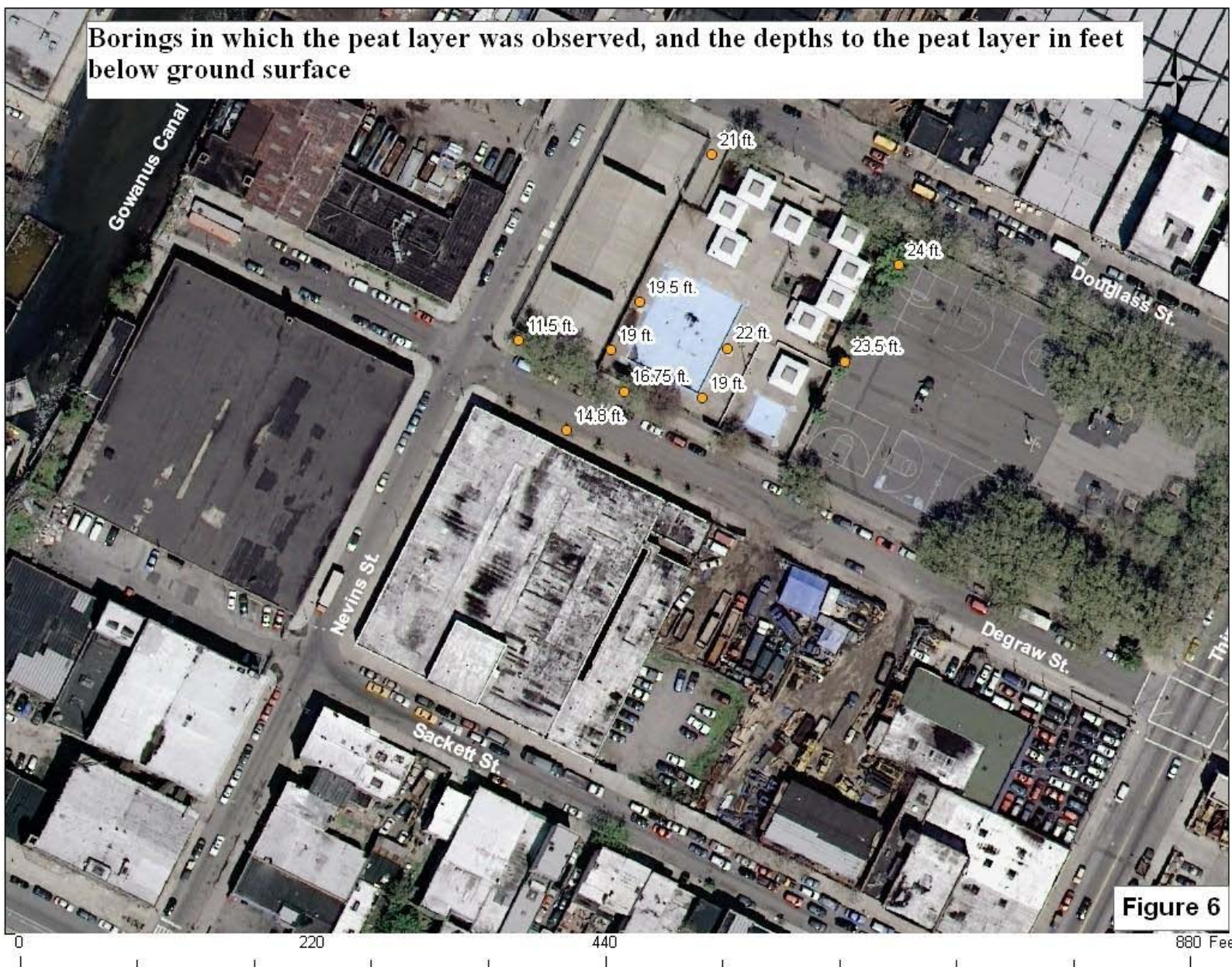
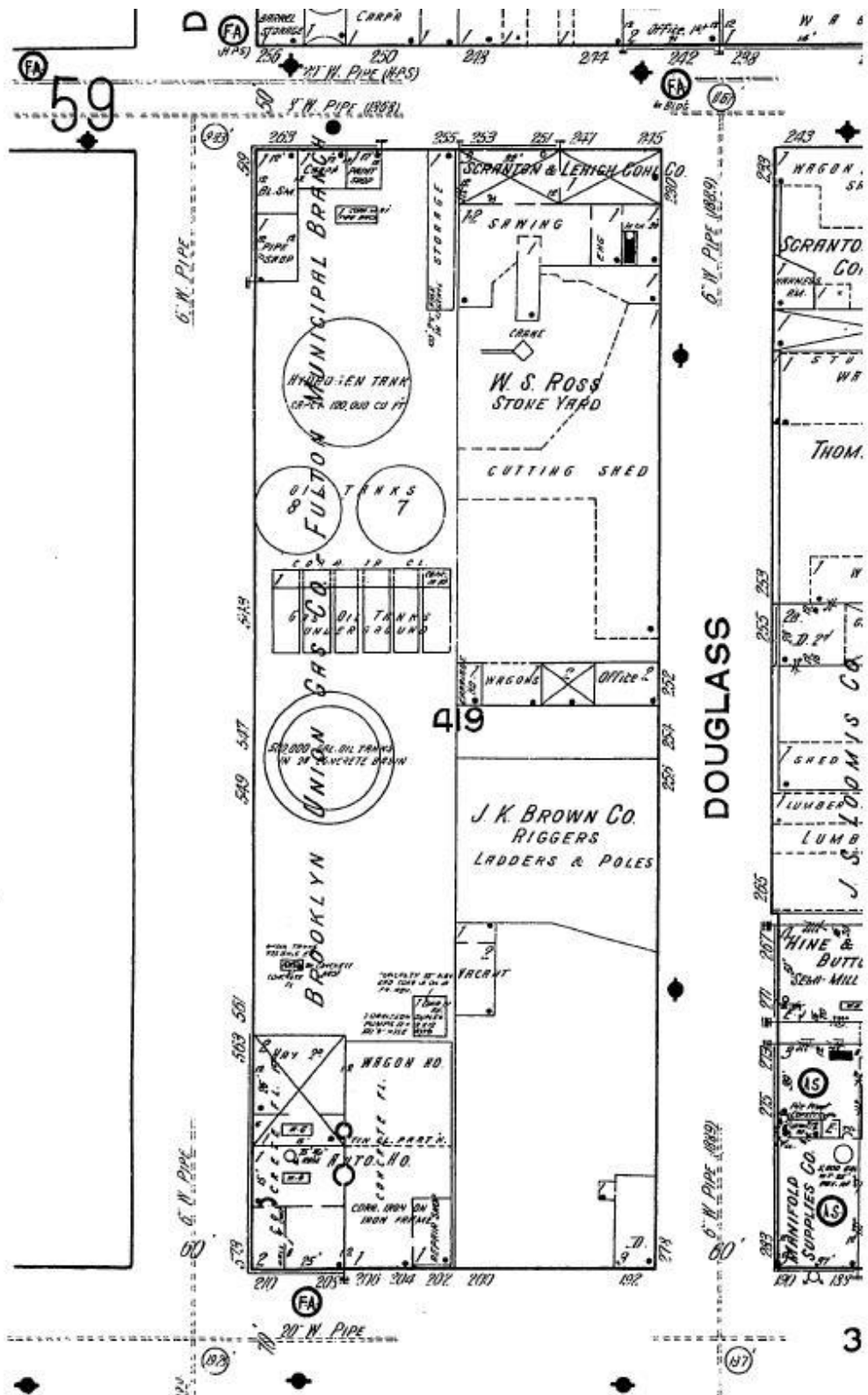


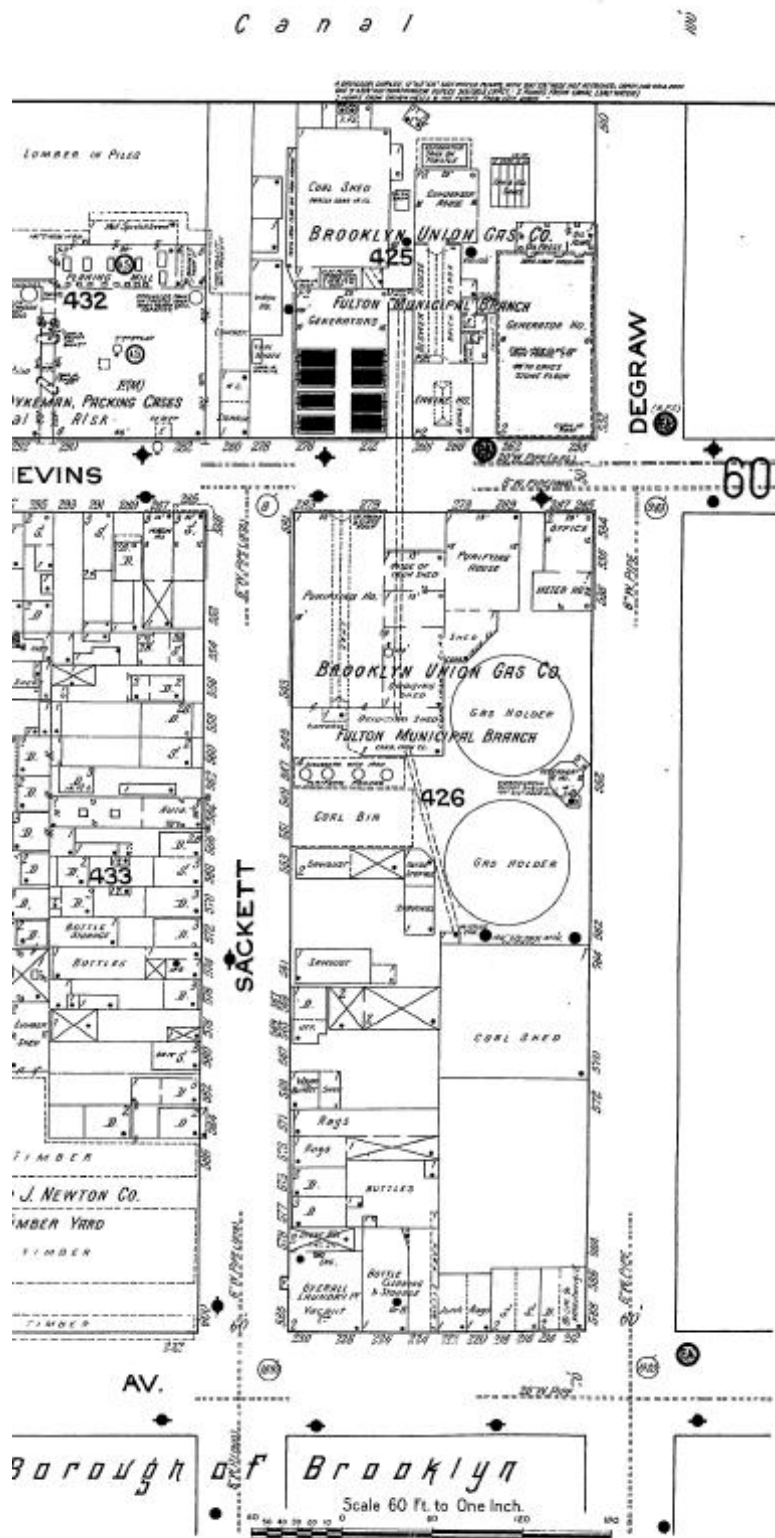
Figure 6

**APPENDIX A**  
**HISTORICAL MAPS**





Sanborn Insurance Map 1915 - 1933



**APPENDIX B**  
**PHOTOGRAPHS**



**Photo #1** KSF-SB-01, (0-4') Typical fill material



**Photo#2** KSF-SB-01, (16-20') Coal Tar saturated sand and gravel overlying peat and clay



**Photo#3** KSF-SB-04,(20-24') Clay layer (right) overlying clay and peat layer(left)



**Photo#4** KSF-SB-05, (8-12') Coal tar saturated silty sand and gravel



**Photo#5** KSF-SB-05 Coal tar flowing out of drill rods



**Photo#6** KSF-SB-09 (24-27.5') No recovery, coal tar coated sample tube



**Photo#7** KSF-SB-14 (16-20') Coal tar saturated silty sand & gravel, clay layer 18.5-19.5'



**Photo #8** KSF-SB-17 (12-16') Coal tar saturated silty sand & gravel



**Photo#9** KSF-SB-22 (8-12') Coal tar saturated silty sand & gravel from 9' to 11.5'

## **APPENDIX C**

### **SOIL BORING LOGS**

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Date: Start/finish:</b> 4/17/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 20'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-01<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                  | Comments                |
|-------|-----------------|----------|-----------|-----------|--------------------------------------------------------------------------------------------|-------------------------|
| 4     | 0-4             | 2' 7"    | 0         |           | brown to black silty SAND, trace gravel and cinders                                        |                         |
| 6     | 4-6             | 3' 2"    | 0         |           | brown silty SAND, brick fragments, no stain or odor                                        | Lab Sample<br>6' - 8'   |
| 8     | 6-8             |          |           |           | tar stained silty SAND, moist, strong coal tar odor                                        |                         |
| 10    | 8-10            | 1' 8"    | 39        | X         | wet brown to black silty SAND w/ gravel and brick fragments, heavy sheen, trace NAPL       |                         |
| 12    | 10-12           |          | 108       | X         | wet brown to black silty SAND w/ gravel, brick and coal fragments, heavy NAPL, strong odor |                         |
| 12    | 12-16           | 1' 10"   | 20-146    | X         | wet silty SAND w/gravel, heavy NAPL throughout, appears to be running out of the soil      |                         |
| 18    | 16-18           | 1' 2"    |           | X         | 16'-18' silty SAND w/gravel, heavy NAPL staining                                           | Lab Sample<br>16' - 18' |
|       | 18-19'6"        |          | 125       | X         | 18'-19'6" silty SAND with wood fragments, heavy NAPL staining                              |                         |
| 20    | 19'6"-20'       |          | 25        |           | 19'6" - 20' silty gray clay w/peat, no NAPL, drilling much harder<br>END OF BORING         |                         |

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Date: Start/finish:</b> 4/17/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 20'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-02<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                  | Comments |
|-------|-----------------|----------|-----------|-----------|--------------------------------------------------------------------------------------------|----------|
| 4     | 0-4             | 2' 10"   | 6         |           | brown to black SAND, little silt, trace gravel and cinders, no stain or odor               |          |
| 6     | 4-6             | 2' 0"    | 1.3       |           | brown silty SAND and gravel, rock fragments, no stain or odor                              |          |
| 8     | 6-8             |          |           |           | moist brown to black silty SAND with brick, rock and coal fragments<br>no stain or odor    |          |
| 10    |                 | 6"       | 3         |           | poor sample, wet brown silty SAND, mild odor<br>Good water level reading 7.5' below grade  |          |
| 12    |                 |          |           |           |                                                                                            |          |
| 16    | 12-16           | 1' 7"    | 95        | X         | wet silty SAND and gravel, heavy sheen. Blebs of NAPL strong coal tar odor                 |          |
| 18    | 16-19           | 1' 6"    | 134       | X         | 16'-19 SAND and gravel with wood fragments, strong sheen, NAPL blebs, strong coal tar odor |          |
| 19    | 19' - 20'       |          | 34        |           | 19'-20' dense sandy silt w/gravel, brick fragments, strong coal tar odor, no NAPL,         |          |
| 20    |                 |          |           |           | END OF BORING                                                                              |          |

|                                                                                                                                                                                                                       |                                                                                                                            |                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Date: Start/finish:</b> 4/17/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 8'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-03<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth       | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                                          | Comments |
|-------------|-----------------|----------|-----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4      | 0-4             | 2' 4"    | 10.5      |           | brown to gray silty SAND w/ rock and brick fragments<br>moderate odor, possibly diesel                                                                                             |          |
| 4<br>6<br>8 | 4-7<br><br>7-8  | 2' 0"    | 6.6       | X         | brick and rock fragments w/ silty sand becomes wet at 6'6"<br><br>silty black to gray SAND, strong coal tar odor, trace NAPL from 7'6" to 8'<br>REFUSAL AT 8'<br><br>END OF BORING |          |

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                                  |
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| <b>Date: Start/finish:</b> 4/17/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 24'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-04<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                             | Comments             |
|-------|-----------------|----------|-----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 0     | 0-3             | 2' 4"    | 17        |           | brown silty SAND with rock and brick fragments                                                                                                        |                      |
| 4     | 3-4             |          |           |           | dark gray silty SAND and gravel w/ rock and brick fragments, moderate odor-possibly diesel                                                            |                      |
| 4     | 4-6.5           | 2' 0"    | 7.6       |           | gray silty SAND with gravel, rock and brick fragments, no stain or odor                                                                               |                      |
| 6     | 6.5 -8          |          |           |           | wet below 6'                                                                                                                                          |                      |
| 8     |                 |          |           | X         | gray silty SAND w/ gravel, rock and brick fragments                                                                                                   |                      |
|       |                 |          |           |           | from 7.5 to 8.0 heavy stain and sheen, coal tar odor                                                                                                  |                      |
| 8     |                 |          |           |           |                                                                                                                                                       |                      |
| 10    | 8 - 12          | 8"       | 111       | X         | poor sample, wet, dark gray sandy SILT w/ rock fragments and cinders                                                                                  |                      |
|       |                 |          |           |           | heavy stain and sheen, coal tar odor                                                                                                                  |                      |
| 12    | 12- 12.5        | 2' 4"    | 264       | X         | sandy SILT w/ trace gravel and rock fragments, black stain, coal tar odor                                                                             |                      |
| 16    | 12.5 - 16       |          |           |           | sandy SILT w/ trace gravel and rock fragments, visible yellow NAPL strong diesel odor                                                                 | Lab Sample 12' - 14' |
| 16    |                 |          |           |           |                                                                                                                                                       |                      |
|       | 16 - 20         | 2'       | 94        | X         | dark gray to black SILT w/sand, gravel and rock fragments Entire sample showS discrete NAPL phase, staining and pooling of NAPL, strong coal tar odor |                      |
| 20    |                 |          |           |           |                                                                                                                                                       |                      |

|                      |         |       |     |   |                                                                  |  |
|----------------------|---------|-------|-----|---|------------------------------------------------------------------|--|
| 20<br><br><br><br>24 | 20-21   | 3.75' | 7.1 | X | gray silty CLAY, strong sheen, NAPL staining, coal tar odor      |  |
|                      | 21 - 22 |       |     |   | gray silty CLAY, stain and odor much reduced                     |  |
|                      | 22 - 24 |       |     |   | dark brown CLAY and peat, strong organic smell, no coal tar odor |  |
|                      |         |       |     |   | END OF BORING                                                    |  |

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                                  |
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| <b>Date: Start/finish:</b> 4/17/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 24'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-05<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth    | Sample Interval                  | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                           | Comments |
|----------|----------------------------------|----------|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4   | 0 - 4                            | 2' 4"    | 11        |           | brown silty SAND with rock fragments<br>moderate staining, mild diesel odor                                                                                         |          |
| 4<br>6   | 4-7                              | 1' 9"    | 10.5      |           | brown silty SAND w/rock fragments and gravel, slight diesel odor<br><br>Wet at 7.5'                                                                                 |          |
| 8        | 7.5 -8.0                         |          |           | X         | wet silty SAND w/rock fragments and gravel, heavy stain sheen and coal tar odor, some NAPL                                                                          |          |
| 8<br>12  | 8 - 12                           | 1'4"     | 375       | X         | wet black silty SAND w/ gravel and rock fragments sandy SILT w/ rock fragments heavy stain, sheen and coal tar odor, free phase TAR present<br>clayey zone at 11.5' |          |
| 12<br>16 | 12- 14<br>14 - 15<br><br>15 - 16 | NA       | 234       | X         | sandy SILT w/ rock fragments,full of NAPL/TAR<br>silty CLAY contains NAPL<br><br>silty SAND and gravel, totally TAR impacted                                        |          |
| 16<br>20 | 16 - 19<br><br>19 - 20           | 1'6"     | 100       | X         | silty SAND and gravel w/ rock fragments, full of TAR<br><br><br>brown to gray silty CLAY with peat. No NAPL or staining, strong organic odor                        |          |

|    |         |       |    |  |                                                                          |  |
|----|---------|-------|----|--|--------------------------------------------------------------------------|--|
| 20 |         |       |    |  | gray to brown silty CLAY with peat No evidence of coal tar contamination |  |
|    | 20 - 24 | 3.00' | 26 |  | END OF BORING                                                            |  |
| 24 |         |       |    |  |                                                                          |  |

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Date: Start/finish:</b> 4/17/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 24'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-06<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth         | Sample Interval               | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                                                            | Comments |
|---------------|-------------------------------|----------|-----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4        | 0 - 4                         | 2' 0"    | 3.4       |           | brown silty SAND with rock and brick fragments                                                                                                                                                       |          |
| 4<br>8        | 4 - 6<br>6 - 7.5<br>7.5 - 8   | 2'6"     | 2.5       |           | brown silty SAND with rock and brick fragments<br>brown SAND and cinders, wet at 7.5'<br>wet sandy SILT, NAPL stain, moderate coal tar odor                                                          |          |
| 8<br>10<br>12 | 8 - 10<br>10 - 11<br>11 - 12  | 2' 6"    | 34        | X         | wet brown silty SAND with rock fragments<br>black to gray stained silty SAND, diesel odor<br>yellow/brown stained silty SAND with rock fragments, free phase NAPL, staining, strong odor             |          |
| 12<br>16      | 12 - 16                       | 2' 6"    | 220       | X         | gray to black silty, gravelly SAND, heavy sheen, strong staining and coal tar odor, free phase NAPL present throughout the sample<br>silty CLAY layers 2" thick at 14' and 15'<br>TAR from 15 to 16' |          |
| 16<br>20      | 16 - 18<br>18 - 19<br>19 - 20 | 3'0"     | 134       | X<br>X    | silty SAND and gravel<br>heavy TAR<br>medium SAND, heavy TAR contamination<br>silty CLAY and peat, organic odor, no tar present                                                                      |          |

|    |           |      |     |   |                                                                                                                                                 |  |
|----|-----------|------|-----|---|-------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 20 | 20 - 23.5 | 1'0" | 5.3 | X | alternate 6" layers of gray silty SAND and cinders exhibiting a heavy sheen and dark gray sandy SILT exhibiting no sheen, strong coal tar odor. |  |
| 24 | 23.5 - 24 |      |     |   | silty CLAY and peat, organic odor                                                                                                               |  |
|    |           |      |     |   | END OF BORING                                                                                                                                   |  |

|                                                                                                                                                                                                                       |                                                                                                                               |                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Date: Start/finish:</b> 4/18/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 17.5'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-07<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                        | Comments                |
|-------|-----------------|----------|-----------|-----------|----------------------------------------------------------------------------------|-------------------------|
| 0     | 0 - 2           | 3' 4"    | 43        |           | brown silty SAND with rock and brick fragments                                   |                         |
|       | 2 - 2.7         |          |           |           | black silty SAND w/ rock fragments and gravel, stained, diesel odor              |                         |
| 4     | 2.7 - 4         |          |           |           | brown silty SAND and gravel, large brick fragments                               |                         |
| 4     | 4 - 8           | 3' 8"    | 14.6      |           | brown silty SAND with rock and brick fragments<br>slight stain and odor          |                         |
| 8     |                 |          |           |           |                                                                                  |                         |
| 8     | 8 - 10          | 2'4"     | 523       | X         | coarse brown to gray silty SAND and cinders<br>wet from 9'                       |                         |
| 10    | 10 - 11         |          |           |           | gray silty SAND, gravel and cinders, diesel odor 10' - 11'                       |                         |
| 12    | 11 - 12         |          |           |           | 11' - 12' visible NAPL, coal tar odor 11.5' - 12'                                |                         |
| 12    | 12 - 14'        | 3.2'     | 220       | X         | gray silty Sand, strong coal tar odor, NAPL bleeding out of soil                 | Lab Sample<br>15' - 16' |
|       | 14' - 15.5'     |          |           | X         | dark gray SILT with sand, NAPL present, coal tar odor                            |                         |
| 16    | 15.5 - 16'      |          |           | X         | gray SAND and cinders ,wood fragments yellow-brown NAPL,<br>strong coal tar odor |                         |
| 16    | 16 - 17.0'      |          |           | X         | gray SAND and cinders, heavy NAPL coating on soil                                |                         |
|       | 17.0 - 17.6     |          |           | X         | silty SAND w/ wood fragments, NAPL coating, coal tar odor                        |                         |
| 17.6  |                 |          |           |           | refusal at 17.6'                                                                 |                         |
| 20    |                 |          |           |           | END OF BORING                                                                    |                         |

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Date: Start/finish:</b> 4/18/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 24'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-08<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth         | Sample Interval                           | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                                                                                                      | Comments                |
|---------------|-------------------------------------------|----------|-----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 0<br>4        | 0 - 4                                     | 2' 2"    | 4.3       |           | brown TO GRAY silty SAND and gravel with rock fragments, and cinders                                                                                                                                                                           |                         |
| 4<br><br>8    | 4 - 5.6<br><br>5.6 - 7.7<br><br>7.7 - 8   | 2' 6"    | 219       |           | gray to black silty SAND and cinders with rock fragments<br><br>gray to black silty SAND and cinders with rock fragments, heavy sheen, diesel odor<br><br>gray to black silty SAND and cinders with rock fragments, heavy sheen, coal tar odor |                         |
| 8<br>10<br>12 | 8 - 10.5<br><br>10.5 - 12                 | 2' 6"    | 111       |           | gray to black silty SAND and cinders<br><br>black silty SAND w/ cinders, trace organics                                                                                                                                                        |                         |
| 12<br><br>16  | 12 - 14<br><br>14 - 15.5<br><br>15.5 - 16 | 2' 2"    | 38        | X         | dark gray silty Sand and cinders, diesel odor<br><br>black silty SAND, organics, no odor<br><br>gray SAND and cinders little NAPL, coal tar odor                                                                                               | Lab Sample<br>15' - 16' |
| 16<br><br>20  | 16 - 20                                   |          |           | X         | black SAND and cinders and wood fragments<br>heavy sheen, NAPL blebs, coal tar odor                                                                                                                                                            |                         |

|    |         |      |    |   |                                                   |                         |
|----|---------|------|----|---|---------------------------------------------------|-------------------------|
| 20 | 20 - 21 | 2'6" | 43 | X | gray SAND and cinders, NAPL sheen, coal tar odor. | Lab Sample<br>23' - 24' |
|    | 21 - 22 |      |    |   | Brown silty CLAY and peat, organic odor           |                         |
|    | 22 - 23 |      |    |   | black silty CLAY, organic odor                    |                         |
| 24 | 23 - 24 |      |    |   | gray dense sandy SILT, no odor                    |                         |
|    |         |      |    |   | END OF BORING                                     |                         |

|                                                                                                                                                                                                                       |                                                                                                                               |                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Date: Start/finish:</b> 4/18/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 27.5'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-09<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth         | Sample Interval                    | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                           | Comments |
|---------------|------------------------------------|----------|-----------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4        | 0 - 4                              | 2' 4"    | 4.8       |           | brown TO GRAY silty SAND and gravel with rock fragments, and cinders                                                                                |          |
| 4<br>8        | 4 - 8                              | 3' 0"    | 1.4       |           | brown to gray SAND w/ rock fragments and cinders                                                                                                    |          |
| 8<br>10<br>12 | 8 - 9.5<br>9.5 - 10.5<br>10.5 - 12 | 2' 9"    | 2.4       |           | brown SAND with gravel and cinders<br>black silty SAND w/ gravel and brick fragments<br>wet brown silty SAND, trace gravel                          |          |
| 12<br>16      | 12 - 13<br>13 - 15.5<br>15.5 - 16  | 2' 2"    | 82.6      | X         | brown silty Sand<br>gray to black silty SAND, heavy sheen, coal tar odor<br>silty black SAND and cinders coated with TAR, very strong coal tar odor |          |
| 16<br>20      | 16 - 18<br>18 - 20                 | 1' 8"    | 27.8      | X<br>X    | brown to gray silty SAND and wood fragments<br>heavy sheen, visible TAR<br>brown to gray silty SAND, heavy sheen                                    |          |

|      |           |      |      |   |                                                                                                                                                                     |  |
|------|-----------|------|------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 20   | 20 - 23.5 |      |      | X | alternate 6" layers of gray silty SAND and cinders exhibiting a heavy sheen and dark gray sandy SILT exhibiting no sheen, strong coal tar odor.                     |  |
| 24   | 23.5 - 24 | 2'6" | 27.8 |   | black silty CLAY, no odor                                                                                                                                           |  |
| 24   |           | 0    |      | X | solid/ abrupt refusal indicative of rock or a structure<br>no sample recovered, entire sample sleeve coated with TAR. TAR came up and out the top of the drill rods |  |
| 27.5 |           |      |      |   | END OF BORING                                                                                                                                                       |  |

|                                                                                                                                                                                                                       |                                                                                                                           |                                                                                                                          |
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| <b>Date: Start/finish:</b> 4/18/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><b>Borehole Depth:</b> 27.5'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-10<br><b>Project:</b> FORMER FULTON MGP<br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth    | Sample Interval    | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                                                                                     | Comments |
|----------|--------------------|----------|-----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4   | 0 - 4              | 1' 6"    | 3.4       |           | brown silty SAND with gravel, cinders, brick and rock fragments, moist                                                                                                                                                        |          |
| 4<br>8   | 4 - 8              | 1' 2"    | 2.3       |           | brown silty SAND w/ brick, rock and wood fragments                                                                                                                                                                            |          |
| 8<br>12  | 8 - 12             | 1' 6"    | 0         |           | gray to brown silty SAND w/ coal, brick, rock fragments and cinders                                                                                                                                                           |          |
| 12<br>16 | 12 - 14<br>14 - 16 | 2' 4"    | 124       | X         | wet gray silty Sand with rock and brick fragments and cinders.<br>Moderate diesel odor<br>wet gray silty Sand with rock and brick fragments and cinders Strong<br>coal tar odor, heavy staining, NAPL coating on sample liner |          |
| 16<br>20 | 16 - 20            | 1' 0"    | 66.4      | X         | gray silty SAND with cinders, wood, metal and oyster shell fragments, heavy sheen, strong coal tar odor, NAPL coating sample liner                                                                                            |          |

|      |           |      |     |   |                                                                                                                   |  |
|------|-----------|------|-----|---|-------------------------------------------------------------------------------------------------------------------|--|
| 20   | 20 - 23   | 2'2" | 105 | X | gray silty SAND and cinders, heavy sheen, strong coal tar odor, NAPL on sample liner                              |  |
|      | 23 - 23.5 |      |     |   | black silty CLAY, no sheen or stain                                                                               |  |
| 24   | 23.5 - 24 |      |     |   | gray silty clay with peat, no stain or sheen, organic odor                                                        |  |
| 24   | 24 - 27.5 | 3"   |     |   | gray silty CLAY poor sample , solid/ abrupt refusal indicative of rock or a structure similar to that at KSFSB-09 |  |
| 27.5 |           |      |     |   | END OF BORING                                                                                                     |  |

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                                  |
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| <b>Date: Start/finish:</b> 4/18/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 28'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-11<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth    | Sample Interval            | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                                 | Comments |
|----------|----------------------------|----------|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4   | 0 - 4                      | 2' 3"    | 0         |           | brown silty SAND with brick and rock fragments encountered obstruction at 4' offset 3' toward KSFSB-10                                                                    |          |
| 4<br>8   | 4 - 5<br>5- 6.5<br>6.5 - 8 | 2' 6"    | 0         |           | brown SAND and brick fragments<br>brown SAND w/ brick, fragments , 2" thick layer of yellow sand<br>black silty SAND and gravel and cinders. "sweet" possibly diesel odor |          |
| 8<br>12  | 8 - 11<br>11 - 12          | 2' 3"    | 0         |           | brown silty SAND and gravel with rock and brick fragments<br>brown to gray sandy SILT with cinders and rock fragments, moist                                              |          |
| 12<br>16 | 12 - 14<br>14 - 16         | 2' 4"    | 0         |           | wet brown silty Sand with rock and cinders. Slight sheen, no odor<br>black SILT with wood, pottery fragments and cinders                                                  |          |
| 16<br>20 | 16 - 20                    | 1' 4"    | 0         |           | Wet gray to black silty SAND with gravel, wood, pottery and brick fragments                                                                                               |          |

|    |         |       |     |  |                                                                                                     |                      |
|----|---------|-------|-----|--|-----------------------------------------------------------------------------------------------------|----------------------|
| 20 | 20 - 24 | 1'0"  | NA  |  | silty SAND, wood, rock fragments and cinders, Bottom 2" of sample was sandy SILT with clay and peat | Lab Sample 22' - 24' |
| 24 |         |       |     |  |                                                                                                     |                      |
| 24 |         | 1' 5" | 6.3 |  | gray CLAY with peat                                                                                 |                      |
| 28 |         |       |     |  | END OF BORING                                                                                       |                      |

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| <b>Date: Start/finish:</b> 4/18/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 18'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-12<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth    | Sample Interval    | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                          | Comments                |
|----------|--------------------|----------|-----------|-----------|--------------------------------------------------------------------------------------------------------------------|-------------------------|
| 0<br>4   | 0 - 4              | 2' 6"    | 0         |           | moist gray silty SAND with wood rock fragments and cinders encountered obstruction at 4' offset 12' toward KSFSB-9 |                         |
| 4<br>8   |                    | 2' 3"    | 0         |           | brown silty SAND and gravel with brick fragments, moist                                                            |                         |
| 8<br>12  | 8 - 12             | 2' 4"    | NA        |           | brown silty SAND with brick and rock fragments and cinders wet below 10', mild diesel odor from 10 - 12'           |                         |
| 12<br>16 | 12 - 14<br>14 - 16 | 2' 0"    | NA        |           | wet brown silty Sand with gravel,cinders, rock and brick fragments. Heavy sheen, diesel odor                       |                         |
| 16<br>18 | 16 - 18            | NA       | NA        | X         | wet brown silty Sand with gravel,cinders, rock and brick fragments. Black NAPL, sheen, diesel odor                 |                         |
|          |                    |          |           |           | Wet gray SAND and gravel, strong diesel odor<br>Refusal at 18'<br><br>END OF BORING                                | Lab Sample<br>16' - 18' |

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                                  |
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| <b>Date: Start/finish:</b> 4/18/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 19'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-13<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> THOMAS GREENE PARK,<br>BROOKLYN |
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| Depth    | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                          | Comments                |
|----------|-----------------|----------|-----------|-----------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 0<br>4   | 0 - 4           | 3'       | 0         |           | moist brown to gray silty SAND with rock , brick and glass fragments encountered obstruction at 4' offset 3' toward KSFSB-10       |                         |
| 4<br>8   | 4 - 8           | 2' 6"    | 7.7       |           | gray to black silty SAND with brick, rock fragments and cinders                                                                    |                         |
| 8<br>12  | 8 - 12          | 2' 3"    | 0         |           | wet gray to black SAND with minor brick and rock fragments                                                                         |                         |
| 12<br>16 | 12 - 16         | 1' 4"    | 0         |           | wet gray silty Sand and cinders, brick fragments. Slight sheen, mild diesel odor                                                   | Lab Sample<br>14' - 16' |
| 16<br>19 | 16 - 19         | 3"       | NA        |           | poor sample gray silty SAND with rock fragments and cinders, moderate sheen and diesel odor<br>Refusal at 19'<br><br>END OF BORING |                         |

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| <b>Date: Start/finish:</b> 5/21/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 20'<br><b>Surface Elevation:</b><br><b>Geologist:</b> SD | <b>Well/Boring ID</b> KSF-SB-14<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> NEVINS ST., BROOKLYN |
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| Depth    | Sample Interval                     | Recovery (ft.) | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                                                                                            | Comments |
|----------|-------------------------------------|----------------|-----------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4   | 0 - 4'                              | 2.0            | 0         |           | Brown medium to fine SAND and gravel, black coarse material from 1.7 to 2.0 ft.                                                                                                                                                      |          |
| 4<br>8   | 4 - 8'                              | 1.8            | 0         |           | Brown medium to fine SAND, little gravel. Wet 7.5 - 8.0'                                                                                                                                                                             |          |
| 8<br>12  | 8 - 12'                             | 1.0            | 8.4       | X         | Wet brown coarse to fine SAND and gravel<br>Coal tar odor, moderate sheen, trace NAPL                                                                                                                                                |          |
| 12<br>16 | 12 - 16'                            | 1.5            | 117       | X         | Wet brown medium to fine SAND and gravel<br>Coal tar odor, heavy sheen, heavy NAPL 15.5 - 16.0                                                                                                                                       |          |
| 16<br>20 | 16 - 17'<br>17 - 19.5'<br>19.5 - 20 | 4.0'           | 428       | X<br>X    | Coarse to fine SAND and gravel, coal tar odor, NAPL 16 - 17'<br>Coarse to fine SAND and gravel, coal tar odor, heavier NAPL 17 - 18'<br>Gray silty clay 18.5 - 19.5<br><br>Dense medium to fine SAND and gravel<br><br>END OF BORING |          |

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| <b>Date: Start/finish:</b> 5/21/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 20'<br><b>Surface Elevation:</b><br><b>Geologist:</b> SD | <b>Well/Boring ID</b> KSF-SB-15<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> NEVINS ST. , BROOKLYN |
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| Depth    | Sample Interval      | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                                    | Comments |
|----------|----------------------|----------|-----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4   | 0 - 4'               | 1.6'     | 0         |           | Coarse to fine SAND and Gravel., wood and brick fragments                                                                                                                    |          |
| 4<br>8   | 4 - 8'               | 2.6'     | 0         |           | Brown coarse to fine SAND and Gravel., wood and brick fragments, cinders                                                                                                     |          |
| 8<br>12  | 8 - 12'              | 3'       | 0         |           | Coarse to medium SAND and gravel with brick. wood and coal fragments and cinders. Wet at 14.3'                                                                               |          |
| 12<br>16 | 12 - 14'<br>14 - 16' | 3.6'     | 0         |           | 12 - 14' Wet coarse to medium SAND and gravel with brick. wood and coal fragments and cinders.<br>14 - 16' Wet black coarse to medium SAND and gravel. 0.3' silty clay layer |          |
| 16<br>20 | 16 - 20'             | 3.0'     | 0         |           | Wet coarse to medium SAND and gravel. 6" of dense medium to fine SAND and gravel<br><br>END OF BORING                                                                        |          |

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| <b>Date: Start/finish:</b> 5/21/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 20'<br><b>Surface Elevation:</b><br><b>Geologist:</b> SD | <b>Well/Boring ID</b> KSF-SB-16<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> DEGRAW ST., BROOKLYN |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                               | Comments |
|-------|-----------------|----------|-----------|-----------|-----------------------------------------------------------------------------------------|----------|
| 0     | 0 - 3'          | 3.0'     | 0         |           | 0 - 3' Brown coarse to fine SAND and gravel with brick and cinders3 -                   |          |
| 4     | 3 - 4'          |          |           |           | 4' Black/gray cinders, coal and brick fragments                                         |          |
| 4     | 4 - 6.5         | 3.1'     |           |           | Refusal at 4.5' bgs, moved 5'<br>4 - 6.5' Brown cinders, medium to fine SAND and gravel |          |
| 8     | 6.5 - 8         |          |           |           | 6.5 - 8' Wet black stained medium to fine SAND, diesel odor                             |          |
| 8     | 8 - 9           |          |           |           | 8 - 9' Medium to fine SAND, wet, diesel odor                                            |          |
|       | 9 - 11          | 3.5'     | 44.4      |           | 9 - 11' Wet silty clay                                                                  |          |
| 12    | 11 - 12         |          |           |           | 11 - 12' peat, silt and clay                                                            |          |
| 12    | 12 - 15'        |          |           |           | 12 - 15' brown/black coarse to medium wet SAND and gravel                               |          |
|       | 15 - 15.5       | 4.0      | 29.2      | X         | 15 - 15.5' Same material, coal tar odor, slight sheen                                   |          |
| 16    | 15.5 - 16       |          |           | X         | 15.5 - 16' Same material, coal tar odor, NAPL, slight sheen                             |          |
| 16    | 16-18.5'        |          |           |           | 16 - 18.5' Wet coarse to medium SAND and gravel, sheen, trace NAPL                      |          |
|       | 18.5-19.5       | 3.5'     | 15.4      |           | 18.5 - 19.5' Dense coarse to medium SAND and gravel                                     |          |
|       | 19.5 - 20       |          |           |           | 19.5 - 20' SILT, medium to fine sand                                                    |          |
| 20    |                 |          |           |           | END OF BORING                                                                           |          |

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| <b>Date: Start/finish:</b> 5/21/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 20'<br><b>Surface Elevation:</b><br><b>Geologist:</b> SD | <b>Well/Boring ID</b> KSF-SB-17<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> DEGRAW ST., BROOKLYN |
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| Depth    | Sample Interval        | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                    | Comments |
|----------|------------------------|----------|-----------|-----------|------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4   | 0 - 4'                 | 2.9'     | 0         |           | Brown coarse to fine SAND and gravel with brick fragments and cinders                                                        |          |
| 4<br>8   | 4 - 7'<br>7 - 8'       | 1.9'     | 79.8      |           | 4 - 7' Brown coarse to fine SAND and gravel with brick fragments and cinders<br><br>7 - 8' Same material, wet, coal tar odor |          |
| 8<br>12  | 8 - 12'                | 3.3'     | 211       | X         | Wet SILT and fine sand, little clay coal tar odor, sheen, NAPL                                                               |          |
| 12<br>16 | 12 - 16'               | 3.5'     | 74.5      | X         | Coarse to medium wet SAND and gravel, clay, silt<br>Sheen, coal tar odor, NAPL throughout                                    |          |
| 16<br>20 | 16 - 16.8'<br>16.8-20' | 2.2'     | 224       | X         | Wet coarse to medium SAND and gravel, coal tar odor, NAPL, sheen<br><br>SILT, peat and clay<br><br>END OF BORING             |          |

|                                                                                                                                                                                                                                                            |                                                                                                                        |                                                                                                               |
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| <b>Date: Start/finish:</b> 5/21/03 Wet coarse to medium SAND and gravel<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><b>Borehole Depth:</b> 12'<br><b>Surface Elevation:</b><br><b>Geologist:</b> SD | <b>Well/Boring ID</b> KSF-SB-18<br><b>Project:</b> FORMER FULTON MGP<br><b>Location:</b> DEGRAW ST., BROOKLYN |
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| Depth   | Sample Interval                       | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                               | Comments |
|---------|---------------------------------------|----------|-----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4  | 0 - 4'                                | 2.0      | 0         |           | Brown coarse to fine SAND and gravel, brick and coal fragments                                                                                                          |          |
| 4<br>8  | 4 - 7'<br>7 - 8'                      | 2.6      | 234       | X         | 4 - 7' SAND and gravel<br>7 - 8' Wet black SAND and gravel, coal tar odor, NAPL,                                                                                        |          |
| 8<br>12 | 8 - 8.8'<br>8.8 - 11.5'<br>11.5 - 12' | 2.7      | 403       | X         | 8 - 8.8'Coarse to medium SAND and gravel, coal tar odor<br>8.8 - 11.5' Black stained SAND and gravel, silt, heavy NAPL<br>11.5 - 12' Clay and peat<br><br>END OF BORING |          |

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| <b>Date: Start/finish:</b> 5/21/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 16'<br><b>Surface Elevation:</b><br><b>Geologist:</b> SD | <b>Well/Boring ID</b> KSF-SB-19<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> DEGRAW ST. , BROOKLYN |
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| Depth            | Sample Interval                     | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                                                                    | Comments |
|------------------|-------------------------------------|----------|-----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br>4           | 0 - 4'                              | 1.9      | 15.4      |           | coarse to fine SAND and gravel with coal and cinders                                                                                                                         |          |
| 4<br>5<br>8      | 4 - 5'<br>5 - 5.3'<br>5.3 - 8'      | 2.3      |           |           | Coarse to fine SAND and gravel, coal, cinders<br>Fine sand<br>Coarse to medium SAND and gravel, coal, brick                                                                  |          |
| 8<br>12          | 8 - 11.5'                           | 2.6      | 0         |           | 8 - 11.5' Coarse to fine SAND and gravel, coal and cinders, wet at 9'<br><br>11.5 - 12' SILT, clay, little peat                                                              |          |
| 12<br>14<br>14.5 | 12 - 13.5<br>13.5 - 14<br>14 - 14.5 | 2.0      | 0         |           | 12 - 13.5' Coarse to fine SAND and gravel, brick, cinders, coal<br>13.5 - 14 Black fine SAND<br>Coarse to medium SAND, rock fragments. Refusal at 14.5'<br><br>END OF BORING |          |

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| <b>Date: Start/finish:</b> 5/21/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 16'<br><b>Surface Elevation:</b><br><b>Geologist:</b> SD | <b>Well/Boring ID</b> KSF-SB-20<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> DEGRAW ST. , BROOKLYN |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                            | Comments                |
|-------|-----------------|----------|-----------|-----------|------------------------------------------------------------------------------------------------------|-------------------------|
| 0     | 0 - 1'          |          |           |           | 0-1' Brown organics, medium to fine SAND                                                             |                         |
| 4     | 1 - 4'          | 2.1'     | 0         |           | 1 - 4' Brown medium to fine SAND                                                                     |                         |
| 4     |                 | 1.5'     | 0         |           | Brown medium to fine SAND, brick and concrete fragments                                              |                         |
| 8     |                 |          |           |           |                                                                                                      |                         |
| 8     | 8 - 9.1'        | 1.5'     | 38.4      |           | Wet coarse to medium SAND, slight sheen, coal tar odor                                               |                         |
| 12    | 9.1 - 12'       |          |           | X         | Wet medium to fine SAND, wood and brick fragments. Coal tar odor, trace NAPL                         |                         |
| 12    |                 | 1.9'     | 131       | X         | Wet black stained coarse to fine SAND and gravel<br>Sheen, coal tar odor, NAPL<br><br>Refusal at 16' | Lab Sample<br>14' - 16' |
| 16    |                 |          |           |           | END OF BORING                                                                                        |                         |



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| <b>Date: Start/finish:</b><br><b>Drilling Company:</b><br><b>Driller:ROB</b><br><b>Drilling Method:Direct push</b><br><b>Auger Size:</b><br><b>Rig type: GEOPROBE</b><br><b>Sampling Method:CONTINUOUS</b> | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth: 16'</b><br><b>Surface Elevation:</b><br><b>Geologist:SD</b> | <b>Well/Boring ID KSF-SB-22</b><br><br><b>Project:FORMER FULTON MGP</b><br><br><b>Location: DEGRAW ST. , BROOKLYN</b> |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                       | Comments             |
|-------|-----------------|----------|-----------|-----------|---------------------------------------------------------------------------------|----------------------|
| 0     | 0 - 0.2'        | 2.0'     | 0         |           | 0-0.2' Concrete, brick, coal                                                    |                      |
| 4     |                 |          |           |           | 0.2-4.0' Coarse to medium SAND and gravel, brick, coal                          |                      |
| 4     | 4 - 6.5'        | 3.5'     | 131.2     |           | 4-6.5' Coarse to medium SAND and gravel, brick, slight diesel odor, wet at 6.5' |                      |
| 8     | 6.5 - 8'        |          |           |           | 6.5-8' Wet medium to fine SAND and gravel, brick, diesel odor                   |                      |
| 8     | 8 - 9'          | 2.5      | 68.7      |           | 8-9' Wet coarse to medium SAND and gravel, diesel odor                          |                      |
| 12    | 9 - 11.5'       |          |           | X         | 9-11.5' Medium to fine SAND and gravel, coal tar odor, NAPL                     | Lab Sample 11' - 12' |
|       | 11.5 - 12'      |          |           |           | Same material, coal tar odor                                                    |                      |
| 12    | 12 - 16'        | 0        |           |           | No Recovery, NAPL and sheen on water<br>Refusal at 16'                          |                      |
| 16    |                 |          |           |           | END OF BORING                                                                   |                      |

|                                                                                                                                                                                                                      |                                                                                                                              |                                                                                                                        |
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| <b>Date: Start/finish:</b><br><b>Drilling Company:</b><br><b>Driller:ROB</b><br><b>Drilling Method:Direct push</b><br><b>Auger Size:</b><br><b>Rig type: GEOPROBE</b><br><b>Sampling</b><br><b>Method:CONTINUOUS</b> | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth: 23.5'</b><br><b>Surface Elevation:</b><br><b>Geologist:HTW</b> | <b>Well/Boring ID KSF-SB- 23</b><br><br><b>Project:FORMER FULTON MGP</b><br><br><b>Location: DEGRAW ST. , BROOKLYN</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|

| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                            | Comments |
|-------|-----------------|----------|-----------|-----------|----------------------------------------------------------------------|----------|
| 0     | 0 - .5'         | 2.0'     | 1.0       |           | 0-.5' concrete                                                       |          |
| 4     | 0.5 - 4.0'      |          |           |           | 0.5-4' Dark brown to black silty SAND with cinders and gravel        |          |
| 4     | 4 - 6'          | 1.2'     | 0         |           | 4-6' Gray SAND and gravel with rock fragments                        |          |
| 8     | 6 - 8'          |          |           |           | 6-8' Moist brown silty SAND with brick fragments                     |          |
| 8     | 8 - 12'         | 1.5'     |           |           | Moist brown silty SAND and gravel                                    |          |
| 12    | 12 - 15'        |          |           |           | 12-15' Wet gray sandy SILT, little clay, slight sheen, diesel odor   |          |
|       | 15 - 15.5'      | 4.0'     | 3         |           | 15-15.5' Wet coarse gray SAND, sheen ,diesel odor                    |          |
| 16    | 15.5 - 16'      |          |           |           | 15.5 - 16' Wet gray sandy SILT, sheen ,diesel odor                   |          |
| 16    | 16 - 17'        |          | 4.7       |           | 16-17' Wet gray silty SAND, little clay, diesel odor, sheen on water |          |
|       | 17 - 18'        |          |           |           | 17-18' Wet gray sandy SILT, little clay, diesel odor, sheen on water |          |
|       | 18-19'          |          |           |           | 18-19' Wet gray silty CLAY, little sand, diesel odor, sheen on water |          |
| 20    | 19-20'          |          |           |           | 19-20' Wet coarse gray SAND, diesel odor, sheen on water             |          |

|      |         |  |     |                                                                                                                                    |  |
|------|---------|--|-----|------------------------------------------------------------------------------------------------------------------------------------|--|
| 20   | 20-23'  |  | 117 | <p>Drilled through obstruction at 20'</p> <p>20-23' Wet coarse gray SAND, little gravel, shell fragments, strong diesel odor.</p>  |  |
| 23.5 | 23-23.5 |  |     | <p>23-23.5 Wet sandy dense SILT, strong diesel odor, boring cant be advanced further with this equipment.</p> <p>END OF BORING</p> |  |

|                                                                                                                                                                                                                       |                                                                                                                         |                                                                                                                         |
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| <b>Date: Start/finish:</b> 5/22/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b><br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB- 24<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> DEGRAW ST. , BROOKLYN |
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| Depth            | Sample Interval                   | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                                                                  | Comments |
|------------------|-----------------------------------|----------|-----------|-----------|----------------------------------------------------------------------------------------------------------------------------|----------|
| 0<br><br><br>4   | 0 - .5'<br>0.5 - 3'<br><br>3 - 4' | 3.2'     | 0         |           | 0-0.5' Dark gray silty GRAVEL<br>0.5-3' Red CLAY with wood fragments<br><br>3-4' Moist brown silty coarse SAND             |          |
| 4<br><br><br>8   | 4 - 4.5'<br><br><br>4.5 - 8'      | 2.0'     | 0         |           | 4-4.5' Moist red CLAY<br><br><br>4.5-8' Moist coarse brown SAND                                                            |          |
| 8<br><br><br>12  | 8 - 10'<br><br><br>10 - 12'       | 4.0'     | 58.6      |           | 8-10' Moist coarse brown SAND<br><br><br>10-12' Wet gray SAND, mild diesel odor                                            |          |
| 12<br><br><br>16 | 12 - 13'<br><br><br>13 - 16'      | 4.0'     | 83        | X         | 12-13' Wet brown coarse SAND, moderate diesel odor<br><br>13-16' Wet coarse gray SAND, diesel odor, NAPL                   |          |
| 16<br><br><br>20 | 16 - 17'<br><br><br>17 - 20'      | 4.0'     | 45.3      |           | 16-17' Wet coarse brown SAND, diesel odor<br><br>17-20' Wet gray medium SAND with mica flakes, diesel odor, sheen on water |          |

|    |          |      |     |  |                                                            |  |
|----|----------|------|-----|--|------------------------------------------------------------|--|
| 20 | 20 - 21' |      |     |  | 20-21' Wet brown SAND, strong diesel odor                  |  |
|    | 21 - 24' | 4.0' | 103 |  | 21-24' Wet gray SAND with mica flakes, strong diesel odor. |  |
| 24 |          |      |     |  | END OF BORING                                              |  |

|                                                                                                                                                                                                                       |                                                                                                                         |                                                                                                                         |
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| <b>Date:</b> Start/finish: 5/22/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b><br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB- 25<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> NEVINS ST. , BROOKLYN |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                         | Comments      |
|-------|-----------------|----------|-----------|-----------|-------------------------------------------------------------------|---------------|
| 0     |                 |          |           |           | Obstruction at 2.0'                                               |               |
| 2'    | 0 - 2'          |          |           |           | 0-2' Gray silty SAND and gravel<br>REFUSAL AT 2'<br>END OF BORING | Refusal at 2' |

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                        |
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| <b>Date: Start/finish:</b> 5/22/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 24'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-26<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location;</b> NEVINS ST. , BROOKLYN |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                                        | Comments |
|-------|-----------------|----------|-----------|-----------|----------------------------------------------------------------------------------|----------|
| 0     | 0 - 0.5'        | 2.5'     | 0         |           | 0-0.5' GRAVEL (crushed stone)                                                    |          |
| 4     | 0.5 - 4'        |          |           |           | 0.5-4' Moist brown to gray sandy SILT, little clay, rock and brick fragments     |          |
| 4     | 4 - 6'          | 2.25     | 0         |           | 4-6' Moist gray sandy SILT with rock fragments                                   |          |
| 8     | 6 - 8'          |          |           |           | 6-8' Moist brown coarse SAND                                                     |          |
| 8     | 8 - 8.5'        | 4.0'     | 0         |           | 8-8.5' Moist silty SAND with rock fragments                                      |          |
| 12    | 8.5 - 12'       |          |           |           | 8.5-12' Wet coarse gray SAND, little gravel, very mild diesel odor               |          |
| 12    | 12 - 14.5'      |          | 0         |           | 12-14.5' Wet coarse gray SAND and gravel with mica flakes, very mild diesel odor |          |
| 16    | 14.5 - 16'      |          |           |           | 14.5-16' Wet dark gray fine silty SAND, mica flakes., moderate diesel odor       |          |

|    |          |      |   |  |                                                                                     |                         |
|----|----------|------|---|--|-------------------------------------------------------------------------------------|-------------------------|
| 16 | 16 - 18' |      | 0 |  | 16-18' Wet coarse gray SAND, little gravel, moderate diesel odor                    | Lab Sample<br>16' - 20' |
| 20 | 18 - 20' |      |   |  | 18-20' Wet fine silty SAND, moderate diesel odor, sheen on sample tube              |                         |
| 20 | 20 - 22' | 4.0' | 0 |  | 20-22' Wet coarse gray SAND and gravel, moderate diesel odor                        |                         |
| 24 | 22 - 24' |      |   |  | 22-24' Wet medium SAND with mica flakes, moderate diesel odor.<br><br>END OF BORING |                         |

|                                                                                                                                                                                                                       |                                                                                                                         |                                                                                                                         |
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| <b>Date: Start/finish:</b> 5/22/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b><br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-27<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> SACKETT ST. , BROOKLYN |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                    | Comments |
|-------|-----------------|----------|-----------|-----------|--------------------------------------------------------------|----------|
| 0     | 0 - 3'          |          |           |           | 0-3' Brown sandy SILT, moist                                 |          |
| 4     | 3 - 4'          | 4.0'     | 0         |           | 3-4' Moist brown silty SAND                                  |          |
| 4     | 4 - 5'          |          |           |           | 4-5' Brown sandy SILT                                        |          |
| 8     | 5 - 8'          | 3.5'     | 0         |           | 5-8' Moist medium to coarse silty SAND                       |          |
| 8     | 8 - 8.5'        |          |           |           | 8-8.5' Moist brown sandy SILT                                |          |
| 12    | 8.5 - 12'       | 3,5'     | NA        |           | 8.5-12' Coarse to medium silty SAND, wet below 9.5'          |          |
| 12    | 12 - 16'        |          |           |           |                                                              |          |
| 16    |                 | 4'       | 0         |           | Wet coarse to medium brown SAND and gravel with mica flakes. |          |
| 16    | 16 - 20'        | 4'       | 0         |           | 16-20' Wet brown coarse to medium SAND and gravel            |          |
| 20    |                 |          |           |           |                                                              |          |

|    |            |    |      |  |                                                                               |                         |
|----|------------|----|------|--|-------------------------------------------------------------------------------|-------------------------|
| 20 | 20 - 23.5' |    |      |  | 20-23.5' Wet brown coarse to medium brown SAND                                |                         |
| 24 | 23.5 - 24' | 4' | 1.3  |  | 23.5-24' Wet brown coarse to medium brown SAND, sheen, moderate coal tar odor |                         |
| 24 |            |    |      |  |                                                                               |                         |
| 26 | 24 - 26'   | 1  | 11.1 |  | 24-26' Wet gray coarse to medium SAND, heavy sheen, moderate coal tar odor.   | Lab Sample<br>24' - 26' |
|    |            |    |      |  | End of boring                                                                 |                         |

|                                                                                                                                                                                                                       |                                                                                                                             |                                                                                                                         |
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| <b>Date: Start/finish:</b> 5/22/07<br><b>Drilling Company:</b><br><b>Driller:</b> ROB<br><b>Drilling Method:</b> Direct push<br><b>Auger Size:</b><br><b>Rig type:</b> GEOPROBE<br><b>Sampling Method:</b> CONTINUOUS | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b> 20'<br><b>Surface Elevation:</b><br><b>Geologist:</b> HTW | <b>Well/Boring ID</b> KSF-SB-28<br><br><b>Project:</b> FORMER FULTON MGP<br><br><b>Location:</b> SACKETT ST. , BROOKLYN |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                             | Comments |
|-------|-----------------|----------|-----------|-----------|-------------------------------------------------------|----------|
| 0     | 0 - 3'          | 2.75     | 0         |           | 0-3' Black sandy SILT with cinders and rock fragments |          |
| 4     | 3 - 4'          |          |           |           | 3-4' moist brown sandy SILT with brick fragments      |          |
| 4     | 4 - 6.5'        |          |           |           | 4-6.5' Brown sandy SILT, cinders and rock fragments   |          |
| 8     | 6.5 - 8'        | 2.0'     | 0         |           | 6.5-8' Moist gray sandy SILT with gravel              |          |
| 8     | 8 - 11'         |          |           |           | 8-11' Brown sandy SILT, wet below 8.5'                |          |
| 12    | 11 - 12'        | 4.0'     | 0         |           | 11 - 12' Rock fragments and cinders                   |          |
| 12    | 12 - 15.5'      |          |           |           | 12-15.5 Wet gray SILT, rock fragments and cinders     |          |
| 16    | 15.5 - 16'      | 2.5'     | 0         |           | 15.5-16' Gray to brown CLAY with peat                 |          |
| 16    | 16 - 18'        |          |           |           | Gray to brown CLAY and peat                           |          |
| 20    | 18 - 20'        | 1.0'     | 0         |           | 18-20' Gray sandy SILT                                |          |
|       |                 |          |           |           | End of boring                                         |          |

|                                                                                                                                                                                                            |                                                                                                                       |                                                                                                                        |
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| <b>Date: Start/finish:</b><br><b>Drilling Company:</b><br><b>Driller:ROB</b><br><b>Drilling Method:Direct push</b><br><b>Auger Size:</b><br><b>Rig type: GEOPROBE</b><br><b>Sampling Method:CONTINUOUS</b> | <b>Northing:</b><br><b>Easting:</b><br><br><b>Borehole Depth:</b><br><b>Surface Elevation:</b><br><b>Geologist:SD</b> | <b>Well/Boring ID KSF-SB-29</b><br><br><b>Project:FORMER FULTON MGP</b><br><br><b>Location: SACKETT ST. , BROOKLYN</b> |
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| Depth | Sample Interval | Recovery | PID (ppm) | NAPL Zone | Stratigraphic Description                                   | Comments |
|-------|-----------------|----------|-----------|-----------|-------------------------------------------------------------|----------|
| 0     | 0 - 4'          | 2.5'     | 0         |           | 0-4' Brown to gray sandy SILT with brick and rock fragments |          |
| 4     |                 |          |           |           |                                                             |          |
| 4     |                 | 2.75     | 0         |           | Brown silty SAND with brick and rock fragments and cinders  |          |
| 8     |                 |          |           |           |                                                             |          |
| 8     |                 | 0        | NA        |           | No recovery, no sign of sheen or odor on sampler            |          |
| 12    |                 |          |           |           |                                                             |          |
| 12    |                 | 0        | NA        |           | No recovery, no sign of sheen or odor on sampler            |          |
| 16    |                 |          |           |           |                                                             |          |
| 16    | 16 - 17.5'      | 2.75'    | 0         |           | 16-17.5' Gray silty SAND and cinders                        |          |
|       | 17.5 - 20'      |          |           |           | 17.5-20' Peat and CLAY                                      |          |
| 20    |                 |          |           |           | End of boring                                               |          |



## **APPENDIX D**

### **LABORATORY ANALYTICAL REPORTS**

Available Electronically  
Upon Request