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REPORT

Remedial Investigation
South First Street Site
Fulton, New York

National Grid

September 2009

O'BRIEN & GERE

Job No. 1118.35165

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1. Introduction

1.1. Project Background

The Remedial Investigation (RI) of the South First Street former manufactured gas plant (MGP) Site in Fulton, New York is being conducted by National Grid pursuant to an Order on Consent with the New York State Department of Environmental Conservation (NYSDEC), dated November 2003 (Index # A-0473-0000). The investigative activities at the Site were initiated in 1996 under an earlier Order on Consent dated December 7, 1992 between the NYSDEC and the Niagara Mohawk Power Corporation. The 2003 Order on Consent supersedes the 1992 Order. Niagara Mohawk is now operating as National Grid.

Pursuant to the agreements with NYSDEC noted above, National Grid implemented a Preliminary Site Assessment and Interim Remedial Measures (PSA/IRM) Study at the South First Street Site between July 1996 and September 1996. The results of the PSA did not indicate conditions that would warrant the completion of an interim remedial measure (IRM). However, based on the results of the PSA a Remedial Investigation (RI) was recommended to further evaluate horizontal and vertical extent of chemical constituents.

This RI Report serves to summarize the RI conducted at the South First Street Site. Results of the RI have been integrated with the results of the PSA/IRM Study to provide characterization of Site conditions.

1.2. Site Description and History

The South First Street Site, located in Fulton, NY (Figure 1-1), encompasses approximately 1.04 acres. The Site is made up of two areas, Area 1 and Area 2, which are separated by South First Street (Figure 1-2). Both Area 1 and Area 2 are owned by National Grid. Area 1 is located on the northeast side and Area 2 is located on the southwest side of South First Street. Presently, Area 1 is an undeveloped grass covered lot bounded by Conrail railroad tracks to the northeast and residential properties to the northwest and southeast. The topography in this area slopes to the southwest. The railroad tracks are elevated approximately 10 ft above the surface of Area 1.

Area 2 is a vacant, asphalt-paved lot. Within the lot is a concrete slab where the former Crossroads Gospel Tabernacle Ministries Church (CGTMC) building was located. Area 2 is bounded by the Oswego River to the southwest and residential properties to the northwest and southeast. The topography of the Site is generally flat, sloping gently to the southwest toward the Oswego River. The surface water level in the Oswego River is approximately 10 feet below ground surface of Area 2. The surface of Area 2 is approximately four feet above the surrounding properties.

There are a number of properties surrounding the Site as shown on Figure 1-2. Land between Area 2 and the Oswego River is owned by the New York State Canal Corporation. Land to the southwest of Area 2 is owned by the City of Fulton and is used as a park. Land northwest and southeast of Area 2 is owned by private property owners. As with the Area 2 parcel, land between the residential properties and the river is owned by the New York State Canal Corporation.

Prior to construction of the MGP in 1902, the Site was generally vacant land.

The following historical information was developed by National Grid based on review of historical records and maps. This information has been excerpted from the Final Work Plan for the PSA/IRM dated June 1996 as prepared by National Grid. Figure 1-3 depicts Site historical features.

In 1902, the Fulton Fuel and Light Company built the gas plant on South First Street, which began operation on February 20, 1903. The gas plant itself was located on Area 2, west of South First Street. A gas holder and oil tank were located on Area 1, east of South First Street. By 1906, a gas tank was constructed on Area 1 east of the oil tank (Sanborn 1906) (Niagara Mohawk 1996).

By 1911, two additional gas tanks, a coke shed and a small oil house were constructed on Area 2 west of the gas plant (Sanborn 1911). Records also indicate that by 1911, and possibly earlier, a tar well, approximately 4 ft in diameter, was located between the southern corner of the coal shed and the northern corner of the coke shed on a survey map.

A 1924 Sanborn Fire Insurance Map indicates the coke shed was removed in Area 2 and a concentrator house was added east of the coke shed location. In Area 1, a 30,000 cubic foot holder and second gas tank were added between the first holder and the railroad tracks.

In the late 1920's, natural gas was discovered locally and the gas plant was only used to supplement the peak demand periods. By 1932, a pipeline from Syracuse brought natural gas to Fulton and the gas plant ceased operation. A natural gas regulator station was located on Area 1 until 1984.

In 1947, the southern half of Area 2 was used as a used car lot. From 1958 to 1978 the southern half of Area 2 was used as Foster's Garden Center and Outdoor Power Equipment. In 1980 Area 2 was occupied by Modern Floor Covering (Fulton City Directories 1947-1980). The former Garden Center building was converted and used as the CGTMC. The CGTMC building and property was purchased by National Grid and subsequently demolished in January 1992.

In late July/early August 1993, National Grid cleared debris, and graded and seeded the northeastern half of Area 1 in response to complaints from adjacent landowners regarding the aesthetics of the Site. Prior to initiating the work, the western half of Area 1 was well-maintained lawn. The eastern half of Area 1 was undulating, overgrown, and contained large concrete saddles. The work consisted of the removal of the concrete saddles and general debris; grubbing of vegetation; placement of 102 cubic yards of bank-run gravel to fill low areas; placement of 36 cubic yards of topsoil; and hydro-seeding. Area 1 has subsequently been maintained by periodic mowing of the grass.

Review of historical maps from the Site area at the Friend of Fulton Historical Society indicates that the Oswego Canal was constructed prior to 1827. Excavation and subsequent maintenance of the canal created an island of dredge spoils west of the Site named Yelverton Island. Aerial photograph review indicates that the canal was no longer present in 1938. Presumably, the canal was backfilled to grade prior to 1938. Based on an interview with City of Fulton Water Department representative Roger Parsons, the canal was partially backfilled and the edge of the former canal served as an open drainage ditch. Sections of piping were subsequently added as the ditch was filled in to provide useable land.

1.3. Regional Setting

1.3.1. Regional Geology

The South First Street Site is located in southwestern Oswego County, along the Oswego River approximately 10 miles south of Lake Ontario and within the glaciated hummocky lowlands of the Lake Ontario lowland (USGS 1982). The Lake Ontario lowland is covered by glacial and lake deposits which are underlain by a series of sandstone and shale formations that dip gently southward at a rate of 50 feet per mile. Unconsolidated overburden deposits overlying bedrock are typically glacial till. Drumlins, which are elongate deposits of lodgment till of varying thickness, overlie bedrock predominantly in the eastern part of the Lake Ontario lowland, and occur to a lesser extent in the western portion of the Lowland. Thinner deposits of till are found between the drumlins. Scattered deposits of sand and gravel, laid down by melt waters flowing away from the ice front, are interspersed throughout the area (USGS 1982). These include kame and outwash deposits, which either overlie the till, or, where no till is present, lie directly on bedrock.

1.3.2. Regional Hydrogeology

Regionally, ground water occurs within unconsolidated deposits consisting of lake sand, silt and clay; alluvial silt and sand; swamp deposits; and glacial deposits of low permeability lodgment till. These deposits directly overlie the bedrock surface throughout the area. However, distinct areas of sand and gravel glacial outwash form select segments of the aquifer system that overlies the till.

The regional unconfmed aquifer system in the vicinity of the Site is defined by surface water drainage divides, because the relatively flat Lake Ontario plain contains no lateral bedrock boundaries. Similar to the topography, the water table is relatively flat. Ground water levels rise and fall seasonally in response to fluctuations in recharge or discharge. Regionally, ground water discharges into streams, the Oswego River and into Lake Neatahwanta. Ground water flows toward the Oswego River in a direction roughly parallel to the slope of the land surface.

The Oswego River flows northwest and discharges into Lake Ontario, approximately 10 miles downstream of Fulton. In the Fulton area, which encompasses both sides of the river, ground water is primarily recharged through kame sand and gravels. Well yields in the Fulton area are generally less than 50 gallons per minute (gpm). However, three areas have been defined which contain highly permeable gravel that produces more than 250 gpm from individual wells. These areas include: Fulton Water Works, Lake Neatahwanta Municipal well field, and Great Bear Springs (USGS 1982) and are discussed in Section 1.3.3.

Fulton is located in the vicinity of contact between shale-sandstone bedrock of the Clinton Group and the underlying sandstone bedrock of the Medina Group (Fisher 1970). The median yield of the sandstone-shale unit is 3 gpm, and yields in about 25% of all bedrock wells in this unit are considered inadequate for domestic and farm supplies. The upper 100 feet of bedrock in the vicinity of Fulton is likely to contain salty ground water (Kantrowitz 1970).

1.3.3. Ground Water Usage in Site Vicinity

The South First Street Site is located within a sole source aquifer area. The Fulton Area aquifer serves nearly 22,000 people (USGS 1982). Residents of the City of Fulton receive public water from the Fulton Water Works well field, which taps one of the glacial sand and gravel units. The Fulton Water Works well field is located approximately 0.9 miles upriver (southeast) of the Site (Figure 1-1).

A ridge of Pleistocene-age lake silt deposits forms a hydraulic barrier between the river and the aquifer and therefore, pumping does not draw river water into the aquifer (USGS 1982). Ground water flow at the South First Street Site is to the west and northwest away from the Water Works. Based on the Water Works location and on site hydrogeology, there is no potential for the well field to be impacted by the Site.

Other water supply sources in the vicinity of the Site include the Great Bear Springs located approximately 3.5 miles southeast of the Site, the Lake Neatahwanta Municipal Community Water System Well Fields located approximately 1 mile west of the Site, and domestic wells. The Great Bear Springs and South Bay are not affected based on distance from the Site, and the location of the Oswego River between the Site and the well fields. As discussed in Section 2.9, private domestic wells are not located in the Site area.

1.4. Summary of PSA/IRM Study

A Preliminary Site Assessment (PSA) was conducted in accordance with:

1. the NYSDEC approved Final Work Plan for Preliminary Site Assessment/Interim Remedial Measures (PSA/IRM) Study at the South First Street Site, dated June 1996.
2. Generic Quality Assurance Program Plan (GQAPP) for Site Investigations, Niagara Mohawk, June 1996.
3. Generic Field Sampling Plan (GFSP) for Site Investigations, Niagara Mohawk, June 1996.
4. Health & Safety Plan (HASP) for PSA/IRM Study for the South First Street Site, City of Fulton, NY, O'Brien & Gere, June 1996.

Pursuant to the 1992 Order on Consent, National Grid implemented a PSA/IRM Study at the South First Street Site between July 1996 and September 1996. The study objective was to collect sufficient environmental data for a preliminary evaluation of the presence and nature of MGP and non-MGP related chemical constituents at the Site. Study activities included completion of four test pits, seven soil borings, five monitoring wells, one piezometer, and the collection of subsurface soil, surface soil and ground water samples for analysis.

Test Pits
Four test pits were completed on site to evaluate the presence, integrity, and contents of the former tar well, gas holder foundations, and the oil tank foundation that remain on site. One sample from each test pit was collected and analyzed for MGP-related parameters and total organic carbon (TOC).

Soil borings and subsurface soil sampling
Soil borings were completed and subsurface soil samples were collected to assess the presence of MGP and non-MGP-related constituents in subsurface soils, to provide information regarding the vertical extent of potential residues, and to provide hydrogeologic information pertaining to the Site.

A total of seven borings were completed at the Site. Five of the soil borings were converted into monitoring wells (MW-1 through MW-5) and one was converted to a piezometer (PZ-1). A total of twenty-six subsurface soil samples were collected from the soil borings. One sample from each of the borings was analyzed for full Target Compound List/Target Analyte List (TCL/TAL) parameters. In addition to chemical analyses, four subsurface soil samples were selected for laboratory hydraulic conductivity testing.

Surface Soils
A total of six sample locations, including two background locations, were identified and analyzed for TCL/TAL parameters and cyanide, along with total organic carbon (TOC). Samples were collected from two intervals, 0 to 2 inches and 0 to 24 inches, except at background samples which were sampled from the 0 to 2 inch interval only.

Ground Water Sampling
Two sets of ground water samples were collected to assess the presence and, if detected, nature of MGP-related constituents in the ground water underlying the former Site. Samples were collected on July 24, 1996 and September 4, 1996. The purpose of collecting the second set of samples was to verify the results obtained during the first sampling event. Both sets of samples were analyzed for TCL/TAL parameters. The TCL/TAL parameter list includes MGP related constituents as well as non-MGP related constituents to identify other possible sources/contributors that may impact ground water quality.

Fish and Wildlife Impact Analysis (FWIA)
In November 1996, as part of the PSA/IRM, Steps I & IIa of a FWIA were conducted for the South First Street Site to evaluate the potential for ecological impacts.

PSA Recommendations
Based on the findings of the PSA/IRM Study, the following recommendations were made:

Area 1
- The concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs) observed in the soils and ground water in Area 1 of the Site suggested that the impacts from former MGP operations are limited. Depending on the potential risks, it may be necessary to further delineate the extent and determine the form of cyanide found in the surface soil sample SS-2. Otherwise, it may be appropriate to eliminate this portion of the Site from further assessment.

Area 2
- A monitoring well should be installed between the Site and the Oswego River to better evaluate the concentrations of constituents potentially flowing toward the Oswego River. This would further define the horizontal extent of impacts and will enable a better evaluation of potential exposure to fish and wildlife via surface water and sediment.

- Deeper borings/wells should be installed at TP-4 and along the west portion of the Site to assess the quality of ground water and/or soil.

- In situ hydraulic conductivity tests should be performed on existing and proposed monitoring wells to evaluate the horizontal hydraulic conductivity.

In addition, the document recommended that:

- A baseline human health risk assessment should be conducted to identify whether remedial actions are necessary

- Step IIb of the Fish and Wildlife Impact Analysis (FWIA) should be considered to evaluate the effects of chemical exposures on the ecological receptors. (It was later decided that Step IIb was not required.)

1.5. Remedial Investigation Objectives

The objectives of the RI were to collect sufficient environmental data to address data gaps and implement the recommendations identified in the PSA/IRM Study to allow the nature and extent of contamination associated with the former MGP to be assessed. These objectives were presented in the Remedial Investigation/Feasibility Study Work Plan (O'Brien & Gere 1998). Additional data gaps were also defined in subsequent correspondence between NYSDEC and National Grid dated December 14, 2003, April 1, 2005, and December 12, 2005.

1.6. Report Organization

This RI report is organized into the following sections:

Section 1 - Introduction
Section 2 - RI field investigation activities
Section 3 - Geologic and hydrogeologic conditions
Section 4 - Nature and extent of contamination
Section 5 - Qualitative exposure assessment
Section 6 - Conclusions

2. RI Field Activities

This section describes the RI activities that were completed at the South First Street Site in Fulton, NY. The RI was conducted in accordance with the Remedial Investigation/Feasibility Study Work Plan dated February 1998 and approved by the NYSDEC. The initial objectives were defined by data gaps identified by the PSA. Additional activities were completed as needed to fill data gaps identified by National Grid or the NYSDEC. Activities were performed in accordance with NYSDEC approved supplemental work plans. These scope additions were documented in correspondence between NYSDEC and National Grid dated December 14, 2003, April 1, 2005, and December 12, 2005. The scope of work included:

- surface soil sampling and analysis
- soil vapor sampling and analysis
- subsurface soil sampling and analysis
- monitoring well installation
- ground water sampling and analysis
- ground water usage survey
- cultural resource assessment.

Field investigation procedures and activities were implemented in accordance with three companion documents previously prepared under the 1992 Order on Consent, specifically for the MGP Site investigations. The documents are listed below:

1. Generic Quality Assurance Program Plan (GQAPP) for Site Investigations, Niagara Mohawk, June 1996.
2. Generic Field Sampling Plan (GFSP) for Site Investigations, Niagara Mohawk, June 1996.
3. Health & Safety Plan (HASP) for PSA/IRM Study for the South First Street Site, City of Fulton, NY, O'Brien & Gere, June 1996.

In general, samples collected during the field efforts were submitted for analysis of the primary constituents of concern related to MGP sites including BTEX, PAHs, and cyanide.

Samples were delivered to O'Brien & Gere Laboratories, Inc. using chain-of-custody procedures outlined in the guidance documents. Analyses were completed in accordance with NYSDEC analytical services protocol (ASP) with Category B Deliverables. Data were reviewed and a Data Usability Summary Report (DUSR) was prepared to verify that data were useable for achieving the RI objectives.

2.1. Surface Soil Samples

Surface soil samples were collected from 36 on site, off site, and background locations as illustrated in Figure 2-1. As discussed in Section 1, samples SS-1 through SS-6 were collected from the 0 to 2 inch and 0 to 24 inch interval in 1996 as part of the PSA/IRM. Samples SS-7 through SS-9 were collected from the 0 to 24 inch interval as part of the RI activities. Samples SS-10 through SS-32 collected during the RI were from the 0 to 2 inch interval. The following provides a summary of the samples collected from each of the on site and off site areas.

2.1.1. Area 1

Three surface soil samples, SS-1 through SS-3, were collected from Area 1 during the PSA/IRM and analyzed for TCL/TAL parameters and cyanide. The NYSDEC requested additional sampling in the vicinity of SS-2 to investigate an elevated detection of cyanide in the sample collected from the 0 to 24 inches interval. As part of the RI, three samples, SS-7 through SS-9, were collected adjacent to SS-2 from 0 to 24 inches and analyzed for cyanide.

2.1.2. Area 1 Off Site

Eight samples, SS-10 through SS-17, were collected from off site locations on residential properties adjacent to Area 1 during the RI. These samples were collected from the 0 to 2 inch interval and analyzed for PAHs, BTEX, metals, and cyanide.

2.1.3. Area 2

Due to blacktop cover, surface soil was only collected at location SS-4 in a grass-covered area of Area 2, as part of the PSA/IRM. Samples were collected from both a 0 to 2 inch and 0 to 24 inch depth and analyzed for VOCs, SVOCs, pesticides, PCBs, metals and cyanide.

2.1.4. Area 2 Off Site

Fourteen samples, SS-23 through SS-32 and SS-24A through SS-24D, were collected from off site locations adjacent to Area 2. The samples were collected from 0 to 2 inches and analyzed for PAHs.

2.1.5. Background

A total of seven samples were collected to evaluate background concentrations of constituents in surficial soils as follows:

- During the PSA/IRM Study, surface soil samples were collected from two locations SS-5 and SS-6. At each location samples were collected from the 0 to 2 ineh and 0 to 24 inch interval. These samples were collected from the city park located northwest of the Site and analyzed for VOCs, SVOCs, pesticides, PCBs, metals and cyanide.

- During the RI, five samples, SS-18 through SS-22, were collected from the 0 to 2 inch depth interval along the north side of South First Street. These samples were analyzed for PAHs.

2.2. Soil Vapor Samples

Soil vapor samples SV-1, SV-2, and SV-3 were collected during the original RI in 1998. These samples were collected and analyzed using the methods identified in the RI Work Plan. The locations of these samples are on the north side of Area 2 as shown on Figure 2-1.

Subsequent to the issuance of the NYSDOH document entitled *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 (NYSDOH VI Guidance Document), NYSDEC requested that the vapor migration pathway be addressed using the methods identified in this guidance document. The subsequent evaluation was conducted in three phases. NYSDEC and NYSDOH were provided with data from each phase of the program as it was received and provided input into the scope of each of the subsequent sampling events. The three phases included the following:

- Phase I occurred on July 27, 2007 and included the collection of six soil vapor samples (SV-04 through SV-09) at locations along the property boundaries of the four adjacent residences as shown on Figure 2-3.
- Phase II included the collection of 12 samples (SV-04R, SV-05R, SV-06R, SV-08R, SV-10 through SV-17) oriented along four transects representing potential on-site sources of MGP-material, the site boundary (near selected Phase I locations), and a point in between to assess the origin of the BTEX compounds identified during Phase I. These samples were collected on June 4, 2008.
- Phase III included collection of four samples on the property located to the south of SV-06R (SV-18 through SV-21) to assess the extent of potential MGP constituents identified in the soil vapor at SV-06R. These samples were collected on December 23, 2008.

The locations of these samples are shown on Figure 2-2.

Samples were collected using pre-evacuated 6-liter SUMMA canisters as outlined in the NYSDOH VI Guidance Document. Soil vapor probes were placed between 3.5 and 5 ft below grade and soil vapor was drawn into the canisters at rate of approximately 0.2 liters per minute. Sample collection information is provided in Appendix A. Samples collected during Phase I were analyzed by Columbia Analytical Services, Inc. using USEPA method TO-15 including reporting of the MGP-indicator compounds identified in the NYSDOH VI Guidance Document as tentatively identified compounds (TICs), if present. Samples collected during Phase II and Phase III of the program were submitted to Test America and analyzed using a modification of USEPA Method TO-15 that included a PIANO-list of constituents (paraffins, isoparaffins, aromatics, napthenes, and olefins) as well as a number of the MGP-indicator compounds. The data were reviewed by a data validator and a Data Usability Summary Report (DUSR) was prepared for each sampling event. The DUSRs are included in Appendix H.

2.3. Soil Borings and Subsurface Soil Samples

Four test pits and seven soil borings were completed during the PSA/IRM and 65 soil borings were completed during the RI. The objectives of these activities were to assess the presence of MGP-related constituents in subsurface soils, to provide information regarding the horizontal and vertical extent of MGP-related contamination at the Site, and to further assess Site geologic characteristics. Some of the soil borings were converted to monitoring wells to provide ground water quality data and assess ground water flow conditions.

Borings were advanced through the shallow unconsolidated deposits utilizing hollow-stem auger drilling techniques as described in Section 5 of the GFSP. Split-spoon samples were collected continuously from each soil boring and screened for the presence of volatile organic constituents using a photoionization detector (PID), and the presence of non-aqueous phase liquid (NAPL) or other indicators of contamination using ultraviolet light (UVL) and/or visual inspection. The field hydrogeologist selected the number and location of soil samples for analyses at each boring location with the intent of delineating the upper and lower boundaries of affected soils and the constituent concentrations within the soils. Specifically, soil samples were selected for analysis to establish the vertical extent and horizontal extent of impacted soils at soil boring locations where elevated PID readings, positive UVL readings (indicative of the potential presence of MGP-related NAPL), or visual observations indicated possible MGP residuals. At some soil boring locations where evidence indicated possible residuals, an attempt was made to establish the vertical extent of impacted soils

through collection of samples from above and below the identified zone but rather were collected from soil samples with no field indicators of contamination to evaluate and confirm the vertical extent of impacts. In these instances soils were not always collected for analysis from within the zone identified as impacted via field screening, based on the assumption that concentrations would likely be above criteria in this zone. Boring logs reflect these observations and are included in Appendix B. Table 2-1 summarizes sample number, depth interval, and types of analyses conducted.

2.4. Ground Water Investigation

2.4.1. Monitoring Well and Piezometer Installation

Seventeen monitoring wells and seven piezometers were installed during the PSA/IRM and RI at the locations illustrated on Figure 2-1. Wells were installed to evaluate the extent of MGP-related constituents, assess the direction of ground water flow, and to evaluate hydraulic conductivity of the unconsolidated deposits.

Monitoring well installation and development was conducted in accordance with the procedures described in Section 6 of the GFSP. The monitoring wells and piezometers were constructed with 2 inch diameter, flush joint, PVC riser pipe and screens. The only exception is MW-13, which was constructed of 4 inch diameter, flush joint, PVC riser pipe and screen. In addition, wells MW-1 through MW-5 and MW-13 were constructed with sumps at the bottom of the wells. Well construction details are included on the soil boring logs in Appendix B. Monitoring well specifications are summarized in Table 2-2.

The monitoring wells and piezometers were developed to optimize hydraulic connection with the adjacent unconsolidated deposits and to reduce the effects of residual formation silts and clays that could potentially interfere with chemical analysis. The wells were developed using a bottom-loading bailer in accordance with procedures described in Section 6.2 of the GFSP.

2.4.2. Ground Water Sampling and Water Level and NAPL Gauging

To evaluate the extent of MGP-related compounds in the ground water, ground water samples were collected from the monitoring wells on seven occasions during the investigations as follows:

PSA/IRM

- July 1996: MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6
- September 1996: MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6

RI

- July 1998: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9S, MW-9D, and MW-10
- August 1999: MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9S, and MW-9D
- May/June 2001: MW-1, MW-4, MW-5, MW-8, MW-9S, and MW-11
- July 2004: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-7D, MW-8, MW-8D, MW-9S, MW-9D, MW-10, MW-11, MW-12S, and MW-12D
- November 2005: MW-1, MW-2, MW-3 (8.5 ft), MW-3 (12 ft), MW-4 (8 ft), MW-4 (12 ft), MW-5, MW-6, MW-7 (7 ft), MW-7 (11ft), MW-7D, MW-8, MW-8D, MW-9S, MW-9D, MW-10, MW-11 (5 ft), MW-11 (10 ft), MW-12S (8.5 ft), MW-12S (12 ft), and MW-12D.

The most complete and recent set of ground water samples was collected between November 1 and November 3, 2005 from the 16 on site and off site monitoring wells.

Prior to water sampling, water levels were measured in the monitoring wells for use in the assessment of ground water flow conditions at the Site. Measurements of water levels were obtained using an electronic water-level probe.

Conventional bailing techniques were used to collect the ground water samples prior to 2001. The sampling method includes purging three well volumes of water from the well prior to sample collection. If the well went dry during purging, the water level was allowed to recover prior to sample collection. The bailer was inspected for evidence of NAPL prior to purging and sample collection. Temperature, pH, conductivity, and turbidity were measured and recorded on ground water sampling logs.

The ground water sampling method was changed from bailing techniques to low flow techniques in 2001. With this technique, samples were collected using a peristaltie pump with disposable polyethylene tubing. During the purging process, the flow rate did not exceed 0.5 liters/min except during the start up of the pump.

Sampling performed in November 2005 consisted of a combination of low-flow and bailing techniques. Shallow wells were sampled using low flow techniques. Samples were collected from two depth intervals at wells MW-3, MW-4, MW-7, MW-11, and MW-12S to evaluate whether the change in the method of sampling (i.e., use of low-flow sampling methods in 2001 and 2004) may have influenced the concentrations observed. The first sample was collected from the upper portion of the screened interval. The tubing was then replaced and the intake was lowered to the bottom portion of the screen to collect the second sample. Deep wells were sampled using bailing techniques due to low yield of these wells.

Measurements of pH, specific conductivity, temperature, oxidation-reduction potential (ORP), dissolved oxygen (DO), turbidity, and flow rate were recorded at regular intervals during low flow purging.

Ground water samples were collected after equilibration of water quality parameters. Equilibration was defined as three consecutive readings of turbidity and DO within 10% of each other, specific conductivity and temperature within 3% of each other, a change in ORP of less than 10 millivolts, and drawdown stabilization. Ground water sampling logs are contained in Appendix C.

Ground water samples collected during the PSA/IRM were analyzed for TCL/TAL parameters. Ground water samples collected during subsequent investigations were analyzed for BTEX and PAHs as MGP indicators with the samples collected during November 2005 also being analyzed for cyanide.

2.4.3. In situ hydraulic conductivity tests

Hydraulic conductivity tests were completed on two separate occasions to evaluate the range of hydraulic conductivity values across the Site. In 1998, tests were conducted on monitoring wells MW-1, MW-6, MW-7, MW-9, and MW-9D. In 2004, hydraulic conductivity tests were conducted on two wells previously tested and six new wells. The tests were completed on monitoring wells MW-3, MW-7, MW-7D, MW-8S, MW-8D, MW-9, MW-12S, and MW-12D.

Hydraulic conductivity testing was conducted in accordance with procedures described in Section 6.3 of the GFSP. The test data were analyzed using the Bouwer and Rice method (Bouwer 1989) for unconfined aquifers contained in Aquifer Win32 ® version 2.36. Results of the hydraulic conductivity test results are included on Table 2-2, and test plots are contained in Appendix D.

2.5. Investigation Derived Waste Management

Investigation derived waste (IDW) was managed in accordance with the procedures described in Section 10 GFSP. Specifically, IDW was containerized and staged on site pending characterization and subsequent disposal off site by National Grid.

2.6. Sediment Evaluation

2.6.1. Sediment Probing

In a June 29, 1999 letter from NYSDEC, sediment probing was requested to assess the presence or absence of MGP-related contamination in Oswego River sediments proximal to the Site. Accordingly, on August 19, 1999, reconnaissance was conducted along a 120-ft stretch of the shore of the Oswego River near the Site to observe and document the nature of river sediment (i.e., extent of fine-grained sediments, rocks, cobbles, etc.), water depths, and potential evidence of sheens or odors.

Sediment probing was conducted along seven transects spaced 20 ft apart. Along each transect, probing was conducted at the shoreline and at 10 ft and 25 ft from the shore. Two methods were utilized dependent on water depth. A 5-ft steel rod with a pointed tip was used in water less than 4 ft deep. For water greater than 4 ft deep, a 1 inch diameter 10-ft steel pipe was used to probe sediment from an aluminum boat. Observations were recorded in field logs, which are presented in Appendix E.

2.6.2. Sediment Sampling

In a letter dated September 18, 2000, NYSDEC requested that sediment samples be collected. In May 2001, nine sediment samples were collected; four from background locations and five from locations near the Site. Background samples were collected from upstream locations as illustrated in Figure 2-3. Background samples BK-1 and BK-2 were collected from the west bank of the river while samples BK-3 and BK-4 were collected from the east bank of the river. Five sediment samples (Figure 2-4) were collected immediately adjacent to and downstream from the Site. Samples were collected from a boat using a standard sediment core sampler. The samples were analyzed for TOC, PAHs, and BTEX

2.7. Sewer Line Evaluation

In early 2000, a storm sewer line was identified directly west of Area 2 of the South First Street Site as a result of conversations with City of Fulton employee Roger Parsons. Review of maps available at the time suggested that the line ran in a north-south direction and crossed the Site to the west of monitoring well MW-4. According to conversations with City of Fulton employees, the storm sewer reportedly discharges to the Oswego River north (downstream) of the Site.

In April 2001, a remote sensing device was used to locate the sewer line. The device consisted of a transmitter attached to a fiberglass pole. The transmitter was pushed through the sewer line from the manhole located southwest of Area 2. A receiver was used along the ground surface to trace the movement of the transmitter. The location and depth of the pipe was marked on the surface and subsequently surveyed to tie the location into the Site datum. The sewer line was traced to a point approximately 15 ft north of Area 2 where an obstruction in the line prevented further locating efforts. The sewer is located on the western edge of Area 2, trending in a southeast to northwest direction. The sewer location is shown on Figure 2-1.

In June 2001, water samples from within the sewer line were collected at two locations to assess whether MGP-related constituents were being introduced into the storm sewer in the vicinity of the South First Street Site. One sample was collected from the manhole located 400 ft south of the Site to provide upstream information, and a second sample was collected from the storm grate located 600 ft north of the Site. The samples were analyzed for PAHs and BTEX.

On October 6, 2005 video-inspection of the sewer line was conducted to evaluate the construction, integrity, and degree of infiltration within the sewer. Skanex Pipe Services, Inc. was contracted to conduct the inspection. The inspection was conducted from two directions. Inspection was conducted from a manhole south of the Site behind the residence at 582 South First Street and a manhole north of the Site adjacent to a pump house located in the City park property.

2.8. Cultural Resource Assessment

In July 1998 a Stage 1A Cultural Resource Assessment (CRA) was performed at the South First Street Site by the Department of Anthropology at the State University of New York (SUNY) at Binghamton. The assessment included Site file checks, a literature review, and a Site inspection. The Stage 1A CRA Report was submitted under separate cover to the New York State Office of Parks, Recreation, and Historic Preservation (SHPO) on December 22, 1998. The CRA Report is included as Appendix F.

2.9. Ground Water User Survey

A ground water user survey was initiated for the nearest three residences located on either side of Areas 1 and 2 to verify that private domestic wells are not located on the properties. Prior to the survey, the City of Fulton Water Department verified that the twelve closest residences to the Site were connected to the city water system. Respondents to the survey indicated that no domestic ground water wells were located at the residences adjacent to the Site. Specific details of the survey are presented in National Grid correspondence to the NYSDEC dated July 27, 1998. A copy of this correspondence is included in Appendix G.

2.10. Fish and Wildlife Impact Analysis

During the PSA/IRM, steps I and IIa of a FWIA were conducted for the South First Street Site to evaluate the potential for ecological impacts. The FWIA was developed based on information obtained from regulatory agencies, by the study area reconnaissance conducted on November 6, 1996, and information generated under other PSA tasks. The FWIA was conducted in accordance with the NYSDEC Division of Fish and Wildlife guidance document entitled Fish and Wildlife Impact

Analysis for Inactive Hazardous Waste Sites (NYSDEC 1994). This document was previously submitted and approved as part of the original PSA/IRM dated January 1997.

2.11. DUSR

Laboratory analyses of environmental samples were conducted in accordance with NYSDEC ASP-CLP protocols, and Category B deliverables were provided by the analytical laboratory. For each set of analytical data, a DUSR was prepared by Data Validation Services to establish and document usability of the data for site assessment purposes. The DUSR was prepared by reviewing and evaluating the analytical data packages. The parameters and documentation that were evaluated include chain-of-custody, holding times, instrument print-outs, chromatograms, calibrations, spikes, blanks, control samples, surrogate recoveries, duplicates and sample data. Quality control issues that were identified were then evaluated as to their effect on the usability of the sample data.

In general, the DUSRs prepared for this project concluded that the analytical data were usable. Some of the results were adjusted or qualified as estimated based on matrix interference and other related issues. These qualifiers were added or adjustments were made to the analytical tables as indicated by the DUSR. The DUSRs are included as Appendix H.

3. Geologic and Hydrogeologic Conditions

3.1. Geology

The subsurface geology in the vicinity of the South First Street Site is illustrated in generalized hydrogeologic cross-sections A-A', B-B', and C-C' (Figure 2-1). Cross Section A-A' (Figure 3-1) extends from southwest to northeast across the Site. Cross-section B-B' (Figure 3-2) extends from southeast to northwest across Area 2 and cross-section C-C' (Figure 3-3) extends across Area 2 from south to north.

The overburden deposits encountered at the Site consist of three units: fill; fluvial deposits composed of silt, sand, gravel and/or clay; and glacial till composed predominantly of fine sand with varying amounts of silt and gravel. Surficial fill materials were found in both Area 1 and Area 2. Fill materials consist of sand, gravel and various debris such as brick fragments, asphalt pieces, cinders, glass and other material. In Area 1, fill materials ranged in thickness from 0.5 ft in the south central end at SB-40 to 8 ft in the northwest portion of Area 1 at SB-16. In Area 2, fill thickness ranged from 1.5 ft at SB-2 to 15 ft at SB-36 and SB-43, which is located on the southwest Site boundary near the Oswego River (Figure 2-1). In general, fill thickness increases towards the river.

Review of historic maps and aerial photographs indicates that the Oswego Canal was filled sometime between 1911 and 1938. Evidence of the former Oswego Canal (e.g., canal bottom and/or walls) was not observed during drilling. Some historic maps indicate that the canal structure ended just north of the Site, such that the segment of the canal adjacent to the Site was not contained within structural walls. It is speculated that the canal channel was filled with several types of material, some similar to native soils. Thus, there is not a distinct subsurface material indicative of canal fill. Dredge spoils were reportedly placed on Yelverton Island and these materials may have also been used for fill in the canal.

The unit underlying the fill is a series of discontinuous layers of silt, silt and fine sand, sand, clay, and gravel. The thickness of this unit and the individual layers varies across the Site (Figures 3-1, 3-2 and 3-3). However, as the unit approaches the river in the vicinity of MW07, composition becomes primarily silt with obvious clay lenses. This unit is the result of historical depositional environments, such as recent processes of the Oswego River or historic streambeds feeding the river. As noted above, the deposits near the river may actually be local, native material that was placed in the former Oswego canal.

A glacial till unit, consisting primarily of sand, with varying amounts of silt and gravel overlies bedrock at the Site. The density of the till grades from loose at shallow depths to extremely dense with greater depth. The top of till undulates and was observed from 5.3 ft at SB-28 to 26.2 ft at SB-41. The dense till is encountered at depths ranging from at 12 ft in SB-16, SB-17, and SB-18 to 28.5 ft below land surface (bls) at SB-4 and SB-36. The top of the dense till layer slopes down toward the southwest and the river. The unit was fully penetrated at MW-6 where bedrock was encountered at 36.5 ft below grade. At this location the dense till is 17.5 ft thick.

3.2. Hydrogeology

Ground water elevations have been measured on a number of occasions since the 1996 PSA. Recent and historical water elevation data are presented on Table 2-2. The most complete set of water level data was collected on March 31, 2006.

An unconfined overburden water-bearing zone exists beneath the Site. The ground water table was encountered within the fill unit at approximate depths of 1.5 ft in well MW-11 to 8 ft at MW-10. A ground water elevation contour map was developed to illustrate the shallow ground water flow characteristics. These contour maps are provided as Figures 3-4 and 3-5 and present the ground water elevations on November 5, 2005 and March 31, 2006, respectively. As illustrated on these figures, generally ground water flows to the south across Area 1 to Area 2. Ground water flow under Area 2 veers towards the west. Of note, flow contours appear to converge along the axis of the storm sewer line. The hydraulic gradient varies slightly from 0.035 ft/ft in Area 1 to 0.05 ft/ft in Area 2.

The ground water contour convergence observed in the vicinity of PZ-3, PZ-5, and PZ-6 is likely indicative of infiltration of ground water into the storm sewer. Slightly higher ground water elevations are observed at PZ-2 and PZ-4 indicating similar flow convergence near PZ-3. This indicates that the storm sewer and/or the associated bedding intercepts ground water flowing across the Site. The sewer is approximately 20 feet below grade at the Site, and as such is below the river level. As described in Section_4.6, infiltration is apparent as water was observed entering the pipe through fractures as well as through joints in the pipe.

Six deep wells (MW-6, MW-7D, MW-8D, MW-9D, MW-12D, and MW-13) are screened between 20 ft and 37 ft below grade. Wells MW-6, MW-8D, MW-9D, and MW-12 D are screened within the till unit. MW-13 is screened within a sand and gravel lense. The screen for well MW-7D extends 1 ft below the top of the dense till unit. However, this well is also screened across a 2 ft thick sand and gravel deposit located adjacent to the river. Therefore it is considered to be in a separate hydrogeologic unit.

Ground water elevations at the deep wells are shown on the shallow ground water contour map (Figure 3-5) to allow for assessment of vertical flow potential at each location because the deep wells are not considered to be installed within a single hydrogeologic unit. Review of ground water elevations between the shallow and deep well pairs suggest that a downward vertical hydraulic gradient ranging from 0.17 ft/ft at MW-12 to 0.07 ft/ft at MW-9 cluster exists in Area 2.

Hydraulic conductivity values in the shallow water-bearing zone above the till at the Site range from 0.49 ft/day in MW-12S to 3.31 ft/day in MW-3 with a geometric mean value of 1 ft/day. Within the till unit, hydraulic conductivity values range from 0.04 ft/day in MW-9D to 1.14 ft/day in MW-12D with a geometric mean of 0.15 ft/day. These values are approximately an order of magnitude less than the shallow materials. Deep well, MW-7D is screened in a deep gravel unit (Figure 3-3). The hydraulic conductivity of this material is significantly higher at 4.39 ft/day. The degree of variation observed in hydraulic conductivity supports the observations of a variety of materials in the overburden soils.

4. Nature and Extent of Contamination

The following section provides a discussion of the nature and extent of contamination based on findings from the PSA and RI. The evaluation of nature and extent of contamination includes comparison of analytical results with NYSDEC standards and guidance to screen the data for potential constituents of concern. Analytical data for soil samples were screened using NYSDEC's recommended soil cleanup objectives (RSCOs) provided in Technical Administrative Guidance Memorandum #4046 entitled "Determination of Soil Cleanup Objectives and Soil Cleanup Levels" (TAGM 4046 RSCOs). Per NYSDEC correspondence dated May 16, 2005, the TAGM 4046 RSCO of 500 ppm for total SVOCs was used as a screening criterion for the subsurface soil samples. Given that PAHs are considered to be representative of MGP operations and only trace amounts of other SVOCs were detected, the total PAH value was compared to the total SVOCs/TAGM 4046 RSCOs at this Site. Individual VOCs were compared to compound-specific TAGM 4046 RSCOs. For the evaluation of surface soil concentrations from background surface soil sample results were used for comparison, as appropriate.

Ground water sample results were compared to New York State Class GA Ground Water Standards or guidance values as presented in the Division of Water Technical and Operational Guidance Series 1.1.1 entitled Ambient Water Quality Standards and Guidance Values and Ground Water Effluent Limitations – (NYSDEC TOGS).

The following tables present data collected during the PSA/IRM and RI investigations. Tables 4-1 through 4-5 summarize the analytical results for surface soil. Tables 4-9 through 4-13 summarize the analytical results for subsurface soil. Tables 4-14 through 4-18 summarize the analytical results for ground water. Tables 4-19 through 4-20 summarize the analytical results for sediment. Table 4-21 summarizes Total Organic Carbon (TOC) for sediment and surface soil samples. Table 4-22 summarizes the analytical results for the storm sewer water sampling.

4.1. Surface Soil

4.1.1. Background Samples

To assess the potential contribution of constituents to surface soil from sources other than historical MGP operations, a total of seven background surface soil samples were collected. These samples are identified as SS-05, SS-06, SS-18, SS-19, SS-20, SS-21, and SS-22. Samples SS-05 and SS-06 were analyzed for VOCs, SVOCs, metals, cyanide, pesticides, and PCBs. Samples SS-18 through SS-22 were analyzed for PAHs. Results for surface soil samples are provided in Tables 4-1 through 4-5. Concentrations of total PAHs and the following carcinogenic PAHs (CPAHs) were used for developing background concentrations:

- benzo(a)anthracene
- benzo(a)pyrene
- benzo(b)fluoranthene
- benzo(k)fluoranthene
- chrysene
- dibenzo[a,h]anthracene
- ideno(1,2,3-cd)pyrene)

Concentrations from the background locations are as follows:

Location	Total PAHs (ppm)	Total CPAHs (ppm)
SS-05	0.119	0.056
SS-06	0.568	0.099
SS-18	19.84	10.94
SS-19	4.65	2.37
SS-20	7.88	4.14
SS-21	24.25	11.24
SS-22	16.20	7.89

Based on this evaluation, background concentrations of total PAHs and total CPAHs of up to 24.25 mg/kg and 11.24 mg/kg, respectively, can be expected in the surficial soil.

4.1.2. General

A total of four potential areas of concern were identified for surface soil. These areas were in the vicinity of samples SS-1, SS-2, SS-4, and SS-24. CPAHs were detected above the background concentration, 11.24 parts per million (ppm), in three of the areas. Also, NYSDEC requested additional sampling in the vicinity of sample SS-2 based on cyanide concentrations

Analytical results for metals in surface soil samples are presented in Table 4-4. Metals concentrations detected in Areas 1 and 2 are comparable to background concentrations. Detected constituent concentrations are within an order of magnitude of background samples and are not discussed further.

Trace concentrations of pesticides were detected in samples as indicated in Table 4-5. Similar constituents were detected in Areas 1 and 2 as well as in background samples at concentrations typically in the range of 0.05 ppm. The source of these compounds is likely local use of pesticides on lawns and shrubbery in the area. These compounds are not considered to be a result of historic land use and are not discussed further.

Data collected during the PSA reveal that surface soil samples from both areas of the Site indicated that BTEX compounds, if present, are below the screening criteria.

As previously discussed, surface soil samples were collected from 2 depth intervals in early stages of investigation: 0 to 2 inch and 0 to 24 inch. As the New York State department of Health (NYSDOH) considers the 0 to 2 inch interval to represent the surface soil exposure pathway, only the 0 to 2 inch samples will be discussed within the context of surface soil. The exception being the evaluation of cyanide at SS-2 and associated follow-up samples SS-7 through SS-9.

4.1.3. Area 1

Surficial samples (SS-1 through SS-3, SS-7 through SS-10, and SS-11 through SS-17) were collected from Area 1 and the adjacent properties (Figure 2-1). Samples SS-1, SS-2, and SS-3 were analyzed for VOCs, SVOCs, metals, and cyanide during the original investigation. Samples SS-7, SS-8, and SS-9 were collected during follow-up investigations and analyzed for cyanide.

SS-1 and SS-2, located in Area 1, had concentrations of total PAHs and CPAHs above the maximum background concentrations (Section 4.1.1). The CPAH concentrations at the other samples in Area 1, and the surrounding properties, were within the range of background concentrations.

At surface soil sample SS-2, collected during the PSA cyanide was detected at 11 ppm in the 0 to 2 inch interval and 810 ppm in the 0 to 24 inch interval. Upon request from NYSDEC, surface soil samples surrounding SS-2 (SS-7, SS-8, and SS-9) were subsequently collected from the 0 to 24 inch interval to delineate the extent of cyanide detected at SS-2. Cyanide was detected at all three locations, with a highest concentration of 60 ppm at SS-9, which was significantly lower than the 810 ppm identified at SS-2.

No soil RSCO has been developed in TAGM 4046 for cyanide. However, as reference, the 6 NYCRR Part 375 Restricted Use Soil Cleanup Objectives (SCO) for Restricted-Residential is 27 ppm. Based on this SCO, the presence of cyanide at the SS-2 and SS-9 locations are elevated. However, these elevations are not considered to be significant. The concentration of cyanide in the 0 to 2 inch interval at SS-2, which is the interval defined by the NYSDEC and NYSDOH for human health exposure, was only 11 ppm, below the SCO of 27 ppm. In addition, the elevated concentration of cyanide detected in the 0 to 24 inch interval at SS-9 is not in the interval defined by the NYSDEC and NYSDOH for human health exposure.

4.1.4. Area 2

Only a small segment of Area 2 contains exposed soil. The remainder of the area is covered by asphalt pavement or the concrete building slab. Sample SS-4, collected from the area of exposed soil, contained total CPAHs above the background concentration criterion.

4.1.5. Area 2 Off Site

Figure 4-1 presents the Area 2 off site surface soil locations and total PAH and CPAH concentrations. Surface soil sample location SS-24, located on City of Fulton property adjacent to Area 2, was sampled in 2002. SS-24 contained total CPAHs above background concentrations. Subsequently, a total of nine additional samples were collected from locations surrounding SS-24 in two phases to further evaluate the CPAH concentrations in this area. The initial phase of sampling (SS-24A through SS-24D) was focused immediately adjacent to location SS-24. Total CPAHs were detected above background at two of the locations, SS-24C and SS-24D. The second phase of sampling (SS-28 through SS-32) included off site locations on the City property surrounding SS-24, at distances varying from 15 to 60 feet. Total CPAHs were detected above background at one location, SS-32, approximately 60 ft southwest of location SS-24 adjacent to the tree line. Additional surface soil samples were not collected in the tree line as the area is used for general disposal of household debris including included roofing shingles and ashes. PAH concentrations are likely attributable to sources unrelated to the MGP Site. No visible staining or discoloration was observed at the sample locations. Soils contained pieces of coal, clinkers, glass, and brick, indicating it is fill material.

The material in this area was the result of filling of the Oswego Canal sometime between 1911 (1911 Sanborn Fire Insurance map) and 1938 (aerial photograph dated June 6, 1938) during MGP operation. The source of the fill has not been determined, but is likely comprised predominantly of dredge spoils that had been placed on the former Yelverton Island. Historical records review indicated that in 1912 there were discussions among local officials regarding use of dredge spoils from Yelverton Island, formerly located near the Site between the Oswego River and the former Oswego Canal, to backfill

the canal bed (Fulton Times, March 6, 1912). It is, therefore, unclear whether CPAHs are related to historic MGP operations or are inherent to the fill material.

4.2. Soil Vapor

As outlined in section 2.2, the soil vapor samples were analyzed for a list of compounds that can potentially be associated with MGP sites. A list of those compounds that can potentially be associated with MGP operations follows.

- Benzene
- Ethylbenzene
- Toluene
- Xylenes
- Naphthalene
- Indane
- Indene
- 1,2,4-trimethylbenzene
- Thiopenes
- Tetramethylbenzenes[1]
- n-Nonane[1]
- n-Decane[1]
- nUndecane[1]
- n-Dodecane[1]

[1] *Volatile constituents associated with petroleum at MGP sites that employed the carbureted water gas process.*

In addition to these constituents, the NYSDOH considers that thiopene compounds can also be associated with MGP. However, each of these compounds can also be associated with other common petroleum-related sources. Summaries of compounds detected in the soil vapor samples collected in Phase I, II and II are summarized on Tables 4-6, 4-7, and 4-8 respectively.

Analytical results of the Phase I soil vapor samples, collected at the boundary of the national Grid parcels and the neighboring properties, are summarized on Table 4-6. These data show elevated concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX) in the samples collected. As the neighboring properties are residences, the BTEX could have originated from a number of non-MGP sources on the properties (automobiles, lawn and garden equipment). Therefore, a second set of soil vapor samples (Phase II) were collected in June 2008 to further assess the distribution and sources of the identified BTEX.

As discussed in Section 2.2, during Phase II, the soil vapor sample locations were arranged in transects to represent potential on-site sources of MGP-material, the site boundary (near selected Phase I locations), and a point in between to assess the origin of the BTEX compounds identified during Phase I (Figure 2-2). The analytical data from this sampling event are summarized on Table 4-7. Data from SV-04, SV-05, SV-06 and SV-08 collected during Phase I are also provided on this table for comparison as soil vapor samples were collected from the same locations during Phase II (samples with "R" designation). As illustrated on this table, the analytical results indicated that BTEX compounds in the Phase II samples were significantly lower than those identified during the Phase I sampling event as follows:

Total BTEX (in µg/m^3)	
Phase I Sample	**Phase II Sample**
SV-04 - 372	SV-04R - 77.1
SV-05 – 1308	SV-05R – 14.7
SV-06 – 503	SV-06R – 75.6

SV08 - 370	SV-08R – 8.37

The reduction in the BTEX concentration suggested that the BTEX was transient in nature and likely originated from more recent, temporal sources such as lawn mowers and vehicles. Furthermore, potential MGP-indicator compounds were generally not present in the samples with the exception of SV-06R, located along the southern boundary of Area 2 (SV-06R). This sample contained elevated concentrations of several of the potential MGP indicator compounds and particularly, naphthalene and indene. However, the sampling probe was noted to have been coated with black material suggesting that it may have been installed within MGP-impacted soil and therefore, the soil vapor sample was considered to represent constituents within impacted soil rather than migrating vapor. Phase III of the program was subsequently completed at the request of NYSDOH to assess whether the constituents identified in SV-06R were migrating via soil vapor.

The Phase III sampling effort included the collection of four soil vapor samples (SV-18, SV-19, SN-20 and SV-21) from the property located to the south of sample SV-06R (Figure 2-2). The results of these analyses are provided on Table 4-8. As shown, the concentrations of the potential indicator compounds in these samples were very low or non-detect and, therefore, indicate that elevated concentrations of MGP-indicator compounds were not migrating via soil vapor. Upon review of these data, NYSDEC and NYSDOH concluded that no further action was required with respect the vapor intrusion pathway

4.3. Subsurface Soil

Concentrations of constituents potentially related to MGP operations were used to evaluate impacts to subsurface soil. In addition to analytical data, observation of impacted soil was noted in the drilling and test pit logs. As previously discussed, observations included staining, NAPL droplets, odor, or a positive fluorescence with the UVL. UVL fluorescence is an indicator of the potential presence of residual NAPL. Analytical results for subsurface soil were compared to the NYSDEC TAGM 4046 RSCOs as screening criteria as described in the beginning of this section.

Figures 4-2 through 4-6 provide a visual representation of BTEX and PAHs detected above screening criteria as well as observed impacts for subsurface soils at 4 ft depth intervals beginning at grade. As previously discussed, these screening criteria were the TAGM 4046 RSCO of 500 ppm for total PAHs and individual TAGM 4046 RSCOs for the each of the BTEX compounds. Tables 4-9 through 4-13 present the analytical data and provide a comparison to individual TAGM 4046 RSCOs for individual constituents.

4.3.1. Area 1

In Area 1, one or more BTEX compounds were detected above screening criteria at two locations, SB-15 and SB-38. Total PAHs were detected above 500 ppm at three locations SB-15, SB-38 and SB-46. Staining, residual NAPL, or UV-positive soil was observed at SB-15, SB-35, SB-38, and SB-46 as illustrated in Figures 4-1 through 4-5. In general, impacts are centered at the eastern concrete gas holder pad. The areal extent of impacts generally narrows with depth and impacts are generally limited to the upper 8 ft with some observed impacts reaching 12 ft (Figures 4-2 through 4-5).

The tapering of impacts at depth in tandem with impacts identified in shallow soils suggests that a surface release (e.g., a historic spill) was the source of the impacts observed in Area 1.

Metal concentrations detected during the PSA/IRM are comparable to the background surface soil concentrations. Metal analytical results for subsurface soils are presented in Table 4-3. Subsurface soils were also analyzed for cyanide during the original investigations at two locations (MW-1 and MW-2). Cyanide in subsurface soils was detected at MW-2 in the 6-8 ft interval.

4.3.2. Area 1 Off Site

Soil borings were completed on the properties adjacent to Area 1. Total PAHs were not detected in subsurface soil above screening criterion at off site locations adjacent to Area 1. Further, there were no indications of MGP-related impacts (NAPL, staining, sheens) on these adjacent properties based on field screening of soil samples (e.g., visual observations, UV fluorescence and odor).

4.3.3. Area 2

BTEX and PAHs were detected above screening criterion at nine locations in Area 2. NAPL or UV positive soil was observed at eight locations. Pesticides were either not detected or detected at concentrations below screening criteria, with the exception of Dieldrin. Dieldrin was detected above the criterion at SB-01 (6-8 ft). Dieldrin is not an MGP-related constituent.

Review of Figures 4-2 through 4-6 indicates that the largest area of impact was observed between 4 and 12 ft bls interval. Evidence of impacts greater than 16 ft bls is primarily limited to the southern property boundary.

The lack of impacts in soil shallower than 4 ft suggests releases below the ground surface, possibly from piping or other underground structures. An alternative explanation may be that the surface of the property was covered with fill after MGP operations ceased.

With the exception of MW-4 (8-10 ft) and MW-5 (8-10 ft), inorganic concentrations in the subsurface soil are comparable to background surface soil concentrations (Table 4-3). Concentrations of arsenic, iron, and lead were elevated at MW-4 (8-10 ft) compared to other subsurface soil samples and an order of magnitude higher than the background surface soil samples. Cyanide was detected at MW-4 (8–10 ft) above USEPA Region 3 PRG and USEPA Region 9 PRG for cyanide. In addition, the lead concentration of 560 ppm in MW-5 (8-10 ft) was also an order of magnitude higher than the background surface soil samples. With the potential exception of cyanide, the inorganics are not considered to be representative of MGP operations; and based on the depth, more likely associated with the fill material.

4.3.4. Area 2 Off Site

Soil borings were drilled and sampled on the off site properties adjacent to Area 2 to assess whether impacts identified on site extend onto off site areas. Impacts at off site properties appear to be limited to three general areas, as described below.

The first area is the southeastern corner of the paved lot near the retaining wall as identified by borings SB-36, SB-37, and SB-41. As illustrated in Figures 4-2 through 4-5, soils in this area contain elevated PAHs and BTEX that begin around 4 ft and continue to depths beyond 16 ft. In this area, analysis of soil reveals concentrations of PAHs and BTEX above screening criterion to at least 24 ft at SB-36. Although analyses were not completed on soil deeper than 24 ft at this location, no visual evidence of impacts is present below approximately 28 ft. The top of the dense till is located at 28 ft below grade at this location.

Of note, the MW-7 well cluster is located between this area and the river. Impacted soils were not observed at this location suggesting that MGP-related impacts have not migrated toward the river.

The second area is west of the former canal in borings SB-42 and SB-44. Total PAH concentrations are above the screening criterion at this location and are limited to soil less than 4 ft deep (Figure 4-2). Sample descriptions indicate the soil is fill, including various construction debris, coal fragments, etc. Based on historical maps, the area west of the former canal was formerly Yelverton Island, which was built from dredge spoils. These concentrations are potentially a reflection of constituents in the dredge spoil material and are not considered to have migrated from the Site.

The third area is behind the neighboring property to the north of Area 2 at SB-14and MW-12D and behind Area 2 at PZ-06. These locations are near the sewer line described in Section 2.7 above. The sewer line runs along the southern property boundaries in what was formerly the old canal. Conversations with representatives of the Fulton Public Works Department reveal that the sewer line was constructed in this area as the canal was being filled in. As noted in Section 4.1.5, the MGP ceased operation in 1932 and review of a 1938 aerial photograph indicates that regrading of the former Yelverton Island and filling in of the canal was nearing completion at that time. PAHs were detected above soil screening criterion up to 14 ft bls at SB-14 and MW-12D. In addition, staining and NAPL blebs were observed at these locations in soils between 4 ft and 16 ft bls. These impacted materials begin above the depth of the sewer line (12 ft bls at MW-12D, 14 ft bls at SB-14, and 18 ft bls at PZ-06). At PZ-06 the impacted soil is clay and silt and contains shells. Therefore, the impacted materials may be associated with dredge spoils or canal sediments placed or relocated to this area rather than migration of NAPL from Area 2.

In February 2002, soil boring SB-22 was completed in an area suspected to be within the former canal based on historic mapping. Field screening indicated limited soil impacts (i.e., a light spotty sheen on water in soil sample). A soil sample collected from the 12 to 14 ft depth was submitted to Worldwide Geosciences, Inc., for fingerprint analysis. The sample was analyzed by high resolution capillary gas chromatography to determine the type or types of parent products associated with the sample and to provide an indication of parent product age. The signature characteristics of the sample were determined to be indicative of coal tar as the product type. The complete report is attached in Appendix J. Of note, a portion of this sample was also submitted for analysis of PAHs. The results indicated that the sample contained 0.14 ppm total PAHs. Based on the history and timing of filling in this area (as described previously), it is unlikely MGP constituents migrated to this location. It is likely that this material was placed during filling.

4.4. Ground Water

Ground water quality data were compared to NYSDEC TOGS as ground water screening criteria. As previously discussed, the most recent and complete set of ground water samples were collected in November 2005 and analyzed for BTEX and PAHs. These results were used for the following discussion of ground water quality. The ground water analytical results, including a comparison to the ground water screening criteria, are provided on Tables 4-14 through 4-18. Figures 4-7 and 4-8 provide a visual representation of BTEX, PAHs and cyanide detected above ground water screening criteria during the most recent sampling event.

Concentrations of BTEX and PAH compounds that are above the ground water criteria are limited to Area 2. BTEX compounds were detected in several shallow wells and were measured at concentrations above criteria at MW-4 and MW-5. PAHs were also detected in MW-4 and MW-5 at

concentrations above the criteria. Additionally, in deep well MW-6, PAHs were also detected at concentrations above the criteria.

Review of historical ground water quality data indicates that concentrations of BTEX compounds and PAHs have decreased over time. As previously discussed, sampling methods changed from bailing techniques to low flow techniques in 2001. To assess whether the change in sampling methods affected the data, during the November 2005 sampling event samples were conducted at two depths from shallow wells MW-3, MW-4, MW-7, MW-11, and MW-12S. The data indicate that concentrations do not vary substantially based on vertical placement of the intake in the screened interval, and thus, the change in sampling method does not appear to affect the quality of the results.

BTEX compounds, when detected, were at concentrations below criteria in deep wells MW-6, MW-8D and MW-12D.

Inorganics (metals and cyanide) were analyzed during the PSA. The concentrations of a number of inorganic constituents were detected above ground water criteria. Several of these are also above the criteria in upgradient well MW-1. Metals concentrations in ground water samples were generally comparable to measured concentrations in samples from Area 1. Some constituents were found to be above ground water standards in downgradient wells but not detected in the upgradient well (see Table 4-16). In these instances, the concentrations only slightly exceed the criteria and can likely be attributed to elevated turbidity. Furthermore, the constituents identified are not considered related to the MGP. Sampling logs are presented in Appendix C.

Cyanide was detected above TOGS in shallow ground water at wells MW-3 and MW-5. Cyanide was detected below TOGS in the remaining wells that were sampled. Cyanide was not detected in upgradient well MW-1.

Trace concentrations of pesticides were detected in the ground water during the PSA/IRM study on July 24, 1996. With the exception of samples from MW-4, the pesticides detected were either also detected in the associated laboratory preparatory blanks or not detected in follow-up sampling event. At MW-4, Endosulfan II was detected in a follow-up sampling event on September 4, 1996. No criterion exists for Endosulfan. Also, PCB Aroclor 1242 was detected in MW-1 during the July 1996 sampling event, however, it was not detected during a second sampling event in September 1996. None of these constituents are considered to be Site-related.

Ground water impacts potentially related to the former MGP (BTEX, PAHs, and cyanide) are limited to Area 2. These areas are proximal to the location of impacted subsurface soil. Impacts were not observed above criteria at sample points between the affected wells and the river or the downgradient locations suggesting that constituents are not migrating from the source area to the Oswego River.

4.5. Sediment

A total of 9 sediment samples were collected from the Oswego River at the approximate locations presented on Figure 2-2. As described in Section 2.6, five samples were collected near and downstream of the Site, and four were collected from upstream areas considered to generally represent background conditions. The sediment samples were analyzed for BTEX, PAHs, and TOC. Analytical results for BTEX, PAHs and TOC are provided in Tables 4-19 through 4-21. BTEX compounds were not detected.

Low levels of PAHs were detected in the river sediments both near the Site and upstream of the Site. The total PAH concentrations in the sediments near and downstream of the Site range from 0.36 to 1.6 mg/kg. This concentration range is similar to the concentrations measured in the upstream areas, which range from not-detected to 1.1 mg/kg. Note that several individual PAH compounds were detected near and downstream of the Site, while only one, benzo(a) pyrene, was detected in the upstream area (Table 4-19).

The detection of PAHs in the Oswego River sediments is not unexpected given the urban nature of the area and historic uses of this river for commercial transportation, and is not indicative of contribution from the former MGP.

4.6. Sewer Line Evaluation

April 2001 sewer line tracing activities traced the line from the southern manhole to a location adjacent to MW-12S and MW-12D. (Figure 2-1) It was suspected that the line had a blockage or was collapsed at this location. The sewer line is located between 18 and 20 ft below grade. In October 2005 the sewer line was inspected with a remote video camera. The sewer line appeared to be a 24 inch diameter concrete pipe. An initial attempt was made to conduct the video inspection starting from a manhole located approximately 500 feet to northwest of the Site. This inspection progressed 418 feet to a point approximately 60 feet west of the Site, where a concrete block prevented further progress of the video tractor. Subsequently, an attempt was made to conduct the video inspection from a manhole located approximately 210 feet southeast of the Site. This inspection progressed 90 feet to a point approximately 120 feet southeast of the Site, where a rock was encountered and prevented further progress of the video tractor. Several cracks in the concrete sewer line pipe were also observed and water was observed entering the pipe through these fractures as well as through joints in the pipe.

On June 20, 2001, samples of water from within the storm sewer line were collected upstream and downstream of the Site as discussed in Section 2.7. The following table presents the detected constituents.

Table 4-22. *Storm sewer water sampling results.*

Parameter	Upstream	Downstream
Benzene	<0.50	1.6
Ethylbenzene	<0.50	0.69
Xylene (total)	<0.50	0.68

Results in µg/L (ppb)
< - indicates not detected. Value to right is detection limit

As illustrated on this table, low concentrations of benzene, ethylbenzene, and total xylenes were detected in the downstream storm water sample. The compounds detected in the downstream manhole may be contributed from infiltration of contaminated ground water from the Site. However, the downstream location is approximately 600 ft north of the Site and is covered by a grate. Therefore, the compounds detected at this location may be due to contaminated storm water rather than ground water infiltration from Area 2 as this catch basin, and possibly others, collect storm water from the roadways.

5. Qualitative Exposure Assessment

A qualitative assessment of the potential for receptors to be exposed to site-related constituents was completed for the Site. The assessment consisted of characterizing the exposure setting (including the physical environment and potentially exposed human populations), identifying complete and potentially complete exposure pathways, and evaluating contaminant fate and transport. Without an exposure pathway, constituents cannot impact human or ecological receptors. If an exposure pathway is complete, the potential for risk to the receptor depends on the degree and duration of exposure.

5.1. Current and Future Site Use

The use of the property is the underlying factor that influences the activities and potential for exposure to constituents that are present. The area in which the South First Street Site is located is predominantly residential in nature. The Site is vacant with no restriction to access. National Grid owns this property. Future use of the Site has not been established. The physical characteristics of the property are described in Section 1.2.

Ground water in the area is not used for potable water supplies. Surrounding residential properties are connected to City of Fulton water supply, which is provided by the City of Fulton Water Department. The City of Fulton Water Department receives its water from a well field located adjacent to the Oswego River, approximately one mile upstream from the Site (see Figure 1-1).

5.2. Constituents of Concern

The surface soil was found to contain several CPAHs at concentrations above background values in Area 1, Area 2, and an off site location adjacent to Area 2. As previously discussed, it is not clear whether the presence of CPAHs at all locations is related to the former MGP operations.

In subsurface soil, PAHs and BTEX were detected above the screening criteria in several areas of the Site and some off site locations. In general, inorganic concentrations detected during the PSA/IRM are comparable to the background surface soil concentrations. The exceptions are arsenic and iron, which were detected above criteria at one location and lead which was detected above criteria at two locations in Area 2. These constituents are not considered to be associated with former MGP operations. Cyanide was detected in one location above USEPA Region 3 PRG and USEPA Region 9 PRG for cyanide (no TAGM 4046 RSCO has been developed for cyanide).

Current ground water analysis indicates that PAHs and BTEX compounds were detected above ground water criteria. These elevated concentrations are limited to Area 2.

5.3. Contaminant Transport

According to the Agency for Toxic Substances and Disease Registry (ATSDR) *ToxFAQs® for Polycyclic Aromatic Hydrocarbons*, while some PAHs can volatilize to the air to some extent, they most commonly migrate in the air by sorbing to small particles that become entrained in the air as dust. PAHs do not readily dissolve in water. PAHs will attach to soil and sediment particles. In surface water bodies PAHs are typically sorbed to sediment particles and will migrate with the

sediments via typical sediment transport mechanisms. Transport in the ground water is limited due to the preference for adsorption of most PAHs to subsurface soil.

BTEX compounds are volatile organic compounds. These compounds volatilize readily and therefore, can migrate via air. The compounds do degrade when exposed to the atmosphere. BTEX compounds can also migrate as vapors through unsaturated soil, and subsequently into outdoor or indoor air. BTEX compounds are also slightly soluble in ground water and can migrate in dissolved form with the ground water.

According to the ATSDR *ToxFAQs® for Cyanide*, cyanide enters the environment from both natural processes and human industrial activities. If detected in air, cyanide is mainly found as gaseous hydrogen cyanide and in less volatile forms associated with fine dust particles. Some cyanide compounds in soil can form hydrogen cyanide and evaporate while some compounds are transformed into other chemical forms by microorganisms. However, ferric ferrocyanide and other iron cyanide solids are the predominant form of cyanide associated with MGP residuals. These iron cyanides typically dissolve into iron cyanide complexes (Ghosh, et al, 1999) when leached. The rate of dissociation of iron cyanide complexes to free cyanide/hydrogen cyanide is very slow in the subsurface, and thus little if any hydrogen cyanide is expected to be associated with MGP sites. In high concentrations in soil, cyanide can pass through soil into ground water.

Based on the analytical data from sampling programs as presented in Section 4.4, ground water contaminant transport appears to be limited either by rapid degradation and/or interception by the storm sewer. Impacted ground water is isolated to the western portion of Area 2 predominantly in samples from two monitoring wells in Area 2. Data indicate that ground water impacts do not extend beyond these two wells.

Airborne transport of contaminants adhered to dust from Area 1, Area 2, and locations off site from Area 2 are expected to be minimal. Area I is covered with grass while the majority of Area 2 is blacktop-covered with the remaining land grass-covered. The majority of locations surrounding Area 2 are grass-covered. These conditions generally reduce or eliminate the potential for dust emissions from the Site. However, there is limited vegetative cover at the off site location to the west of Area 2, on City of Fulton property, where elevated PAH concentrations were observed near the Site. Therefore, this area is potentially susceptible to wind erosion. As noted in Section 4, it is possible that the PAH concentrations in this area are not related to former MGP operations at the Site.

BTEX and PAH constituents were not detected in soil vapor samples collected at the Site. The vapor migration pathway was therefore, not addressed further during the risk evaluation.

Analytical results for the sediment samples did not indicate that Site-related constituents were present in the river sediments. Therefore this exposure pathway was not addressed further.

5.4. Potential Receptors

A potential receptor is the population that is or may be exposed to contaminants at a point of exposure. In the areas of the South First Street Site the following receptors may be present:

Off Site
- Local residents (adults and children) using the area of the City park adjacent to the Site or the nearby residential properties
- Utility or contractors working at the off site properties

On Site
- Trespassers who walk on the Site
- Utility or construction workers working on the Site

Current and future receptors are considered to be similar.

5.5. Potential Exposure Pathways

5.5.1. Surface Soils
Under existing Site conditions, a potentially complete exposure pathway to exists for Area 1, Area 2, and off site surface soils immediately west of Area 2. Surface soils in Area 2 are limited to the small, unpaved area. The receptor population includes trespassers (adults and children), construction, and utility workers. Routes of exposure include direct dermal contact, inhalation, or accidental ingestion. As discussed above, contaminants in soils west of Area 2 may be unrelated to former MGP operations. Under future conditions, the exposures above would include the same population.

5.5.2. Subsurface Soils
A potentially complete exposure pathway exists for on site and limited off site subsurface soils. The receptor population includes trespassers, construction, and utility workers who dig through the grass cover or pavement and come into contact with underlying soils located in Area 1, Area 2, and adjacent to Area 2. Routes of exposure include direct dermal contact, inhalation, or accidental ingestion. Under future conditions, the exposures above would include the same population.

5.5.3. Ground Water
A potential exposure pathway exists for construction and utility workers coming into contact with ground water underlying Area 2. However, ground water in this area lies approximately 7 to 8 ft below grade so the exposure potential is reduced. Routes of exposure include direct dermal contact, inhalation, or accidental ingestion. Under future conditions, the exposures above would include the same population.

There are no nearby users of ground water. Although the City of Fulton obtains its drinking water from ground water, the water supply wells are located approximately one mile from the Site and are not impacted by site-related constituents.

5.6. Summary

Based on the qualitative exposure assessment, there are potentially complete exposure pathways for PAHs, BTEX, and cyanide compounds in surface soil, subsurface soil, and/or ground water.

Specifically, a complete exposure pathway was identified for PAHs in surface soil in Area 1, Area 2, and west of Area 2 by direct dermal contact, inhalation, and accidental ingestion.

A potentially complete exposure pathway exists for constituents in Area 1 and Area 2 on site subsurface soils. Area 2 off site surface soils, Area 1 and Area 2 off site subsurface soils, and on site ground water in Area 2 by direct dermal contact, inhalation, and accidental ingestion. This type of exposure would occur only if potential receptors were to dig through the pavement, grass cover, and surface soils and come into contact with subsurface soils or ground water.

Future potential exposures are similar to current exposures and may occur via direct dermal contact and accidental ingestion of on site and off site soils by adult construction and utility workers and trespassers.

6. Conclusions

The following conclusions are drawn based on the data collected during the completion of the PSA/IRM and the RI at the South First Street Site in Fulton, New York.

6.1. Hydrogeologic Conditions

The overburden deposits encountered at the Site consist of three units: fill, alluvial deposits consisting of discontinuous lenses of sand, silt, clay and gravel, and sandy glacial till. The till generally becomes more dense with depth. Bedrock was encountered at approximately 36.5 ft below grade at one location.

The water table is positioned within the overburden materials overlying the till at depths ranging from 1.5 to 8 feet deep across the Site.

The geometric mean hydraulic conductivity of the till unit (0.15 ft/d) is an order of magnitude lower than that of the overlying deposits (1.0 ft/d). Thus, lateral ground water flow in the overburden occurs primarily within the deposits above the till.

The top of the till unit comprises the bottom of the upper water-bearing zone. The surface of till unit undulates, but generally slopes downward toward the Oswego River. Although the surface is variable, where completely penetrated, the till is approximately 17.5 ft thick.

Shallow ground water flows to the south and west across the Site towards the Oswego River. At Area 2 the flow contours shift to the west in the vicinity of the storm sewer line that crosses the area, indicating that the sewer and/or associated bedding intercepts shallow ground water flowing across the Site. This shift is likely a localized effect due to leakage into the sewer line, which drains to the northwest and eventually into the Oswego River. Based on the video inspection, leakage into the sewer line may have been confirmed as ground water appears to contribute water to the storm sewer. Based on the relatively low hydraulic conductivity of the till unit, the rate of ground water flow through the till is substantially lower than in the overlying water bearing zone. A slight downward vertical hydraulic gradient exists in Area 2 from the upper water-bearing zone to the till unit.

The City of Fulton ground water supply wells are present adjacent to the Oswego River approximately one mile upstream to the southeast of the Site. Thus, Site ground water is outside the capture zone of these wells. Respondents to the ground water user survey completed as part of the RI indicated that no domestic ground water wells exist at the residences adjacent to the Site.

6.2. Nature and Extent of Contamination

The following summarizes the evaluation of the nature and extent of site-related impacts.

Surface Soil
BTFX compounds detected in surface soils are consistent with background concentrations.

Total CPAH concentrations are elevated in comparison to background concentrations at four areas surrounding SS-1, SS-2, SS-4, and SS-24. Samples SS-1 and SS-2 are located within Area 1. SS-4 is located adjacent to the pavement in Area 2. These three locations are on properties owned by National Grid.

Sample SS-24 is located on property to the west of Area 2. This property is behind a residence and owned by the City of Fulton. Additional sampling defined the northern and western extent of CPAHs above background levels. The southern extent is unclear due to the presence of debris (household debris including roofing shingles and ashes) in the area. Due to historical filling in this area, it is unclear whether the elevated CPAHs are the result of historic MGP operations or constituents within material used to fill the former Oswego Canal which was located in this area.

Concentrations of cyanide in surface soils are below the USEPA Region 3 PRG for cyanide (1,564 mg/kg) and the Region 9 PRG (1200 mg/kg). A TAGM 4046 RSCO has not been established by NYSDEC for cyanide.

Subsurface Soil

In Area 1, both analytical and visual evidence of MGP-related impacts were observed in subsurface soil. In general, impacts are centered at the eastern concrete gas holder pad. Impacts generally narrow with depth and are limited to the upper 8 ft with some observed impacts reaching 12 ft in the center of the area. Subsurface soil from the adjacent properties bordering Area 1 did not contain MGP-related constituents above the screening criteria or visual indicators of MGP-tar-related impacts. .

In Area 2, analytical and visual impacts were observed in the subsurface soils. Evidence of impacts begins at 4 ft below grade and, in the southern corner of the area, extends to depths up to at least 24 ft below grade. The widest zone of impacted soil was observed between, 4 to 12 ft below grade. The impacted soil extends off the National Grid property to the south and southeast but was not observed adjacent to the Oswego River. The lack of impacted soil shallower than 4 ft suggests that releases occurred below the ground surface, possibly from piping or other underground structures or, alternatively, fill may have been brought in after MGP operations ceased covering the impacted soil.

Impacted subsurface soil was also observed in two general areas to the west of Area 2. One area is located west of the former Oswego Canal. The second area is located in the vicinity of the sewer line that runs along the southwestern side of Area 2.

In the area west of the former canal concentrations of total PAHs above 500 ppm were generally limited to less than 4 ft below grade. Based on historical maps, the area west of the former canal was formerly Yelverton Island, which was reportedly constructed from dredge spoils. Therefore, these observed impacts are potentially a reflection of constituents in the dredge spoil material and are not considered to represent migration of materials from the former MGP area.

Impacts in soil near the sewer line included visual evidence (e.g., stained soil, NAPL blebs) observed in soils shallower than 16 ft and PAHs greater than criterion shallower than 12 ft.

Ground Water

Concentrations of BTEX compounds, PAHs and cyanide above the ground water screening criteria (NYSDEC TOGS) are limited to the shallow ground water beneath Area 2. Constituent concentrations in off site wells, including those between Area 2 and the Oswego River, are below the

criteria. Ground water with constituent concentrations above the criteria is likely captured via seepage to the storm sewer located directly southwest of Area 2. Video inspection directly upstream and downstream of the Site did not indicate any visible site-related impacts. Samples from storm sewer manholes located 400 feet upstream and 600 ft downstream of the Site indicated the presence of low concentrations of benzene, ethylbenzene, and total xylenes in the downstream storm water sample. It is unclear whether this is the result of contribution from the property or influent from storm water discharges from nearby roadways or other potential sources.

Sediment
There is no evidence of contribution of site-related constituents to the sediment of the river. PAH compounds were detected below screening criteria at all locations and were consistent with concentrations in background (upstream) samples. BTEX compounds were not detected.

Soil Vapor
BTEX and PAH constituents were not detected in soil vapor samples SV-1, SV-2, and SV-3 collected during the RI on June 22, 1998. In order to expedite the RI, soil vapor concerns are being addressed separately from this RI. Existing soil vapor sample locations are provided on Figure 2-1. At the request of NYSDOH, additional soil vapor evaluations are being conducted consistent with the NYSDOH Soil Vapor Intrusion protocols. Upon completion of these evaluations the RI will be updated and resubmitted to NYSDEC.

6.3. Exposure Pathways

Potential complete pathways exist on Areas 1 and 2 for contact with surface soil and subsurface soil. The ground water exposure pathway is also complete in Area 2. Potential receptors include trespassers, construction, and utility workers.

The off site subsurface soil south of Area 2 represents a potential complete exposure pathway to users of the property in this area. Users may include local residents, contractors, and utility workers.

Surface and subsurface soil represents a potential complete exposure pathway in localized areas to the west, southwest, and northwest of Area 2. Users may include local residents, contractors, and utility workers. However, it should be noted that it is not clear whether the constituents identified in these areas are related to the former MGP operations.

The soil vapor exposure pathway will be addressed separately from this RI.

7. Recommendations

To date, the nature and extent of MGP-related impacts from the Site to environmental media (surface and subsurface soil, ground water, and sediments) have been evaluated to a degree sufficient to meet the RI objectives, with the exception of potential impact to soil vapor. At the request of NYSDOH, additional soil vapor evaluations are being conducted. Upon completion of these evaluations the RI will be updated and resubmitted to NYSDEC.

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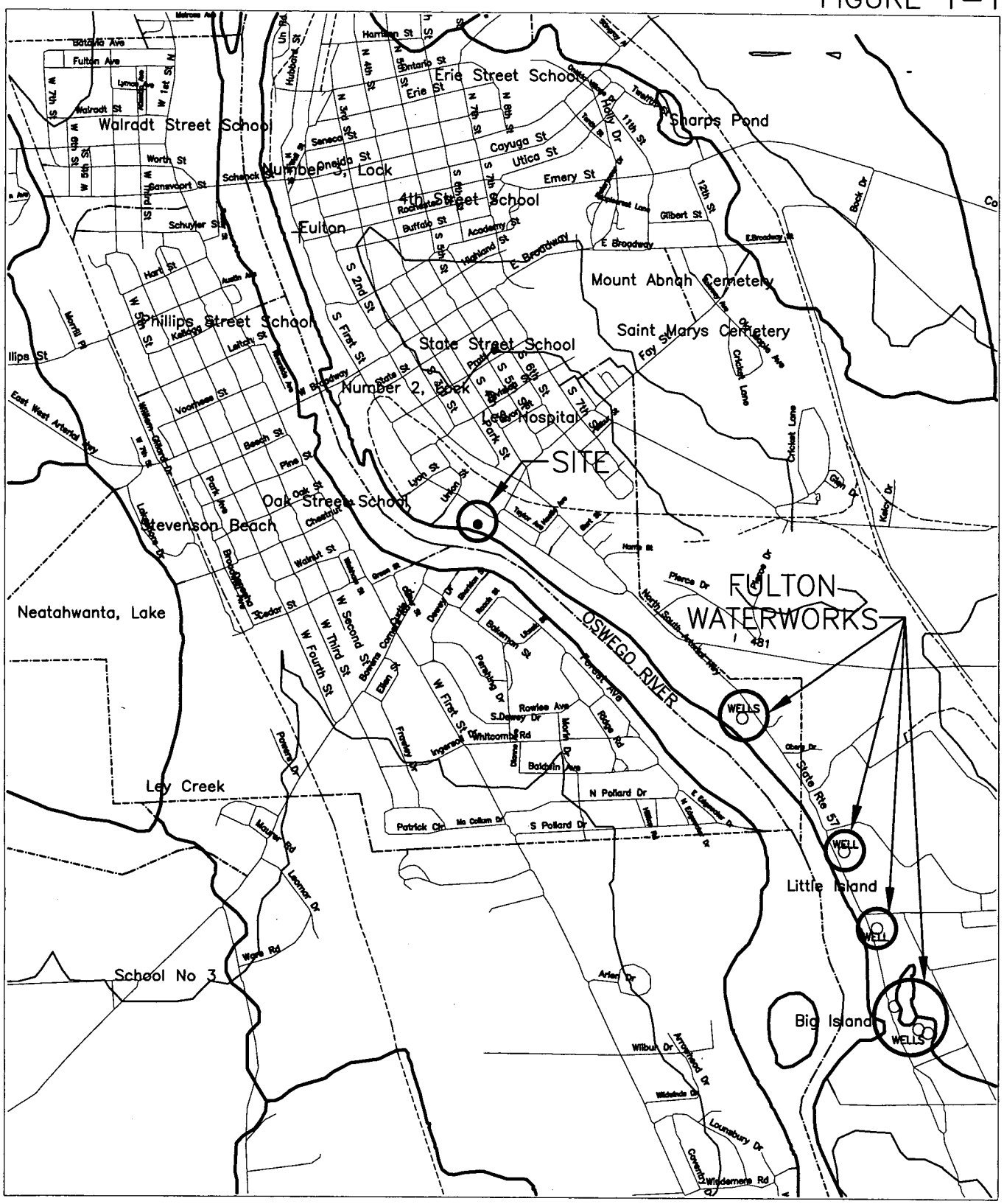
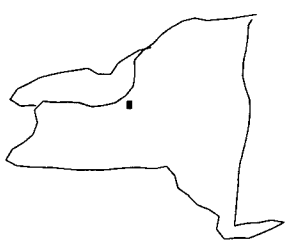
FIGURE 1-1



NIAGARA MOHAWK
SOUTH FIRST STREET SITE
FULTON, NEW YORK

SITE LOCATION MAP



QUADRANGLE LOCATION

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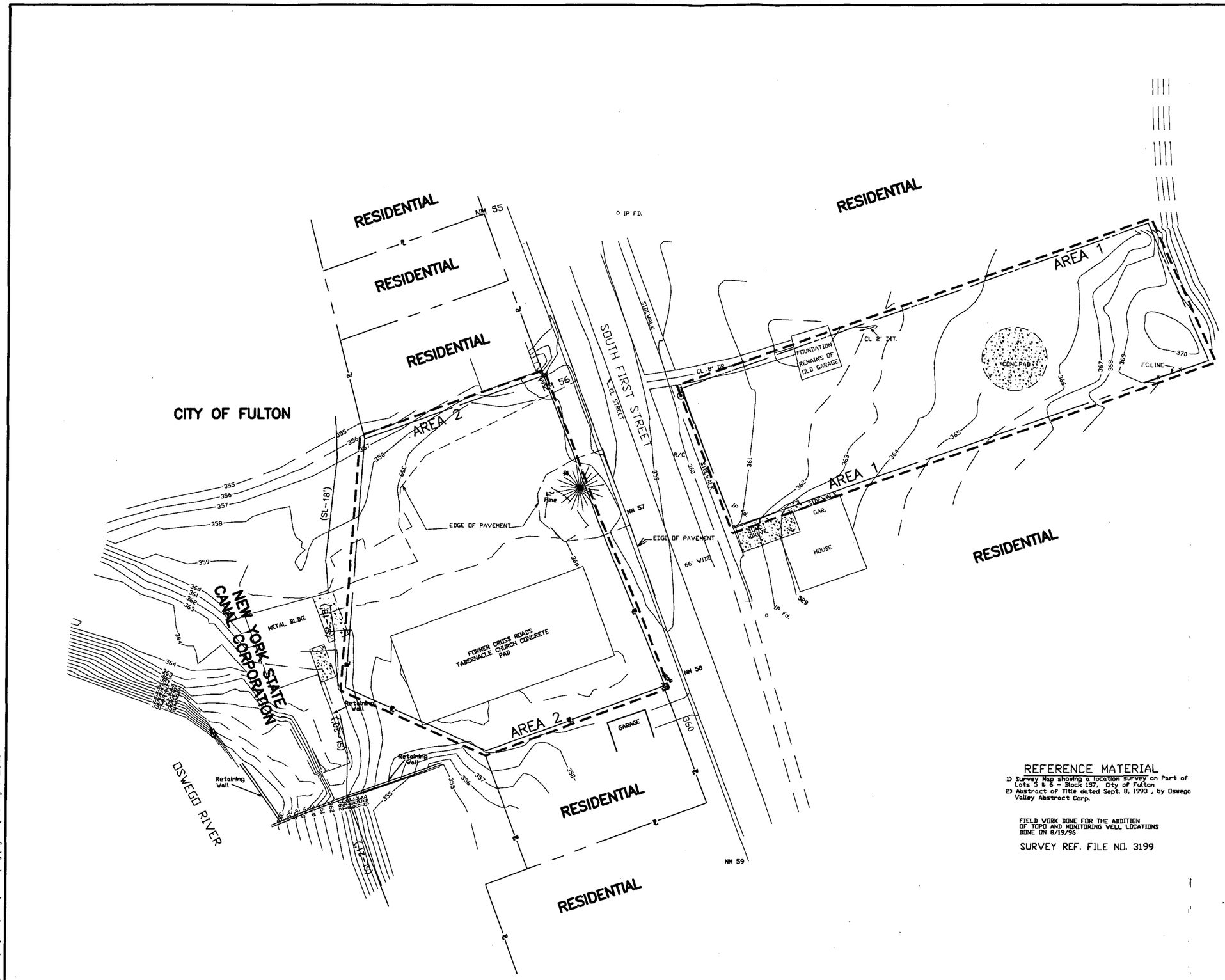
SCALE IN FEET

O'BRIEN & GERE ENGINEERS, INC.

FILE NO. 1118-35165.002

FIGURE 1–2



LEGEND

—PL— PROPERTY LINES

– – – AREA BOUNDARIES

RESIDENTIAL PROPERTY OWNERSHIP

REFERENCE MATERIAL

1) Survey Map showing a location survey on Part of Lots 5 & 6 - Block 157, City of Fulton
2) Abstract of Title dated Sept. 8, 1993, by Oswego Valley Abstract Corp.

FIELD WORK DONE FOR THE ADDITION OF TOPO AND MONITORING WELL LOCATIONS DONE ON 8/19/96

SURVEY REF. FILE NO. 3199

NIAGARA MOHAWK
SOUTH FIRST STREET SITE
FULTON, NEW YORK

SITE MAP

1"=50' 50 0 50

FILE NO. 1118.35165.003

FEBRUARY 2005

O'BRIEN & GERE ENGINEERS, INC.

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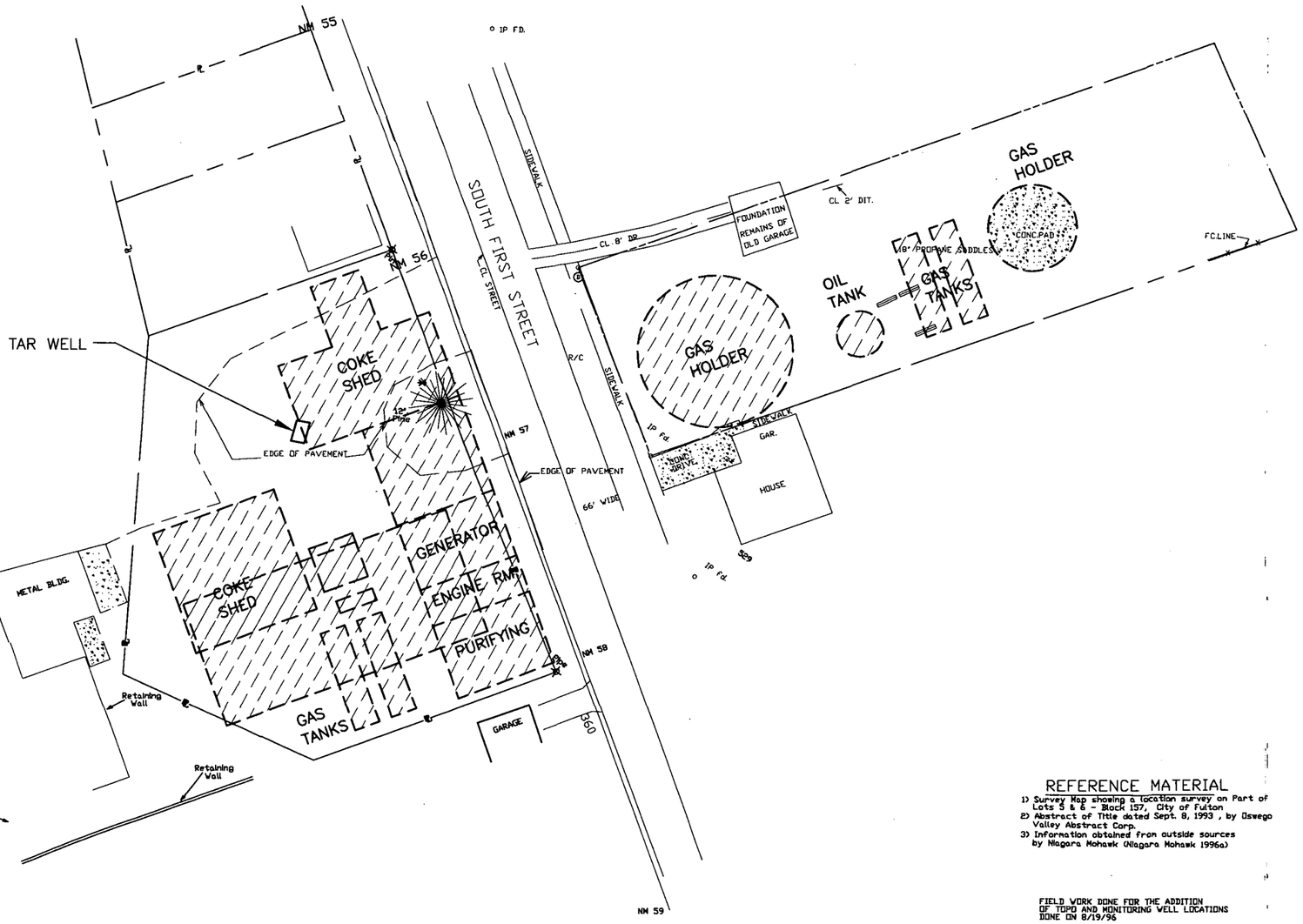
FIGURE 1–3



LEGEND

PL PROPERTY LINES

HISTORICAL STRUCTURES

REFERENCE MATERIAL

1) Survey Map showing a location survey on Part of Lots 5 & 6 - Block 157, City of Fulton
2) Abstract of Title dated Sept. 8, 1993 , by Oswego Valley Abstract Corp.
3) Information obtained from outside sources by Niagara Mohawk (Niagara Mohawk 1996a)

FIELD WORK DONE FOR THE ADDITION OF TOPO AND MONITORING WELL LOCATIONS DONE ON 8/19/96

SURVEY REF. FILE NO. 3199

NIAGARA MOHAWK
SOUTH FIRST STREET SITE
FULTON, NEW YORK

HISTORICAL FEATURES

1"=50' 50 0 50

FILE NO. 1118.35165.004

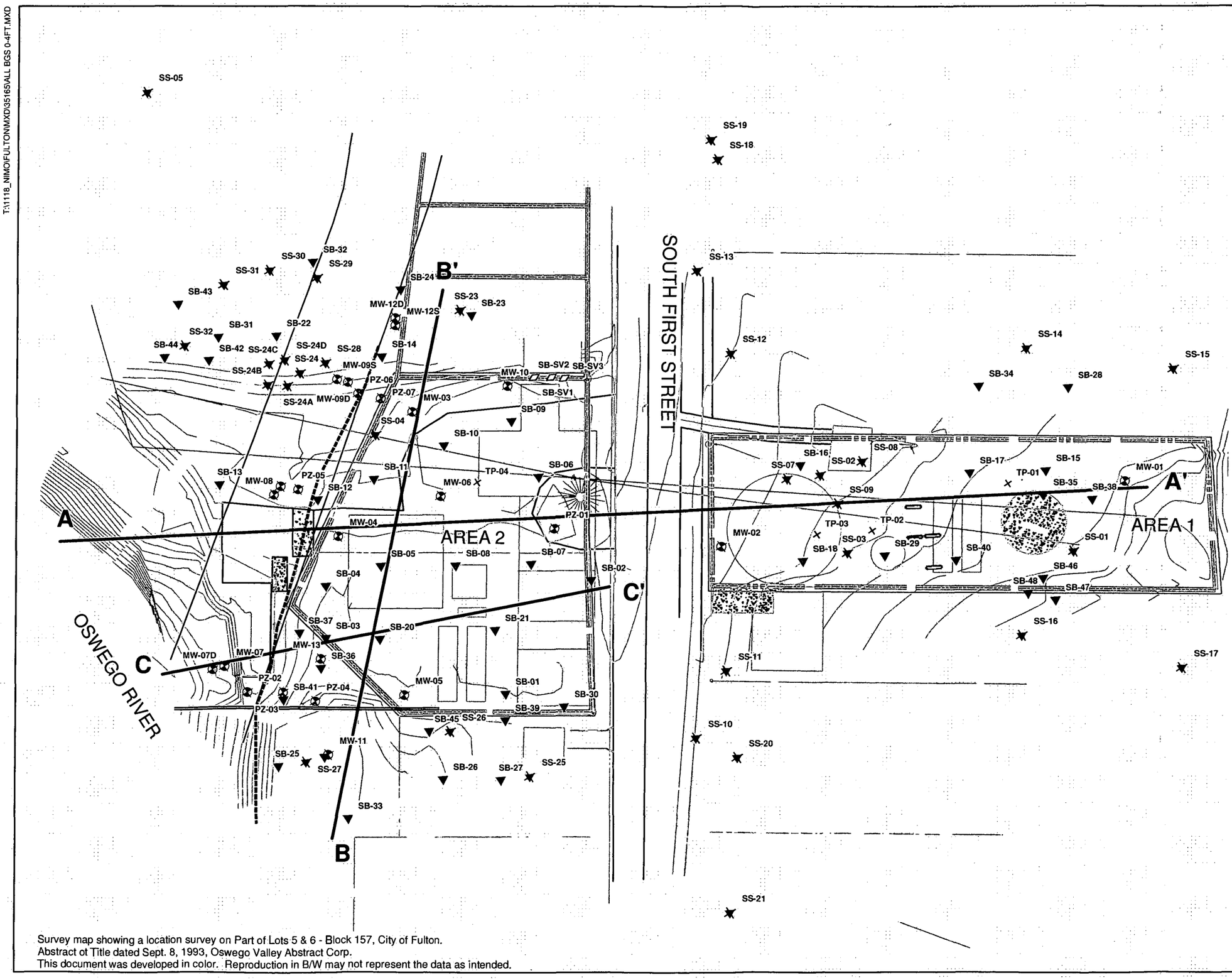
FEBRUARY 2005

O'BRIEN & GERE ENGINEERS, INC.

i:\DIV71\Projects\1118\35165\dwg\Figures\004-Fig-1-3.dwg

T:\1118_NIMO\FULTON\MXD\35165\ALL BGS 0-4FT.MXD

FIGURE 2-1



Survey map showing a location survey on Part of Lots 5 & 6 - Block 157, City of Fulton.
Abstract ot Title dated Sept. 8, 1993, Oswego Valley Abstract Corp.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- CROSS SECTION LINES
- APPROX CANAL BOUNDARY
- SEWER LINE

Sample Locations

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SOIL VAPOR
- SURFACE SOIL
- TEST PIT

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

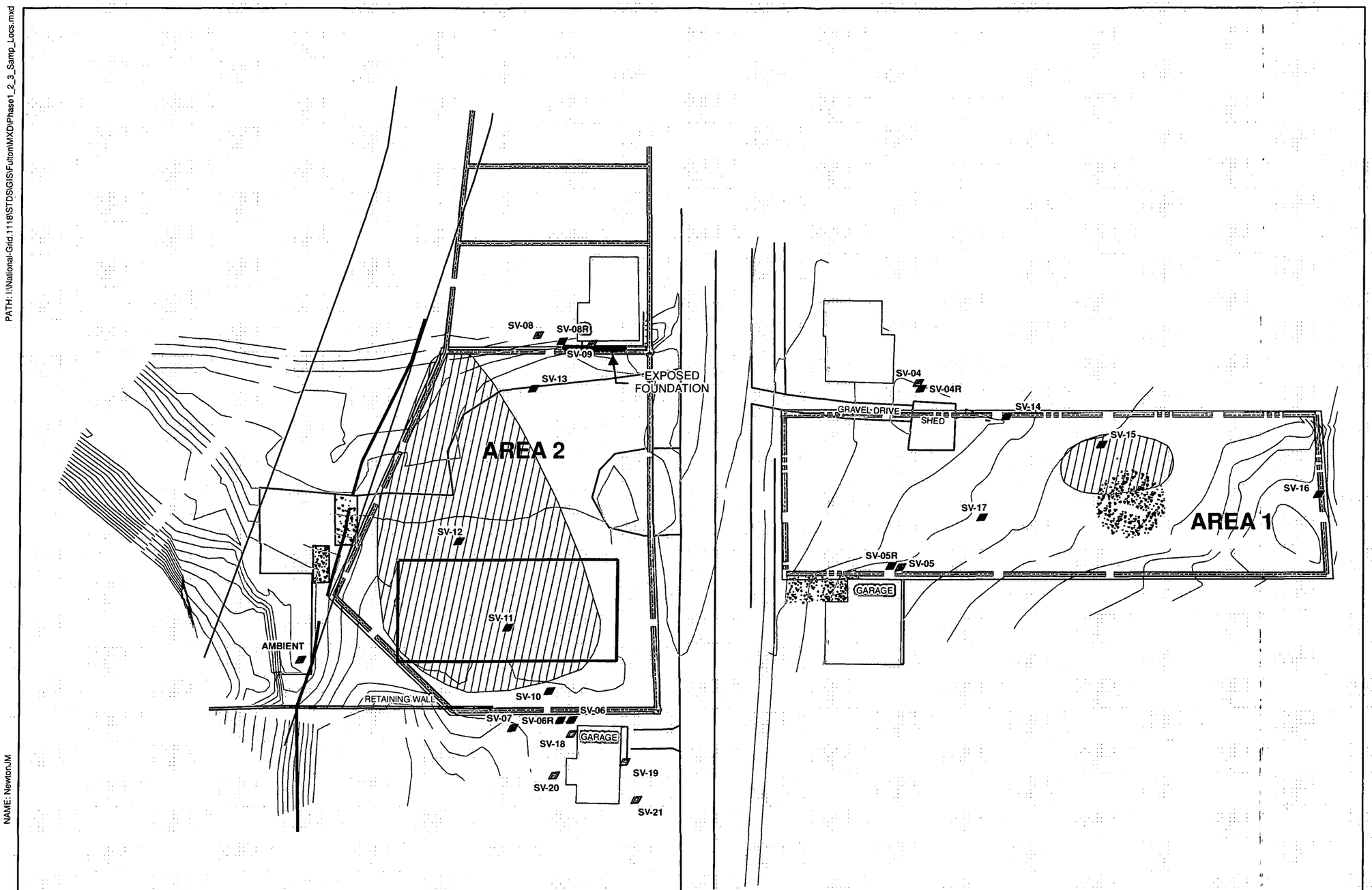
SAMPLE LOCATIONS

0 25 50 100
Feet

MARCH 2005
1118.35165

O'BRIEN & GERE ENGINEERS, INC.

FIGURE 2-2



LEGEND

- PHASE I SAMPLES
- PHASE II SAMPLES
- PHASE III SAMPLES
- HOUSE
- POTENTIAL MGP SOURCE

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SOIL VAPOR SAMPLE LOCATIONS

0 25 50 100
Feet

JULY 2009
1118.35165

O'BRIEN & GERE ENGINEERS, INC.

This document was developed in color. Reproduction in B/W may not represent the data as intended.
Sample locations are approximate.

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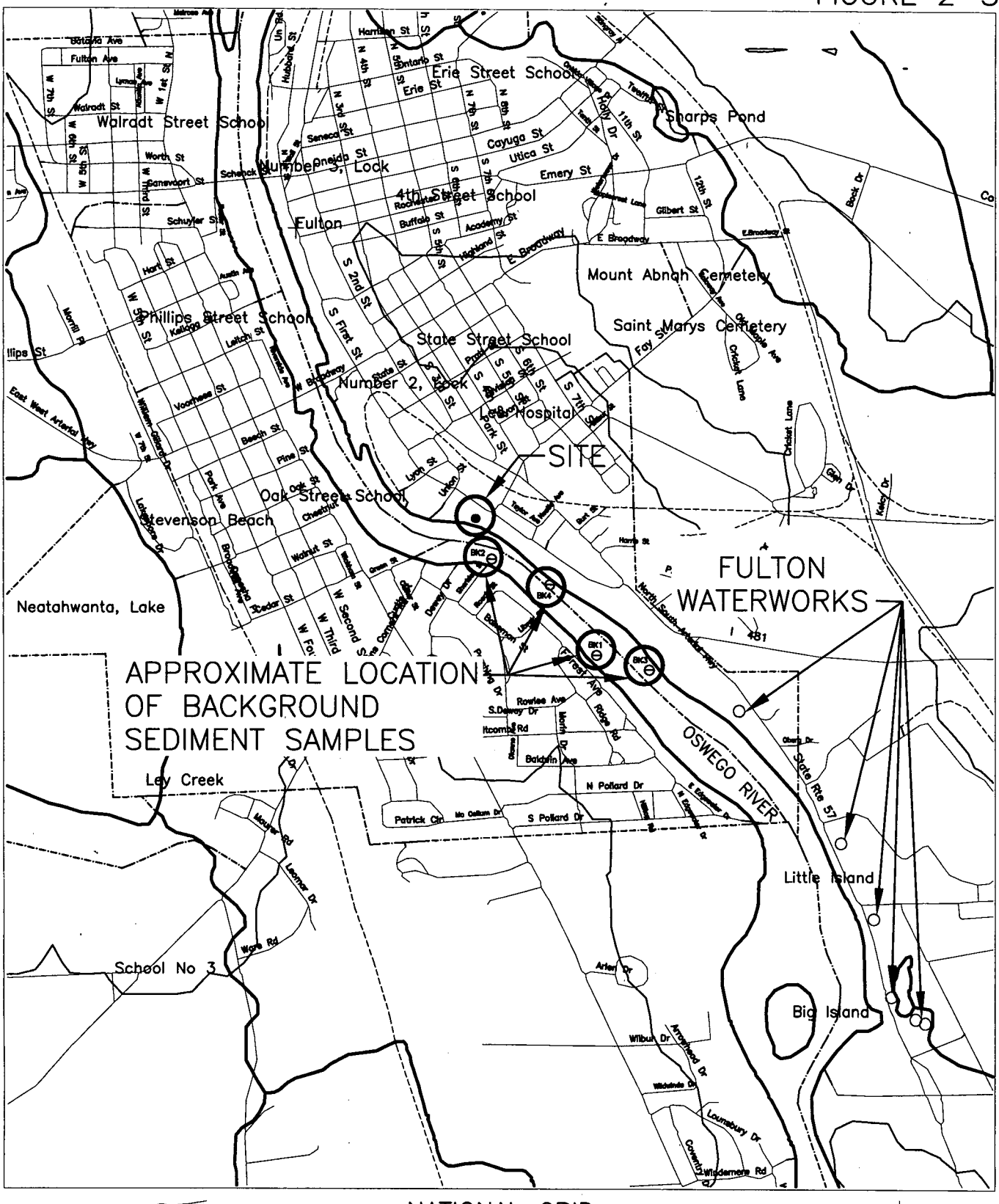
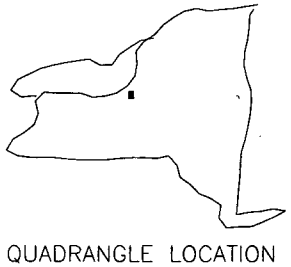
FIGURE 2-3





QUADRANGLE LOCATION

NATIONAL GRID
SOUTH FIRST STREET SITE
FULTON, NEW YORK

BACKGROUND SEDIMENT SAMPLE LOCATIONS

2000 0 2000

SCALE IN FEET

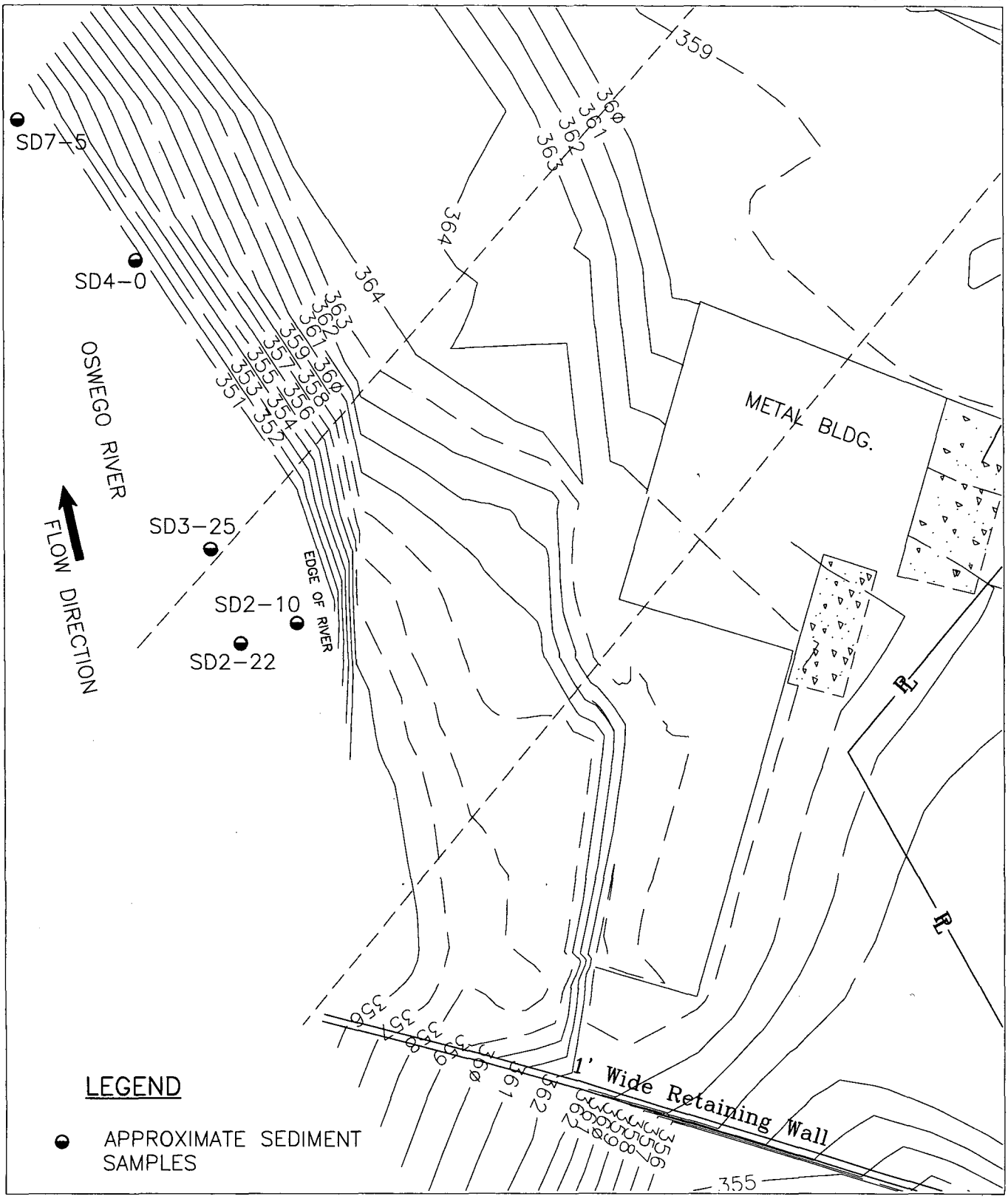
FILE NO. 1118-35165.006

O'BRIEN & GERE ENGINEERS, INC.

Sep 09, 2009 - 7:47am

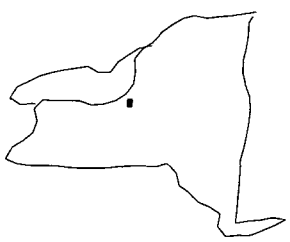
I:\National-Grid.1118\35165.Ri-Fs-South-Fir\dwg\Figures\006-Fig 2-2.dwg

FIGURE 2-4



NATIONAL GRID
SOUTH FIRST STREET SITE
FULTON, NEW YORK

SEDIMENT SAMPLE LOCATIONS



QUADRANGLE LOCATION

0 20 40

SCALE IN FEET

FILE NO. 1118-35165.006

O'BRIEN & GERE ENGINEERS, INC.

Sep 09, 2009 - 7:50am

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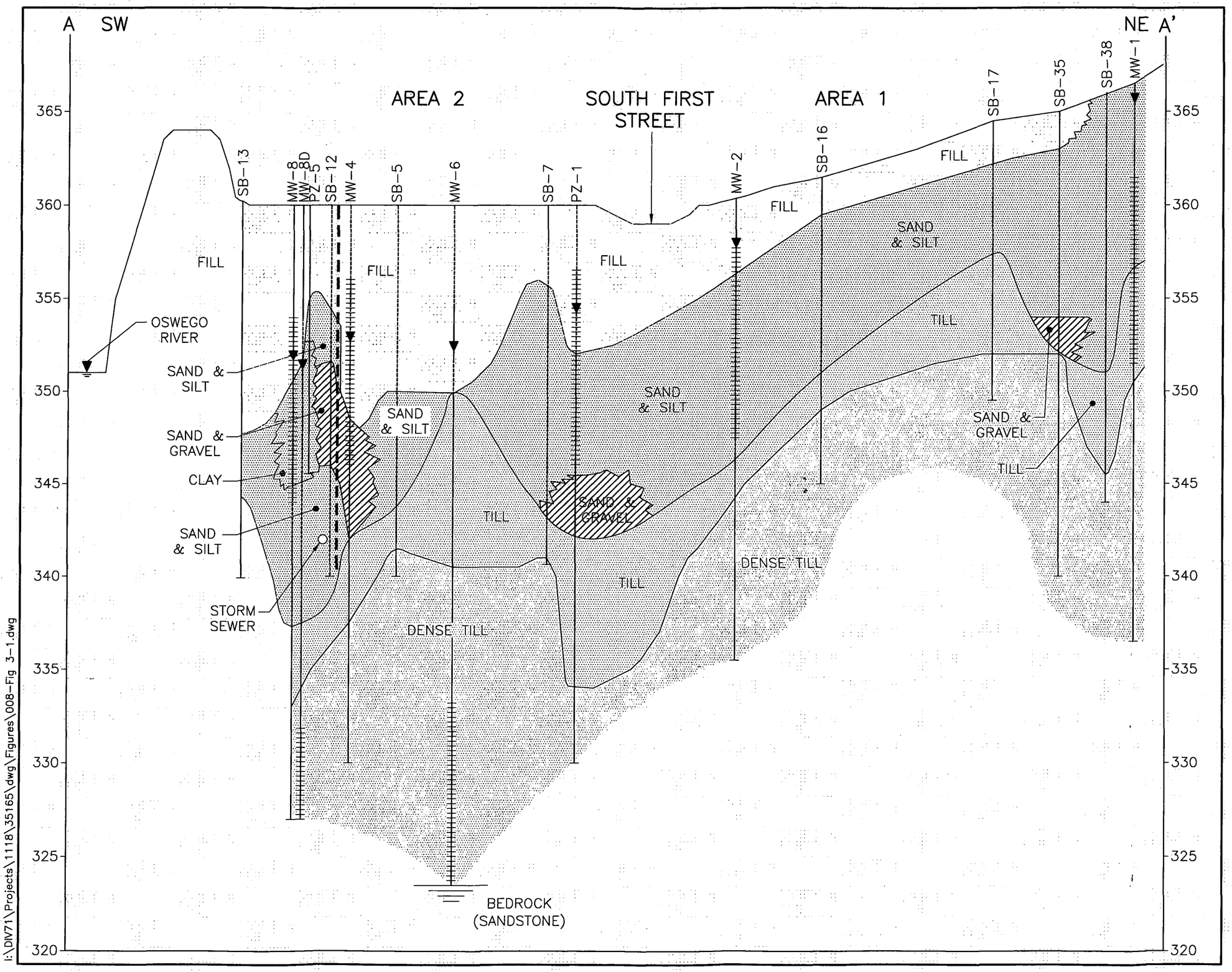
FIGURE 3–1



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LEGEND

WELL SCREEN

▼ GROUND WATER ELEVATION (MARCH 31, 2006)

ESTIMATED BOUNDARY OF FORMER CANAL CHANNEL

NOTE:

1. CANAL LIKELY DID NOT HAVE CONSTRUCTED WALLS ADJACENT TO THE SITE.
2. OSWEGO RIVER WATER ELEVATION IS APPROXIMATE.

NATIONAL GRID
SOUTH FIRST STREET SITE
FULTON, NEW YORK

CROSS SECTION
A–A'

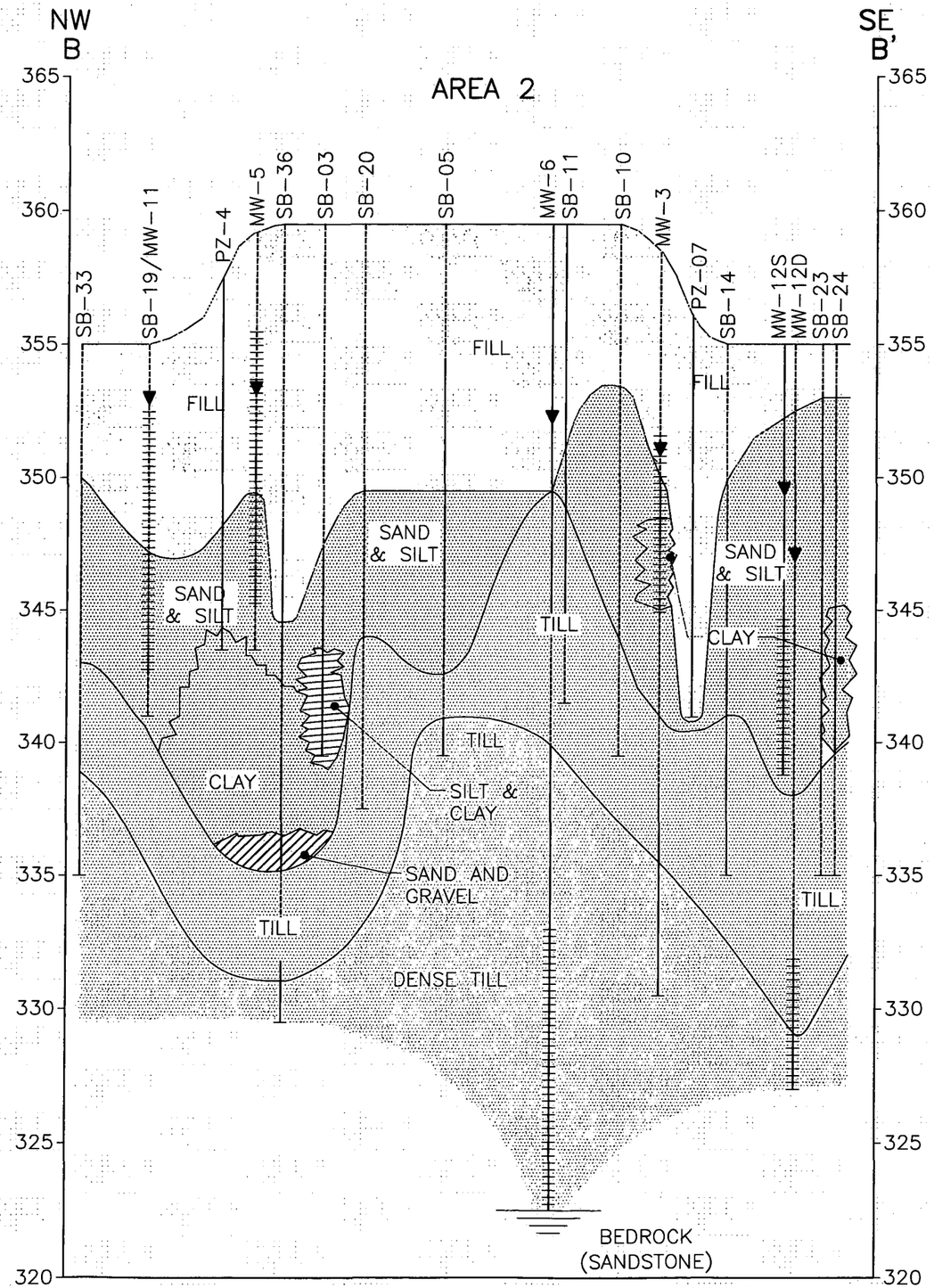
1"=50' 50 0 50
HORIZONTAL SCALE IN FEET

1"=5' 5 0 5
VERTICAL SCALE IN FEET

FILE NO. 1118.35165.008
FEBRUARY 2005

O'BRIEN & GERE ENGINEERS INC.

FIGURE 3-2



LEGEND

WELL SCREEN

▼ GROUND WATER ELEVATION (MARCH 31, 2006)

NOTE:

1. CANAL LIKELY DID NOT HAVE CONSTRUCTED WALLS ADJACENT TO THE SITE.

NIAGARA MOHAWK
SOUTH FIRST STREET SITE
FULTON, NEW YORK

CROSS SECTION
B-B'

1"=50' 50 0 50
HORIZONTAL SCALE IN FEET

1"=5' 5 0 5
VERTICAL SCALE IN FEET

FILE NO. 1118.35165.009
FEBRUARY 2005

O'BRIEN & GERE
ENGINEERS INC.

Apr 25, 2006 - 3:45pm

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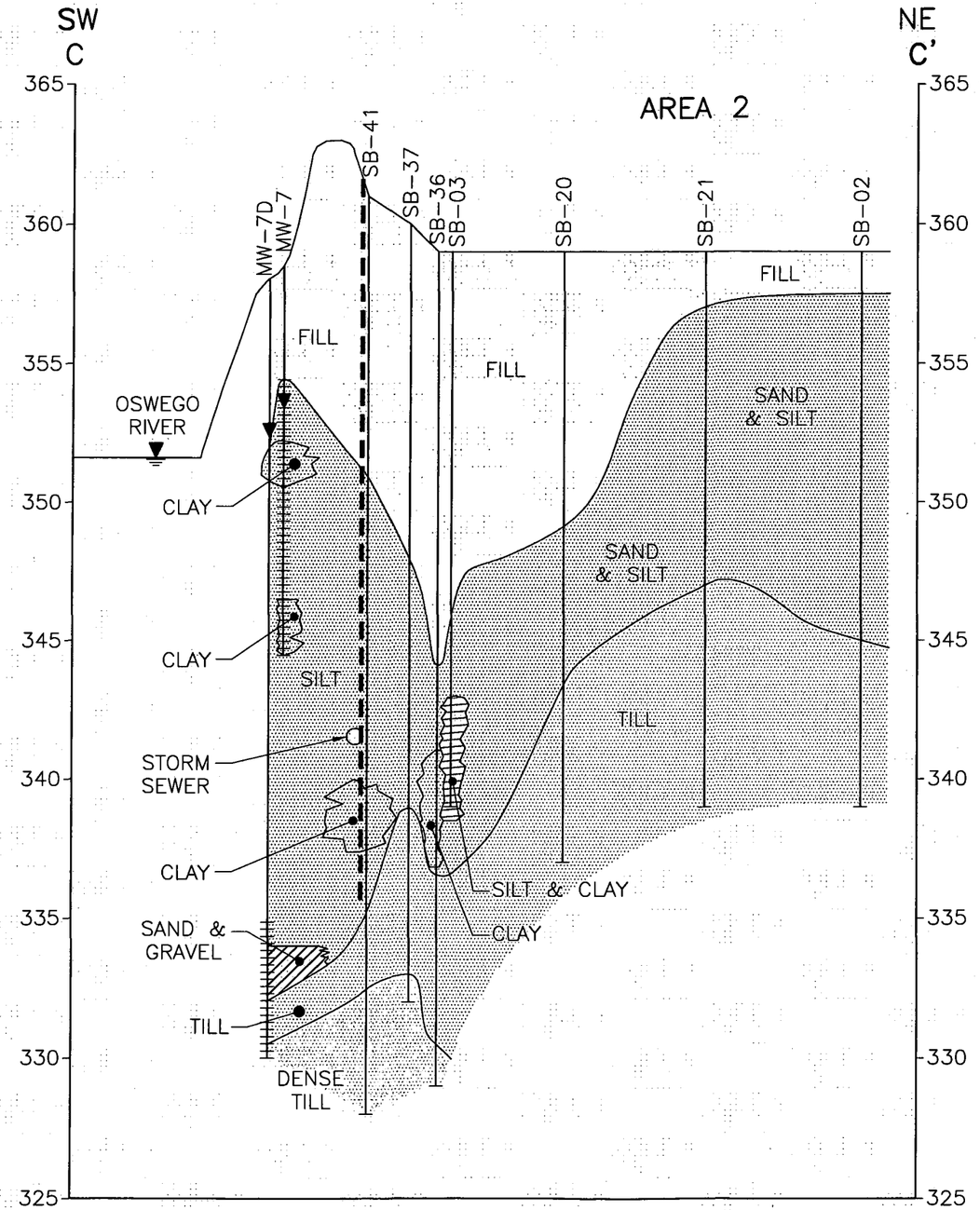
FIGURE 3-3



LEGEND

- WELL SCREEN
- ▼ GROUND WATER ELEVATION (MARCH 31, 2006)
- ESTIMATED BOUNDARY OF FORMER CANAL CHANNEL

NOTE:

1. CANAL LIKELY DID NOT HAVE CONSTRUCTED WALLS ADJACENT TO THE SITE.
2. OSWEGO RIVER WATER ELEVATION IS APPROXIMATE.

NATIONAL GRID
SOUTH FIRST STREET SITE
FULTON, NEW YORK

CROSS SECTION
C-G'

1"=50' 50 0 50
HORIZONTAL SCALE IN FEET

1"=5' 5 0 5
VERTICAL SCALE IN FEET

FILE NO. 1118.35165.010
FEBRUARY 2005

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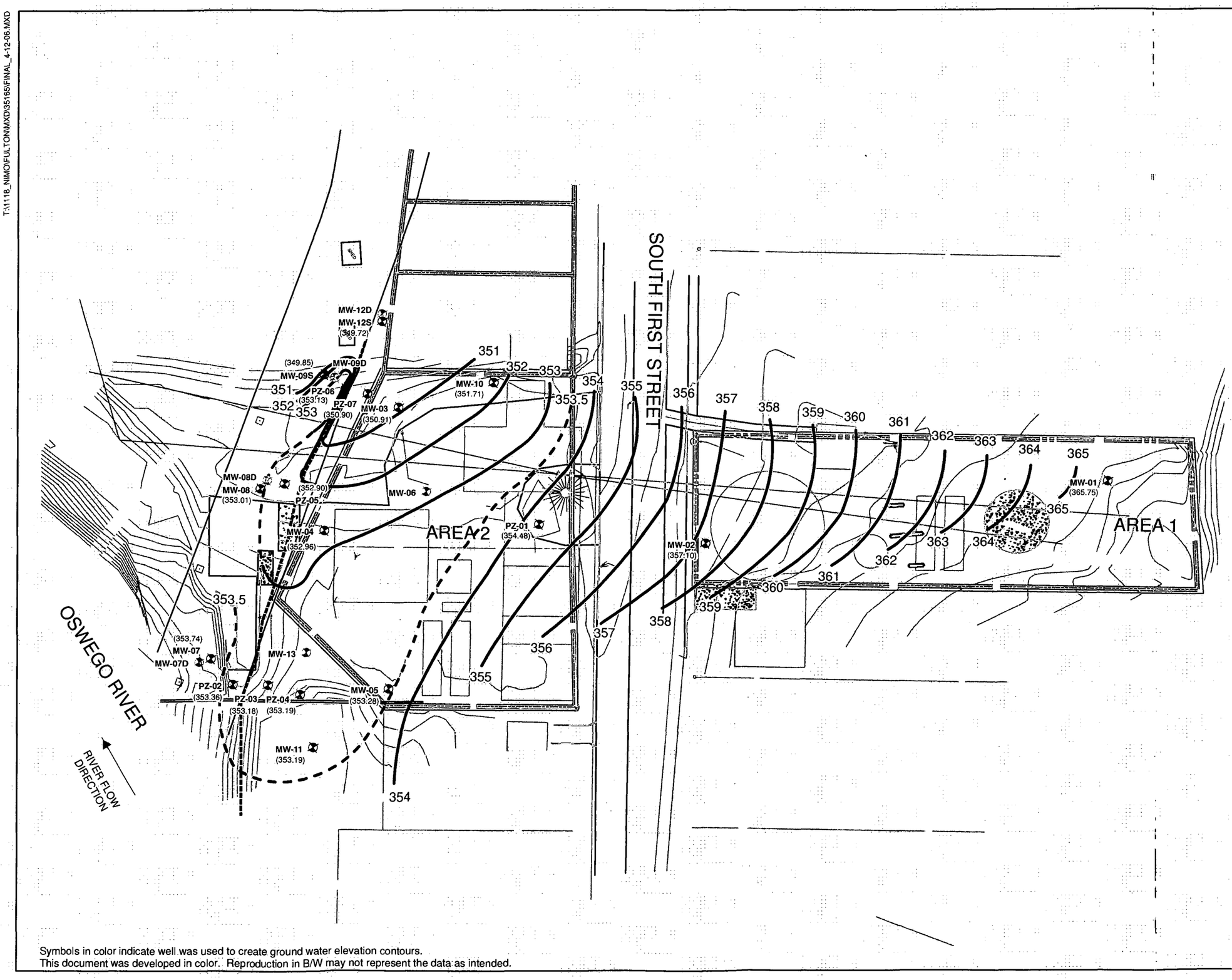
FIGURE 3-4



Symbols in color indicate well was used to create ground water elevation contours.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SOIL VAPOR
- SURFACE SOIL
- TEST PIT
- APPROX BOUNDARY OF FORMER CANAL
- SEWER LINE
- GROUND WATER CONTOUR
- GROUND WATER CONTOUR ESTIMATED

NOTES:

(365.75) SHALLOW GROUND WATER ELEVATION (FT, NAVD 1988)

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SHALLOW GROUND WATER ELEVATION CONTOURS (11/5/05)

0 25 50 100
Feet

April 2006
1118.35165

O'BRIEN & GERE ENGINEERS, INC.

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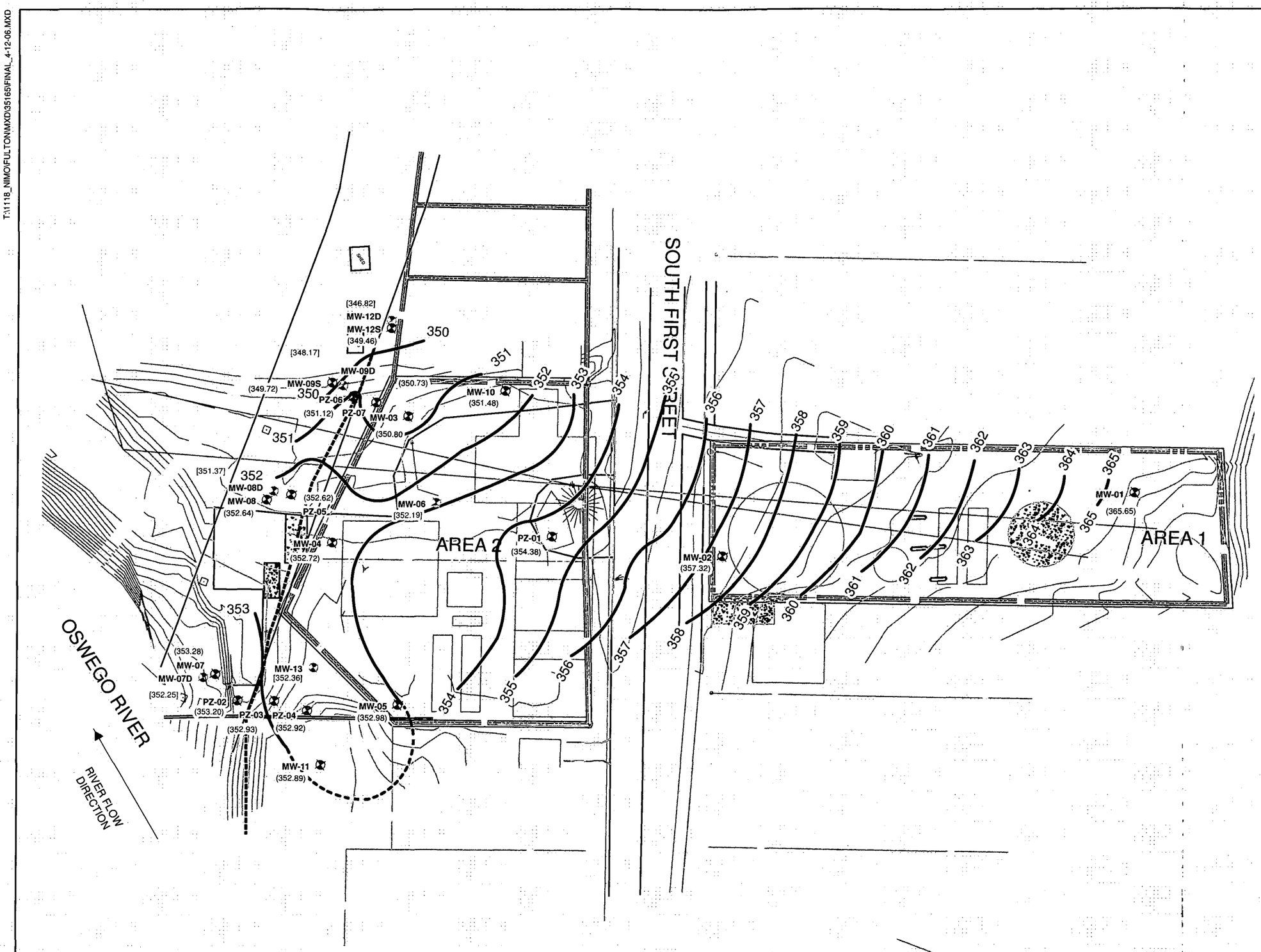
FIGURE 3-5



Symbols in color indicate well was used to create ground water elevation contours.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SOIL VAPOR
- SURFACE SOIL
- TEST PIT
- APPROX BOUNDARY OF FORMER CANAL
- SEWER LINE
- GROUND WATER CONTOUR
- ESTIMATED GROUND WATER CONTOUR

NOTES:

(365.75) SHALLOW GROUND WATER ELEVATION (FT, NAVD 1988)

[365.75] DEEP GROUND WATER ELEVATION (FT, NAVD 1988)

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SHALLOW GROUND WATER ELEVATION CONTOURS (3/31/06)

0 25 50 100
Feet

April 2006
1118.35165

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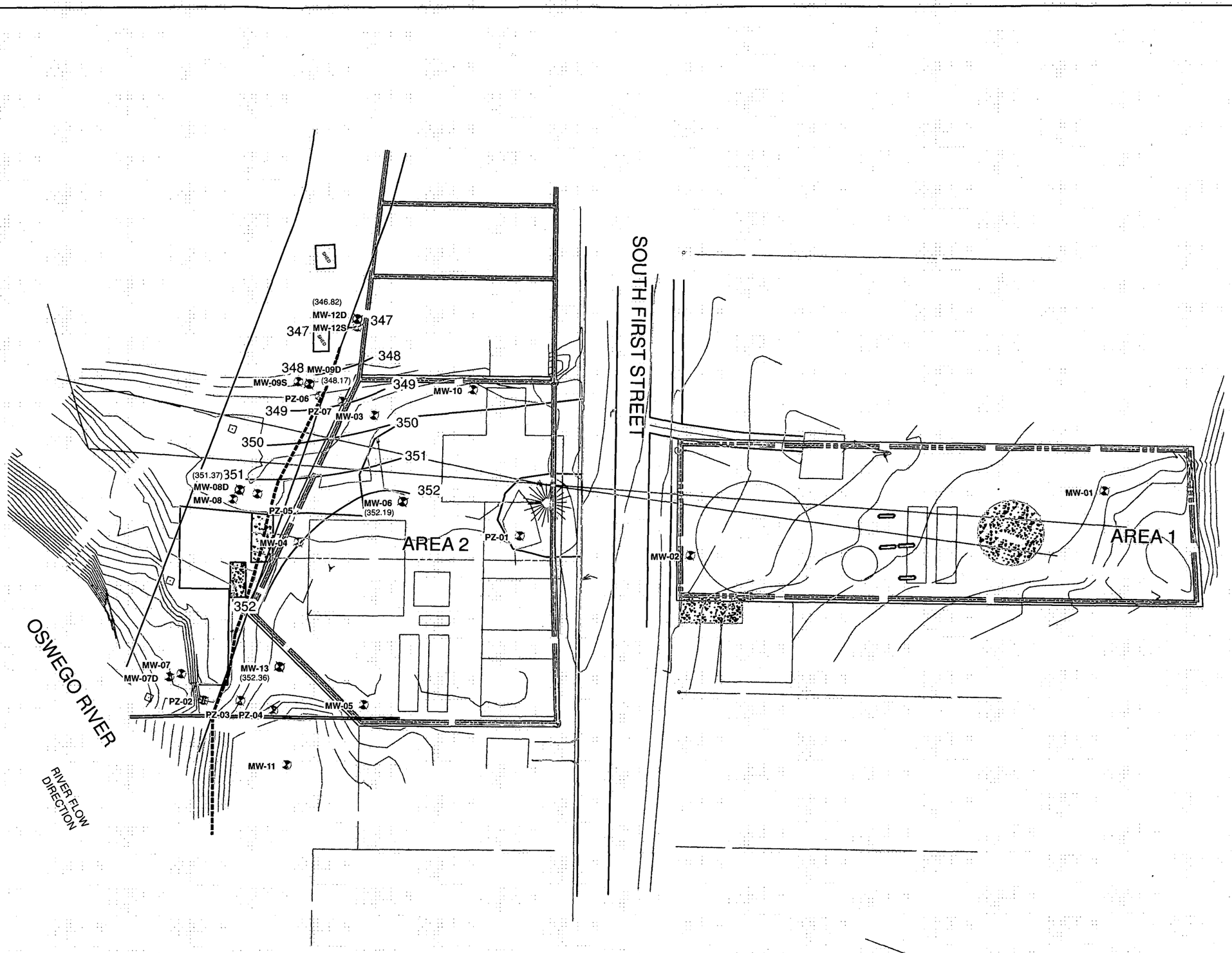
FIGURE 3-6



LEGEND

- GROUND WATER CONTOUR
- APPROX BOUNDARY OF FORMER CANAL
- SEWER LINE
- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SOIL VAPOR
- SURFACE SOIL
- TEST PIT

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

DEEP GROUND WATER ELEVATION CONTOURS (3/31/06)

0 25 50 100
Feet

April 2006
1118.35165

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T:\1118_NIMO\FULTON\MXD\35165\FIGURE 4-1.MXD

FIGURE 4-1

SS-30 (12.3 / 10.7)
SS-31 (7.7 / 6.9)
SB-43
SB-31
SS-32 (42.6 / 38.4)
SB-44
SB-42
SB-32
SS-29 (11.7 / 9.8)
SB-22
SHED
SHED
SB-24
SS-23
SB-23
MW-12D
MW-12S
SS-24C (134.6 / 70)
SS-24D (271.24 / 156.1)
SS-28 (11 / 8.6)
SB-14
SS-24 (50.68 / 29.31)
MW-09S
MW-09D
SS-24B (18.9 / 9.8)
SS-24A (22.2 / 11.2)
MW-10
PZ-06
PZ-07
MW-03
SB-09
SS-04
SB-13
MW-08D
PZ-05
MW-08
SB-12

Units: mg/kg
Sample interval shown: 0 - 0.17 ft
Data displayed - (total PAHs/total CPAHs)
When exceedence is indicated, one or more compounds from indicated group exceeded TOGS.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- APPROXIMATE TREE LINE
- APPROX BOUNDARY OF FORMER CANAL
- SEWER LINE

Sample Locations

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SOIL VAPOR
- SURFACE SOIL
- TEST PIT

NOTES: SEE FOOTNOTE

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SURFACE SOIL AREA 2 OFFSITE PAH/CPAH RESULTS

0 10 20 40
Feet

September 2006
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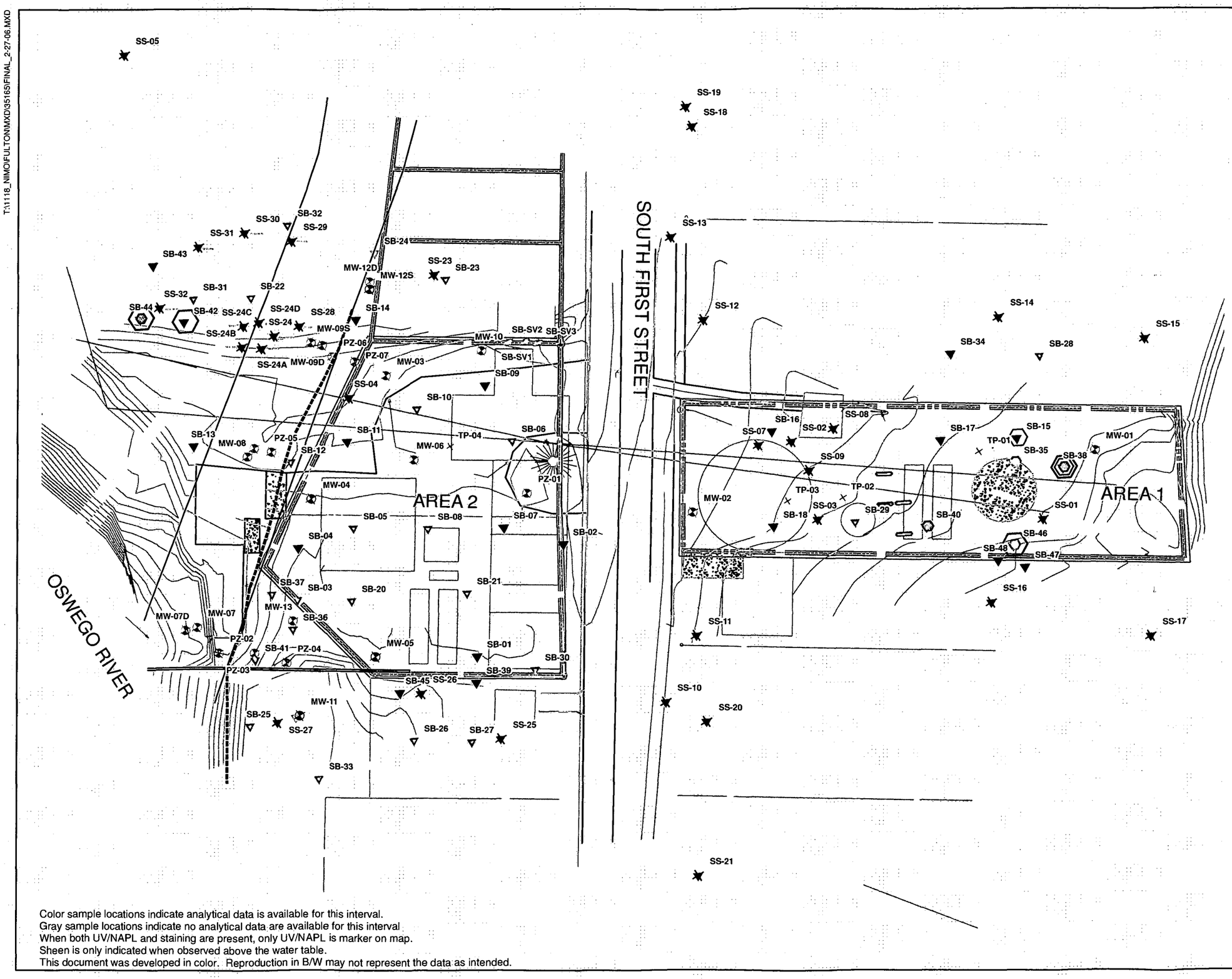
FIGURE 4-2



Color sample locations indicate analytical data is available for this interval.
Gray sample locations indicate no analytical data are available for this interval
When both UV/NAPL and staining are present, only UV/NAPL is marker on map.
Sheen is only indicated when observed above the water table.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- APPROX CANAL BOUNDARY
- SEWER LINE
- PAHs >= 500
- BTEX ABOVE CRITERIA
- UV POSITIVE OR NAPL
- STAIN OR SHEEN

SAMPLE TYPE

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SURFACE SOIL
- TEST PIT

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SOIL SAMPLE LOCATIONS
0-4 FT BGS
TOTAL PAHs >= 500 PPM
BTEX ABOVE CRITERIA

0 25 50 100
Feet

April 2006
1118.35165

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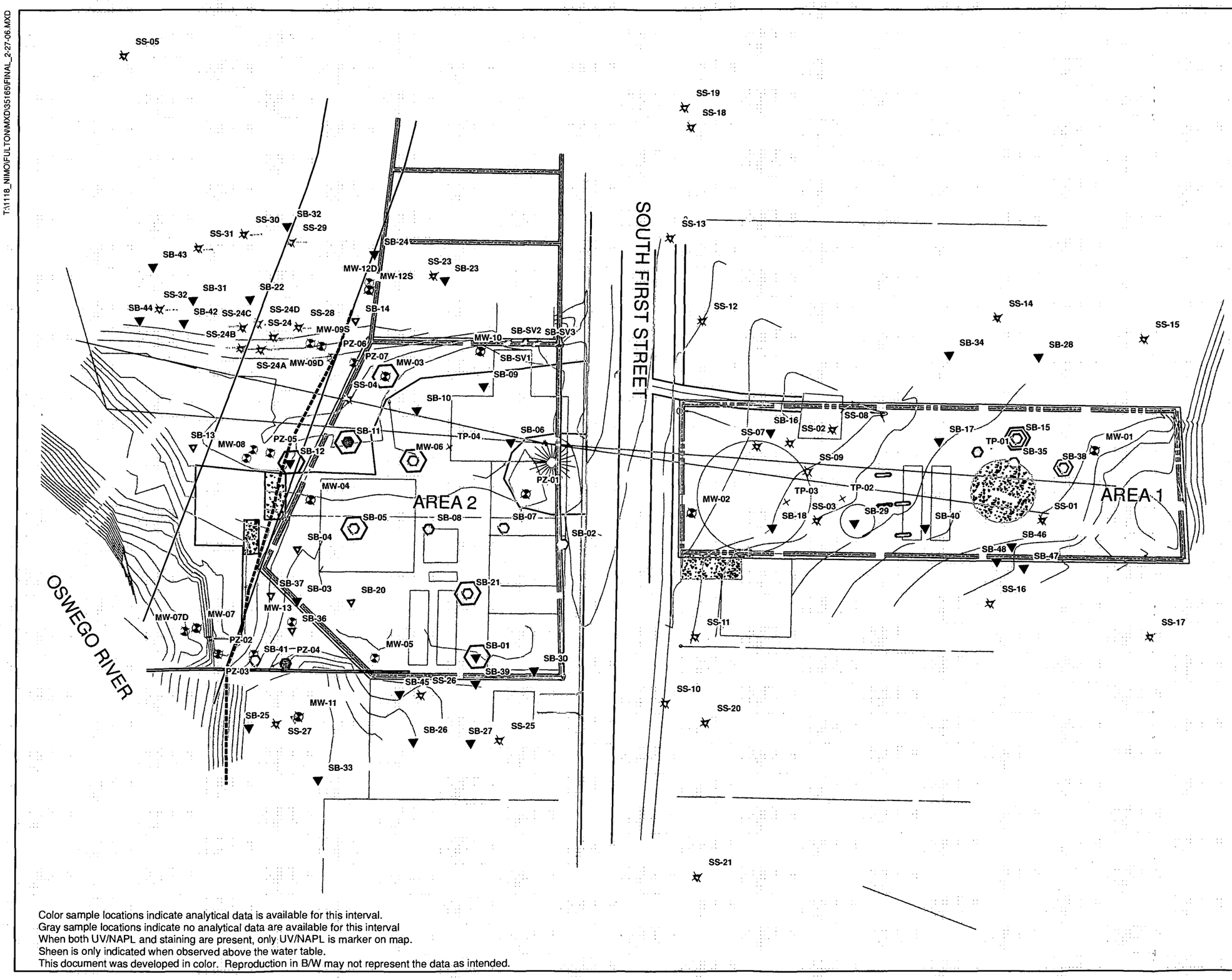
FIGURE 4-3



Color sample locations indicate analytical data is available for this interval.
Gray sample locations indicate no analytical data are available for this interval
When both UV/NAPL and staining are present, only UV/NAPL is marker on map.
Sheen is only indicated when observed above the water table.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- APPROX CANAL BOUNDARY
- SEWER LINE
- PAHs >= 500
- BTEX ABOVE CRITERIA
- UV POSITIVE OR NAPL
- STAIN OR SHEEN

SAMPLE TYPE

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SURFACE SOIL
- TEST PIT

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SOIL SAMPLE LOCATIONS
4-8 FT BGS
TOTAL PAHs >= 500 PPM
BTEX ABOVE CRITERIA

0 25 50 100
Feet

April 2006
1118.35165

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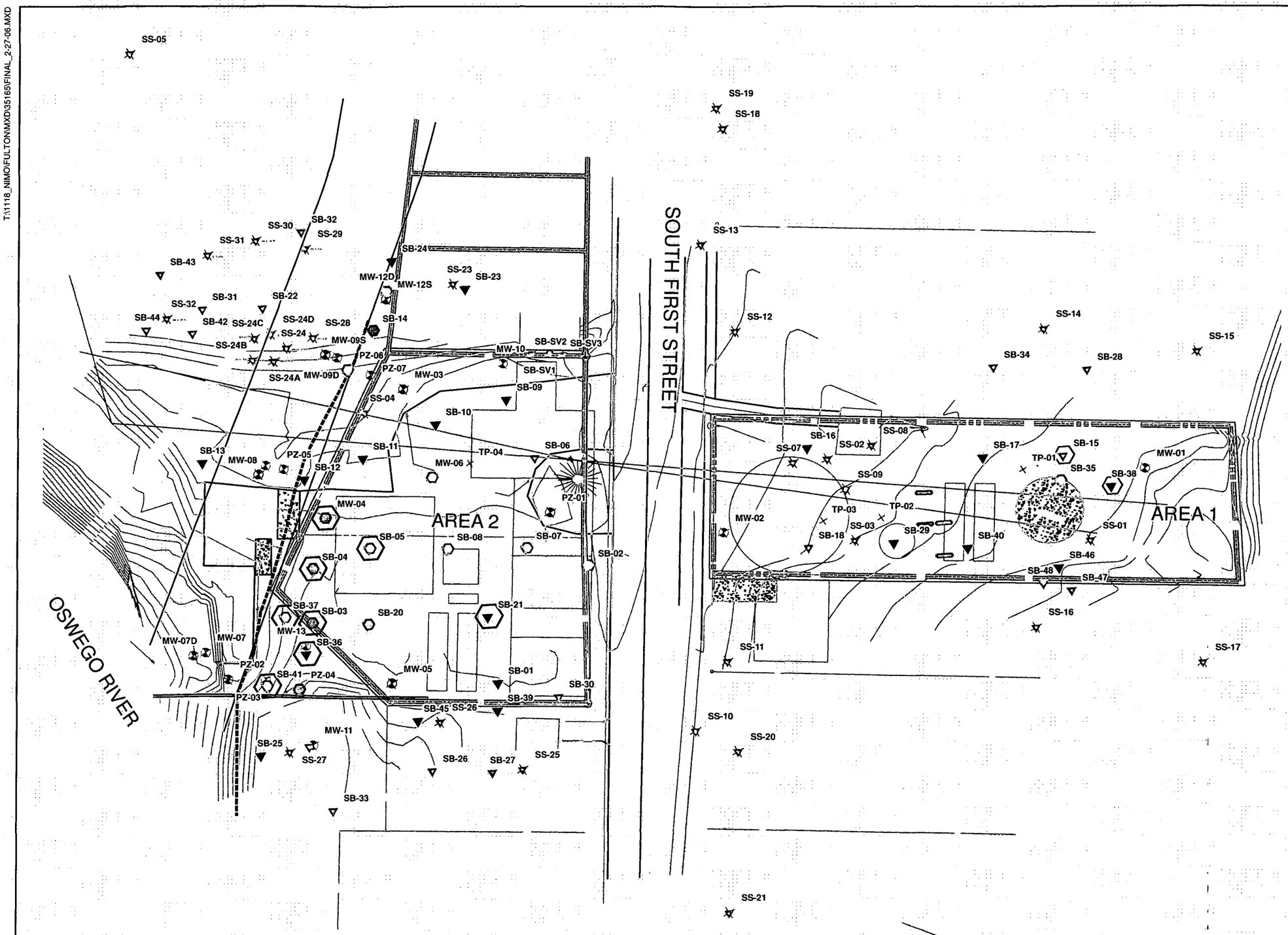
FIGURE 4-4



Color sample locations indicate analytical data is available for this interval.
Gray sample locations indicate no analytical data are available for this interval
When both UV/NAPL and staining are present, only UV/NAPL is marker on map.
Sheen is only indicated when observed above the water table.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- APPROX CANAL BOUNDARY
- SEWER LINE
- PAHs >= 500
- BTEX ABOVE CRITERIA
- UV POSITIVE OR NAPL
- STAIN OR SHEEN

SAMPLE TYPE

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SURFACE SOIL
- TEST PIT

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SOIL SAMPLE LOCATIONS
8-12 FT BGS
TOTAL PAHs >= 500 PPM
BTEX ABOVE CRITERIA

0 25 50 100
Feet

April 2006
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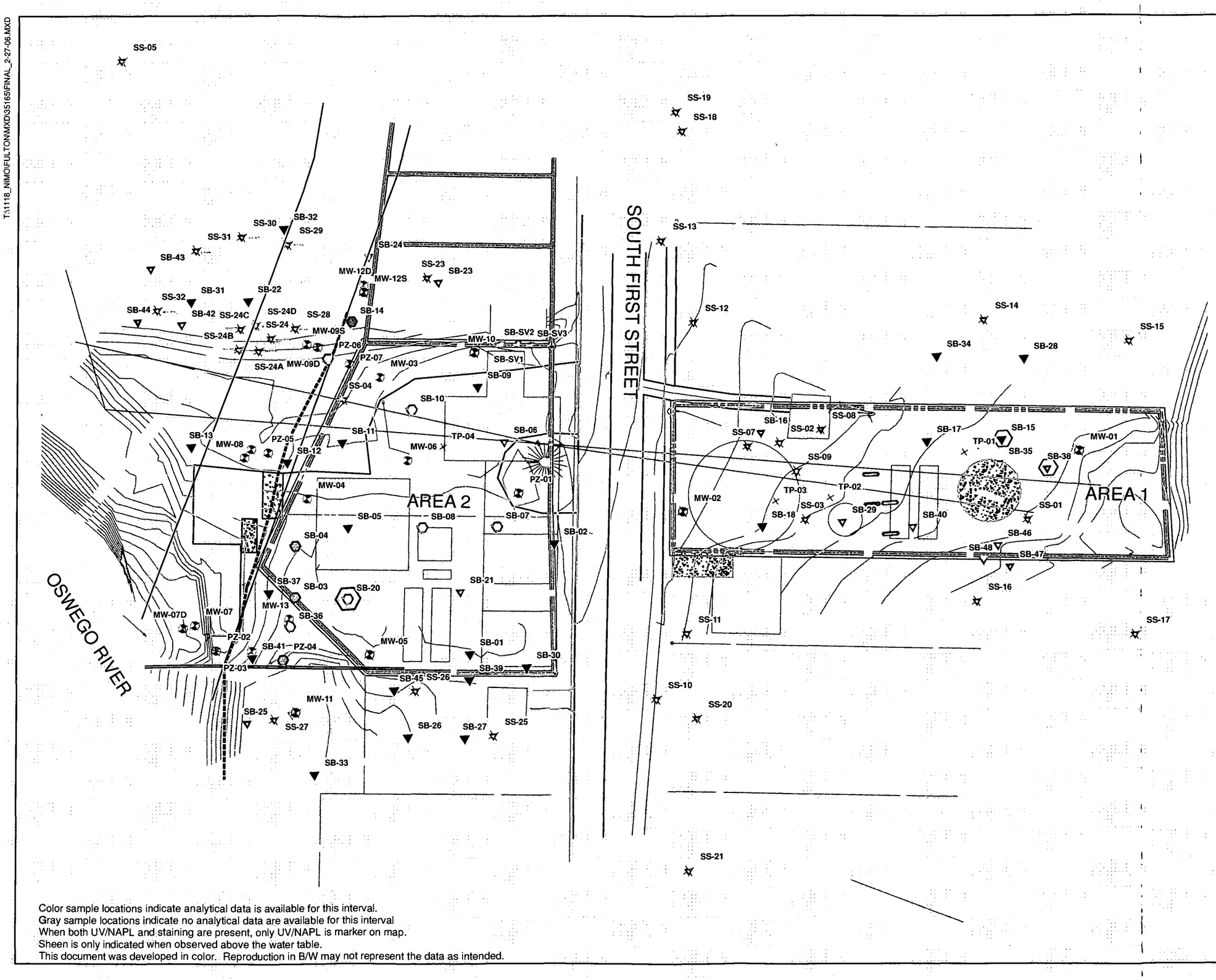
FIGURE 4-5



Color sample locations indicate analytical data is available for this interval.
Gray sample locations indicate no analytical data are available for this interval
When both UV/NAPL and staining are present, only UV/NAPL is marker on map.
Sheen is only indicated when observed above the water table.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- APPROX CANAL BOUNDARY
- SEWER LINE
- PAHs >= 500
- BTEX ABOVE CRITERIA
- UV POSITIVE OR NAPL
- STAIN OR SHEEN

SAMPLE TYPE

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SURFACE SOIL
- TEST PIT

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SOIL SAMPLE LOCATIONS
12-16 FT BGS
TOTAL PAHs >= 500 PPM
BTEX ABOVE CRITERIA

0 25 50 100
Feet

April 2006
1118.35165

O'BRIEN & GERE ENGINEERS, INC.

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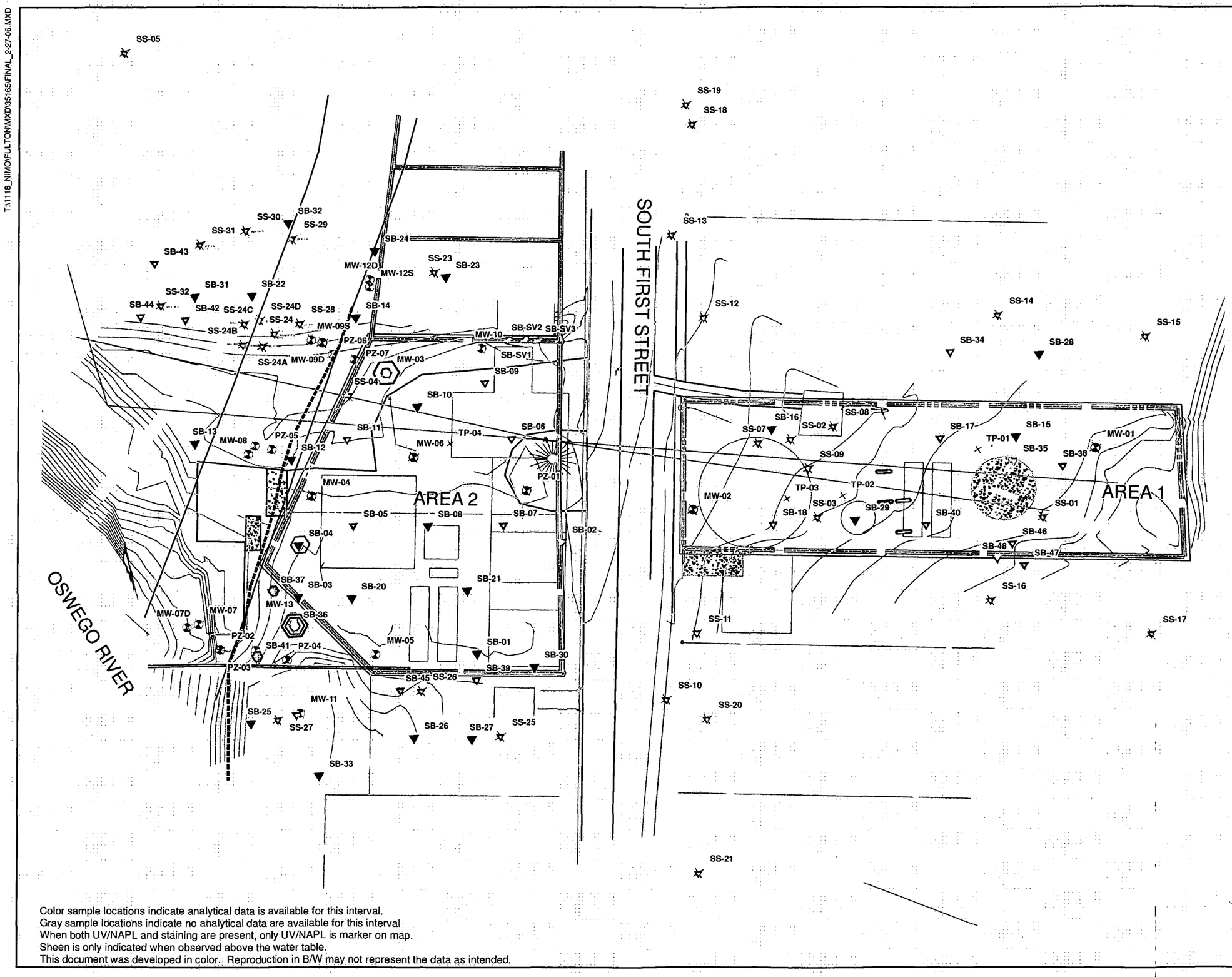
FIGURE 4-6



Color sample locations indicate analytical data is available for this interval.
Gray sample locations indicate no analytical data are available for this interval
When both UV/NAPL and staining are present, only UV/NAPL is marker on map.
Sheen is only indicated when observed above the water table.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- APPROX CANAL BOUNDARY
- SEWER LINE
- PAHs >= 500
- BTEX ABOVE CRITERIA
- UV POSITIVE OR NAPL
- STAIN OR SHEEN

SAMPLE TYPE

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SURFACE SOIL
- TEST PIT

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SOIL SAMPLE LOCATIONS GREATER THAN 16 FT BGS TOTAL PAHs >= 500 PPM BTEX ABOVE CRITERIA

0 25 50 100
Feet

April 2006
1118.35165

O'BRIEN & GERE ENGINEERS, INC.

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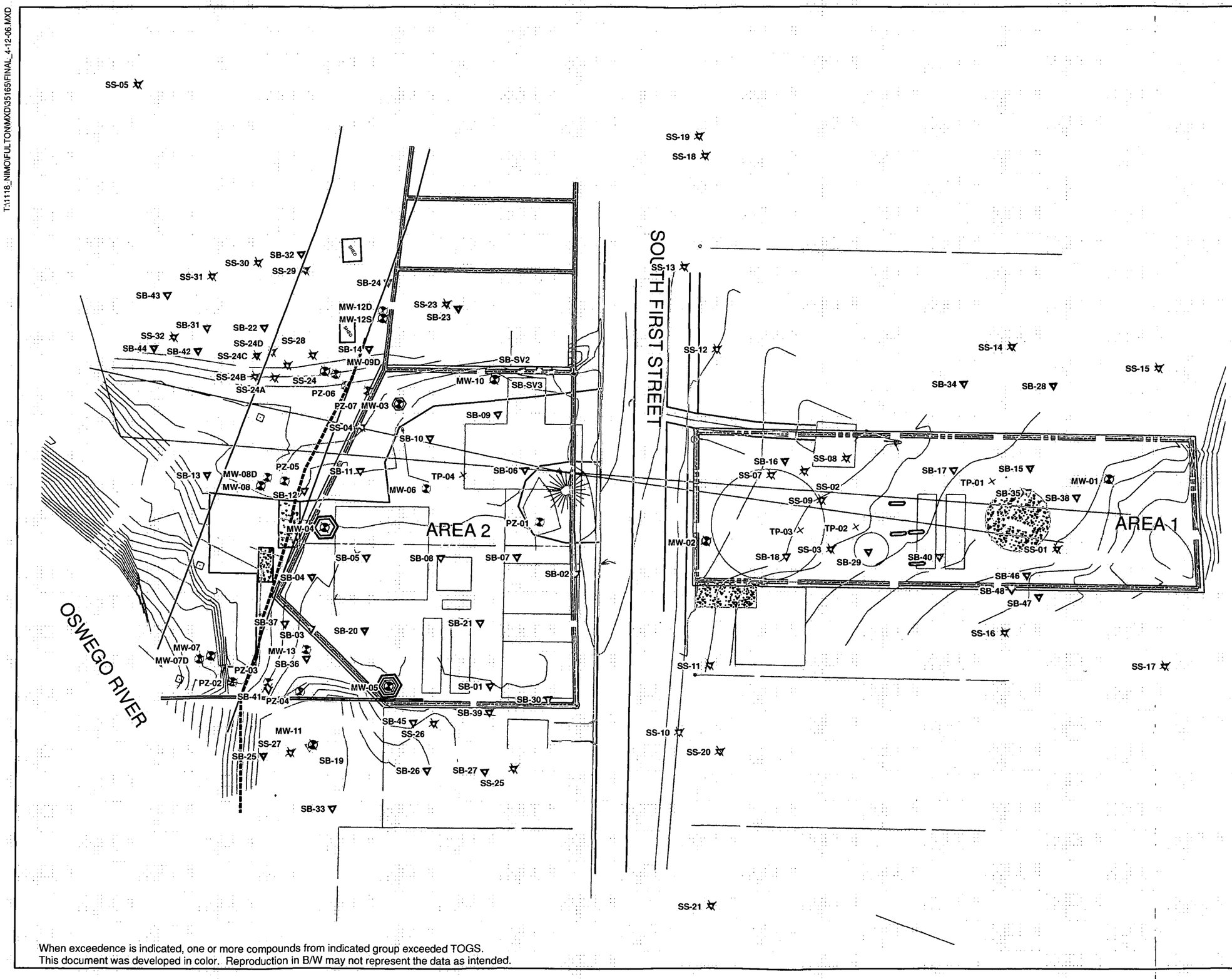
FIGURE 4-7



LEGEND

- ONE OR MORE PAH >= TOGS
- BTEX >= TOGS
- CYANIDE >= TOGS
- APPROX BOUNDARY OF FORMER CANAL
- SEWER LINE
- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SOIL VAPOR
- SURFACE SOIL
- TEST PIT

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

SHALLOW GROUND WATER
SAMPLE DATA
NOVEMBER 2005
PAHs EXCEEDING TOGS
BTEX EXCEEDING TOGS

0 25 50 100
Feet

April 2006
1118.35165

O'BRIEN & GERE ENGINEERS, INC.

When exceedence is indicated, one or more compounds from indicated group exceeded TOGS.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

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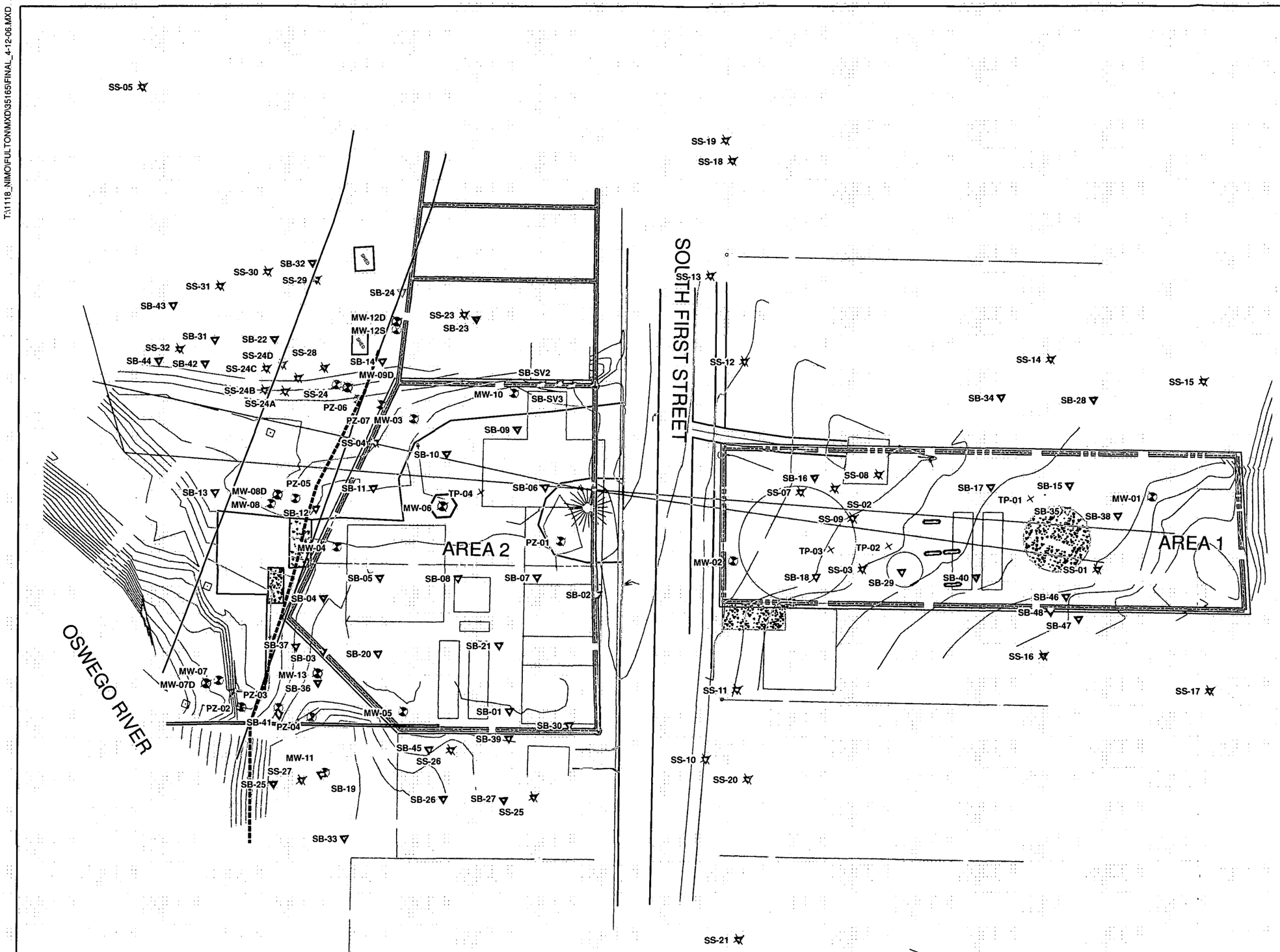
FIGURE 4-8



Well MW-13 was not sampled due to NAPL observed on PVC well material and bailer.
When exceedence is indicated, one or more compounds from indicated group exceeded TOGS.
This document was developed in color. Reproduction in B/W may not represent the data as intended.

LEGEND

- ONE OR MORE PAH >= TOGS
- BTEX >= TOGS
- CYANIDE >= TOGS
- APPROX BOUNDARY OF FORMER CANAL
- SEWER LINE
- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- SOIL VAPOR
- SURFACE SOIL
- TEST PIT

NATIONAL GRID
SOUTH FIRST STREET
FULTON, NEW YORK

DEEP GROUND WATER SAMPLE DATA NOVEMBER 2005 PAHs EXCEEDING TOGS BTEX EXCEEDING TOGS

0 25 50 100
Feet

April 2006
1118.35165

O'BRIEN & GERE ENGINEERS, INC.

O'BRIEN & GERE

Table 2-1
National Grid
Fulton, New York
Subsurface Soil Summary

Sample Location	Sample Date	Sample Interval		Sample Analytes						
		Start Depth (ft)	End Depth (ft)	BTEX	VOCs	PAHs	SVOCs	Metals	Cyanide	Pesticides / PCBs
MW-01	7/9/1996	6	8		X		X	X	X	X
MW-01	7/9/1996	14	16	X		X			X	
MW-01	7/9/1996	24	26	X		X			X	
MW-02	7/9/1996	6	8		X		X	X	X	X
MW-02	7/9/1996	14	16	X		X			X	
MW-02	7/10/1996	20	22	X		X			X	
MW-03	7/12/1996	4	6	X		X			X	
MW-03	7/12/1996	8	10	X		X			X	
MW-03	7/12/1996	18	20	X		X			X	
MW-03	7/12/1996	22	24		X		X	X	X	X
MW-03	7/12/1996	26	28	X		X			X	
MW-04	7/11/1996	0	6	X		X			X	
MW-04	7/11/1996	8	10		X		X	X	X	X
MW-04	7/11/1996	18	20	X		X			X	
MW-04	7/11/1996	26	28	X		X			X	
MW-05	7/11/1996	2	4	X		X			X	
MW-05	7/11/1996	8	10		X		X	X	X	X
MW-05	7/11/1996	15.5	16	X		X			X	
MW-06	6/17/1998	6	8	X		X				
MW-06	6/17/1998	10	12	X		X				
MW-06	6/17/1998	16	18	X		X				
MW-06	6/17/1998	24	24.7	X		X				
MW-06	6/18/1998	32	34	X		X				
MW-07	6/17/1998	4	6	X		X				
MW-08	6/16/1998	8	10	X		X				
MW-09D	6/18/1998	18	20	X		X				
MW-09D	6/18/1998	26	26.9	X		X				
MW-09S	6/16/1998	10	12	X		X				
MW-10	6/17/1998	6	8	X		X				
MW-10	6/17/1998	12	14	X		X				
MW-11	5/10/2001	2	4	X		X				
MW-11	5/10/2001	6	8	X		X				
MW-11	5/10/2001	12	14	X		X				
MW-12	6/24/2004	0	4	X		X				
MW-12	6/24/2004	4	8	X		X				
MW-12	6/24/2004	10	12	X		X				
MW-12	6/24/2004	14	16	X		X				
PZ-01	7/10/1996	6	10		X		X	X	X	X
PZ-01	7/10/1996	14	16	X		X			X	
PZ-01	7/10/1996	24	26	X		X			X	
SB-01	7/12/1996	2	4	X		X			X	
SB-01	7/12/1996	6	8		X		X	X	X	X
SB-01	7/12/1996	12	14	X		X			X	

O'BRIEN & GERE

Table 2-1
National Grid
Fulton, New York
Subsurface Soil Summary

Sample Location	Sample Date	Sample Interval		Sample Analytes						
		Start Depth (ft)	End Depth (ft)	BTEX	VOCs	PAHs	SVOCs	Metals	Cyanide	Pesticides / PCBs
SB-01	7/12/1996	18	20	X		X			X	
SB-01	7/12/1996	26	28	X						
SB-01	7/12/1996	28	30			X			X	
SB-02	2/23/2000	2	4			X				
SB-02	2/23/2000	4	6	X		X				
SB-02	2/23/2000	6	8			X				
SB-02	2/23/2000	8	10			X				
SB-02	2/23/2000	10	12			X				
SB-02	2/23/2000	12	14			X				
SB-03	2/22/2000	6	8			X				
SB-03	2/22/2000	10	12	X		X				
SB-03	2/22/2000	12	14			X				
SB-03	2/22/2000	14	16			X				
SB-03	2/22/2000	18	20			X				
SB-04	2/22/2000	2	4			X				
SB-04	2/22/2000	8	10			X				
SB-04	2/22/2000	10	12			X				
SB-04	2/22/2000	14	16			X				
SB-04	2/22/2000	16	18	X		X				
SB-04	2/22/2000	18	20			X				
SB-05	2/21/2000	4	6			X				
SB-05	2/21/2000	6	8	X		X				
SB-05	2/21/2000	10	12			X				
SB-05	2/21/2000	12	14			X				
SB-05	2/21/2000	14	16			X				
SB-06	2/22/2000	6	8	X		X				
SB-07	2/21/2000	2	4			X				
SB-07	2/21/2000	6	8	X		X				
SB-07	2/21/2000	10	12			X				
SB-07	2/21/2000	12	14			X				
SB-07	2/21/2000	14	16			X				
SB-08	2/21/2000	4	6			X				
SB-08	2/21/2000	6	8	X		X				
SB-08	2/21/2000	10	12			X				
SB-08	2/21/2000	12	14			X				
SB-08	2/21/2000	16	18			X				
SB-09	2/23/2000	2	4	X		X				
SB-09	2/23/2000	4	6			X				
SB-09	2/23/2000	8	10			X				
SB-09	2/23/2000	12	14			X				
SB-10	2/23/2000	4	6			X				
SB-10	2/23/2000	8	10			X				
SB-10	2/23/2000	10	12			X				

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Table 2-1
National Grid
Fulton, New York
Subsurface Soil Summary

Sample Location	Sample Date	Sample Interval		Sample Analytes						
		Start Depth (ft)	End Depth (ft)	BTEX	VOCs	PAHs	SVOCs	Metals	Cyanide	Pesticides / PCBs
SB-10	2/23/2000	12	14			X				
SB-10	2/23/2000	18	20	X		X				
SB-11	2/23/2000	2	4			X				
SB-11	2/23/2000	4	6	X		X				
SB-11	2/23/2000	8	10			X				
SB-11	2/23/2000	14	16	X		X				
SB-12	5/8/2001	4	6	X		X				
SB-12	5/8/2001	8	10	X		X				
SB-12	5/8/2001	12	14	X		X				
SB-12	5/8/2001	18	20	X		X				
SB-13	5/8/2001	2	4	X		X				
SB-13	5/8/2001	8	10	X		X				
SB-13	5/8/2001	14	16	X		X				
SB-13	5/8/2001	18	20	X		X				
SB-14	5/8/2001	2	4	X		X				
SB-14	5/8/2001	8	10	X		X				
SB-14	5/8/2001	12	14	X		X				
SB-14	5/8/2001	16	18	X		X				
SB-15	5/8/2001	2	4	X		X				
SB-15	5/8/2001	6	8	X		X				
SB-15	5/8/2001	12	14	X		X				
SB-15	5/8/2001	18	20.2	X		X				
SB-16	5/9/2001	2	4	X		X				
SB-16	5/9/2001	4	6	X		X				
SB-16	5/9/2001	8	10	X		X				
SB-16	5/9/2001	16	16.7	X		X				
SB-17	5/9/2001	2	4	X		X				
SB-17	5/9/2001	6	8	X		X				
SB-17	5/9/2001	10	12	X		X				
SB-17	5/9/2001	14	14.4	X		X				
SB-18	5/9/2001	0	2	X		X				
SB-18	5/9/2001	6	8	X		X				
SB-18	5/9/2001	14	14.4	X		X				
SB-20	2/11/2002	8	10			X				
SB-20	2/11/2002	14	16			X				
SB-20	2/11/2002	20	22			X				
SB-21	2/11/2002	4	6			X				
SB-21	2/11/2002	8	10			X				
SB-21	2/11/2002	16	18			X				
SB-22	2/12/2002	6	8			X				
SB-22	2/12/2002	12	14			X				
SB-22	2/12/2002	18	20			X				
SB-23	2/12/2002	4	6			X				

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Table 2-1
National Grid
Fulton, New York
Subsurface Soil Summary

Sample Location	Sample Date	Sample Interval		Sample Analytes						
		Start Depth (ft)	End Depth (ft)	BTEX	VOCs	PAHs	SVOCs	Metals	Cyanide	Pesticides / PCBs
SB-23	2/12/2002	10	12			X				
SB-23	2/12/2002	16	18			X				
SB-24	2/12/2002	4	6			X				
SB-24	2/12/2002	10	12			X				
SB-24	2/12/2002	18	20			X				
SB-25	2/13/2002	4	6			X				
SB-25	2/13/2002	10	12			X				
SB-25	2/13/2002	18	20			X				
SB-26	2/13/2002	4	6			X				
SB-26	2/13/2002	12	14			X				
SB-26	2/13/2002	18	20			X				
SB-27	2/13/2002	4	6			X				
SB-27	2/13/2002	12	14			X				
SB-27	2/13/2002	18	20			X				
SB-28	2/14/2002	4	6			X				
SB-28	2/14/2002	12	14			X				
SB-28	2/14/2002	18	20			X				
SB-29	2/14/2002	4	6			X				
SB-29	2/14/2002	10	12			X				
SB-29	2/14/2002	16	18			X				
SB-30	2/14/2002	6	8			X				
SB-30	2/14/2002	12	14			X				
SB-30	2/14/2002	18	20			X				
SB-31	2/15/2002	4	6			X				
SB-31	2/15/2002	12	14			X				
SB-31	2/15/2002	18	20			X				
SB-32	2/15/2002	6	8			X				
SB-32	2/15/2002	12	14			X				
SB-32	2/15/2002	18	20			X				
SB-33	2/15/2002	4	6			X				
SB-33	2/15/2002	12	14			X				
SB-33	2/15/2002	18	20			X				
SB-34	6/6/2003	2	4			X				
SB-34	6/6/2003	6	8			X				
SB-34	6/6/2003	14	16			X				
SB-35	6/14/2004	2	4	X		X				
SB-35	6/14/2004	6	8	X		X				
SB-35	6/14/2004	8	10	X		X				
SB-36	6/15/2004	8	10	X		X				

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Table 2-1
National Grid
Fulton, New York
Subsurface Soil Summary

Sample Location	Sample Date	Sample Interval		Sample Analytes						
		Start Depth (ft)	End Depth (ft)	BTEX	VOCs	PAHs	SVOCs	Metals	Cyanide	Pesticides / PCBs
SB-36	6/15/2004	14	16	X		X				
SB-36	6/15/2004	16	18	X		X				
SB-36	6/15/2004	22	24	X		X				
SB-37	6/15/2004	10	12	X		X				
SB-37	6/15/2004	14	16	X		X				
SB-37	6/15/2004	18	20	X		X				
SB-37	6/15/2004	26	28	X		X				
SB-38	6/16/2004	2	4	X		X				
SB-38	6/16/2004	4	8	X		X				
SB-38	6/16/2004	8	12	X		X				
SB-39	6/16/2004	0	4	X		X				
SB-39	6/16/2004	6	8	X		X				
SB-39	6/16/2004	10	12	X		X				
SB-39	6/16/2004	12	16	X		X				
SB-40	6/17/2004	0	2	X		X				
SB-40	6/17/2004	4	8	X		X				
SB-40	6/17/2004	10	12	X		X				
SB-41	6/18/2004	8	12	X		X				
SB-41	6/18/2004	12	16	X		X				
SB-41	6/18/2004	16	20	X		X				
SB-41	6/18/2004	30	34	X		X				
SB-42	6/23/2004	0	4			X				
SB-42	6/23/2004	4	8			X				
SB-43	6/23/2004	0	4			X				
SB-43	6/23/2004	4	8			X				
SB-44	6/23/2004	0	4			X				
SB-44	6/23/2004	4	8			X				
SB-45	6/24/2004	2	4	X		X				
SB-45	6/24/2004	4	8	X		X				
SB-45	6/24/2004	8	12	X		X				
SB-45	6/24/2004	12	16	X		X				
SB-46	6/24/2004	0	4	X		X				
SB-46	6/24/2004	4	8	X		X				
SB-46	6/24/2004	8	12	X		X				
SB-47	10/14/2005	0	2	X		X				
SB-47	10/14/2005	2	4	X		X				
SB-47	10/14/2005	4	6	X		X				
SB-48	10/14/2005	0	2	X		X				
SB-48	10/14/2005	2	4	X		X				
TP-01	7/8/1996			X		X			X	
TP-02	7/8/1996			X		X			X	
TP-03	7/8/1996			X		X			X	
TP-04	7/8/1996			X		X			X	

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Table 2-2
National Grid
Fulton, NY
Monitoring Well Specifications

Well No.	Ground Elevation (ft)	Top of PVC Casing Elevation (ft)	Well Depth (ft bgs)	Screen interval (ft bgs)	Sump interval (ft bgs)	Hydraulic Conductivity (ft/day)[1]	Ground Water Elevations (ft)							
							7/24/1996	9/4/1996	7/16/1998	8/4/1999	5/31/2001	7/7/2004	11/5/2005	3/31/2006
MW-1	367.20	369.69	17	5 - 15	15 - 17	0.54*	365.43	363.91	364.70	363.05	365.03	364.19	365.75	365.65
MW-2	361.00	360.80	15	2.5 - 12.5	13 - 15	-	357.64	356.43	357.05	355.06	357.65	355.77	357.10	357.32
MW-3	358.70	361.13	16	4 - 14	14 - 16	3.31	350.10	349.21	349.73	349.01	350.15	349.57	350.91	350.80
MW-4	360.00	359.74	16	4 - 14	14 - 16	-	351.88	350.92	351.54	350.76	352.14	351.61	352.96	352.72
MW-5	359.70	359.51	16	4 - 14	14 - 16	-	352.53	351.39	352.03	351.65	352.71	352.23	353.28	352.98
MW-6	359.39	359.00	37	27 - 37	NI	0.1*	-	-	351.84	351.25	352.16	351.64	352.49	352.19
MW-7	359.00	361.33	14	4 - 14	NI	0.57* and 0.95	-	-	352.43	351.99	352.84	352.62	353.74	353.28
MW-7D	358.10	360.13	28	23 - 28	NI	4.39	-	-	-	-	-	351.82	352.17	352.25
MW-8	358.70	360.78	16	6 - 16	NI	1.23	-	-	351.35	350.29	351.94	351.26	353.01	352.64
MW-8D	358.60	360.14	33	28 - 33	NI	0.1	-	-	-	-	-	350.52	351.58	351.37
MW-9	356.10	357.04	16	6 - 16	NI	0.97* and 0.81	-	-	348.48	347.60	348.67	348.37	349.85	349.72
MW-9D	356.40	358.21	30	20 - 30	NI	0.04*	-	-	347.64	347.15	347.90	347.70	348.55	348.17
MW-10	359.51	359.15	15	5 - 15	NI	-	-	-	351.24	350.39	351.46	350.88	351.71	351.48
MW-11	flush	354.41	12.5	2.5 - 12.5	NI	-	-	-	-	-	352.30	351.61	353.19	352.89
MW-12S	flush	353.91	16	6 - 16	NI	0.49	-	-	-	-	-	348.67	349.72	349.46
MW-12D	flush	353.34	28	23 - 28	NI	1.14	-	-	-	-	-	346.29	347.31	346.82
MW-13	flush	359.46	26	19 - 24	24 - 26	-	-	-	-	-	-	-	352.67	352.36
PZ-1	360.19	359.88	16	3.5 - 13.5	NI	-	354.49	353.59	-	353.24	354.49	-	354.48	354.38
PZ-2	flush	358.3	14	4 - 14	NI	-	-	-	-	-	-	-	353.36	353.20
PZ-3	flush	359.06	14	4 - 14	NI	-	-	-	-	-	-	-	353.18	352.93
PZ-4	flush	359.02	14	4 - 14	NI	-	-	-	-	-	-	-	353.19	352.92
PZ-5	358.3	360.49	14	4 - 14	NI	-	-	-	-	-	-	-	352.90	352.62
PZ-6	357.2	359.16	16	6 - 16	NI	-	-	-	-	-	-	-	353.13	351.12
PZ-7	357.8	359.67	16	6 - 16	NI	-	-	-	-	-	-	-	350.90	350.73

Notes:
[1]- K-tests were performed in 1998 and 2004. Some locations were tested twice. Results from 1998 testing are marked with an asterisks.
- Dash indicates no data collected.
NI - Not installed

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Table 4-1
National Grid
Fulton, New York
Surface Soil Samples - Volatile Organic Compounds

Chemical Name	Action Level [1]	Location ID	Sample Date	Depth Interval (ft)	Sample Type
		SS-01	7/10/1996	0 - 0.17	N
		SS-01	7/10/1996	0 - 2	N
		SS-02	7/10/1996	0 - 0.17	N
		SS-02	7/10/1996	0 - 2	N
		SS-03	7/11/1996	0 - 0.17	N
		SS-03	7/11/1996	0 - 2	N
		SS-04	7/11/1996	0 - 0.17	N
1,1,1-Trichloroethane	0.8	0.01 U	0.01 U	0.01 U	0.00082 J	0.01 U	0.01 U	0.01 U
Benzene	0.06	0.00072 J	0.00087 J	0.00089 J	0.0017 J	0.01 U	0.01 U	0.01 U
Toluene	1.5	0.01 U	0.00085 J	0.01 U	0.0013 J	0.01 U	0.01 U	0.01 U
Xylenes, Total	1.2	0.01 U	0.01 U	0.01 U	0.00066 J	0.01 U	0.01 U	0.01 U
Total BTEX	NC	0.00072	0.00172	0.00089	0.00366	ND	ND	ND

Chemical Name	Action Level [1]	Location ID	Sample Date	Depth Interval (ft)	Sample Type
		SS-04	7/11/1996	0 - 2	N
		SS-10	5/14/2001	0 - 0.17	N
		SS-11	5/14/2001	0 - 0.17	N
		SS-12	5/14/2001	0 - 0.17	N
		SS-13	5/14/2001	0 - 0.17	N
		SS-14	5/14/2001	0 - 0.17	FD
		SS-14	5/14/2001	0 - 0.17	N
1,1,1-Trichloroethane	0.8	0.01 U	---	---	---	---	---	---
Benzene	0.06	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Toluene	1.5	0.01 U	0.01 U	0.01 U	0.0008 J	0.01 U	0.002 J	0.01 U
Xylenes, Total	1.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Total BTEX	NC	ND	ND	ND	0.0008	ND	0.002	ND

					Background Samples	
Chemical Name	Action Level [1]	Location ID	Sample Date	Depth Interval (ft)	Sample Type
		SS-15	5/14/2001	0 - 0.17	N
		SS-16	5/14/2001	0 - 0.17	N
		SS-17	5/14/2001	0 - 0.17	N
		SS-05	7/11/1996	0 - 0.17	N
		SS-06	7/11/1996	0 - 0.17	N
1,1,1-Trichloroethane	0.8	---	---	---	0.01 U	0.01 U
Benzene	0.06	0.01 U	0.01 U	0.01 U	0.01 U	0.0037 J
Toluene	1.5	0.01 U	0.01 U	0.002 J	0.01 U	0.0026 J
Xylenes, Total	1.2	0.01 U	0.01 U	0.01 U	0.01 U	0.00077 J
Total BTEX	NC	ND	ND	0.002	ND	0.00707

Notes:
Hits only table
Units are in mg/kg (miiligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-2
National Grid
Fulton, New York
Surface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Action Level[1]	Location ID	SS-01	SS-01	SS-02	SS-02	SS-03	SS-03	SS-04	SS-04	SS-10	SS-11	SS-12	SS-13	SS-14	SS-14	SS-15
		Sample Date	7/10/1996	7/10/1996	7/10/1996	7/10/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	5/14/2001	5/14/2001	5/14/2001	5/14/2001	5/14/2001	5/14/2001	5/14/2001
		Depth Interval (ft)	0 - 0.17	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N
2-Methylnaphthalene	36.4		0.005 J	0.45 U	0.013 J	40.00 U	0.39 U	0.005 J	3.70 U	0.059 J	0.38 U	0.083 J	0.11 J	0.096 J	0.068 J	0.52 U	0.59 U
Acenaphthene	50		0.46 U	0.005 J	0.41 U	40.00 U	0.005 J	0.40 U	3.70 U	3.60 U	0.056 J	0.42 U	0.051 J	0.084 J	2.60 U	0.52 U	0.59 U
Acenaphthylene	50		0.043 J	0.026 J	0.41	40.00 U	0.004 J	0.014 J	0.08 J	0.19 J	0.38 U	0.26 J	0.093 J	0.076 J	0.24 J	0.056 J	0.069 J
Anthracene	50		0.039 J	0.028 J	0.034 J	40.00 U	0.021 J	0.013 J	0.064 J	0.26 J	0.14 J	0.19 J	0.18 J	0.27 J	2.3	0.09 J	0.59 U
Benz(a)anthracene*	0.224		**3**	**1.6**	**2**	**1.6 J**	**0.6**	**0.8**	**5.1**	**14**	**0.44**	**1.3**	**0.8**	**1.2**	**6.6**	**0.31 J**	**0.27 J**
Benzo(a)pyrene*	0.061		**4**	**1.9**	**3.2**	**2.8 J**	**0.63**	**0.96 J**	**7.5 J**	**19**	**0.41**	**1.5**	**0.81**	**1.1**	**5.3**	**0.36 J**	**0.26 J**
Benzo(b)fluoranthene*	0.22		**6**	**3.4**	**5.6**	**50**	**0.88**	**2.2 J**	**12 J**	**22**	**0.68**	**2.6**	**1.4**	**1.9**	**7.3**	**0.61**	**0.41 J**
Benzo(g,h,i)perylene	50		4.7	1.3	4.3	1.8 J	1.4	0.81 J	4.9 J	11	0.099 J	0.52	0.29 J	0.37 J	1.8	0.15 J	0.11 J
Benzo(k)fluoranthene*	0.22		**1.6**	**1.1**	**2.1**	**1.9 J**	0.027 J	**0.72 J**	**0.29 J**	**8.2**	0.21 J	**0.91**	**0.43 J**	**0.52**	**3.2**	0.19 J	0.14 J
Carbazole	NC		0.007 J	0.009 J	0.009 J	40.00 U	0.004 J	0.005 J	3.70 U	0.09 J	---	---	---	---	---	---	---
Chrysene*	0.4		**4.5**	**2.1**	**3**	**2.6 J**	**0.69**	**0.99**	**5.1**	**14**	**0.46**	**1.4**	**0.93**	**1.2**	**6**	0.37 J	0.31 J
Dibenz[a,h]anthracene*	0.0143		0.46 U	0.45 U	0.41 U	40.00 U	0.39 U	0.40 UJ	3.70 UJ	3.60 U	0.38 U	**0.16 J**	**0.1 J**	**0.11 J**	**0.52 J**	0.52 U	0.59 U
Dibenzofuran	6.2		0.46 U	0.006 J	0.007 J	40.00 U	0.39 U	0.40 U	3.70 U	0.062 J	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1		0.46 U	0.45 U	0.41 U	40.00 U	0.009 J	0.015 J	3.70 U	3.60 U	---	---	---	---	---	---	---
Fluoranthene	50		5.7	2.2	2.1	2.3 J	1.3	1	7.1	19	0.9	2	1.6	2.1	12	0.56	0.49 J
Fluorene	50		0.013 J	0.013 J	0.007 J	40.00 U	0.009 J	0.40 U	3.70 U	0.067 J	0.06 J	0.057 J	0.058 J	0.088 J	0.23 J	0.52 U	0.59 U
Indeno (1,2,3-cd)pyrene*	3.2		**4.4**	1.2	**4.2**	2.1 J	0.027 J	0.82 J	**4.5**	**11**	0.11 J	0.55	0.32 J	0.38 J	1.7	0.14 J	0.11 J
Naphthalene	13		0.016 J	0.007 J	0.035 J	40.00 U	0.39 U	0.011 J	0.091 J	0.16 J	0.38 U	0.11 J	0.091 J	0.081 J	0.12 J	0.52 U	0.59 U
Phenanthrene	50		2.1	1.3	1.1	0.8 J	0.81	0.51	0.22 J	7.9	0.69	0.87	0.93	1.2	7.7	0.34 J	0.15 J
Pyrene	50		8.2	3.6	3.2	2.3 J	1.2	1.8	7.6	22	0.99	3	1.6	2.3	18	0.75	0.52 J
Total CPAH*	11.24*		**23.5**	**11.3**	**20.1**	**61**	2.854	6.49	**34.49**	**88.2**	2.31	8.42	4.79	6.41	**30.62**	1.98	1.5
Total PAH	24.25*		**44.316**	19.779	**31.299**	**68.2**	7.603	10.653	**54.545**	**148.836**	5.245	15.51	9.793	13.075	**73.078**	3.926	2.839

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
** Highest Background Value
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Fieid Duplicate

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Table 4-2
National Grid
Fulton, New York
Surface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Action Level[1]	SS-16 5/14/2001 0 - 0.17 N	SS-17 5/14/2001 0 - 0.17 N	SS-23 4/16/2002 0 - 0.17 N	SS-24 4/16/2002 0 - 0.17 N	SS-24A 6/25/2004 0 - 0.17 FD	SS-24A 6/25/2004 0 - 0.17 N	SS-24B 6/25/2004 0 - 0.17 N	SS-24C 6/25/2004 0 - 0.17 N	SS-24D 6/25/2004 0 - 0.17 N	SS-25 4/16/2002 0 - 0.17 N	SS-26 4/16/2002 0 - 0.17 FD	SS-26 4/16/2002 0 - 0.17 N	SS-27 4/16/2002 0 - 0.17 N	SS-28 12/29/2005 0 - 0.17 N	SS-29 12/29/2005 0 - 0.17 N
2-Methylnaphthalene	36.4	0.36 U	0.44 U	.1 J	.22 J	.092	.089 J	.066 J	.97 J	4.5 U	.14 J	.46 U	.45 U	.078 J	.058 J	.45 U
Acenaphthene	50	0.36 U	0.44 U	.13 J	.18 J	.079	.12 J	.057 J	4.2 U	.48 J	.45 U	.46 U	.45 U	.056 J	.22 J	.19 J
Acenaphthylene	50	0.36 U	0.048 J	.41 U	1.4	.15	.14 J	.23 J	2.2 J	5.4	.25 J	.15 J	.15 J	.56	.065 J	.051 J
Anthracene	50	0.36 U	0.44 U	.4 J	.78 J	.27	.35 J	.25 J	2 J	3.4 J	.18 J	.11 J	.092 J	.38 J	.53 J	.5
Benz(a)anthracene*	0.224	0.069 J	0.14 J	**1.1**	**4.2**	**1.6**	**1.8**	**1.5**	**11**	**22**	**1.1**	**0.55**	**0.46**	**1.9**	**1.6 J**	**1.8**
Benzo(a)pyrene*	0.061	0.051 J	**0.14 J**	**0.98**	**5.3**	**1.8**	**2**	**1.8**	**12**	**23**	**1.2**	**0.67**	**0.56**	**2.3**	**1.6 J**	**1.8 J**
Benzo(b)fluoranthene*	0.22	0.08 J	**0.26 J**	**1.4**	**8.9**	**1.9**	**2.2**	**1.9**	**14**	**33**	**2.4**	**1.2**	**0.98**	**4**	**2.2 J**	**2.8 J**
Benzo(g,h,i)perylene	50	0.36 U	0.062 J	.37 J	2.7	.88	.93	1	6.3	16	.59	.34 J	.29 J	1.2	.83 J	.97 J
Benzo(k)fluoranthene*	0.22	0.36 U	0.076 J	**0.53**	**3.3**	**1.9**	**2**	**1.7**	**13**	**33**	**0.64**	**.34 J**	**.29 J**	**1.3**	**.85 J**	**.83 J**
Carbazole	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	.19 J	.15 J
Chrysene*	0.4	0.066 J	0.17 J	**1.1**	**4.2**	**1.8**	**2**	**1.7**	**12**	**25**	**1.3**	**0.58**	**0.52**	**2.1**	**1.6 J**	**1.8**
Dibenz[a,h]anthracene*	0.0143	0.36 U	0.44 U	**.13 J**	**.71 J**	**0.26**	**.28 J**	**.26 J**	**1.7 J**	**4.1 J**	**.17 J**	**.096 J**	**.08 J**	**.28 J**	**.22 J**	**.27 J**
Dibenzofuran	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	0.13 J	0.23 J	2.4	6.4	2.9	3.4	2.7	20	36	2	.98	.85	3.3	3.1 J	3.2
Fluorene	50	0.36 U	0.44 U	.12 J	.2 J	.094	.13 J	.058 J	.5 J	.46 J	.45 U	.46 U	.45 U	.1 J	.2 J	.16 J
Indeno (1,2,3-cd)pyrene*	3.2	0.36 U	0.063 J	.35 J	2.7	.82	.88	.89	**6.2**	**16**	.61	.32 J	.28 J	1.1	.52 J	.52 J
Naphthalene	13	0.36 U	0.44 U	.071 J	.49 J	.11	.15 J	.15 J	2.4 J	1.4 J	.15 J	.054 J	.061 J	.13 J	.075 J	.047 J
Phenanthrene	50	0.11 J	0.095 J	1.7	2.5	1.4	1.8	1.2	8.3	12	.78	.4 J	.34 J	1.4	2.1 J	1.9
Pyrene	50	0.12 J	0.25 J	2.2	6.5	3.7	3.9	3.4	22	40	2	1.1	.91	4	3.4 J	4.2
Total CPAH*	11.24*	0.266	0.849	5.59	**29.3**	10.1	11.2	9.75	**69.9**	**156**	7.42	3.76	3.17	**13**	8.59	9.82
Total PAH	24.25*	0.626	1.534	13.1	**50.7**	19.8	22.2	18.9	**135**	**271**	13.5	6.89	5.86	24.2	19.2	21

Notes:
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* Carcinogenic PAHs
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Table 4-2
National Grid
Fulton, New York
Surface Soil Samples - Semivolatile Organic Compounds

					Background Samples						
	Location ID	SS-30	SS-31	SS-32	SS-05	SS-06	SS-18	SS-19	SS-20	SS-21	SS-22
	Sample Date	12/29/2005	12/29/2005	12/29/2005	7/11/1996	7/11/1996	4/16/2002	4/16/2002	4/16/2002	4/16/2002	4/16/2002
	Depth Interval (ft)	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17
	Sample Type	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level[1]										
2-Methylnaphthalene	36.4	.063 J	.46 U	.21 J	0.37 U	0.39 U	.048 J	.43 U	2.2 U	.14 J	.15 J
Acenaphthene	50	.17 J	.071 J	.77	0.37 U	0.39 U	.056 J	.43 U	2.2 U	.14 J	.1 J
Acenaphthylene	50	.22 J	.14 J	.87	0.37 U	0.39 U	.1 J	.43 U	2.2 U	.098 J	.097 J
Anthracene	50	.5	.26 J	2.1	0.37 U	0.39 U	.3 J	.09 J	2.2 U	.44 J	.29 J
Benz(a)anthracene*	0.224	**1.8**	**1.2**	**6.8 J**	0.009 J	0.018 J	**2**	**.41 J**	**.67 J**	**2**	**1.3**
Benzo(a)pyrene*	0.061	**1.9 J**	**1.2 J**	**6.1 J**	0.009 J	0.017 J	**2**	**.41 J**	**.77 J**	**2**	**1.4**
Benzo(b)fluoranthene*	0.22	**3.1 J**	**2.1 J**	**11 J**	0.017 J	0.027 J	**2.9**	**0.57**	**1.2 J**	**3.1**	**2.3**
Benzo(g,h,i)perylene	50	1.1 J	.75 J	4.2 J	0.018 J	0.006 J	.78	.28 J	.35 J	.83	.57
Benzo(k)fluoranthene*	0.22	**1 J**	**.66 J**	**4 J**	0.005 J	0.011 J	**1**	.22 J	**.33 J**	**1**	**0.68**
Carbazole	NC	.18 J	.13 J	.71	0.37 U	0.39 U	---	---	---	---	---
Chrysene*	0.4	**2**	**1.2**	**6.8 J**	0.011 J	0.02 J	**2**	**.42 J**	**.83 J**	**2.1**	**1.5**
Dibenz[a,h]anthracehe*	0.0143	**.29 J**	**.2 J**	**1.2 J**	0.37 U	0.39 U	**.26 J**	**.079 J**	2.2 U	**.24 J**	**.16 J**
Dibenzofuran	6.2	---	---	---	0.37 U	0.39 U	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	0.009 J	0.006 J	---	---	---	---	---
Fluoranthene	50	3.3	2.2	13	0.02 J	0.41	3.4	.81	1.4 J	4.6	2.8
Fluorene	50	.17 J	.082 J	.72	0.37 U	0.39 U	.07 J	.43 U	2.2 U	.15 J	.09 J
Indeno (1,2,3-cd)pyrene*	3.2	.59 J	.38 J	2.5 J	0.005 J	0.006 J	.78	.26 J	.34 J	.8	.55
Naphthalene	13	.093 J	.06 J	.53	0.37 U	0.39 U	.048 J	.43 U	2.2 U	.11 J	.11 J
Phenanthrene	50	2	1.1	7.3	0.01 J	0.02 J	1.2	.4 J	.69 J	2.5	1.5
Pyrene	50	4.2	2.7	11 J	0.015 J	0.033 J	2.9	.7	1.3 J	4	2.6
Total CPAH*	11.24*	10.7	6.94	**38.4**	0.056	0.099	10.9	2.37	4.14	11.24**	7.89
Total PAH	24.25*	22.5	14.3	**79.1**	0.119	0.568	19.8	4.65	7.88	24.25**	16.2

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-3
National Grid
Fulton, New York
Surface Soil Samples - Metals

Chemical Name	Location ID / Sample Date / Depth Interval (ft) / Sample Type / Action Level [1]	SS-01 7/10/1996 0 - 2 N	SS-01 7/10/1996 0 - 0.17 N	SS-02 7/10/1996 0 - 0.17 N	SS-02 7/10/1996 0 - 2 N	SS-03 7/11/1996 0 - 0.17 N	SS-03 7/11/1996 0 - 2 N	SS-04 7/11/1996 0 - 0.17 N	SS-04 7/11/1996 0 - 2 N	SS-10 5/14/2001 0 - 0.17 N	SS-11 5/14/2001 0 - 0.17 N
Aluminum	SB	9600	7400	6100	3900	7100	7400	5800	5900	6280	7840
Antimony	SB	16.00 UJ	17.00 UJ	15.00 UJ	15.00 UJ	14.00 UJ	14.00 UJ	13.00 UJ	13.00 UJ	0.24 J	0.35 J
Arsenic	7.5 or SB	4	5	4	**9**	4	6	5	6	3.2	**8.9**
Barium	300 or SB	70	60	70	100	60	80	60	70	41.2	79.1
Beryllium	0.16 (HEAST) or SB	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	**0.28 J**	**0.35 J**
Cadmium	1 or SB	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.23 J	0.28 J
Calcium	SB	2200 J	4800 J	4100 J	3100 J	4000 J	2000 J	23000 J	20000 J	1520	2300
Chromium	10 or SB	**13**	9	10	**11**	9	10	10	9	8	9.8
Cobalt	30 or SB	10.00 U	10.00 U	10.00 U	10.00 U	10.00 U	10.00 U	10.00 U	10.00 U	3.2 J	3.3 J
Copper	25 or SB	16	24	**32**	**62**	**27**	**35**	**41**	**42**	13	20.2
Iron	2,000 or SB	**14000 J**	**15000 J**	**16000 J**	**24000 J**	**13000 J**	**16000 J**	**13000 J**	**14000 J**	**10600**	**13300**
Lead	SB	27 J	48 J	50 J	120 J	69 J	120 J	150 J	90 J	26.6	89.8
Magnesium	SB	1500	2400	2400	1200	2300	1400	3000	2900	1400	1500
Manganese	SB	240 J	510 J	420 J	280 J	330 J	220 J	400 J	440 J	258	306
Mercury	0.1	0.1	**0.2**	**0.2**	**0.7**	0.10 U	0.1	**1.1**	**0.5**	0.091 J	**0.22**
Nickel	13 or SB	10.00 UJ	10.00 UJ	10.00 UJ	10 J	10.00 UJ	10.00 UJ	10 J	9 J	7.1	8.7
Potassium	SB	1400.00 U	1400.00 U	1200.00 U	1200.00 U	1200.00 U	1200.00 U	1100.00 U	1100.00 U	473 J	571 J
Selenium	2 or SB	1	1	2	**3**	1	2	1.00 U	1.00 U	0.33 J	0.7
Silver	SB	3.00 U	3.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	0.08 U	0.09 U
Sodium	SB	300.00 U	300.00 U	200.00 U	200.00 U	200.00 U	200.00 U	200.00 U	200.00 U	45 J	31.5 J
Thallium	SB	1.00 UJ	1.00 UJ	1.00 UJ	1.00 UJ	1.00 UJ	1.00 UJ	1.00 UJ	1.00 UJ	1.1 J	0.45 U
Vanadium	150 or SB	20	10	10	20	10	10	10	10	12.3	16.6
Zinc	20 or SB	**53 J**	**63 J**	**64 J**	**78 J**	**74 J**	**110 J**	**110 J**	**89 J**	**47.3**	**94.9**

Notes:
Hits only table
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[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-3
National Grid
Fulton, New York
Surface Soil Samples - Metals

									Background Samples	
	Location ID	SS-12	SS-13	SS-14	SS-14	SS-15	SS-16	SS-17	SS-05	SS-06
	Sample Date	5/14/2001	5/14/2001	5/14/2001	5/14/2001	5/14/2001	5/14/2001	5/14/2001	7/11/1996	7/11/1996
	Depth Interval (ft)	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17	0 - 0.17
	Sample Type	N	N	FD	N	N	N	N	N	N
Chemical Name	Action Level [1]									
Aluminum	SB	8320	6380	9870	9980	10200	3870	12200	5500	6000
Antimony	SB	0.8 J	0.37 J	9.6	8.6 J	0.89 J	0.27 J	0.41 J	13.00 UJ	14.00 UJ
Arsenic	7.5 or SB	**8.6**	4.3	**12.1**	**12.2**	5.9	2.6	**11.2**	4	3
Barium	300 or SB	166	72.4	**871**	**949**	85.7	38.2	58.8	60	50
Beryllium	0.16 (HEAST) or SB	**0.44 J**	**0.34 J**	**0.55 J**	**0.57 J**	**0.49 J**	**0.18 J**	**0.52 J**	1.00 U	1.00 U
Cadmium	1 or SB	0.72	0.42 J	**1.6**	**1.5**	0.36 J	0.06 J	0.28 J	1.00 U	1.00 U
Calcium	SB	4280	11200	5140	5150	4290	16200	1370	1400 J	1800 J
Chromium	10 or SB	**14.1**	**12.6**	**19.5**	**20**	**14.8**	5.6	**14.5**	7	8
Cobalt	30 or SB	4.3 J	3.4 J	4.5 J	4.2 J	4.2 J	2.6 J	5.9 J	10.00 U	10.00 U
Copper	25 or SB	**33.2**	**29.3**	**46.8**	**48.6**	17.8	19.9	**37.1**	18	22
Iron	2,000 or SB	**16100**	**13400**	**16300**	**16000**	**15800**	**9980**	**19800**	**11000 J**	**9300 J**
Lead	SB	340	116	2840	2770	91.8	10.8	52.1	22 J	36 J
Magnesium	SB	1850	3050	2030	2070	2030	3110	2550	1700	1400
Manganese	SB	454	298	699	496	178	369	318	310 J	80 J
Mercury	0.1	**0.49**	**0.19**	**0.26**	**0.24**	**0.11 J**	0.03 U	0.081 J	0.1	**0.2**
Nickel	13 or SB	11.4	10.7	11.7	12.7	11	6.5	13	10.00 UJ	10 J
Potassium	SB	889	679	667 J	607 J	587 J	439 J	1020	1100.00 U	1200.00 U
Selenium	2 or SB	1	0.55 J	1.3	1.4	1.8	0.20 U	1	1.00 U	1.00 U
Silver	SB	0.16 J	0.09 U	0.13 J	0.11 U	0.13 U	0.07 U	0.09 U	2.00 U	2.00 U
Sodium	SB	43.1 J	207 J	116 J	115 J	140 J	50.8 J	44.8 J	200.00 U	200.00 U
Thallium	SB	0.50 U	0.44 U	0.9 J	0.68 J	0.88 J	0.39 U	0.99 J	1.00 UJ	1.00 UJ
Vanadium	150 or SB	25.2	18.6	23	24.3	20.3	8.7	24.3	10.00 U	10
Zinc	20 or SB	**216**	**93.6**	**3380**	**3360**	**169**	**44.7**	**75.9**	**34 J**	**120 J**

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Table 4-4
National Grid
Fulton, New York
Surface Soil Samples - Cyanide

	Location ID	SS-01	SS-01	SS-02	SS-02	SS-03	SS-03	SS-04	SS-04
	Sample Date	7/10/1996	7/10/1996	7/10/1996	7/10/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996
	Depth Interval (ft)	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 2	0 - 0.17
	Sample Type	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]								
Cyanide	NC	3.3 J	8.3 J	810 J	11 J	2.3 J	0.9 J	5.1 J	1.9 J

						Background Samples	
	Location ID	SS-07	SS-08	SS-09	SS-09	SS-05	SS-06
	Sample Date	6/22/1998	6/22/1998	6/22/1998	6/22/1998	7/11/1996	7/11/1996
	Depth Interval (ft)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 0.17	0 - 0.17
	Sample Type	N	N	N	FD	N	N
Chemical Name	Action Level [1]						
Cyanide	NC	15	2.3	60	58	0.60 UJ	0.60 UJ

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-4
National Grid
Fulton, New York
Surface Soil Samples - Cyanide

	Location ID	SS-01	SS-01	SS-02	SS-02	SS-03	SS-03	SS-04	SS-04
	Sample Date	7/10/1996	7/10/1996	7/10/1996	7/10/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996
	Depth Interval (ft)	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 2	0 - 0.17
	Sample Type	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]								
Cyanide	27	3.3 J	8.3 J	**810 J**	11 J	2.3 J	0.9 J	5.1 J	1.9 J

						Background Samples	
	Location ID	SS-07	SS-08	SS-09	SS-09	SS-05	SS-06
	Sample Date	6/22/1998	6/22/1998	6/22/1998	6/22/1998	7/11/1996	7/11/1996
	Depth Interval (ft)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 0.17	0 - 0.17
	Sample Type	N	N	N	FD	N	N
Chemical Name	Action Level [1]						
Cyanide	27	15	2.3	**60**	**58**	0.60 UJ	0.60 UJ

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
[1] 6 NYCRR Part 375, Table 375-6.8(b): Restricted Use Soil Cleanup Objectives, Protection of Public Health, Residential, December 14, 2006.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-5
National Grid
Fulton, New York
Surface Soil Samples - Pesticides PCBs

										Background Samples	
	Location ID	SS-01	SS-01	SS-02	SS-02	SS-03	SS-03	SS-04	SS-04	SS-05	SS-06
	Sample Date	7/10/1996	7/10/1996	7/10/1996	7/10/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996
	Depth Interval (ft)	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 2	0 - 0.17	0 - 0.17	0 - 0.17
	Sample Type	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]										
Aldrin	0.041	0.0023 U	0.0023 U	0.02 U	0.0021 U	0.002 U	0.002 U	0.0026 J	0.0057 NJ	0.0019 U	0.002 U
alpha-Chlordane	NC	0.0047 BJ	0.0023 U	0.02 U	0.0021 U	0.0018 NJ	0.002 U	0.061 NJ	0.01 BJ	0.0011 NJ	0.002 U
Dieldrin	0.044	0.0045 U	0.0046 U	0.04 U	0.0041 U	0.004 U	0.004 U	**0.048**	0.05 U	0.0037U	0.004 U
Endosulfan II	0.9	0.0052 U	0.0096 U	0.04 U	0.013 NJ	0.00084 NJ	0.004 U	0.019 NJ	0.024 J	0.00065 NJ	0.004 U
Endosulfan Sulfate	1	0.0045 U	0.0046 U	0.042 J	0.007 U	0.004 U	0.004 U	0.03 U	0.03 U	0.0037U	0.004 U
Endrin Ketone	NC	0.0045 U	0.024 B	0.087 BJ	0.01 U	0.0058 J	0.0025 J	0.056	0.044 NJ	0.0025 J	0.004 U
gamma-Chlordane	NC	0.0023 U	0.01 NJ	0.03 U	0.0023 U	0.0016 J	0.002 U	0.072	0.044	0.0019 U	0.002 U
gamma-Hexachloroc	0.06	0.0023 U	0.0023 U	0.02 U	0.006 BJ	0.002 U	0.002 U	0.0019 BJ	0.01 U	0.0019 U	0.002 U
Heptachlor	0.1	0.0023 U	0.0023 U	0.02 U	0.0021 U	0.002 U	0.002 U	0.004 BJ	0.01 U	0.0019 U	0.002 U
Methoxychlor	10	0.0023 U	0.03 U	0.21 U	0.048 NJ	0.02 U	0.0064 NJ	0.052 J	0.18 U	0.0056 J	0.02 U
p,p'-DDD	2.9	0.0045 U	0.0046 U	0.049 NJ	0.012 J	0.0041 U	0.0031 NJ	0.022	0.03 U	0.0037U	0.0011 J
p,p'-DDE	2.1	0.0045 U	0.0045 BJ	0.04 U	0.0041 U	0.0058 NJ	0.004 U	0.0043 NJ	0.03 U	0.0013 J	0.0011 J
p,p'-DDT	2.1	0.0045 U	0.033	0.12 U	0.01 U	0.012 NJ	0.0079	0.046 NJ	0.04 U	0.0017 J	0.004 U

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
B - blank contamination
N - negated value
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-6
National Grid
Fulton, NY
SOIL VAPOR ANALYTICAL DATA - PHASE I[a]

Analyte	Shallow Soil Vapor Sample Results[b] Location ID							Ambient
Potential MGP Indicators[c]	**SV-04**	**SV-05**	**SV-06**	**SV-07**	**SV-08**	**SV-08 DUP**	**SV-09**	**Air**
Benzene	19	87	16	8.9	11	11	17	ND
Toluene	170	700	170	110	120	120	190	3.2
Ethylbenzene	31	89	44	31	32	32	48	ND
m,p-Xylenes	120	340	210	160	160	160	240	2.0
o-Xylene	32	92	63	48	47	47	71	ND
1,2,4-Trimethylbenzene	ND	44	50	49	40	40	63	ND
n-Nonane	ND	24	19	17	15	14	21	ND
Other Detected Compounds								
Dichlorodifluoromethane (CFC 12)	ND	ND	ND	ND	ND	ND	ND	2.7
Chloromethane	ND	ND	ND	ND	ND	ND	ND	1.0
Acrolein	ND	ND	14	17	ND	ND	ND	1.9
Acetone	2,400	2,200	2,800	2,300	1,200	1,200	2,100	11.0
2-Propanol (Isopropyl Alcohol)	20	ND	41	31	11	9.1	22	ND
2-Methyl-2-Propanol (tert-Butyl Alcohol)	ND	52	ND	9.4	ND	ND	ND	ND
Methylene chloride	19	63	17	12	ND	ND	14	1.2
Carbon Disulfide	14	21	ND	ND	ND	ND	17	ND
1,3,5-Trimethylbenzene	ND	ND	ND	10	8.4	8.5	ND	ND
1,2,3-Trimethylbenzene	ND	ND	ND	10	8.1	8.2	ND	ND
2-Butanone (MEK)	66	110	91	77	34	31	68	2.5
n-Hexane	ND	30	ND	ND	ND	7.5	ND	1.1
2-Hexanone	16	20	28	21	10	9.3	24	ND
4-Ethyltoluene	ND	19	19	17	15	15	22	ND
1,4-Dichlorobenzene	14	92	130	140	99	94	170	ND
Chloroform	ND	15	19	ND	ND	ND	34	ND
Cyclohexane	ND	63	ND	ND	ND	ND	ND	ND
n-Heptane	ND	29	ND	ND	ND	ND	ND	ND
d-Limonene	57	260	340	320	240	230	450	ND
Total BTEX	372	1,308	503	358	370	370	566	5

Notes:

[a] Results reported in µg/m^3. Only compounds that were detected are presented.

[b] Samples collected on July 27, 2007.

[c] Potential MGP Indicators as presented in National Grid Document. " *Standard Operating Procedure - Soil Vapor Intrusion Evaluations at National Grid MGP Sites in New York State*".

NA - Not Available

ND - Not detected above reporting limit.

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TABLE 4-7
National Grid
Fulton, New York
SOIL VAPOR ANALYTICAL DATA - PHASE II

Analyte	Ambient	SV-04R Boundary	SV-14 Intermediate	SV-15 Source	SV-05R Boundary	SV-17 Intermediate	SV-15 Source	SV-06R Boundary	SV-10 Intermediate	SV-11 Source	SV-08R Boundary	SV-13 Intermediate	SV-12 Source	SV-12 Dup Source	SV-16 Background
Potential MGP Indicators[1]															
Benzene	0.73 J	4.2	11	20	3.8	280	20	3.9	15	4.5	1.6	2.3	0.61 J	0.51 J	1.6 J
Toluene	1.8 J	38	68	84 J	4.2	74	84 J	8.7 J	17 J	6.2 J	3.9	2.7	1.2 J	0.97 J	2.3 J
Ethylbenzene	2.2 UJ	5.9 J	13 J	10 J	2.1 J	3.1 J	10 J	14 J	2.4 J	0.94 J	0.51 J	2.2 UJ	2.2 UJ	2.2 UJ	0.89 J
m-Xylene & p-Xylene	0.55 J	22 J	50 J	35 J	2.9 J	25 J	35 J	29 J	8.4 J	4.6 J	1.6 J	0.94 J	0.65 J	0.8 J	2.7 J
o-Xylene	2.2 U	7	19	13	1.7 J	24	13	20	3.3	2.1 J	0.76 J	0.51 J	2.2 U	2.2 U	1.1 J
1,2,4-Trimethylbenzene	2.5 U	7.4	25	11	1.8 J	6	11	99	8.4	3	0.61 J	2.5 U	0.5 J	0.61 J	1.2 J
1,2,4,5-Tetramethylbenzene	2.7 U	2.7 U	2.2 J	1.1 J	1.1 J	5.5 U	1.1 J	130	1.2 J	2.8	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Naphthalene	5.2 U	5.2 UJ	3.4 J	1.7 J	1.7 J	10 U	1.7 J	700	20	96	1.3 J	1.7 J	2.8 J	2.6 J	1.3 J
Indane	0.97 U	0.97 U	3.1 J	1.2 J	0.97 U	1.9 U	1.2 J	52 J	1.4 J	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U
Indene	1.9 U	1.9 U	3.8 J	1.9 U	1.9 U	3.8 U	1.9 U	930 J	17 J	6.4 J	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
n-Nonane	2.6 U	1.8 J	0.71 J	4.8	12	3.6 J	4.8	5.2	1.3 J	1.5 J	0.65 J	2.6 U	0.71 J	0.62 J	0.95 J
n-Decane	0.98 J	11	2.6 J	32	9.2	5.8	32	16	1.7 J	3.7	1 J	0.64 J	1 J	1.2 J	5.1
n-Undecane	3.2 U	5.5	3.2 U	17	27	6.4 U	17	20	0.87 J	2 J	3.2 U	3.2 U	1.1 J	1.5 J	3.4
n-Dodecane	7 U	1.2 J	7 U	45	8.2	2.2 J	45	11	1.9 J	4.5 J	1.1 J	7 U	1.5 J	1.3 J	18
2-Ethylthiophene	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	1.8 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
2-Methylthiophene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1.6 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
3-Methylthiophene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1.6 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(b)thiophene	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	5.5 U	2.7 U	92 J	2.7 U	5 J	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Thiophene	0.69 U	0.69 U	0.69 U	0.8 J	0.69 U	1.4 U	0.8 J	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Other Detected Compounds															
1,2,3-Trimethylbenzene	0.98 U	2.1 J	10 J	4.5 J	0.98 U	5.4 J	4.5 J	290 J	6.3 J	3.3 J	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
1,2-Dimethyl-4-ethylbenzene	1.1 U	1.1 U	3.2 J	1.3 J	1.1 U	2.2 U	1.3 J	76 J	1.1 U	1.8 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,2-Dibromoethane (EDB)	3.8 UJ	3.8 U	3.8 U	3.8 UJ	0.9 J	7.7 U	3.8 UJ	3.8 U	3.8 UJ	3.8 UJ	3.8 U	3.8 U	3.8 U	3.8 UJ	3.8 UJ
1,2-Dichloroethane	2 U	2 U	2 U	2 U	0.4 J	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Diethylbenzene	2.7 U	2.7 U	2.7 U	2.7 U	0.95 J	5.5 U	2.7 U	3.1	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
1,3,5-Trimethylbenzene	2.5 U	2.9	7.6	3.7	0.99 J	3.9 J	3.7	100	9.8	2 J	0.43 J	2.5 U	2.5 U	2.5 U	0.39 J
1-Decene	2.9 U	1.2 J	2.9 U	4.9	10	1.5 J	4.9	2.9 U	2.9 U	30	2.9 U	2.9 U	1.3 J	0.84 J	2.5 J
1-Ethyl-2,4-dimethylbenzene	2.7 U	2.7 U	1.7 J	0.82 J	0.97 J	5.5 U	0.82 J	36	2.7 U	0.69 J	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
1-Heptene	2 U	1.7 J	2 U	1.9 J	26	4 U	1.9 J	2.7	1.7 J	1.9 J	0.4 J	2 U	1.6 J	1.1 J	1.7 J
1-Hexene	1.7 U	6.1	2.2	5.7	29	1.5 J	5.7	6.5	4	1.6 J	0.36 J	1.7 U	1.8	1.2 J	2.3
1-Methyl-2-propylbenzene	2.7 U	2.7 U	1.1 J	0.65 J	1.2 J	5.5 U	0.65 J	7.3	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
1-Methyl-3-propylbenzene	2.7 U	0.74 J	2.5 J	1.2 J	1.4 J	5.5 U	1.2 J	20	0.41 J	0.56 J	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
1-Methyl-4-propylbenzene	2.7 U	2.7 U	1.2 J	0.47 J	0.94 J	5.5 U	0.47 J	6.4	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
1-Methylnaphthalene	15 U	15 U	15 U	15 U	15 U	29 U	15 U	770 J	15 U	59 J	15 U	15 U	15 U	15 U	15 U
1-Nonene	2.6 U	2.8	2.6 U	3.4	25	5.2 U	3.4	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	3.9	2.6 U
1-Octene	2.3 U	2.3 U	4.6	2.3 U	35	4.6 U	2.3 U	2.6	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
1-Pentene	0.26 J	15	1.4	2.1	12	1.6 J	2.1	6	3.3	1.4 U	0.17 J	1.4 U	1 J	0.5 J	1.5
2,2,3-Trimethylpentane	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	0.59 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2,2,4-Trimethylpentane	2.3 U	0.46 J	2.3 U	0.31 J	2.3 U	4.7 U	0.31 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2,2-Dimethylpentane	2 U	2 U	2 U	2 U	2 U	4.3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2,3,4-Trimethylpentane	2.3 U	0.43 J	2.3 U	0.38 J	3	4.7 U	0.38 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2,3-Dimethylbutane	1.8 U	0.7 J	1.8 U	2	2.1	46	2	0.52 J	1.8 U	1.8 U	1.8 U	0.26 J	0.24 J	1.8 U	1.8 U
2,3-Dimethylhexane	2.3 U	0.32 J	2.3 U	0.39 J	3.8	5.6	0.39 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2,3-Dimethylpentane	2 U	0.66 J	2 U	1.3 J	6	49	1.3 J	2 U	2 U	2 U	0.8 J	0.53 J	2 U	2 U	2 U
2,4-Dimethylhexane	2.3 U	2.3 U	2.3 U	0.52 J	3.4	3.2 J	0.52 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2,4-Dimethylpentane	2 U	0.5 J	0.34 J	0.66 J	1.8 J	7.6	0.66 J	0.23 J	2 U	2 U	0.24 J	2 U	0.64 J	0.23 J	2 U
2,5-Dimethylhexane	2.3 U	2.3 U	2.3 U	2.3 U	1.5 J	4.1 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U

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TABLE 4-7
National Grid
Fulton, New York
SOIL VAPOR ANALYTICAL DATA - PHASE II

Analyte	Ambient	SV-04R Boundary	SV-14 Intermediate	SV-15 Source	SV-05R Boundary	SV-17 Intermediate	SV-15 Source	SV-06R Boundary	SV-10 Intermediate	SV-11 Source	SV-08R Boundary	SV-13 Intermediate	SV-12 Source	SV-12 Dup Source	SV-16 Background
2-Ethoxy-2-methylpropane	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	17 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
2-Ethyl-1,4-dimethylbenzene	2.7 U	2.7 U	1.8 J	0.76 J	0.96 J	5.5 U	0.76 J	44	0.59 J	0.65 J	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
2-Ethyltoluene	2.5 U	1.7 J	5.4	3	1.2 J	2 J	3	18	0.73 J	0.93 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Methoxy-2-methylbutane	2.1 U	1.4 J	2.1 U	2.1 U	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
2-Methyl-1-butene	0.35 J	3.7	1 J	1.9	8.6	1.8 J	1.9	4.9	2.6	1.4 U	0.25 J	1.4 U	0.51 J	0.45 J	0.57 J
2-Methylbutane	2.1	7.7	3	19	17	320	19	5.1	2.5	1.6	3.8	2.4	0.96 J	0.75 J	0.67 J
2-Methylheptane	2.3 U	0.76 J	0.41 J	1.6 J	12	17	1.6 J	0.79 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2-Methylhexane	0.33 J	1.4 J	0.59 J	2.1	13	29	2.1	1.1 J	2 U	2 U	0.84 J	0.29 J	2 U	2 U	2 U
2-Methylnaphthalene	15 U	15 U	15 U	15 U	15 U	29 U	15 U	1700 J	15 U	120 J	15 U	15 U	15 U	15 U	15 U
2-Methylpentane	0.76 J	3.3	1.8	5.7	12	110	5.7	2.2	0.93 J	0.6 J	0.91 J	0.36 J	0.37 J	1.8 U	1.8 U
3-Ethylhexane	2.3 U	0.25 J	2.3 U	2.3 U	5.6	1.1 J	2.3 U	0.27 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
3-Ethyltoluene	2.5 U	5.3	12	6.7	2.1 J	2.4 J	6.7	51	1.8 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
3-Methylheptane	2.3 U	1.7 J	2.3 U	2.3 U	16	8.2	2.3 U	1.1 J	2.3 U	0.37 J	0.39 J	2.3 U	2.3 U	2.3 U	2.3 U
3-Methylhexane	0.4 J	1.7 J	0.69 J	2.5	23	30	2.5	1.6 J	1.2 J	1.2 J	1.7 J	0.39 J	0.49 J	0.42 J	2 U
3-Methylpentane	0.27 J	2.2	0.72 J	3.6	14	86	3.6	1.7	0.42 J	0.42 J	0.62 J	0.35 J	0.2 J	1.8 U	0.2 J
4-Ethyltoluene	2.5 U	2.4	7.4	3.2	1.9 J	0.83 J	3.2	16	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-2-Pentene	1.4 U	2	0.45 J	0.67 J	4.5	0.49 J	0.67 J	2.7	0.58 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Cumene	2.5 U	0.84 J	1.2 J	1.3 J	0.89 J	2 J	1.3 J	2.5	2.5 U	2.5 U	2.5 U	0.43 J	2.5 U	2.5 U	2.5 U
Cyclohexane	1.7 U	2.3	1.2 J	6.3	1.7 U	380	6.3	2.7	1.7 U	1.7	1.2 J	1.6 J	0.37 J	1.7 U	1.7 U
Cyclopentane	1.4 U	0.3 J	1.4 U	0.74 J	0.44 J	19	0.74 J	0.27 J	0.24 J	1.4 U	0.15 J	1.4 U	1.4 U	1.4 U	1.4 U
Diisopropyl ether	2.1 U	0.55 J	2.1 U	2.1 U	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Ethanol	7.4 J	9.3 J	7.5 J	3 J	7.8 J	2.7 J	3 J	2.5 J	15	15	2.2 J	1.5 J	13	7 J	18
Methyl tert-butyl ether	1.8 U	1.8 U	0.39 J	0.5 J	1.8 U	3.6 U	0.5 J	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Methylcyclohexane	2 U	2.5	1.9 J	13	1.9 J	330	13	3.6	0.95 J	3.6	1.7 J	4.1	2 U	2 U	2 U
Methylcyclopentane	1.7 U	0.89 J	0.48 J	2.7	1.1 J	130	2.7	0.58 J	1.7 U	0.56 J	0.47 J	0.34 J	0.35 J	1.7 U	1.7 U
n-Butylbenzene	2.7 U	2.7 U	1.3 J	2.7 U	1.7 J	5.5 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
n-Heptane	2 U	3.8	2 U	5.7	22	22	5.7	2.7	2 U	2 U	1.4 J	0.36 J	2 U	2 U	2 U
n-Hexane	1.8 U	10	3	7.5	21	41	7.5	3.8	1.8 U	1.8 U	1.8	0.55 J	1.8 U	1.8 U	1.8 U
n-Octane	2.3 U	2.3 J	1.2 J	5.2	16	10	5.2	2.2 J	1.5 J	0.94 J	0.74 J	2.3 U	2.3 U	0.57 J	1.6 J
n-Pentane	3 U	7.2	2.6 J	9.8	12	38	9.8	7.3	3.7	3 U	2.3 J	2.1 J	0.61 J	3 U	0.68 J
n-Propylbenzene	2.5 UJ	2.1 J	4 J	2.3 J	1.5 J	0.79 J	2.3 J	2.9 J	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
p-Cymene	2.7 U	2 J	5.9	4.5	1.8 J	5.5 U	4.5	11	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Pentylbenzene	6.1 U	6.1 U	6.1 U	6.1 U	1.6 J	12 U	6.1 U	2.6 J	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U
sec-Butylbenzene	2.7 U	2.7 U	0.62 J	2.7 U	1 J	5.5 U	2.7 U	2.2 J	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Styrene	2.1 UJ	0.71 J	1.4 J	4.8 J	1.2 J	4.3 UJ	4.8 J	220 J	12 J	2.8 J	2.1 UJ	2.1 UJ	2.1 UJ	2.1 UJ	0.43 J
t-Butanol	1.2 J	2.4 J	2 J	0.55 J	2 J	0.64 J	0.55 J	0.61 J	10	8.1	0.31 J	0.22 J	10	1.8 J	13
trans-2-Pentene	0.16 J	0.93 J	0.31 J	0.51 J	2.8	0.4 J	0.51 J	0.9 J	0.69 J	0.18 J	0.21 J	1.4 U	0.2 J	0.16 J	0.16 J
Total BTEX	3.08 J	77.1 J	161 J	162 J	14.7 J	406.1 J	162 J	75.6 J	46.1 J	18.34 J	8.37 J	6.45 J	2.46 J	2.28 J	8.59 J

Notes: Results reported in µg/m^3. Only compounds that were detected are presented.
[1] - As identified in the National Grid document "*Standard Operating Procedures - Soil Vapor Intrusion Evaluation at National Grid MGP Sites in New York State.*" September 2007.
Bold values indicate detected concentration.
J - *Value* Estimated
U - Not detected; value is the detection limit

O'BRIEN & GERE

TABLE 4-8
National Grid
Fulton, New York
SOIL VAPOR ANALYTICAL DATA - PHASE III

	June 2008		June 2008			December 2008			
Analyte	**Ambient**	**SV-16**	**SV-11**	**SV-10**	**SV-06R**	**SV-18**	**SV-19**	**SV-20**	**SV-21**
		Background	Source	Intermediate	Boundary	Neigh - N	Neigh - N	Neigh - S	Neigh - S
Potential MGP Indicators[1]									
Benzene	0.73 J	1.6 J	4.5	15	3.9	14	6.7	4	4.5
Toluene	1.8 J	2.3 J	6.2 J	17 J	8.7 J	140	68	30	13
Ethylbenzene	2.2 UJ	0.89 J	0.94 J	2.4 J	14 J	11	7.7	2.8	1.9 J
m-Xylene & p-Xylene	0.55 J	2.7 J	4.6 J	8.4 J	29 J	36	26	9.3	3.5 J
o-Xylene	2.2 U	1.1 J	2.1 J	3.3	20	12	8.8	3	1.3 J
Naphthalene	5.2 U	1.3 J	96	20	700	1.3 U	5.2	5.2 U	5.2 U
1,2,4-Trimethylbenzene	2.5 U	1.2 J	3	8.4	99	11	9.3	3	0.43 J
1,2,4,5-Tetramethylbenzene	2.7 U	2.7 U	2.8	1.2 J	130	0.81 J	2.7 U	2.7 U	2.7 U
Indane	0.97 U	0.97 U	0.97 U	1.4 J	52 J	1.5	1.8	0.97 U	0.97 U
Indene	1.9 U	1.9 U	6.4 J	17 J	930 J	1.9 U	1.9 U	1.9 U	1.9 U
n-Nonane	2.6 U	0.95 J	1.5 J	1.3 J	5.2	2.6 J	4.0	2.6 U	2.6 U
n-Decane	0.98 J	5.1	3.7	1.7 J	16	18	9.3	2.3 J	2.9 U
n-Undecane	3.2 U	3.4	2 J	0.87 J	20	3 J	3.2 U	3.2 U	3.2 U
n-Dodecane	7 U	18	4.5 J	1.9 J	11	4.5 J	7 U	7 U	7 U
2-Ethylthiophene	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
2-Methylthiophene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
3-Methylthiophene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(b)thiophene	2.7 U	2.7 U	5 J	2.7 U	92 J	2.7 U	2.7 U	2.7 U	2.7 U
Thiophene	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.98	0.69 U	0.69 U
Other Detected Compounds									
1,2-Dibromoethane (EDB)	3.8 UJ	3.8 UJ	3.8 UJ	3.8 UJ	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
1,2-Dichloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Diethylbenzene	2.7 U	2.7 U	2.7 U	2.7 U	3.1	2.7 U	2.7 U	2.7 U	2.7 U
1,2,3-Trimethylbenzene	0.98 U	0.98 U	3.3 J	6.3 J	290 J	4.9	3.8	1.3	0.98 U
1,3,5-Trimethylbenzene	2.5 U	0.39 J	2 J	9.8	100	4.2	3.2	1.1 J	2.5 U
1-Decene	2.9 U	2.5 J	30	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
1,2-Dimethyl-4-ethylbenzene	1.1 U	1.1 U	1.8 J	1.1 U	76 J	1.1 U	1.1 U	1.1 U	1.1 U
1-Ethyl-2,4-dimethylbenzene	2.7 U	2.7 U	0.69 J	2.7 U	36	0.55 J	2.7 U	2.7 U	2.7 U
1-Heptene	2 U	1.7 J	1.9 J	1.7 J	2.7	2 U	2 U	2 U	2.6
1-Hexene	1.7 U	2.3	1.6 J	4	6.5	3.9	4.1	1.1 J	12
1-Methyl-2-propylbenzene	2.7 U	2.7 U	2.7 U	2.7 U	7.3	2.7 U	2.7 U	2.7 U	2.7 U
1-Methyl-3-propylbenzene	2.7 U	2.7 U	0.56 J	0.41 J	20	0.65 J	0.58 J	2.7 U	2.7 U
1-Methyl-4-propylbenzene	2.7 U	2.7 U	2.7 U	2.7 U	6.4	2.7 U	2.7 U	2.7 U	2.7 U
1-Methylnaphthalene	15 U	15 U	59 J	15 U	770 J	15 U	15 U	15 U	15 U
1-Nonene	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
1-Octene	2.3 U	2.3 U	2.3 U	2.3 U	2.6	2.3 U	2.3 U	2.3 U	2.3 U
1-Pentene	0.26 J	1.5	1.4 U	3.3	6	1.5 U	1.5 U	1.4 U	18
2,2,3-Trimethylpentane	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2,2,4-Trimethylpentane	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.1	1.5 J	1.9 J	1.5 J
2,2-Dimethylpentane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2,3,4-Trimethylpentane	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	1.9 J	1.5 J	0.76 J	0.72 J
2,3-Dimethylbutane	1.8 U	1.8 U	1.8 U	1.8 U	0.52 J	2.2	0.84 J	0.92 J	0.69 J
2,3-Dimethylhexane	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	0.58 J	0.41 J	0.27 J	2.3 U
2,3-Dimethylpentane	2 U	2 U	2 U	2 U	2 U	1.2 J	0.48 J	0.45 J	0.46 J
2,4-Dimethylhexane	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	0.67 J	0.48 J	2.3 U	2.3 U
2,4-Dimethylpentane	2 U	2 U	2 U	2 U	0.23 J	1 J	0.59 J	0.56 J	0.52 J
2,5-Dimethylhexane	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	0.75 J	2.3 U	2.3 U	2.3 U
2-Ethoxy-2-methylpropane	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
2-Ethyl-1,4-dimethylbenzene	2.7 U	2.7 U	0.65 J	0.59 J	44	0.56 J	2.7 U	2.7 U	2.7 U
2-Ethyltoluene	2.5 U	2.5 U	0.93 J	0.73 J	18	2 J	1.8 J	0.62 J	2.5 U
2-Methoxy-2-methylbutane	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
2-Methyl-1-butene	0.35 J	0.57 J	1.4 U	2.6	4.9	8.3	6.7	1.3 J	14
2-Methylbutane	2.1	0.67 J	1.6	2.5	5.1	19	8.9	8.3	10
2-Methylheptane	2.3 U	2.3 U	2.3 U	2.3 U	0.79 J	1.3 J	0.64 J	0.3 J	0.5 J
2-Methylhexane	0.33 J	2 U	2 U	2 U	1.1 J	2.9	1.4 J	1.4 J	1 J
2-Methylnaphthalene	15 U	15 U	120 J	15 U	1700 J	15 U	15 U	15 U	15 U
2-Methylpentane	0.76 J	1.8 U	0.6 J	0.93 J	2.2	9.2	3.6	3.8	3.4 J
3-Ethylhexane	2.3 U	2.3 U	2.3 U	2.3 U	0.27 J	2.3 U	2.3 U	2.3 U	2.3 U
3-Ethyltoluene	2.5 U	2.5 U	2.5 U	1.8 J	51	6.2	6.2	2 J	0.59 J
3-Methylheptane	2.3 U	2.3 U	0.37 J	2.3 U	1.1 J	2.3 U	2.3 U	2.3 U	0.83 J
3-Methylhexane	0.4 J	2 U	1.2 J	1.2 J	1.6 J	3.9	2.7	1.4 J	2.1
3-Methylpentane	0.27 J	0.2 J	0.42 J	0.42 J	1.7	5.6	2.4	2.3	2.8
4-Ethyltoluene	2.5 U	2.5 U	2.5 U	2.5 U	16	2.8	3.8	1.4 J	0.47 J
cis-2-Pentene	1.4 U	1.4 U	1.4 U	0.58 J	2.7	4.1	2.7	0.84 J	7.3
Cumene	2.5 U	2.5 U	2.5 U	2.5 U	2.5	0.7 J	0.61 J	2.5 U	2.5 U
Cyclohexane	1.7 U	1.7 U	1.7	1.7 U	2.7	3.4	1.2 J	1 J	2.7
Cyclopentane	1.4 U	1.4 U	1.4 U	0.24 J	0.27 J	1.5	0.53 J	0.65 J	0.5 J
Diisopropyl ether	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Ethanol	7.4 J	18	15	15	2.5 J	2.4 JB	6.3 JB	1.9 JB	6.2 JB
Methyl tert-butyl ether	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.79 J	0.75 J	1.8 U	1.8 U
Methylcyclohexane	2 U	2 U	3.6	0.95 J	3.6	3.1	0.71 J	0.77 J	0.51 J
Methylcyclopentane	1.7 U	1.7 U	0.56 J	1.7 U	0.58 J	4.7	1.5 J	2.0	0.94 J
n-Butylbenzene	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
n-Heptane	2 U	2 U	2 U	2 U	2.7	4	2.4	1.5 J	2.6
n-Hexane	1.8 U	1.8 U	1.8 U	1.8 U	3.8	14	11	4.3	6.2
n-Octane	2.3 U	1.6 J	0.94 J	1.5 J	2.2 J	3.1	1.5 J	0.68 J	1.2 J
n-Pentane	3 U	0.68 J	3 U	3.7	7.3	14	7.2	5.5	11
n-Propylbenzene	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.9 J	1.7 J	1.6 J	0.48 J	2.5 U
p-Cymene	2.7 U	2.7 U	2.7 U	2.7 U	11	1.6 J	1.3 J	2.7 U	2.7 U
Pentylbenzene	6.1 U	6.1 U	6.1 U	6.1 U	2.6 J	6.1 U	6.1 U	6.1 U	6.1 U
sec-Butylbenzene	2.7 U	2.7 U	2.7 U	2.7 U	2.2 J	2.7 U	2.7 U	2.7 U	2.7 U
Styrene	2.1 UJ	0.43 J	2.8 J	12 J	220 J	2.1 U	2.1 U	2.1 U	2.1 U
t-Butanol	1.2 J	13	8.1	10	0.61 J	0.66 J	1.4 J	0.89 J	0.57 J
trans-2-Pentene	0.16 J	0.16 J	0.18 J	0.69 J	0.9 J	4	1.8	1.9 JB	3.9
Total BTEX	3.08	8.59	18.34	46.1	55.6	213	117.2	49.1	24.2

Notes: Results reported in µg/m^3. Only compounds that were detected are presented.
[1] - As identified in the National Grid document *"Standard Operating Procedure - Soil Vapor Intrusion Evaluation at National Grid MGP Sites in New York State."* September 2007.
Bold values indicate detected concentration.
J - Value Estimated

O'BRIEN & GERE

Table 4-9
National Grid
Fulton, New York
Subsurface Soil Samples - Volatile Organic Compounds

	Location ID	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03	MW-03	MW-04	MW-04	MW-04
	Sample Date	7/9/1996	7/9/1996	7/9/1996	7/9/1996	7/9/1996	7/10/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/11/1996	7/11/1996	7/11/1996
	Depth Interval	6 - 8	14 - 16	24 - 26	6 - 8	14 - 16	20 - 22	4 - 6	8 - 10	18 - 20	22 - 24	26 - 28	0 - 6	8 - 10	18 - 20
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]														
1,1,1-Trichloroethane	0.8	0.012 U	---	---	0.059 U	---	---	---	---	---	7 U	---	---	1.9 UJ	---
Acetone	0.2	0.012 U	---	---	0.059 U	---	---	---	---	---	7 U	---	---	1.9 UJ	---
Benzene	0.06	0.012 U	0.0028 U	0.0029 U	0.059 U	0.0028 U	0.0028 U	0.0053	0.0034 U	0.043 J	7 U	0.07 U	0.0028 U	**0.11 J**	1.8 U
Ethylbenzene	5.5	0.012 U	0.0028 U	0.0029 U	0.059 U	0.0028 U	0.0028 U	0.0029 U	0.0034 U	0.044 J	0.11 J	0.07 U	0.0028 U	**7.1 J**	1.8 U
Methyl ethyl ketone	0.3	0.012 U	---	---	0.059 U	---	---	---	---	---	7 U	---	---	**1.9 J**	---
Methylene chloride	0.1	0.012 U	---	---	0.059 U	---	---	---	---	---	7 U	---	---	1.9 UJ	---
Tetrachloroethene	1.4	0.0026 J	---	---	0.059 U	---	---	---	---	---	7 U	---	---	1.9 UJ	---
Toluene	1.5	0.012 U	0.0028 U	0.0029 U	0.059 U	0.0028 U	0.0028 U	0.0087	0.0034 U	0.041 J	7 U	0.07 U	0.0028 U	0.016 J	1.8 U
Xylenes, Total	1.2	0.012 U	0.0028 U	0.0029 U	0.059 U	0.0028 U	0.0028 U	0.012	0.0034 U	0.098 U	7 U	0.07 U	0.0028 U	1.9 UJ	1.8 U
Total BTEX	NC	ND	ND	ND	ND	ND	ND	0.026	ND	0.128	0.11	ND	ND	7.226	ND

	Location ID	MW-04	MW-05	MW-05	MW-05	MW-06	MW-06	MW-06	MW-06	MW-06	MW-07	MW-08	MW-09D	MW-09D	MW-09S
	Sample Date	7/11/1996	7/11/1996	7/11/1996	7/11/1996	6/17/1998	6/17/1998	6/17/1998	6/17/1998	6/18/1998	6/17/1998	6/16/1998	6/18/1998	6/18/1998	6/16/1998
	Depth Interval	26 - 28	2 - 4	8 - 10	15.5 - 16	6 - 8	10 - 12	16 - 18	24 - 24.7	32 - 34	4 - 6	8 - 10	18 - 20	26 - 26.9	10 - 12
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]														
1,1,1-Trichloroethane	0.8	---	---	3.3 U	---	---	---	---	---	---	---	---	---	---	---
Acetone	0.2	---	---	3.3 U	---	---	---	---	---	---	---	---	---	---	---
Benzene	0.06	0.0028 U	0.0027 U	3.3 U	0.032 J	**0.066**	**0.47 J**	0.0112 U	0.012 U	0.002 J	0.012 U	0.013 U	0.011 U	0.011 U	0.012 U
Ethylbenzene	5.5	0.0028 U	0.0027 U	5.5	0.031 J	0.074	0.034 J	0.011 U	0.012 U	0.011 U	0.012 U	0.013 U	0.011 U	0.011 U	0.012 U
Methyl ethyl ketone	0.3	---	---	0.043 J	---	---	---	---	---	---	---	---	---	---	---
Methylene chloride	0.1	---	---	3.3 U	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	1.4	---	---	3.3 U	---	---	---	---	---	---	---	---	---	---	---
Toluene	1.5	0.0028 U	0.0027 U	0.02 J	0.41 U	0.034	0.15 J	0.011 U	0.012 U	0.002 J	0.012 U	0.013 U	0.011 U	0.011 U	0.012 U
Xylenes, Total	1.2	0.0028 U	0.0027 U	**12.1**	0.63	0.39	0.12 J	0.011 U	0.012 U	0.011 U	0.012 U	0.013 U	0.011 U	0.011 U	0.012 U
Total BTEX	NC	ND	ND	17.62	0.693	0.564	0.774	ND	ND	0.004	ND	ND	ND	ND	ND

Notes:

Hits only table

Units are in mg/kg (milligrams per kilogram)

NC - No Criteria

ND - Not detected

U - compound analyzed but not detected above the method detection limit.

J - indicates an estimated value

[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.

BOLD - Value exceeds Action Level

--- - Not Analyzed

Sample Type N - Normal

Sample Type FD - Field Duplicate

O'BRIEN & GERE

Table 4-9
National Grid
Fulton, New York
Subsurface Soil Samples - Volatile Organic Compounds

Chemical Name	Action Level [1]	Location ID	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11	MW-11	MW-12	MW-12	MW-12	MW-12	MW-12	PZ-01	PZ-01	PZ-01	SB-01
		Sample Date	6/17/1998	6/17/1998	6/17/1998	5/10/2001	5/10/2001	5/10/2001	5/10/2001	6/24/2004	6/24/2004	6/24/2004	6/24/2004	6/24/2004	7/10/1996	7/10/1996	7/10/1996	7/12/1996
		Depth Interval (ft)	6 - 8	12 - 14	12 - 14	2 - 4	6 - 8	12 - 14	12 - 14	0 - 4	0 - 4	4 - 8	10 - 12	14 - 16	6 - 10	14 - 16	24 - 26	2 - 4
		Sample Type	N	FD	N	N	N	N	FD	FD	N	N	N	N	N	N	N	N
1,1,1-Trichloroethane	0.8		---	---	---	---	---	---	---	---	---	---	---	---	1.5 U	---	---	---
Acetone	0.2		---	---	---	---	---	---	---	---	---	---	---	---	1.5 U	---	---	---
Benzene	0.06		0.012 U	0.012 U	0.012 U	0.001 J	0.77 a	0.0008 J	0.01 U	.0006	.003 U	.003 U	.023 U	.003 U	1.5 U	0.0029 U	0.0028 U	0.003 U
Ethylbenzene	5.5		0.012 U	0.012 U	0.012 U	0.01 U	0.38	0.011 J	0.009 J	.0007	.003 U	.003 U	.023 U	.003 U	0.013 J	0.0029 U	0.0028 U	0.003 U
Methyl ethyl ketone	0.3		---	---	---	---	---	---	---	---	---	---	---	---	0.043 J	---	---	---
Methylene chloride	0.1		---	---	---	---	---	---	---	---	---	---	---	---	1.5 U	---	---	---
Tetrachloroethene	1.4		---	---	---	---	---	---	---	---	---	---	---	---	1.5 U	---	---	---
Toluene	1.5		0.012 U	0.012 U	0.012 U	0.0009 J	0.29	0.004 J	0.001 J	.003 U	.003 U	.003 U	.023 U	.003 U	1.5 U	0.0029 U	0.0028 U	0.003 U
Xylenes, Total	1.2		0.012 U	0.012 U	0.012 U	0.01 U	0.34	0.006 J	0.004 J	.006	.002 J	.003 U	.023 U	.003 U	1.5 U	0.0029 U	0.0028 U	0.003 U
Total BTEX	NC		ND	ND	ND	0.0019	1.78	0.0218	0.014	.0073	.002	ND	ND	ND	0.013	ND	ND	ND

Chemical Name	Action Level [1]	Location ID	SB-01	SB-01	SB-01	SB-01	SB-01	SB-01	SB-02	SB-03	SB-04	SB-05	SB-06	SB-07	SB-08	SB-09	SB-10	SB-11
		Sample Date	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	2/23/2000	2/22/2000	2/22/2000	2/21/2000	2/22/2000	2/21/2000	2/21/2000	2/23/2000	2/23/2000	2/23/2000
		Depth Interval (ft)	6 - 8	6 - 8	12 - 14	12 - 14	18 - 20	26 - 28	4 - 6	10 - 12	16 - 18	6 - 8	6 - 8	6 - 8	6 - 8	2 - 4	18 - 20	4 - 6
		Sample Type	FD	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
1,1,1-Trichloroethane	0.8		70.00 U	7.60 UJ	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	0.2		4.2 J a	7.60 UJ	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzene	0.06		70.00 U	7.60 UJ	0.07 U	0.07 U	0.0029 U	0.0027 U	0.12 J a	0.35 J a	1.2 J a	8.7 a	0.01 U	0.06 U	6.80 U	1.10 U	0.004 J	11 J a
Ethylbenzene	5.5		1.4 J	0.3 J	0.07 U	0.07 U	0.0029 U	0.0027 U	1.7	0.15 J	11 a	3.8 J	0.01 U	0.06 U	5.3 J	1.10 U	0.003 J	120.00 U
Methyl ethyl ketone	0.3		70.00 U	0.13 J	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene chloride	0.1		0.91 a	7.60 UJ	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	1.4		70.00 U	7.60 UJ	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	1.5		70.00 U	7.60 UJ	0.07 U	0.07 U	0.0029 U	0.0027 U	1.30 U	0.38 J	2.8 J a	20 a	0.01 U	0.003 J	0.86 J	0.062 J	0.0008 J	17 J a
Xylenes, Total	1.2		2.8 J a	21 J a	0.07 U	0.07 U	0.0029 U	0.0027 U	1.5 a	0.64 J	24 a	84 a	0.01 U	0.017 J	20 a	0.091 J	0.004 J	67 J a
Total BTEX	NC		4.2	21.3	ND	ND	ND	ND	3.32	1.52	39	116.5	ND	0.02	26.16	0.153	0.0118	95

Notes:
Hits only table
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U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value.
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-9
National Grid
Fulton, New York
Subsurface Soil Samples - Volatile Organic Compounds

Chemical Name	Action Level [1]	Location ID	SB-11	SB-11	SB-12	SB-12	SB-12	SB-12	SB-12	SB-13	SB-13	SB-13	SB-13	SB-14	SB-14	SB-14	SB-14	SB-15
		Sample Date	2/23/2000	2/23/2000	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001	5/8/2001
		Depth Interval (ft)	14 - 16	14 - 16	4 - 6	8 - 10	12 - 14	18 - 20	18 - 20	2 - 4	8 - 10	14 - 16	18 - 20	2 - 4	8 - 10	12 - 14	16 - 18	2 - 4
		Sample Type	FD	N	N	N	N	FD	N	N	N	N	N	N	N	N	N	N
1,1,1-Trichloroethane	0.8		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	0.2		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzene	0.06		0.01 U	0.01 U	0.007 J	0.002 J	0.01 U	0.01 U	0.01 U	0.0007 J	0.01 U	0.01 U	0.01 U	0.002 J	0.05 U	1.20 U	0.01 U	0.47 J a
Ethylbenzene	5.5		0.01 U	0.01 U	0.0007 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.068 J	0.01 U	2.3
Methyl ethyl ketone	0.3		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene chloride	0.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	1.4		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	1.5		0.0007 J	0.01 U	0.005 J	0.007 J	0.01 U	0.01 U	0.01 U	0.001 J	0.01 U	0.01 U	0.01 U	0.003 J	0.05 U	1.20 U	0.01 U	0.14 J
Xylenes, Total	1.2		0.01 U	0.01 U	0.008 J	0.003 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.001 J	0.05 U	0.064 J	0.01 U	1.6 a
Total BTEX	NC		0.0007	ND	0.0207	0.012	ND	ND	ND	0.0017	ND	ND	ND	0.006	ND	0.132	ND	4.51

Chemical Name	Action Level [1]	Location ID	SB-15	SB-15	SB-15	SB-16	SB-16	SB-16	SB-16	SB-17	SB-17	SB-17	SB-17	SB-18	SB-18	SB-18	SB-35	SB-35
		Sample Date	5/8/2001	5/8/2001	5/8/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	6/14/2004	6/14/2004
		Depth Interval (ft)	6 - 8	12 - 14	18 - 20.2	2 - 4	4 - 6	8 - 10	16 - 16.7	2 - 4	6 - 8	10 - 12	14 - 14.4	0 - 2	6 - 8	14 - 14.4	2 - 4	6 - 8
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1,1,1-Trichloroethane	0.8		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	0.2		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzene	0.06		120.00 U	0.01 U	0.01 U	0.0006 J	0.12 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	.027 U	.025 U
Ethylbenzene	5.5		60 J a	0.0006 J	0.002 J	0.01 U	0.12 U	0.01 U	0.01 U	0.01 U	0.01 U	0.006 J	0.01 U	0.01 U	0.01 U	0.01 U	.21	.011 J
Methyl ethyl ketone	0.3		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene chloride	0.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	1.4		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	1.5		11 J a	0.01 U	0.001 J	0.002 J	0.12 U	0.01 U	0.002 J	0.0008 J	0.01 U	0.01 U	0.0009 J	0.01 U	0.01 U	0.01 U	.022 J	.025 U
Xylenes, Total	1.2		120 a	0.0008 J	0.003 J	0.0007 J	0.12 U	0.01 U	0.002 J	0.01 U	0.01 U	0.003 J	0.01 U	0.01 U	0.01 U	0.01 U	.21	.007 J
Total BTEX	NC		191	0.0014	0.006	0.0033	ND	ND	0.004	0.0008	ND	0.009	0.0009	ND	ND	ND	.442	.018

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BOLD - Value exceeds Action Level
— - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-9
National Grid
Fulton, New York
Subsurface Soil Samples - Volatile Organic Compounds

Chemical Name	Action Level [1]	SB-35 6/14/2004 8 - 10 N	SB-36 6/15/2004 8 - 10 N	SB-36 6/15/2004 14 - 16 N	SB-36 6/15/2004 16 - 18 N	SB-36 6/15/2004 22 - 24 N	SB-37 6/15/2004 10 - 12 N	SB-37 6/15/2004 14 - 16 N	SB-37 6/15/2004 18 - 20 N	SB-37 6/15/2004 26 - 28 N	SB-38 6/16/2004 2 - 4 N	SB-38 6/16/2004 4 - 8 FD	SB-38 6/16/2004 4 - 8 N	SB-38 6/16/2004 8 - 12 N	SB-39 6/16/2004 0 - 4 N	SB-39 6/16/2004 6 - 8 N	SB-39 6/16/2004 10 - 12 N
1,1,1-Trichloroethane	0.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzene	0.06	.003 U	.91 a	.036	.024 J	1.8 J a	2.3 a	.007 J	.024	.001 J	.082 J a	.004 U	.026 U	.004 U	.003 U	.003 U	.003 U
Ethylbenzene	5.5	.006	.99	.078	.06	63 a	1.5	.031 U	.022	.003	.71	.001	.026 U	.002 J	.003 U	.003 U	.003 U
Methyl ethyl ketone	0.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene chloride	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	1.5	.003 U	1.3	.031	.046	8.7 a	2.7 a	.008 J	.006 J	.0008 J	.15 J	.004 U	.026 U	.004 U	.003 U	.003 U	.003 U
Xylenes, Total	1.2	.008	13 a	.2	.86	120 a	9.8 a	.024 J	.045	.003	2.4 a	.004	.026 U	.005	.001 J	.003 U	.003 U
Total BTEX	NC	.014	16.2	.345	.99	194	16.3	.039	.097	.0078	3.34	.005	ND	.007	.001	ND	ND

Chemical Name	Action Level [1]	SB-39 6/16/2004 12 - 16 N	SB-40 6/17/2004 0 - 2 N	SB-40 6/17/2004 4 - 8 N	SB-40 6/17/2004 10 - 12 N	SB-41 6/18/2004 8 - 12 N	SB-41 6/18/2004 12 - 16 N	SB-41 6/18/2004 16 - 20 N	SB-41 6/18/2004 30 - 34 N	SB-45 6/24/2004 2 - 4 N	SB-45 6/24/2004 4 - 8 N	SB-45 6/24/2004 8 - 12 N	SB-45 6/24/2004 12 - 16 N	SB-46 6/24/2004 0 - 4 N	SB-46 6/24/2004 4 - 8 N	SB-46 6/24/2004 8 - 12 N	SB-47 10/14/2005 0 - 2 N
1,1,1-Trichloroethane	0.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzene	0.06	.003 U	.003 U	.003 U	.003 U	.62 a	.094 a	.026	.003 J	.003 U	.003 U	.003 U	.012	.006 U	.003 U	.003 U	.0033 U
Ethylbenzene	5.5	.003 U	.003 U	.003 U	.003 U	1.5	.24	.016 J	.006 J	.0006 J	.003 U	.0007 J	.006	.002 J	.003 U	.003 U	.0033 U
Methyl ethyl ketone	0.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene chloride	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	1.5	.003 U	.003 U	.003 U	.003 U	.26 J	.016 J	.014 J	.002 J	.003 U	.003 U	.003 U	.003 U	.006 U	.003 U	.003 U	.0033 U
Xylenes, Total	1.2	.003 U	.003 U	.003 U	.003 U	4.7 a	.26	.1	.015	.004	.002 J	.005	.006	.002 J	.002 J	.0008 J	.0067 U
Total BTEX	NC	ND	ND	ND	ND	7.08	.61	.156	.026	.0046	.002	.0057	.024	.004	.002	.0008	ND

Notes:
Hits only table
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J - indicates an estimated value
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-9
National Grid
Fulton, New York
Subsurface Soil Samples - Volatile Organic Compounds

Chemical Name	Location ID	Action Level [1]	SB-47	SB-47	SB-48	SB-48	SB-48	SB-48
	Sample Date		10/14/2005	10/14/2005	10/14/2005	10/14/2005	10/14/2005	10/14/2005
	Depth Interval (ft)		2 - 4	4 - 6	0 - 2	2 - 4	2 - 4	4 - 6
	Sample Type		N	N	N	N	FD	N
1,1,1-Trichloroethane		0.8	---	---	---	---	---	---
Acetone		0.2	---	---	---	---	---	---
Benzene		0.06	.003 U	.0031 U	.0033 U	.0029 U	.003 U	.003 U
Ethylbenzene		5.5	.003 U	.0031 U	.0033 U	.0029 U	.003 U	.003 U
Methyl ethyl ketone		0.3	---	---	---	---	---	---
Methylene chloride		0.1	---	---	---	---	---	---
Tetrachloroethene		1.4	---	---	---	---	---	---
Toluene		1.5	.003 U	.0031 U	.0033 U	.0029 U	.003 U	.003 U
Xylenes, Total		1.2	.006 U	.0062 U	.0066 U	.0058 U	.006 U	.006 U
Total BTEX		NC	ND	ND	ND	ND	ND	ND

Notes:
Hits only table
Units are in mg/kg (miiligrams per kilogram)
NC - No Criteria
ND - Not detected
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Action Level [1]	Location ID	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03	MW-03	MW-04	MW-04	MW-04	MW-04	MW-05	MW-05
		Sample Date	7/9/1996	7/9/1996	7/9/1996	7/9/1996	7/9/1996	7/10/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996
		Depth Interval (ft)	6 - 8	14 - 16	24 - 26	6 - 8	14 - 16	20 - 22	4 - 6	8 - 10	18 - 20	22 - 24	26 - 28	0 - 6	8 - 10	18 - 20	26 - 28	2 - 4	8 - 10
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
2,4-Dimethylphenol	NC		0.41 U	---	---	0.41 U	---	---	---	---	---	37 U	---	---	670 UJ	---	---	---	0.081 J
2-Methylnaphthalene	36.4		0.41 U	0.37 U	0.38 U	0.41 U	0.37 U	0.37 U	300 U	0.42 U	1.9 J	**230**	1.2	0.36 U	670 UJ	0.15 J	0.36 U	0.75 U	20
2-Methylphenol	0.1		0.41 U	---	---	0.41 U	---	---	---	---	---	37 U	---	---	670 UJ	---	---	---	0.047 J
3+4 Methylphenol	NC		---	---	---	---	---	---	---	---	---	0.01 U	---	---	0.0032 J	---	---	---	---
4-Methylphenol	0.9		0.41 U	---	---	0.41 U	---	---	---	---	---	37 U	---	---	670 UJ	---	---	---	0.097 J
Acenaphthene	50		0.41 U	0.37 U	0.38 U	0.41 U	0.37 U	0.37 U	300 U	0.42 U	**70**	**450**	2.9	0.36 U	670 UJ	2.2	0.36 U	0.016 J	0.32 J
Acenaphthylene	50		0.41 U	0.37 U	0.38 U	0.41 U	0.37 U	0.37 U	6.1 J	0.42 U	38 U	2.3 J	0.41	0.36 U	670 UJ	1.9 U	0.36 U	0.75 U	0.36 J
Anthracene	50		0.41 U	0.37 U	0.38 U	0.006 J	0.37 U	0.37 U	**340**	0.007 J	3.3 J	**180**	2.1	0.36 U	9.7 J	0.047 J	0.36 U	0.88	14
Benz(a)anthracene*	0.224		0.41 U	0.37 U	0.38 U	0.02 J	0.37 U	0.37 U	**950**	0.019 J	**3 J**	**150**	**2**	0.015 J	**51 J**	0.1 J	0.36 U	**2.2**	**14**
Benzo(a)pyrene	0.061		0.41 U	0.37 U	0.38 U	**0.52**	0.006 J	0.37 U	**770**	0.016 J	**2.8 J**	**150**	**1.7**	0.014 J	**28 J**	**0.066 J**	0.36 U	**1.5**	**13**
Benzo(b)fluoranthene*	0.22		0.41 U	0.004 J	0.38 U	**0.5**	0.008 J	0.37 U	**910**	0.023 J	**2.9 J**	**170**	**2.2**	0.021 J	**44 J**	0.087 J	0.36 U	**2.1**	**16**
Benzo(g,h,i)perylene	50		0.41 U	0.032 J	0.38 U	0.028 J	0.005 J	0.37 UJ	**440**	0.006 J	1.5 J	**63**	0.61 J	0.008 J	25 J	0.047 J	0.36 UJ	0.059 J	5.1
Benzo(k)fluoranthene*	0.22		0.41 U	0.37 U	0.38 U	0.018 J	0.37 U	0.37 U	**410**	0.008 J	**0.94 J**	**73**	**0.74**	0.008 J	**18 J**	0.033 J	0.36 U	**0.84**	**6.9**
Carbazole	NC		0.41 U	---	---	0.41 U	---	---	---	---	---	47	---	---	670 UJ	---	---	---	6.2
Chrysene	0.4		0.41 U	0.37 U	0.38 U	0.027 J	0.005 J	0.37 U	**900**	0.02 J	**2.7 J**	**150**	**2.1**	0.016 J	**52 J**	0.091 J	0.36 U	**1.9**	**13**
Dibenz[a,h]anthracene*	0.0143		0.41 U	0.37 U	0.38 U	0.41 U	0.37 U	0.37 U	300 U	0.42 UJ	38 U	37 U	0.36 U	0.36 UJ	670 UJ	1.9 U	0.36 U	0.75 U	4.6 U
Dibenzofuran	6.2		0.41 U	---	---	0.41 U	---	---	---	---	---	**160**	---	---	670 UJ	---	---	---	**9.9**
Di-n-butylphthalate	8.1		0.41 U	---	---	0.015 J	---	---	---	---	---	37 U	---	---	670 UJ	---	---	---	4.6 U
Fluoranthene	50		0.41 U	0.37 U	0.38 U	0.03 J	0.006 J	0.37 U	**1800**	0.51	**110**	**530**	9.7	0.021 J	**1400 J**	2.4	0.004 J	3.5	33
Fluorene	50		0.41 U	0.37 U	0.38 U	0.41 U	0.37 U	0.37 U	11 J	0.42 U	42	**180**	2	0.36 U	670 UJ	0.11 J	0.36 U	0.028 J	12
Indeno (1,2,3-cd)pyrene*	3.2		0.41 U	0.37 UJ	0.38 UJ	0.021 J	0.005 J	0.37 UJ	**430**	0.007 J	1.3 J	**59**	0.67	0.007 J	**20 J**	0.038 J	0.36 U	0.059 J	**5.6**
Naphthalene	13		0.41 U	0.37 U	0.38 U	0.41 U	0.37 U	0.37 U	4.9 J	0.42 U	2.6 J	**1600**	2.4	0.36 U	670 UJ	11	0.36 U	0.75 U	**120**
Phenanthrene	50		0.41 U	0.37 U	0.38 U	0.013 J	0.005 J	0.37 U	**870**	0.027 J	**150**	**970**	13	0.014 J	22 J	2.1	0.36 U	2.9	39
Pyrene	50		0.41 U	0.37 U	0.38 U	0.79	0.008 J	0.37 U	**1600**	0.041 J	**74**	**430**	6.6	0.033 J	**1500 J**	3.6	0.005 J	4.3	28
Total CPAH*	NC		ND	0.004	ND	1.106	0.024	ND	4370	0.093	13.64	752	9.41	0.081	213	0.415	ND	8.599	68.5
Total PAH	500		ND	0.036	ND	1.973	0.048	ND	**9442**	0.684	468.94	**5387.3**	50.33	0.157	**3169.7**	22.069	0.009	20.282	340.28

Notes:
Hits only table
Units are in mg/kg (*milligrams per kilogram*)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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O'BRIEN & GERE

Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Action Level [1]	Location ID	MW-05	MW-06	MW-06	MW-06	MW-06	MW-06	MW-07	MW-08	MW-09D	MW-09D	MW-09S	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11
		Sample Date	7/11/1996	6/17/1998	6/17/1998	6/17/1998	6/17/1998	6/18/1998	6/17/1998	6/16/1998	6/18/1998	6/18/1998	6/16/1998	6/17/1998	6/17/1998	6/17/1998	5/10/2001	5/10/2001	5/10/2001
		Depth Interval (ft)	15.5 - 16	6 - 8	16 - 18	10 - 12	24 - 24.7	32 - 34	4 - 6	8 - 10	18 - 20	26 - 26.9	10 - 12	6 - 8	12 - 14	12 - 14	2 - 4	6 - 8	12 - 14
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	FD
2,4-Dimethylphenol	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4		0.025 J	**160 J**	0.31 J	8.8	0.39 U	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	4.10 U	0.6 J	0.46 U
2-Methylphenol	0.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50		0.43 U	**90 J**	0.18 J	7.8	0.39 U	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	4.10 U	2.30 U	0.46 U
Acenaphthylene	50		0.004 J	**57 J**	0.15 J	1.2 J	0.39 U	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	1.4 J	0.75 J	0.46 U
Anthracene	50		0.016 J	**200 J**	0.52	5.8	0.045 J	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	1.2 J	0.83 J	0.46 U
Benz(a)anthracene*	0.224		0.016 J	**180 J**	**0.51**	**4.9**	0.055 J	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	**13**	**3.8**	0.056 J
Benzo(a)pyrene	0.061		0.013 J	**170 J**	**0.48**	**4.5**	0.049 J	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	**11**	**3.5**	0.46 U
Benzo(b)fluoranthene*	0.22		0.016 J	**170 J**	**0.51**	**4.9**	0.051 J	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	**18**	**5**	0.068 J
Benzo(g,h,i)perylene	50		0.006 J	**110 J**	0.2 J	1.7 J	0.39 U	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	10	2.6	0.46 U
Benzo(k)fluoranthene*	0.22		0.005 J	**62 J**	0.19 J	**1.5 J**	0.39 U	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	**6.4**	**1.9 J**	0.46 U
Carbazole	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4		0.014 J	**160 J**	**0.42**	**3.7**	0.044 J	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	**12**	**3.4**	0.054 J
Dibenz[a,h]anthracene*	0.0143		0.43 U	**19 J**	0.37 U	1.9 U	0.39 U	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	**2.5 J**	2.30 U	0.46 U
Dibenzofuran	6.2		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50		0.45	**450 J**	1.4	14	0.13 J	0.065 J	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	21	5.9	0.083 J
Fluorene	50		0.013 J	**130 J**	0.33 J	5.6	0.39 U	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	4.10 U	0.31 J	0.46 U
Indeno (1,2,3-cd)pyrene*	3.2		0.006 J	**85 J**	0.19 J	1.6 J	0.39 U	0.37 U	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	**9.8**	2.6	0.46 U
Naphthalene	13		1.8	**730 J**	0.72	**30**	0.056 J	0.096 J	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	4.10 U	13	0.096 J
Phenanthrene	50		0.6	**610 J**	1.7	22	0.15 J	0.088 J	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	5.1	2.2 J	0.46 U
Pyrene	50		0.037 J	**590 J**	1.3	14	0.13 J	0.062 J	0.39 U	0.45 U	0.36 U	0.36 U	0.41 U	0.4 U	0.39 U	0.4 U	19	5.5	0.08 J
Total CPAH*	NC		0.07	846	2.3	21.1	0.199	ND	ND	ND	ND	ND	ND	ND	ND	ND	72.7	20.2	0.178
Total PAH	500		3.021	**3973**	9.11	132	0.71	0.311	ND	ND	ND	ND	ND	ND	ND	ND	130.4	51.89	0.437

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - *No Criteria*
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Location ID	MW-11	MW-12	MW-12	MW-12	MW-12	MW-12	PZ-01	PZ-01	PZ-01	SB-01	SB-01	SB-01	SB-01	SB-01	SB-01	SB-01	SB-02
	Sample Date	5/10/2001	6/24/2004	6/24/2004	6/24/2004	6/24/2004	6/24/2004	7/10/1996	7/10/1996	7/10/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	2/23/2000
	Depth Interval (ft)	12 - 14	0 - 4	0 - 4	4 - 8	10 - 12	14 - 16	6 - 10	14 - 16	24 - 26	2 - 4	6 - 8	6 - 8	8 - 30	18 - 20	12 - 14	12 - 14	2 - 4
	Sample Type	N	N	FD	N	N	N	N	N	N	N	FD	N	N	N	FD	N	N
	Action Level [1]																	
2,4-Dimethylphenol	NC	---	---	---	---	---	---	0.39 U	---	---	---	37.00 U	16.00 U	---	---	---	---	---
2-Methylnaphthalene	36.4	0.44 U	.29 J	.74 J	.4 U	.44 U	.37 U	0.006 J	0.38 U	0.37 U	0.39 U	**72 J**	**86 J**	0.004 J	0.38 U	0.013 J	0.014 J	0.56 J
2-Methylphenol	0.1	---	---	---	---	---	---	0.39 U	---	---	---	37.00 U	16.00 U	---	---	---	---	---
3+4 Methylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9	---	---	---	---	---	---	0.39 U	---	---	---	37.00 U	16.00 U	---	---	---	---	---
Acenaphthene	50	0.44 U	.49 J	.97 J	.04 J	.89	.37 U	0.025 J	0.38 U	0.37 U	0.39 U	**140 J**	17 J	0.36 U	0.38 U	0.39 U	0.40 U	0.18 J
Acenaphthylene	50	0.44 U	.73 J	5.3 J	.4 U	2.6	.37 U	0.009 J	0.38 U	0.37 U	0.39 U	0.83 J	16.00 U	0.36 U	0.38 U	0.39 U	0.40 U	2.8 J
Anthracene	50	0.44 U	1.8 J	12 J	.087 J	1.9	.37 U	0.036 J	0.38 U	0.37 U	0.39 U	**69 J**	1.2 J	0.36 U	0.38 U	0.39 U	0.40 U	1.6 J
Benz(a)anthracene*	0.224	0.046 J	**6.9 J**	**30 J**	.22 J	**.34 J**	.37 U	**0.66**	0.38 U	0.37 U	0.027 J	**52 J**	**0.67 J**	0.36 U	0.38 U	0.39 U	0.40 U	**13**
Benzo(a)pyrene	0.061	0.44 U	**7.5 J**	**26 J**	**.19 J**	**.24 J**	.37 U	**0.49**	0.38 U	0.37 U	0.026 J	**51 J**	**0.44 J**	0.36 U	0.38 U	0.39 U	0.40 U	**30**
Benzo(b)fluoranthene*	0.22	0.053 J	**7 J**	**23 J**	.18 J	.18 J	.37 U	**0.86**	0.38 U	0.37 U	**0.4**	**56 J**	**0.32 J**	0.36 U	0.38 U	0.39 U	0.40 U	**33**
Benzo(g,h,i)perylene	50	0.44 U	3.7 J	12 J	.1 J	.1 J	.37 U	0.022 J	0.38 UJ	0.37 UJ	0.015 J	1.9 J	16.00 U	0.36 UJ	0.38 UJ	0.39 UJ	0.40 UJ	18
Benzo(k)fluoranthene*	0.22	0.44 U	**6.2 J**	**26 J**	.21 J	**.24 J**	.37 U	0.031 J	0.38 U	0.37 U	0.013 J	**2.6 J**	16.00 U	0.36 U	0.38 U	0.39 U	0.40 U	**9.4**
Carbazole	NC	---	---	---	---	---	---	0.021 J	---	---	---	1.6 J	16.00 U	---	---	---	---	---
Chrysene	0.4	0.44 U	**6.7 J**	**27 J**	.22 J	.31 J	.37 U	**0.69**	0.38 U	0.37 U	0.03 J	**53 J**	**0.65 J**	0.36 U	0.38 U	0.39 U	0.40 U	**13**
Dibenz[a,h]anthracene*	0.0143	0.44 U	**.39 J**	**3 J**	.4 U	.44 U	.37 U	0.39 U	0.38 U	0.37 U	0.39 U	37.00 U	16.00 U	0.36 U	0.38 U	0.39 U	0.40 U	**3.2 J**
Dibenzofuran	6.2	---	---	---	---	---	---	0.023 J	---	---	---	**62 J**	16.00 U	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	---	---	---	0.39 U	---	---	---	37.00 U	16.00 U	---	---	---	---	---
Fluoranthene	50	0.066 J	15 J	**81 J**	.56	2	.37 U	1.3	0.38 U	0.005 J	0.46	**150 J**	0.91 J	0.009 J	0.38 U	0.006 J	0.005 J	10
Fluorene	50	0.44 U	.6 J	2.5 J	.04 J	3	.37 U	0.028 J	0.38 U	0.37 U	0.39 U	**75 J**	1.5 J	0.36 U	0.38 U	0.005 J	0.004 J	0.34 J
Indeno (1,2,3-cd)pyrene*	3.2	0.44 U	**3.4 J**	**12 J**	.093 J	.098 J	.37 U	0.023 J	0.38 UJ	0.37 UJ	0.015 J	2.1 J	16.00 U	0.36 UJ	0.38 UJ	0.39 UJ	0.40 UJ	**15**
Naphthalene	13	0.067 J	.66 J	2.4 J	.4 U	.15 J	.37 U	0.024 J	0.38 U	0.37 U	0.39 U	**300 J**	**92 J**	0.36 U	0.38 U	0.019 J	0.026 J	2 J
Phenanthrene	50	0.44 U	6.6 J	**62 J**	.39 J	8	.37 U	1.3	0.38 U	0.004 J	0.009 J	**220 J**	40 J	0.014 J	0.38 U	0.019 J	0.018 J	2.6 J
Pyrene	50	0.061 J	14 J	**67 J**	.48	1.5	.37 U	1.1	0.38 U	0.37 U	0.035 J	**120 J**	1.5 J	0.007 J	0.38 U	0.005 J	0.005 J	23
Total CPAH*	NC	0.099	38.1	147	1.11	1.41	ND	2.754	ND	ND	0.511	216.7	2.08	ND	ND	ND	ND	116.6
Total PAH	500	0.293	82	393	2.81	21.5	ND	6.604	ND	0.009	1.03	**1365.43**	242.19	0.034	ND	0.067	0.072	177.68

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Action Level [1]	Location ID	SB-02	SB-02	SB-02	SB-02	SB-02	SB-03	SB-03	SB-03	SB-03	SB-03	SB-04	SB-04	SB-04	SB-04	SB-04	SB-04	SB-04
		Sample Date	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000
		Depth Interval (ft)	4 - 6	6 - 8	8 - 10	10 - 12	12 - 14	6 - 8	10 - 12	12 - 14	14 - 16	18 - 20	2 - 4	8 - 10	8 - 10	10 - 12	14 - 16	16 - 18	18 - 20
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N
2,4-Dimethylphenol	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4		18 J	0.1 J	0.39 U	0.39 U	0.40 U	0.22 J	**64 J**	28	3 J	0.37 J	0.037 J	27 J	**39 J**	0.51 U	0.42 U	0.42 U	1.2
2-Methylphenol	0.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50		15 J	0.66	0.094 J	0.39 U	0.40 U	0.11 J	42 J	11	1.9 J	0.23 J	0.37 U	16 J	25 J	0.22 J	0.42 U	0.42 U	0.99
Acenaphthylene	50		22.00 U	0.066 J	0.39 U	0.39 U	0.40 U	0.14 J	**68 J**	2.5 J	1.9 J	0.2 J	0.37 U	25 J	45 J	0.51 U	0.048 J	0.42 U	0.28 J
Anthracene	50		9.4 J	0.31 J	0.39 U	0.39 U	0.40 U	0.35 J	**240**	6.3 J	4.6	0.53	0.054 J	**61**	**140**	0.18 J	0.19 J	0.06 J	0.82
Benz(a)anthracene*	0.224		**6.8 J**	**0.23 J**	0.39 U	0.39 U	0.40 U	**0.91**	**220**	**2.7 J**	**6.5**	**0.74**	**0.31 J**	**58**	**120**	0.18 J	0.19 J	0.062 J	**0.4**
Benzo(a)pyrene	0.061		**6.7 J**	**0.19 J**	0.39 U	0.39 U	0.40 U	**1**	**180**	**1.9 J**	**6.2**	**0.6**	**0.33 J**	**52**	**100**	**0.096 J**	**0.14 J**	0.42 U	**0.31 J**
Benzo(b)fluoranthene*	0.22		**6.6 J**	0.17 J	0.39 U	0.39 U	0.40 U	**1.4**	**210**	**1.6 J**	**8.9**	**0.77**	**0.46**	**63**	**110**	0.16 J	0.17 J	0.057 J	**0.26 J**
Benzo(g,h,i)perylene	50		4.3 J	0.072 J	0.39 U	0.39 U	0.40 U	0.47	**59 J**	0.87 J	2.7 J	0.26 J	0.14 J	25 J	**55 J**	0.068 J	0.079 J	0.42 U	0.12 J
Benzo(k)fluoranthene*	0.22		**2.8 J**	0.065 J	0.39 U	0.39 U	0.40 U	**0.4**	**63 J**	8.00 U	**2.1 J**	**0.23 J**	0.14 J	**16 J**	**45 J**	0.51 U	0.054 J	0.42 U	0.065 J
Carbazole	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4		**5.4 J**	0.2 J	0.39 U	0.39 U	0.40 U	**0.78**	**170**	**2.2 J**	**4.9**	**0.63**	0.3 J	**47**	**110**	0.17 J	0.18 J	0.058 J	0.37 J
Dibenz[a,h]anthracene*	0.0143		22.00 U	0.39 U	0.39 U	0.39 U	0.40 U	**0.085 J**	**18 J**	8.00 U	**0.74 J**	**0.068 J**	0.37 U	**5.1 J**	**12 J**	0.51 U	0.42 U	0.42 U	0.38 U
Dibenzofuran	6.2		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50		18 J	0.53	0.066 J	0.39 U	0.40 U	1.3	**520**	5.5 J	11	1.5	0.51	**150**	**320**	0.38 J	0.42 J	0.13 J	0.8
Fluorene	50		8.3 J	0.23 J	0.039 J	0.39 U	0.40 U	0.19 J	**180**	7.8 J	3.6	0.4 J	0.37 U	47	**90**	0.26 J	0.11 J	0.42 U	0.8
Indeno (1,2,3-cd)pyrene*	3.2		**3.5 J**	0.062 J	0.39 U	0.39 U	0.40 U	0.38 J	**62 J**	8.00 U	2.6 J	0.24 J	0.12 J	**22 J**	**47 J**	0.056 J	0.068 J	0.42 U	0.099 J
Naphthalene	13		**190**	3.4	0.19 J	0.25 J	0.40 U	0.59	**51 J**	**42**	3.6	0.55	0.37 U	**79**	**66 J**	0.42 J	0.066 J	0.42 U	1.4
Phenanthrene	50		32	1.1	0.15 J	0.07 J	0.40 U	1.2	**670**	20	13	1.4	0.22 J	**170**	**380**	0.43 J	0.45	0.14 J	2.6
Pyrene	50		17 J	0.63	0.063 J	0.045 J	0.40 U	2.8	**440**	8.4	17	1.5	0.59	**150**	**350**	0.57	0.54	0.18 J	1.3
Total CPAH*	NC		31.8	0.917	ND	ND	ND	4.955	923	8.4	31.94	3.278	1.66	263.1	544	0.662	0.802	0.177	1.504
Total PAH	500		343.8	8.015	0.602	0.365	ND	12.325	**3257**	140.77	94.24	10.218	3.211	**1013.1**	**2054**	3.19	2.705	0.687	11.814

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

O'BRIEN & GERE

Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Location ID		SB-05	SB-05	SB-05	SB-05	SB-05	SB-05	SB-06	SB-07	SB-07	SB-07	SB-07	SB-07	SB-08	SB-08	SB-08	SB-08	SB-08
Sample Date		2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/22/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000
Depth Interval (ft)		4 - 6	6 - 8	10 - 12	12 - 14	14 - 16	14 - 16	6 - 8	2 - 4	6 - 8	10 - 12	12 - 14	14 - 16	4 - 6	6 - 8	10 - 12	12 - 14	16 - 18
Sample Type		N	N	N	N	N	FD	N	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]																	
2,4-Dimethylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4	0.39 U	**420**	**200**	0.068 J	0.38 U	0.38 U	0.39 U	19.00 U	0.99 J	0.40 U	0.40 U	0.37 U	0.078 J	9 J	10	6.3 J	0.37 U
2-Methylphenol	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50	0.085 J	**96 J**	41 J	0.086 J	0.38 U	0.14 J	0.39 U	19.00 U	2.6	0.54	0.075 J	0.37 U	0.40 U	11	6.5 J	3.7 J	0.37 U
Acenaphthylene	50	0.39 U	**470**	**160**	0.093 J	0.04 J	0.38 U	0.39 U	19.00 U	0.4 J	0.088 J	0.40 U	0.37 U	0.40 U	1.2 J	8.9	10	0.37 U
Anthracene	50	0.34 J	**670**	**200**	0.23 J	0.07 J	0.13 J	0.39 U	4.9 J	2.2	0.51	0.076 J	0.37 U	0.40 U	6 J	11	12	0.37 U
Benz(a)anthracene*	0.224	**0.73**	**680**	**170**	0.2 J	0.058 J	0.072 J	0.39 U	**30**	**1.8**	**0.32 J**	0.047 J	0.37 U	0.064 J	**5.6 J**	**11**	**9.5**	0.37 U
Benzo(a)pyrene	0.061	**0.65**	**530**	**140**	**0.16 J**	0.042 J	0.048 J	0.39 U	**30**	**1.3 J**	**0.25 J**	0.40 U	0.37 U	0.061 J	**4.7 J**	**8.8**	**8.5**	0.37 U
Benzo(b)fluoranthene*	0.22	**0.92**	**630**	**150**	0.2 J	0.059 J	0.047 J	0.39 U	**41**	**1.6**	**0.26 J**	0.40 U	0.37 U	0.15 J	**4.7 J**	**10**	**8.9**	0.37 U
Benzo(g,h,i)perylene	50	0.28 J	**170 J**	47 J	0.39 U	0.38 U	0.38 U	0.39 U	13 J	0.43 J	0.066 J	0.40 U	0.37 U	0.048 J	1.9 J	3.1 J	3.3 J	0.37 U
Benzo(k)fluoranthene*	0.22	**0.26 J**	**250 J**	**61 J**	0.08 J	0.38 U	0.38 U	0.39 U	**10 J**	**0.55 J**	0.11 J	0.40 U	0.37 U	0.054 J	**2.1 J**	**3.4 J**	**3.8 J**	0.37 U
Carbazole	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4	**0.65**	**560**	**140**	0.15 J	0.047 J	0.055 J	0.39 U	**27**	**1.5 J**	0.26 J	0.40 U	0.37 U	0.11 J	**4.4 J**	**8.2 J**	**7.1 J**	0.37 U
Dibenz[a,h]anthracene*	0.0143	**0.068 J**	**55 J**	**13 J**	0.39 U	0.38 U	0.38 U	0.39 U	**3.6 J**	1.60 U	0.40 U	0.40 U	0.37 U	0.40 U	9.10 U	8.20 U	7.80 U	0.37 U
Dibenzofuran	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	1.4	**1700**	**430**	0.49	0.13 J	0.22 J	0.063 J	**61**	4.3	0.82	0.15 J	0.37 U	0.11 J	13	27	28	0.046 J
Fluorene	50	0.12 J	**420**	**150**	0.17 J	0.077 J	0.086 J	0.39 U	19.00 U	1.9	0.34 J	0.046 J	0.37 U	0.40 U	5 J	10	11	0.37 U
Indeno (1,2,3-cd)pyrene*	3.2	0.28 J	**190 J**	**49 J**	0.04 J	0.38 U	0.38 U	0.39 U	**13 J**	0.44 J	0.062 J	0.40 U	0.37 U	0.042 J	1.9 J	3.2 J	3.2 J	0.37 U
Naphthalene	13	0.1 J	**1300**	**570**	0.13 J	0.082 J	0.38 U	0.39 U	19.00 U	1.9	0.40 U	0.40 U	0.37 U	0.098 J	**51**	**38**	**16**	0.37 U
Phenanthrene	50	1.2	**1900**	**590**	0.7	0.2 J	0.5	0.39 U	18 J	7.7	1.6	0.29 J	0.37 U	0.14 J	17	35	42	0.067 J
Pyrene	50	1.5	**1300**	**350**	0.46	0.14 J	0.27 J	0.057 J	**55**	4.2	1.1	0.18 J	0.37 U	0.12 J	12	21	22	0.047 J
Total CPAH*	NC	3.558	2895	723	0.83	0.206	0.222	ND	154.6	7.19	1.262	0.047	ND	0.481	23.4	44.6	41	ND
Total PAH	500	8.583	**11341**	**3461**	3.257	0.945	1.568	0.12	306.5	33.81	6.326	0.864	ND	1.075	150.5	215.1	195.3	0.16

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

O'BRIEN & GERE

Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Action Level [1]	Location ID	SB-09	SB-09	SB-09	SB-09	SB-10	SB-10	SB-10	SB-10	SB-10	SB-11	SB-11	SB-11	SB-11	SB-11	SB-12	SB-12	SB-12
		Sample Date	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	5/8/2001	5/8/2001	5/8/2001
		Depth Interval (ft)	2 - 4	4 - 6	8 - 10	12 - 14	4 - 6	8 - 10	10 - 12	12 - 14	18 - 20	2 - 4	4 - 6	8 - 10	14 - 16	14 - 16	4 - 6	8 - 10	12 - 14
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N
2,4-Dimethylphenol	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4		0.58 J	0.064 J	0.40 U	0.41 U	0.80 U	0.40 U	0.41 U	0.41 U	0.37 U	0.17 J	**83**	0.39 U	0.37 U	0.37 U	3.8 J	0.41 J	0.41 U
2-Methylphenol	0.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50		0.24 J	0.085 J	0.40 U	0.41 U	0.80 U	0.40 U	0.41 U	0.41 U	0.37 U	0.37 U	47 J	0.39 U	0.37 U	0.37 U	18.00 U	0.13 J	0.67
Acenaphthylene	50		0.7 J	0.11 J	0.40 U	0.41 U	0.24 J	0.40 U	0.41 U	0.41 U	0.37 U	0.75 J	32 J	0.39 U	0.37 U	0.37 U	12 J	0.65 J	0.05 J
Anthracene	50		1	0.25 J	0.40 U	0.41 U	0.25 J	0.40 U	0.41 U	0.41 U	0.37 U	0.35 J	**150**	0.39 U	0.37 U	0.064 J	48	1.4	0.068 J
Benz(a)anthracene*	0.224		**1.2**	**0.53**	0.40 U	0.41 U	**2.4**	0.40 U	0.41 U	0.41 U	0.37 U	**1.1**	**220**	0.06 J	0.044 J	0.087 J	**75**	**2.5**	0.078 J
Benzo(a)pyrene	0.061		**1.1**	**0.49**	0.40 U	0.41 U	**2.6**	0.40 U	0.41 U	0.41 U	0.37 U	**2.3**	**210**	**0.063 J**	0.039 J	**0.078 J**	**63**	**2.2**	**0.092 J**
Benzo(b)fluoranthene*	0.22		**1.4**	**0.67**	0.40 U	0.41 U	**3.6**	0.40 U	0.41 U	0.41 U	0.37 U	**3.1**	**270**	0.1 J	0.049 J	0.095 J	**74**	**3**	0.1 J
Benzo(g,h,i)perylene	50		0.38 J	0.17 J	0.40 U	0.41 U	1.8	0.40 U	0.41 U	0.41 U	0.37 U	3.9	**74 J**	0.052 J	0.37 U	0.059 J	28	1	0.054 J
Benzo(k)fluoranthene*	0.22		**0.46 J**	**0.26 J**	0.40 U	0.41 U	**1.3**	0.40 U	0.41 U	0.41 U	0.37 U	**0.9**	**88**	0.39 U	0.37 U	0.37 U	**23**	**1.2**	0.41 U
Carbazole	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4		**1**	**0.56**	0.40 U	0.41 U	**2.1**	0.40 U	0.41 U	0.41 U	0.37 U	**1**	**190**	0.056 J	0.37 U	0.07 J	**71**	**2.2**	0.075 J
Dibenz[a,h]anthracene*	0.0143		**0.097 J**	**0.042 J**	0.40 U	0.41 U	**0.34 J**	0.40 U	0.41 U	0.41 U	0.37 U	**0.51**	**22 J**	0.39 U	0.37 U	0.37 U	**6.6 J**	**0.25 J**	0.41 U
Dibenzofuran	6.2		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50		3.2	1.4	0.40 U	0.41 U	2.3	0.052 J	0.087 J	0.41 U	0.038 J	1	**540**	0.093 J	0.11 J	0.22 J	**170**	4.7	0.17 J
Fluorene	50		0.9	0.14 J	0.40 U	0.41 U	0.80 U	0.40 U	0.41 U	0.41 U	0.37 U	0.057 J	**120**	0.39 U	0.37 U	0.045 J	8.3 J	0.5 J	0.39 J
Indeno (1,2,3-cd)pyrene*	3.2		0.4 J	0.18 J	0.40 U	0.41 U	1.4	0.40 U	0.41 U	0.41 U	0.37 U	2.4	**76 J**	0.046 J	0.37 U	0.051 J	**23**	0.93	0.049 J
Naphthalene	13		1.2	0.12 J	0.40 U	0.41 U	0.80 U	0.40 U	0.41 U	0.41 U	0.057 J	0.49	**210**	0.046 J	0.37 U	0.039 J	6.6 J	0.54 J	0.41 U
Phenanthrene	50		3.9	1.3	0.40 U	0.41 U	0.11 J	0.40 U	0.41 U	0.41 U	0.087 J	0.87	**590**	0.088 J	0.11 J	0.22 J	**88**	4.7	0.059 J
Pyrene	50		2.7	1.2	0.40 U	0.41 U	4.9	0.049 J	0.088 J	0.41 U	0.37 U	2.7	**490**	0.11 J	0.12 J	0.21 J	**270**	7.8	0.18 J
Total CPAH*	NC		5.657	2.732	ND	ND	13.74	ND	ND	ND	ND	11.31	1076	0.325	0.132	0.381	335.6	12.28	0.394
Total PAH	500		20.457	7.571	ND	ND	23.34	0.101	0.175	ND	0.182	21.597	**3412**	0.714	0.472	1.238	**970.3**	34.11	2.035

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Action Level [1]	SB-12 5/8/2001 18 - 20 FD	SB-12 5/8/2001 18 - 20 N	SB-13 5/8/2001 2 - 4 N	SB-13 5/8/2001 8 - 10 N	SB-13 5/8/2001 14 - 16 N	SB-13 5/8/2001 18 - 20 N	SB-14 5/8/2001 2 - 4 N	SB-14 5/8/2001 8 - 10 N	SB-14 5/8/2001 12 - 14 N	SB-14 5/8/2001 16 - 18 N	SB-15 5/8/2001 2 - 4 N	SB-15 5/8/2001 6 - 8 N	SB-15 5/8/2001 12 - 14 N	SB-15 5/8/2001 18 - 20.2 N	SB-16 5/9/2001 2 - 4 N	SB-16 5/9/2001 4 - 6 N	SB-16 5/9/2001 8 - 10 N
2,4-Dimethylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4	0.39 U	0.40 U	0.78 J	0.94 J	0.38 U	0.40 U	0.49 J	4.00 U	1.3 J	0.37 U	0.22 J	**330**	0.045 J	0.042 J	0.40 U	0.39 U	0.37 U
2-Methylphenol	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50	0.39 U	0.06 J	0.93 J	0.76 J	0.38 U	0.40 U	3.90 U	1.5 J	19	0.37 U	0.14 J	23 J	0.35 U	0.35 U	0.40 U	0.39 U	0.37 U
Acenaphthylene	50	0.39 U	0.40 U	1.6 J	3.4 J	0.38 U	0.40 U	2.6 J	2.2 J	5.3 J	0.37 U	7.5	**190**	0.062 J	0.35 U	0.40 U	0.068 J	0.37 U
Anthracene	50	0.39 U	0.40 U	3.5	12	0.054 J	0.40 U	3.6 J	17	28	0.37 U	0.94	**88 J**	0.094 J	0.35 U	0.40 U	0.076 J	0.37 U
Benz(a)anthracene*	0.224	0.39 U	0.072 J	**11**	**25**	0.15 J	0.40 U	**16**	**16**	**20**	0.37 U	**0.97**	**57 J**	0.079 J	0.35 U	0.13 J	0.12 J	0.37 U
Benzo(a)pyrene	0.061	0.39 U	**0.081 J**	**11**	**21**	**0.13 J**	0.40 U	**19**	**13**	**17**	0.37 U	**12**	**52 J**	**0.072 J**	0.35 U	**0.15 J**	**0.15 J**	0.37 U
Benzo(b)fluoranthene*	0.22	0.39 U	0.088 J	**15**	**32**	0.17 J	0.40 U	**25**	**16**	**21**	0.37 U	**8.2**	**41 J**	0.061 J	0.35 U	0.21 J	0.15 J	0.37 U
Benzo(g,h,i)perylene	50	0.39 U	0.053 J	4.1	8	0.078 J	0.40 U	7.7	4.8	6.3 J	0.37 U	10	20 J	0.35 U	0.35 U	0.14 J	0.093 J	0.37 U
Benzo(k)fluoranthene*	0.22	0.39 U	0.40 U	**5.4**	**12**	0.069 J	0.40 U	**7.8**	**4.5**	**5.6 J**	0.37 U	**1.6**	**16 J**	0.35 U	0.35 U	0.076 J	0.044 J	0.37 U
Carbazole	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4	0.39 U	0.067 J	**11**	**23**	0.14 J	0.40 U	**14**	**14**	**19**	0.37 U	**1.8**	**53 J**	0.078 J	0.35 U	0.14 J	0.13 J	0.37 U
Dibenz[a,h]anthracene*	0.0143	0.39 U	0.40 U	**1 J**	**2.5 J**	0.38 U	0.40 U	**2.1 J**	**1.3 J**	**1.9 J**	0.37 U	**1.3**	97.00 U	0.35 U	0.35 U	0.40 U	0.39 U	0.37 U
Dibenzofuran	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	0.046 J	0.12 J	21	44	0.29 J	0.40 U	23	39	**52**	0.37 U	0.56 J	**130**	0.19 J	0.057 J	0.19 J	0.2 J	0.37 U
Fluorene	50	0.39 U	0.049 J	1.3 J	3.3 J	0.38 U	0.40 U	1.1 J	7.4	23	0.37 U	0.57 J	**97**	0.043 J	0.35 U	0.40 U	0.39 U	0.37 U
Indeno (1,2,3-cd)pyrene*	3.2	0.39 U	0.045 J	**4.1**	**8.7**	0.075 J	0.40 U	**7.8**	**4.7**	**6.4 J**	0.37 U	**8**	**17 J**	0.35 U	0.35 U	0.13 J	0.08 J	0.37 U
Naphthalene	13	0.39 U	0.40 U	1.2 J	1.3 J	0.38 U	0.40 U	1.4 J	1.9 J	11	0.37 U	3.8	**1300**	0.092 J	0.097 J	0.40 U	0.39 U	0.37 U
Phenanthrene	50	0.39 U	0.068 J	13	32	0.18 J	0.40 U	9.6	32	**80**	0.37 U	0.35 J	**350**	0.38	0.11 J	0.094 J	0.26 J	0.37 U
Pyrene	50	0.047 J	0.13 J	22	46	0.26 J	0.40 U	27	38	49	0.37 U	1.6	**190**	0.26 J	0.08 J	0.21 J	0.36 J	0.37 U
Total CPAH*	NC	ND	0.353	58.5	124.2	0.734	ND	91.7	69.5	90.9	ND	33.87	236	0.29	ND	0.836	0.674	ND
Total PAH	500	0.093	0.833	127.91	275.9	1.596	ND	168.19	213.3	365.8	ND	59.55	**2954**	1.456	0.386	1.47	1.731	ND

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Action Level [1]	Location ID	SB-16	SB-17	SB-17	SB-17	SB-17	SB-18	SB-18	SB-18	SB-20	SB-20	SB-20	SB-21	SB-21	SB-21	SB-22	SB-22	SB-22
		Sample Date	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	5/9/2001	2/11/2002	2/11/2002	2/11/2002	2/11/2002	2/11/2002	2/11/2002	2/12/2002	2/12/2002	2/12/2002
		Depth Interval (ft)	16 - 16.7	2 - 4	6 - 8	10 - 12	14 - 14.4	0 - 2	6 - 8	14 - 14.4	8 - 10	14 - 16	20 - 22	4 - 6	8 - 10	16 - 18	6 - 8	12 - 14	18 - 20
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
2,4-Dimethylphenol	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4		0.37 U	0.39 U	0.41 U	0.37 U	0.37 U	0.39 U	0.37 U	0.36 U	.45 U	**130**	3.6	**130**	**110**	.052 J	.14 J	.37 U	.35 U
2-Methylphenol	0.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50		0.37 U	0.39 U	0.41 U	0.5	0.37 U	0.39 U	0.041 J	0.36 U	.45 U	**55**	2.8	**59**	**55**	.084 J	.066 J	.37 U	.35 U
Acenaphthylene	50		0.37 U	0.39 U	0.41 U	1.7	0.37 U	0.51	0.37 U	0.36 U	.092 J	13 J	.89	14 J	14	.078 J	.26 J	.37 U	.35 U
Anthracene	50		0.37 U	0.39 U	0.41 U	3	0.37 U	0.4	0.37 U	0.36 U	.051 J	29 J	1.9	35	32	.24 J	.23 J	.37 U	.35 U
Benz(a)anthracene*	0.224		0.37 U	0.39 U	0.41 U	**2.3**	0.37 U	**2**	0.37 U	0.36 U	.12 J	**16 J**	**1.3**	**23 J**	**21 J**	.16 J	**1.7**	.37 U	.35 U
Benzo(a)pyrene	0.061		0.37 U	0.39 U	0.41 U	**2**	0.37 U	**1.8**	0.37 U	0.36 U	**.091 J**	**11 J**	**0.91**	**17 J**	**16 J**	**.12 J**	**1.3**	.37 U	.35 U
Benzo(b)fluoranthene*	0.22		0.37 U	0.39 U	0.41 U	**1.7**	0.37 U	**3.3**	0.37 U	0.36 U	.084 J	**9.7 J**	**0.73**	**17 J**	**16**	.11 J	**3.2**	.37 U	.35 U
Benzo(g,h,i)perylene	50		0.37 U	0.39 U	0.41 U	0.88	0.37 U	1.4	0.37 U	0.36 U	.45 U	4.6 J	.28 J	6.8 J	7 J	.045 J	1.3	.37 U	.35 U
Benzo(k)fluoranthene*	0.22		0.37 U	0.39 U	0.41 U	**0.51**	0.37 U	**0.93**	0.37 U	0.36 U	.45 U	**3.6 J**	**.29 J**	**5.4 J**	**4.6 J**	.36 U	**0.93**	.37 U	.35 U
Carbazole	NC		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4		0.37 U	0.39 U	0.41 U	**2**	0.37 U	**2**	0.37 U	0.36 U	.12 J	**14 J**	**0.99**	**20 J**	**17 J**	.14 J	**1.6**	.37 U	.35 U
Dibenz[a,h]anthracene*	0.0143		0.37 U	0.39 U	0.41 U	**0.19 J**	0.37 U	**0.37 J**	0.37 U	0.36 U	.45 U	**1.2 J**	**.078 J**	**1.8 J**	**1.7 J**	.36 U	**.3 J**	.37 U	.35 U
Dibenzofuran	6.2		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50		0.37 U	0.39 U	0.41 U	5	0.37 U	3.8	0.37 U	0.36 U	.39 J	32	2.4	48	48	.33 J	2.6	.038 J	.35 U
Fluorene	50		0.37 U	0.39 U	0.41 U	1.2	0.37 U	0.092 J	0.37 U	0.36 U	.45 U	40	2.4	41	39	.16 J	.07 J	.37 U	.35 U
Indeno (1,2,3-cd)pyrene*	3.2		0.37 U	0.39 U	0.41 U	0.73	0.37 U	1.3	0.37 U	0.36 U	.45 U	**3.7 J**	.24 J	**6.1 J**	**5.8 J**	.038 J	1.3	.37 U	.35 U
Naphthalene	13		0.37 U	0.39 U	0.41 U	0.37 U	0.37 U	0.11 J	0.37 U	0.36 U	.45 U	**180**	3.2	**200**	**200**	.053 J	.27 J	.37 U	.35 U
Phenanthrene	50		0.37 U	0.39 U	0.41 U	9.7	0.37 U	1.5	0.37 U	0.36 U	.074 J	**97**	5.8	**100**	**100**	.92	.92	.062 J	.35 U
Pyrene	50		0.37 U	0.39 U	0.41 U	6.6	0.37 U	3.7	0.37 U	0.36 U	.59	47	3.9	**55**	**54**	.44	2.8	.04 J	.35 U
Total CPAH*	NC		ND	ND	ND	9.43	ND	11.7	ND	ND	.415	59.2	4.54	90.3	82.1	.568	10.3	ND	ND
Total PAH	500		ND	ND	ND	38.01	ND	23.212	0.041	ND	1.61	**687**	31.7	**779**	**741**	2.97	19	.14	ND

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
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Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Location ID	SB-22	SB-23	SB-23	SB-23	SB-24	SB-24	SB-24	SB-25	SB-25	SB-25	SB-26	SB-26	SB-26	SB-27	SB-27	SB-27	SB-28
	Sample Date	2/12/2002	2/12/2002	2/12/2002	2/12/2002	2/12/2002	2/12/2002	2/12/2002	2/13/2002	2/13/2002	2/13/2002	2/13/2002	2/13/2002	2/13/2002	2/13/2002	2/13/2002	2/13/2002	2/14/2002
	Depth Interval (ft)	18 - 20	4 - 6	10 - 12	16 - 18	4 - 6	10 - 12	18 - 20	4 - 6	10 - 12	18 - 20	4 - 6	12 - 14	18 - 20	4 - 6	12 - 14	18 - 20	4 - 6
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	Action Level [1]																	
2,4-Dimethylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
2-Methylphenol	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Acenaphthylene	50	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Anthracene	50	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Benz(a)anthracene*	0.224	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Benzo(a)pyrene	0.061	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Benzo(b)fluoranthene*	0.22	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Benzo(g,h,i)perylene	50	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Benzo(k)fluoranthene*	0.22	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Carbazole	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Dibenz[a,h]anthracene*	0.0143	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Dibenzofuran	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.066 J	.041 J	.049 J	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Fluorene	50	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Indeno (1,2,3-cd)pyrene*	3.2	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.38 U	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Naphthalene	13	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.059 J	.039 J	.37 U	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Phenanthrene	50	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.43 U	.041 J	.04 J	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Pyrene	50	.37 U	.48 U	.4 U	.38 U	.41 U	.41 U	.37 U	.068 J	.38 U	.042 J	.4 U	.38 U	.36 U	.41 U	.39 U	.38 U	.38 U
Total CPAH*	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAH	500	ND	ND	ND	ND	ND	ND	ND	.193	.121	.131	ND	ND	ND	ND	ND	ND	ND

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Location ID		SB-28	SB-28	SB-29	SB-29	SB-29	SB-30	SB-30	SB-30	SB-30	SB-31	SB-31	SB-31	SB-32	SB-32	SB-32	SB-33	SB-33
Sample Date		2/14/2002	2/14/2002	2/14/2002	2/14/2002	2/14/2002	2/14/2002	2/14/2002	2/14/2002	2/14/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002
Depth Interval (ft)		12 - 14	18 - 20	4 - 6	10 - 12	16 - 18	6 - 8	12 - 14	12 - 14	18 - 20	4 - 6	12 - 14	18 - 20	6 - 8	12 - 14	18 - 20	4 - 6	12 - 14
Sample Type		N	N	N	N	N	N	FD	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]																	
2,4-Dimethylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	10 U	.37 U	.37 U	.37 U	.39 U	.4 U	.38 U	.36 U
2-Methylphenol	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	10 U	.37 U	.37 U	.049 J	.39 U	.4 U	.38 U	.36 U
Acenaphthylene	50	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	5.4 J	.37 U	.37 U	.13 J	.39 U	.4 U	.38 U	.36 U
Anthracene	50	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	3.5 J	.37 U	.37 U	.23 J	.39 U	.4 U	.38 U	.36 U
Benz(a)anthracene*	0.224	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	**33**	.37 U	.37 U	**0.77**	.041 J	.4 U	.067 J	.36 U
Benzo(a)pyrene	0.061	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	**29**	.37 U	.37 U	**0.55**	.39 U	.4 U	.041 J	.36 U
Benzo(b)fluoranthene*	0.22	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	**54**	.37 U	.37 U	**0.67**	.042 J	.4 U	.06 J	.36 U
Benzo(g,h,i)perylene	50	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	18	.37 U	.37 U	.2 J	.39 U	.4 U	.38 U	.36 U
Benzo(k)fluoranthene*	0.22	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	**14**	.37 U	.37 U	**.26 J**	.39 U	.4 U	.38 U	.36 U
Carbazole	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	**31**	.37 U	.37 U	**0.64**	.39 U	.4 U	.05 J	.36 U
Dibenz[a,h]anthracene*	0.0143	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	**4.6 J**	.37 U	.37 U	**.066 J**	.39 U	.4 U	.38 U	.36 U
Dibenzofuran	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	.37 U	.36 U	.046 J	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	50	.37 U	.37 U	1.6	.069 J	.4 U	.13 J	.36 U
Fluorene	50	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	10 U	.37 U	.37 U	.09 J	.39 U	.4 U	.38 U	.36 U
Indeno (1,2,3-cd)pyrene*	3.2	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	**20**	.37 U	.37 U	.22 J	.39 U	.4 U	.38 U	.36 U
Naphthalene	13	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	3.1 J	.37 U	.37 U	.37 U	.39 U	.4 U	.38 U	.36 U
Phenanthrene	50	.37 U	.36 U	.38 U	.38 U	.37 U	.4 U	.37 U	.37 U	.36 U	9.2 J	.37 U	.37 U	.63	.039 J	.4 U	.12 J	.36 U
Pyrene	50	.37 U	.36 U	.094 J	.38 U	.37 U	.4 U	.094 J	.084 J	.36 U	**51**	.37 U	.37 U	1.4	.067 J	.4 U	.097 J	.36 U
Total CPAH*	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND	186	ND	ND	3.18	.083	ND	.218	ND
Total PAH	500	ND	ND	.14	ND	ND	ND	.094	.084	ND	326	ND	ND	7.51	.258	ND	.565	ND

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
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Sample Type N - Normal
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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Location ID		SB-33	SB-34	SB-34	SB-34	SB-34	SB-35	SB-35	SB-35	SB-36	SB-36	SB-36	SB-36	SB-37	SB-37	SB-37	SB-37	SB-38
Sample Date		2/15/2002	6/6/2003	6/6/2003	6/6/2003	6/6/2003	6/14/2004	6/14/2004	6/14/2004	6/15/2004	6/15/2004	6/15/2004	6/15/2004	6/15/2004	6/15/2004	6/15/2004	6/15/2004	6/16/2004
Depth Interval (ft)		18 - 20	2 - 4	2 - 4	6 - 8	14 - 16	2 - 4	6 - 8	8 - 10	8 - 10	14 - 16	16 - 18	22 - 24	14 - 16	18 - 20	10 - 12	26 - 28	2 - 4
Sample Type		N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]																	
2,4-Dimethylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4	.35 U	N	.44 U	.41 U	.38 U	8.4 J	.82 J	.4 U	**53**	1.5	2.6	**170**	.27 J	.093 J	**270**	.38 U	**50**
2-Methylphenol	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50	.35 U	N	.44 U	.41 U	.38 U	7.2 J	2 J	.045 J	9.9 J	.57 J	.51 J	**76**	.083 J	.057 J	**51 J**	.38 U	26
Acenaphthylene	50	.35 U	N	.44 U	.41 U	.38 U	29	3.9	.19 J	28	1.5	1.8 J	19 J	.17 J	.16 J	**270**	.039 J	46
Anthracene	50	.35 U	N	.44 U	.41 U	.38 U	20	9.5	.32 J	45	2.1	2.8	44	.29 J	.28 J	**280**	.075 J	28
Benz(a)anthracene*	0.224	.35 U	N	.074 J	.41 U	.38 U	**13 J**	**6.2**	**0.44**	**49**	**1.7**	**2.3**	**23 J**	**.25 J**	**.27 J**	**180 J**	.073 J	**31**
Benzo(a)pyrene	0.061	.35 U	N	**.074 J**	.41 U	.38 U	**11 J**	**6**	**0.43**	**40**	**1.2**	**1.6 J**	**18 J**	**.23 J**	**.23 J**	**150 J**	**.063 J**	**62**
Benzo(b)fluoranthene*	0.22	.35 U	.044	.13 J	.41 U	.38 U	**5.5 J**	**3.3 J**	**.23 J**	**40**	**1**	**1.4 J**	**9.6 J**	.19 J	.18 J	**120 J**	.043 J	**32**
Benzo(g,h,i)perylene	50	.35 U	N	.06 J	.41 U	.38 U	4.8 J	2.5 J	.2 J	21	.48 J	.66 J	6.2 J	.12 J	.13 J	**63 J**	.38 U	47
Benzo(k)fluoranthene*	0.22	.35 U	N	.44 U	.41 U	.38 U	**7.5 J**	**3.9**	**.28 J**	**37**	**1.1**	**1.5 J**	**14 J**	.2 J	.18 J	**130 J**	.056 J	**35**
Carbazole	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4	.35 U	N	.44 J	.41 U	.38 U	**12 J**	**6.4**	**0.46**	**46**	**1.5**	**2**	**23 J**	.22 J	.27 J	**180 J**	.073 J	**36**
Dibenz[a,h]anthracene*	0.0143	.35 U	N	.44 U	.41 U	.38 U	18 U	**.51 J**	.4 U	**6.4 J**	**.15 J**	**.21 J**	40 U	.41 R	.44 UJ	230 U	.38 U	**9.8 J**
Dibenzofuran	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	.35 U	.048	.1 J	.41 U	.38 U	32	16	.97	**110**	4.1	5.9	**55**	.71 J	.78 J	**510**	.23 J	**71**
Fluorene	50	.35 U	N	.44 U	.41 U	.38 U	22	2.3 J	.065 J	40	2	2.6	49	.21 J	.18 J	**220 J**	.047 J	25
Indeno (1,2,3-cd)pyrene*	3.2	.35 U	N	.051 J	.41 U	.38 U	**3.9 J**	2 J	.15 J	**20**	.49 J	.68 J	**5.4 J**	.11 J	.11 J	**62 J**	.38 U	**36**
Naphthalene	13	.35 U	N	.44 U	.41 U	.38 U	**89**	3.7 J	.078 J	**180**	3.9	8.1	**340**	1.6 J	.65 J	**1400**	.054 J	**110**
Phenanthrene	50	.35 U	N	.049 J	.41 U	.38 U	**76**	36	.81	**140**	6.1	8.7	**170**	.82 J	.87 J	**780**	.3 J	**100**
Pyrene	50	.35 U	.062	.13 J	.41 U	.38 U	45	23	1.5	**97**	3.5	4.8	**70**	.56 J	.65 J	**430**	.17 J	**90**
Total CPAH*	NC	ND	.044	.329	ND	ND	52.9	28.3	1.99	238	7.14	9.69	93	1.2	1.24	822	.308	242
Total PAH	500	ND	.154	.668	ND	ND	386	128	6.17	**962**	32.9	48.2	**1090**	6.03	5.09	**5100**	1.22	**835**

Notes:
Hits only table
Units are in mg/kg (miiligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Location ID		SB-38	SB-38	SB-38	SB-39	SB-39	SB-39	SB-39	SB-40	SB-40	SB-40	SB-41	SB-41	SB-41	SB-41	SB-42	SB-42	SB-43
Sample Date		6/16/2004	6/16/2004	6/16/2004	6/16/2004	6/16/2004	6/16/2004	6/16/2004	6/17/2004	6/17/2004	6/17/2004	6/18/2004	6/18/2004	6/18/2004	6/18/2004	6/23/2004	6/23/2004	6/23/2004
Depth Interval (ft)		4 - 8	4 - 8	8 - 12	0 - 4	6 - 8	10 - 12	12 - 16	0 - 2	4 - 8	10 - 12	8 - 12	12 - 16	16 - 20	30 - 34	0 - 4	4 - 8	0 - 4
Sample Type		FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
Chemical Name	Action Level [1]																	
2,4-Dimethylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4	1.9 U	1.9 U	.89 J	.46 J	.41 U	.39 U	.41 U	4.1 U	.39 U	.37 U	**640**	.17 J	.17 J	.16 J	9.3 J	.64 J	.082
2-Methylphenol	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50	1.9 U	1.9 U	.51 J	1.9 U	.41 U	.39 U	.41 U	4.1 U	.39 U	.37 U	**110 J**	.38 J	.059 J	.063 J	17 J	.61 J	.79 U
Acenaphthylene	50	1.4	1.5 J	3	1.3 J	.41 U	.39 U	.41 U	7.7	.057 J	.04 J	**540**	.38 J	.14 J	.21 J	**64**	2.5	.39
Anthracene	50	3.6	3.4	4.2	1.8 J	.41 U	.39 U	.41 U	3.6 J	.39 U	.37 U	**460**	.68	.26 J	.47	**110**	4.8	.9
Benz(a)anthracene*	0.224	**3.4**	**4**	**4.3**	**5.4**	.41 U	.39 U	.16 J	**9.5**	.082 J	.062 J	**290**	**0.54**	**.23 J**	**0.4**	**100**	**5.3**	**3.2**
Benzo(a)pyrene	0.061	**3.2**	**3.9**	**4.4**	**5.1**	.41 U	.39 U	**.2 J**	**9.7**	**.069 J**	.056 J	**210 J**	**.47 J**	**.19 J**	**0.39**	**89**	**4.6**	**2.5**
Benzo(b)fluoranthene*	0.22	**1.5**	**2**	**3**	**4.9**	.41 U	.39 U	.21 J	**19**	.13 J	.099 J	**160 J**	**.37 J**	.15 J	**.28 J**	**75**	**4.1**	**3.8**
Benzo(g,h,i)perylene	50	1.6	1.9	2.7	3.1	.41 U	.39 U	.22 J	14	.15 J	.098 J	**73 J**	.24 J	.096 J	.27 J	45	2.1	1.7
Benzo(k)fluoranthene*	0.22	**2.3**	**2.6**	**3.7**	**4.7**	.41 U	.39 U	.2 J	**17**	.11 J	.083 J	**180 J**	**.41 J**	.18 J	**.36 J**	**79**	**3.9**	**4.2**
Carbazole	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	0.4	**3.4**	**4.2**	**4.6**	**5.4**	.41 U	.39 U	.17 J	**14**	.11 J	.079 J	**260**	**.49 J**	.2 J	.38	**100**	**5**	**3.5**
Dibenz[a,h]anthracene*	0.0143	1.9 U	**.36 J**	**.54 J**	**.72 J**	.41 U	.39 U	.41 U	**2.7 J**	.39 U	.37 U	230 U	.51 U	.42 U	.37 U	**11 J**	**.52 J**	**0.49**
Dibenzofuran	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	8.7	10	11	12	.41 U	.39 U	.26 J	16	.16 J	.15 J	**810**	1.6	.58	.94	**350**	16	5.3
Fluorene	50	.69	.55 J	2.4	.74 J	.41 U	.39 U	.41 U	4.1 U	.39 U	.37 U	**490**	.71	.22 J	.26 J	**76**	2.8	.11
Indeno (1,2,3-cd)pyrene*	3.2	1.2	1.5 J	2.2	2.8	.41 U	.39 U	.19 J	**13**	.13 J	.082 J	**84 J**	.23 J	.099 J	.23 J	**42 J**	2	1.8
Naphthalene	13	1.9 U	1.9 U	1.4 J	.41 J	.41 U	.39 U	.41 U	1.1 J	.39 U	.37 U	**2100**	.38 J	.52	.32 J	11 J	.77 J	.24
Phenanthrene	50	11	8.8	15	7.5	.41 U	.39 U	.11 J	6.4	.061 J	.044 J	**1300**	2	.68	1.1	**390**	17	2.5
Pyrene	50	11	14	13	9.9	.41 U	.39 U	.28 J	25	.24 J	.17 J	**580**	1.2	.46	.73	**290**	14	5.4
Total CPAH*	NC	15	18.6	22.7	29	ND	ND	1.13	84.9	.631	.461	1180	2.51	1.05	2.04	496	25.4	19.5
Total PAH	500	53	58.7	76.8	66.2	ND	ND	2	159	1.3	.963	**8290**	10.3	4.23	6.56	**1860**	86.6	36.1

Notes:
Hits only table
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NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-10
National Grid
Fulton, New York
Subsurface Soil Samples - Semivolatile Organic Compounds

Chemical Name	Action Level [1]	SB-43 6/23/2004 0 - 4 N	SB-43 6/23/2004 4 - 8 N	SB-44 6/23/2004 0 - 4 N	SB-44 6/23/2004 4 - 8 N	SB-45 6/24/2004 2 - 4 N	SB-45 6/24/2004 4 - 8 N	SB-45 6/24/2004 8 - 12 N	SB-45 6/24/2004 12 - 16 N	SB-46 6/24/2004 0 - 4 N	SB-46 6/24/2004 4 - 8 N	SB-46 6/24/2004 8 - 12 N	SB-47 10/14/2005 0 - 2 N	SB-47 10/14/2005 2 - 4 N	SB-47 10/14/2005 4 - 6 N	SB-48 10/14/2005 0 - 2 N	SB-48 10/14/2005 2 - 4 FD	SB-48 10/14/2005 2 - 4 N	SB-48 10/14/2005 4 - 6 N
2,4-Dimethylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	36.4	.22 J	.38 U	6.7 J	2.1 U	2 U	.4 U	.39 U	.42 U	8 J	.057 J	.35 U	.11 J	.39 U	.41 U	.11 J	3.9 UJ	.39 UJ	.39 U
2-Methylphenol	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4 Methylphenol	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	0.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	50	.18 J	.38 U	21 U	2.1 U	2 U	.4 U	.39 U	.42 U	18 J	.29 J	.35 U	.44 U	.39 U	.41 U	.045 J	3.9 UJ	.39 UJ	.39 U
Acenaphthylene	50	.77	.075 J	10 J	.89 J	2 U	.4 U	.39 U	.42 U	25	.37	.054 J	.17 J	.046 J	.19 J	2.3	6.4 J	.62 J	.39 U
Anthracene	50	2.5	.15 J	9.5 J	1.2 J	2 U	.4 U	.39 U	.42 U	26	.73	.085 J	.1 J	.39 U	.091 J	.68	1.8 J	.21 J	.39 U
Benz(a)anthracene*	0.224	**4.8**	**0.48**	**70**	**8.3**	**.31 J**	.4 U	.063 J	.054 J	**52**	**0.98**	.15 J	**.4 J**	.1 J	.19 J	**3.7**	**5 J**	**.63 J**	.39 U
Benzo(a)pyrene	0.061	**3.6**	**.34 J**	**43**	**6.7**	**.34 J**	.4 U	.059 J	.049 J	**74**	**1**	**.14 J**	**0.48**	**.13 J**	**.24 J**	**5.8 J**	**10 J**	**1.2 J**	.39 U
Benzo(b)fluoranthene*	0.22	**8**	**0.62**	**94**	**8.3**	**.23 J**	.4 U	.076 J	.068 J	**69**	**0.71**	.11 J	**0.76**	.16 J	**0.53**	**8.7 J**	**15 J**	**2 J**	.39 U
Benzo(g,h,i)perylene	50	2.9	.35 J	48	3.9	.23 J	.4 U	.048 J	.042 J	49	.64	.092 J	.33 J	.12 J	.38 J	5.2 J	12 J	1.3 J	.39 U
Benzo(k)fluoranthene*	0.22	**6.4**	**0.69**	**100**	**9**	**.3 J**	.4 U	.079 J	.061 J	**61**	**0.88**	.13 J	**.24 J**	.057 J	.17 J	**2.2 J**	**5.2 J**	**.51 J**	.39 U
Carbazole	NC	---	---	---	---	---	---	---	---	---	---	---	.063 J	.39 U	.41 U	.14 J	3.9 UJ	.048 J	.39 U
Chrysene	0.4	**5.5**	**0.55**	**84**	**8.4**	.38 J	.4 U	.081 J	.064 J	**64**	**1.1**	.17 J	**0.53**	.14 J	.33 J	**4.6**	**8.1 J**	**.91 J**	.39 U
Dibenz[a,h]anthracene*	0.0143	**0.86**	**.08 J**	**12 J**	**1.1 J**	2 U	.4 U	.39 U	.42 U	**10 J**	**.12 J**	**1**	**.092 J**	.39 U	**.071 J**	**.96 J**	**1.9 J**	**.22 J**	.39 U
Dibenzofuran	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butylphthalate	8.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	5.6	.68	**110**	17	.92 J	.043 J	.12 J	.09 J	**110**	2.5	.37	.67	.15 J	.32 J	4.8	8.8 J	.87 J	.39 U
Fluorene	50	.21 J	.38 U	21 U	2.1 U	2 U	.4 U	.39 U	.42 U	18 J	.49	.042 J	.44 U	.39 U	.41 U	.2 J	.58 J	.065 J	.39 U
Indeno (1,2,3-cd)pyrene*	3.2	3.1	.35 J	**50**	**4.3**	2 U	.4 U	.042 J	.42 U	**41**	.52	.07 J	.21 J	.065 J	.2 J	2.3 J	**5.3 J**	.59 J	.39 U
Naphthalene	13	.62 J	.093 J	**17 J**	.65 J	2 U	.4 U	.39 U	.42 U	9.3 J	.04 J	.35 U	.097 J	.39 U	.41 U	.14 J	3.9 UJ	.39 UJ	.39 U
Phenanthrene	50	2.6	.28 J	**53**	5.6	.33 J	.4 U	.043 J	.42 U	**100**	3	.37	.41 J	.08 J	.15 J	.88	2.3 J	.3 J	.39 U
Pyrene	50	6.2	.66	**110**	14	1.1 J	.4 U	.11 J	.089 J	**150**	3.4	.5	.85	.23 J	.55	10	19 J	1.7 J	.39 U
Total CPAH*	NC	32.3	3.11	453	46.1	1.56	ND	.4	.296	371	5.31	1.77	2.71	.652	1.73	28.3	50.5	6.06	ND
Total PAH	500	54.1	5.4	**817**	89.3	4.14	.043	.721	.517	**884**	16.8	3.28	5.45	1.28	3.41	52.6	101	11.1	ND

Notes:
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J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
* Carcinogenic PAHs
BOLD - Value exceeds Action Level
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Sample Type N - Normal
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Table 4-11
National Grid
Fulton, New York
Subsurface Soil Samples - Metals

Chemical Name	Location ID / Sample Date / Depth Interval (ft) / Sample Type / Action Level [1]	MW-01 7/9/1996 6 - 8 N	MW-02 7/9/1996 6 - 8 N	MW-03 7/12/1996 22 - 24 N	MW-04 7/11/1996 8 - 10 N	MW-05 7/11/1996 8 - 10 N	PZ-01 7/10/1996 6 - 10 N	SB-01 7/12/1996 6 - 8 N	SB-01 7/12/1996 6 - 8 FD
Aluminum	NC	6500	4200	2000	390 J	2000	4800	4600	2700
Arsenic	7.5	4	1	2	**86 J**	3	3	2	2
Barium	300	140	40	60	70 J	90	50	70	110
Calcium	NC	4100 J	6100 J	12000 J	2800 J	1900 J	22000 J	4100 J	15000 J
Chromium	10	**12**	7	4	**16 J**	5	8	8	5
Copper	25	15	14	5	**73 J**	20	18	10	7
Iron	2,000	**17000 J**	**11000 J**	**4500 J**	**128521.472 J**	**10000 J**	**13000 J**	**11000 J**	**7000 J**
Lead	NC	4 J	2.8 J	1.1 J	590 J	560 J	4.6 J	2.6 J	1.2 J
Magnesium	NC	3800	3000	2400	400 UJ	400	6400	2400	3000
Manganese	NC	330 J	500 J	200 J	189.2781 J	60 J	430 J	170 J	280 J
Mercury	0.1	0.1 U	0.1 U	0.1 U	**0.6851**	0.1 U	0.1 U	0.10 U	0.10 U
Nickel	13	10 J	10 UJ	10 UJ	16 UJ	10 UJ	10 UJ	10.00 UJ	10.00 UJ
Selenium	2	1 U	1 U	1 U	**12 J**	1 U	1 U	1.00 U	1.00 U
Vanadium	150	10	10 U	10 U	70 J	10 U	10 U	10.00 U	10.00 U
Zinc	20	**29 J**	**21 J**	10 R	**100 J**	**37 J**	**23 J**	20 J	14 J

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-12
National Grid
Fulton, New York
Subsurface Soil Samples - Cyanide

	Location ID	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03
	Sample Date	7/9/1996	7/9/1996	7/9/1996	7/9/1996	7/9/1996	7/10/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996
	Depth Interval (ft)	6 - 8	14 - 16	24 - 26	6 - 8	14 - 16	20 - 22	4 - 6	8 - 10	18 - 20	22 - 24
	Sample Type	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]										
Cyanide	NC	0.6 UJ	0.6 U	0.6 U	3 J	0.6 U	0.6 U	0.9	1.1	0.6 U	0.6 UJ

	Location ID	MW-03	MW-04	MW-04	MW-04	MW-04	MW-05	MW-05	MW-05	PZ-01	PZ-01
	Sample Date	7/12/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/10/1996	7/10/1996
	Depth Interval (ft)	26 - 28	0 - 6	8 - 10	18 - 20	26 - 28	2 - 4	8 - 10	15.5 - 16	6 - 10	14 - 16
	Sample Type	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level [1]										
Cyanide	NC	0.6 U	0.5 U	2000 J	1.7	1	0.6 U	0.7 J	0.7 U	0.6 UJ	0.6 U

	Location ID	PZ-01	SB-01	SB-01	SB-01	SB-01	SB-01	SB-01	SB-01
	Sample Date	7/10/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996	7/12/1996
	Depth Interval (ft)	24 - 26	6 - 8	2 - 4	6 - 8	6 - 8	12 - 14	12 - 14	18 - 20
	Sample Type	N	N	N	N	FD	N	FD	N
Chemical Name	Action Level [1]								
Cyanide	NC	0.6 U	4.2 J	1.3	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-13
National Grid
Fulton, New York
Subsurface Soil Samples - Pesticides PCBs

Chemical Name	Location ID / Sample Date / Depth Interval (ft) / Sample Type / Action Level [1]	MW-01 7/9/1996 6 - 8 N	MW-02 7/9/1996 6 - 8 N	MW-03 7/12/1996 22 - 24 N	MW-04 7/11/1996 8 - 10 N	MW-05 7/11/1996 8 - 10 N	PZ-01 7/10/1996 6 - 10 N	SB-01 7/12/1996 6 - 8 N	SB-01 7/12/1996 6 - 8 FD	SS-01 7/10/1996 0 - 2 N	SS-02 7/10/1996 0 - 2 N	SS-03 7/11/1996 0 - 2 N	SS-04 7/11/1996 0 - 2 N
Aldrin	0.041	0.0021 U	0.0021 UJ	0.019 U	0.34 UJ	0.0036 U	0.002 U	0.02 U	0.01 BJ	0.0023 U	0.02 U	0.002U	0.0026 J
alpha-Chlordane	NC	0.0021 U	0.0021 UJ	0.019 U	0.34 UJ	0.0023 U	0.002 U	0.02 U	0.01 BJ	0.0047 BJ	0.02 U	0.0018 NJ	0.061 NJ
Dieldrin	0.044	0.0041 U	0.0041 UJ	0.037 U	0.68 UJ	0.0046 U	0.004 U	**0.053 J**	0.04 UJ	0.0045 U	0.04 U	0.004 U	**0.048**
Endosulfan II	0.9	0.0041 U	0.0041 UJ	0.037 U	1.4 UJ	0.0059 NJ	0.004 U	0.04 U	0.02 UJ	0.0052 U	0.04 U	0.00084 NJ	0.019 NJ
Endosulfan Sulfate	1	0.0041 U	0.0041 UJ	0.037 U	0.68 UJ	0.0046 U	0.004 U	0.04 U	0.03 UJ	0.0045 U	0.042 J	0.004 U	0.03 U
Endrin Ketone	NC	0.0041 U	0.0041 UJ	0.037 U	1.3 UJ	0.0076 U	0.004 U	0.04 U	0.37 U	0.0045 U	0.087 BJ	0.0058 J	0.056
gamma-Chlordane	NC	0.0021 U	0.0021 UJ	0.019 U	0.34 UJ	0.0062 J	0.002 U	0.02 U	0.19 U	0.0023 U	0.03 U	0.0016 J	0.072
gamma-Hexachlorocyclohexane	0.06	0.0021 U	0.0021 UJ	0.019 U	0.34 UJ	0.0023 U	0.002 U	0.02 U	0.19 U	0.0023 U	0.02 U	0.002U	0.0019 BJ
Heptachlor	0.1	0.0021 U	0.0021 UJ	0.0021 U	0.34 UJ	0.0042 U	0.002 U	0.02 U	0.19 U	0.0023 U	0.02 U	0.002U	0.004 BJ
Methoxychlor	10	0.021 U	0.021 UJ	0.19 U	4.7 J	0.023 U	0.02 U	0.20 U	1.90 U	0.0023 U	0.21 U	0.02 U	0.052 J
p,p'-DDD	2.9	0.0041 U	0.0041 UJ	0.037 U	0.68 UJ	0.0046 U	0.004 U	0.04 U	0.37 U	0.0045 U	0.049 NJ	0.0041 U	0.022
p,p'-DDE	2.1	0.0041 U	0.00097 BJ	0.037 U	0.68 UJ	0.0046 U	0.004 U	0.04 U	0.02 UJ	0.0045 U	0.04 U	0.0058 NJ	0.0043 NJ
p,p'-DDT	2.1	0.0041 U	0.0041 UJ	0.047 U	1.5 NJ	0.0046 U	0.004 U	0.04 U	0.03 UJ	0.0045 U	0.12 U	0.012 NJ	0.046 NJ

Notes:
Hits only table
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
B - blank contamination
N - negated value
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-14
National Grid
Fulton, New York
Groundwater Samples - Volatile Organic Compounds

	Location ID	MW-01	MW-01	MW-01	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03	MW-03
	Sample Date	7/24/1996	9/4/1996	7/16/1998	5/31/2001	7/12/2004	11/3/2005	7/24/1996	9/4/1996	7/16/1998	7/12/2004	11/3/2005	7/24/1996	7/24/1996	9/4/1996	9/4/1996	7/16/1998
	Depth Interval																
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FD	FD	N	N
Chemical Name	Action Level[1]																
Benzene	1	0.7 U	0.7 U	10 U	10 U	0.50 U	0.50 U	0.7 U	0.7 U	10 U	0.50 U	0.50 U	0.7 U	0.7 U	1.3 J a	0.77 J	10 U
Ethylbenzene	5	5 U	5 U	10 U	10 U	0.50 U	0.50 U	5 U	5 U	10 U	0.50 U	0.50 U	5 U	5 U	32 a	20 a	10 U
Methylene chloride	5	5 U	5 U	---	---	---	---	5 U	5 U	---	---	---	5 U	5 U	0.88 J	5 U	---
Styrene	5	5 U	5 U	---	---	---	---	5 U	5 U	---	---	---	5 U	5 U	5 U	5 U	---
Toluene	5	5 U	5 U	10 U	10 U	0.50 U	0.50 U	5 U	5 U	10 U	0.50 U	0.50 U	5 U	5 U	2.2 J	1.4 J	10 U
Xylenes, Total	5	5 U	5 U	10 U	10 U	0.50 U	1.00 U	5 U	5 U	10 U	0.50 U	1.00 U	5 U	5 U	75 a	51 a	10 U
Total BTEX	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	110.5	73.17	ND

	Location ID	MW-03	MW-03	MW-03	MW-03	MW-03	MW-03	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04
	Sample Date	8/4/1999	8/4/1999	7/8/2004	11/3/2005	11/3/2005	11/3/2005	7/24/1996	9/4/1996	7/16/1998	8/4/1999	5/31/2001	5/31/2001	7/9/2004	11/2/2005	11/2/2005	11/2/2005
	Depth Interval				8.5 - 8.5	- 8.5	12 - 12								8 - 8	12 - 12	- 8
	Sample Type	FD	N	N	N	FD	N	N	N	N	N	FD	N	N	N	N	FD
Chemical Name	Action Level[1]																
Benzene	1	10 J a	10 U	0.50 U	0.50 U	0.50 U	0.50 U	980 a	650 a	450 a	730 a	550 a	520 a	380. J a	530 a	734 a	528 a
Ethylbenzene	5	490 a	10 U	0.50 U	0.50 U	0.50 U	0.50 U	590 a	530 a	390 a	570 a	350 a	340 a	66. J a	228 a	380 a	217 a
Methylene chloride	5	---	---	---	---	---	---	50 U	25 U	---	---	---	---	---	---	---	---
Styrene	5	---	---	---	---	---	---	50 U	25 U	---	---	---	---	---	---	---	---
Toluene	5	12 J a	10 U	0.50 U	0.50 U	0.50 U	0.50 U	93 a	57 a	60 J a	66 J a	51 J a	48 J a	19. J a	33.2 a	42.0 a	35.4 a
Xylenes, Total	5	660 a	10 U	0.50 U	1.00 U	1.00 U	1.00 U	420 a	420 a	350 a	400 a	310 a	300 a	120. J a	167 a	268 a	177 a
Total BTEX	NC	1172	ND	ND	ND	ND	ND	2083	1657	1250	1766	1261	1208	585	958.2	1424	957.4

	Location ID	MW-05	MW-05	MW-05	MW-05	MW-05	MW-05	MW-05	MW-06	MW-06	MW-06	MW-06	MW-07	MW-07	MW-07	MW-07	MW-07D
	Sample Date	7/24/1996	9/4/1996	7/16/1998	8/4/1999	6/1/2001	7/12/2004	11/2/2005	7/16/1998	8/4/1999	7/9/2004	11/2/2005	7/16/1998	8/5/1999	11/1/2005	11/1/2005	7/9/2004
	Depth Interval														11 - 11	7 - 7	
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level[1]																
Benzene	1	6.5 J a	23 a	21 J a	10 J a	9 J a	7 J a	7.20 J a	140 a	7 J a	.4 J	0.92	10 U	10 U	0.50 U	0.50 U	.1 J
Ethylbenzene	5	310 a	62 a	230 a	440 a	390 J a	350 J a	243 a	54 a	4 J	.1 J	0.24 J	10 U	10 U	0.50 U	0.50 U	0.50 U
Methylene chloride	5	25 U	20 U	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Styrene	5	25 U	7.3 J a	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	5	35 a	27 a	13 J a	11 J a	13 J a	9 J a	9.80 J a	91 a	4 J	0.50 U	0.50 U	10 U	10 U	0.50 U	0.50 U	0.50 U
Xylenes, Total	5	410 a	800 a	550 a	570 a	560 a	360 J a	483 a	260 a	21 a	0.50 U	1.00 U	10 U	10 U	1.00 U	1.00 U	.4 J
Total BTEX	NC	761.5	912	814	1031	972	726	743	545	36	0.5	1.28	ND	ND	ND	NO	0.5

Notes:
Hits only table
Units are in ug/l (micrograms per liter)
NA - Not Available
NC - No criteria
ND - Not detected
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
[1] New York State Department of Environmental Conservation, Technicaland Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Database: NimoFulton_Chem.mdb (EQuIS)

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Table 4-14
National Grid
Fulton, New York
Groundwater Samples - Volatile Organic Compounds

	Location ID	MW-07D	MW-07S	MW-08	MW-08	MW-08	MW-08	MW-08	MW-08D	MW-08D	MW-08S	MW-09D	MW-09D	MW-09D	MW-09D	MW-09S	MW-09S
	Sample Date	11/2/2005	7/9/2004	7/16/1998	7/16/1998	8/5/1999	5/31/2001	11/1/2005	7/8/2004	11/2/2005	7/8/2004	7/16/1998	8/5/1999	7/8/2004	11/2/2005	7/16/1998	8/5/1999
	Depth Interval (ft)							11									
	Sample Type	N	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level[1]																
Benzene	1	0.50 U	0.50 U	10 U	10 U	10 U	10 U	0.50 U	.1 J	0.50 U	0.50 U	10 U	10 U	0.50 U	0.50 U	10 U	10 U
Ethylbenzene	5	0.50 U	0.50 U	10 U	10 U	10 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	10 U	10 U	0.50 U	0.50 U	10 U	10 U
Methylene chloride	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Styrene	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	5	0.50 U	0.50 U	10 U	10 U	10 U	10 U	0.50 U	.2 J	0.50 U	0.50 U	10 U	10 U	0.50 U	0.50 U	10 U	10 U
Xylenes, Total	5	1.00 U	0.50 U	10 U	10 U	10 U	10 U	1.00 U	0.50 U	1.00 U	0.50 U	10 U	10 U	0.50 U	1.00 U	10 U	10 U
Total BTEX	NC	ND	ND	ND	ND	ND	ND	NO	0.3	ND	ND	ND	ND	ND	ND	ND	ND

	Location ID	MW-09S	MW-09S	MW-09S	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11	MW-11	MW-12D	MW-12D	MW-12D	MW-12S	MW-12S	MW-12S
	Sample Date	6/1/2001	7/8/2004	11/3/2005	7/16/1998	7/9/2004	11/1/2005	6/1/2001	7/12/2004	11/2/2005	11/2/2005	7/7/2004	7/7/2004	11/2/2005	7/7/2004	11/3/2005	11/3/2005
	Depth Interval						11			10	5					12	8.5
	Sample Type	N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N
Chemical Name	Action Level[1]																
Benzene	1	10 U	0.50 U	0.50 U	10 U	0.50 U	0.50 U	**2 J**	0.50 U	0.50 U	0.50 U	.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	5	10 U	0.50 U	0.50 U	10 U	0.50 U	0.50 U	**6 J**	0.50 U	0.34 J	0.20 J	.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene chloride	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Styrene	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	5	10 U	0.50 U	0.50 U	10 U	0.50 U	0.50 U	0.5 J	0.50 U	0.50 U	0.50 U	.1	.2 J	0.50 U	0.50 U	0.50 U	0.50 U
Xylenes, Total	5	10 U	0.50 U	1.00 U	10 U	0.50 U	1.00 U	2 J	0.50 U	1.00 U	0.14 J	.5 U	0.50 U	1.00 U	0.50 U	1.00 U	1.00 U
Total BTEX	NC	ND	ND	ND	ND	ND	ND	10.5	ND	0.34	0.34	0.1	0.2	ND	ND	ND	ND

Notes:
Hits only table
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ND - Not detected
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[1] New York State Department of Environmental Conservation, Technicaland Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-15
National Grid
Fulton, New York
Groundwater Samples - Semivolatile Organic Compounds

Location ID		MW-01	MW-01	MW-01	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03	MW-03	MW-03	MW-03
Sample Date		7/24/1996	9/4/1996	7/16/1998	5/31/2001	7/12/2004	11/3/2005	7/24/1996	9/4/1996	7/16/1998	7/12/2004	11/3/2005	7/24/1996	7/24/1996	9/4/1996	9/4/1996	7/16/1998	8/4/1999	8/4/1999
Depth Interval (ft)																			
Sample Type		N	N	N	N	N	N	N	N	N	N	N	N	FD	FD	N	N	FD	N
Chemical Name	Action Level[1]																		
2,4-Dimethylphenol	50	10 U	10 U	—	—	—	—	10 U	11 U	—	—	—	11 U	10 U	10 U	11 U	—	—	—
2,4-Dinitrotoluene	5	10 U	10 U	—	—	—	—	10 U	11 U	—	—	—	11 U	10 U	10 U	11 U	—	—	—
2-Methylnaphthalene	NC	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	140	10 U	3.9 J	280	10 U	120 J	10 UJ
2-Methylphenol	1	10 U	10 U	—	—	—	—	10 U	11 U	—	—	—	11 U	10 U	10 U	11 U	—	—	—
4-Methylphenol	1	10 U	10 U	—	—	—	—	10 U	11 U	—	—	—	11 U	10 U	10 U	1.5 J	—	—	—
Acenaphthene	20	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	**350**	**240**	**150**	**460**	**80**	19	**41 J**
Acenaphthylene	NC	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	7.6 J	5 J	10 U	12	5 J	65	**4 J**
Anthracene	50	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	46	30	22	57	33	5 J	16 J
Benz(a)anthracene	0.002	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	**14**	**7.1 J**	**8.6 J**	**42**	**22**	10 U	**21 J**
Benzo(a)pyrene	NC	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	11	4.6 J	4.3 J	35	28	10 U	29 J
Benzo(b)fluoranthene	0.002	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	**14**	**5.8 J**	**8.5 J**	**42**	**32**	10 U	**32 J**
Benzo(g,h,i)perylene	NC	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	5.8 J	2.4 J	2 J	15	19 J	10 U	13 J
Benzo(k)fluoranthene	0.002	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	**3.7 J**	**2 J**	**2.5 J**	**16**	**10**	10 U	**13 J**
bis(2-ethylhexyl)phthalate	5	10 U	10 U	—	—	—	—	10 U	11 U	—	—	—	10 U	1.4 J	1.2 J	11 U	—	—	—
Carbazole	NC	10 U	10 U	—	—	—	10 U	10 U	11 U	—	—	10 U	54	26	1.3 J	73	—	—	—
Chrysene	0.002	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	**12**	**5.9 J**	**9.7 J**	**38**	**20**	10 U	**22 J**
Dibenz[a,h]anthracene	NC	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	2 J
Dibenzofuran	NC	10 U	10 U	—	—	—	—	10 U	11 U	—	—	—	120	56	43	86	—	—	—
Fluoranthene	50	10 U	10 U	10 U	10 U	10.00 U	10 U	1.3 J	11 U	10 U	10.00 U	10 U	**70**	47	34	**170**	**60**	1 J	**60 J**
Fluorene	50	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	**120**	77	**54**	**190**	29	5	13 J
Indeno (1,2,3-cd)pyrene	0.002	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	**5.4 J**	**2.1 J**	**2.4 J**	**14**	**16**	10 U	**13 J**
Naphthalene	10	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	**660 J**	10 UJ	2.4 J	**2500 J**	1 J	**4400**	1 J
Phenanthrene	50	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	11 U	10 U	10.00 U	10 U	**260**	**76**	**61**	**410**	**140**	34	45 J
Phenol	1	1 U	1 U	—	—	—	—	1 U	1.1 U	—	—	—	1.1 U	1 U	1 U	1.1 U	—	—	—
Pyrene	50	10 U	10 U	10 U	10 U	10.00 U	10 U	2.1 J	1.3 J	10 U	10.00 U	10 U	**64**	**42**	22	**150**	**59**	2 J	**55 J**
Total CPAH	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO	60.1	27.5	36	187	128	ND	132
Total PAH	NC	ND	ND	ND	ND	ND	ND	3.4	1.3	ND	ND	ND	1783.5	546.9	387.3	4431	554	4651	380

Notes:
Hits only table
Units are in ug/l (micrograms per liter)
NA - Not Available
NC - No criteria
ND - Not detected
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department.of Environmental Conservation, Technicaland Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-15
National Grid
Fulton, New York
Groundwater Samples - Semivolatile Organic Compounds

Location ID		MW-03	MW-03	MW-03	MW-03	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04	MW-04	MW-05	MW-05	MW-05	MW-05
Sample Date		7/8/2004	11/3/2005	11/3/2005	11/3/2005	7/24/1996	9/4/1996	7/16/1998	8/4/1999	5/31/2001	5/31/2001	7/9/2004	11/2/2005	11/2/2005	11/2/2005	7/24/1996	9/4/1996	7/16/1998	8/4/1999
Depth Interval (ft)			8.5	8.5	12								8	12 - 12	8				
Sample Type		N	N	FD	N	N	N	N	N	FD	N	N	N	N	FD	N	N	N	N
Chemical Name	Action Level[1]																		
2,4-Dimethylphenol	50	—	—	—	—	**150**	**97**	—	—	—	—	—	—	—	—	1 J	49	—	—
2,4-Dinitrotoluene	5	—	—	—	—	53 U	1 J	—	—	—	—	—	—	—	—	100 U	10 U	—	—
2-Methylnaphthalene	NC	10.00 U	10 U	10 U	10 U	3 J	37	14 J	210 U	17 J	16 J	10.00 U	3.2 J	100 R	3.0 J	8 J	100	160 J	140 J
2-Methylphenol	1	—	—	—	—	1 J	10 U	—	—	—	—	—	—	—	—	100 U	10 U	—	—
4-Methylphenol	1	—	—	—	—	**5.6 J**	10 U	—	—	—	—	—	—	—	—	100 U	23	—	—
Acenaphthene	20	10.00 U	10 U	10 U	10 U	4 J	**29**	37 J	**27 J**	**21 J**	19 J	**23**	**21 J**	19 J	19 J	100 U	10 U	19	1000 U
Acenaphthylene	NC	10.00 U	10 U	10 U	10 U	1 J	**8 J**	7 J	**210 U**	100 U	100 U	3. J	6.1 J	100 R	5.8 J	4 J	26	61	1000 U
Anthracene	50	10.00 U	10 U	10 U	10 U	1 J	9.2 J	21 J	31 J	16 J	15 J	10.00 U	1.7 J	100 R	1.4 J	100 U	4.3 J	5 J	1000 U
Benz(a)anthracene	0.002	10.00 U	10 U	10 U	10 U	53 U	**2.5 J**	50 U	210 U	100 U	100 U	10.00 U	10 R	100 R	10 R	100 U	10 U	10 U	1000 U
Benzo(a)pyrene	NC	10.00 U	10 U	10 U	10 U	53 U	10 U	50 U	210 U	100 U	100 U	10.00 U	10 R	100 R	10 R	100 U	10 U	10 U	1000 U
Benzo(b)fluoranthene	0.002	10.00 U	10 U	10 U	10 U	53 U	**1.6 J**	50 U	210 U	100 U	100 U	10.00 U	10 R	100 R	10 R	100 U	10 U	10 U	1000 U
Benzo(g,h,i)perylene	NC	10.00 U	10 U	10 U	10 U	53 U	10 U	50 U	210 U	100 U	100 U	10.00 U	10 R	100 R	10 R	100 U	10 U	10 U	1000 U
Benzo(k)fluoranthene	0.002	10.00 U	10 U	10 U	10 U	53 U	10 U	50 U	210 U	100 U	100 U	10.00 U	10 R	100 R	10 R	100 U	10 U	10 U	1000 U
bis(2-ethylhexyl)phthalate	5	—	—	—	—	53 U	10 U	—	—	—	—	—	—	—	—	100 U	10 U	—	—
Carbazole	NC	—	10 U	10 U	10 U	5 J	24	—	—	—	—	—	22 J	22 J	21 J	1 J	19	—	—
Chrysene	0.002	10.00 U	10 U	10 U	10 U	5.7 J	2.8 J	50 U	210 U	100 U	100 U	10.00 U	10 R	100 R	10 R	100 U	10 U	10 U	1000 U
Dibenz[a,h]anthracene	NC	*10.00 U*	*10 U*	*10 U*	*10 U*	*53 U*	*10 U*	*50 U*	*210 U*	*100 U*	*100 U*	*10.00 U*	*10 R*	*100 R*	*10 R*	*100 U*	*10 U*	*10 U*	*1000 U*
Dibenzofuran	NC	—	—	—	—	3 J	23	—	—	—	—	—	—	—	—	100 U	14	—	—
Fluoranthene	50	10.00 U	10 U	10 U	10 U	2 J	16	18 J	22 J	100 U	100 U	10.00 U	2.5 J	100 R	2.3 J	100 U	3.7 J	2 J	1000 U
Fluorene	50	10.00 U	10 U	10 U	10 U	59	33	57 J	44 J	28 J	27 J	7. J	7.6 J	10 J	6.7 J	100 U	14	34	1000 U
Indeno (1,2,3-cd)pyrene	0.002	10.00 U	10 U	10 U	10 U	53 U	10 U	50 U	210 U	100 U	100 U	10.00 U	10 R	100 R	10 R	100 U	10 U	10 U	1000 U
Naphthalene	10	10.00 U	10 U	10 U	10 U	**2000**	**1100**	**1200**	**1000**	**900**	**830**	**140**	**680 J**	**750 J**	**630**	**1900**	**1600**	**4500**	**4800**
Phenanthrene	50	10.00 U	10 U	10 U	10 U	**55**	28	**56 J**	47 J	27 J	26 J	1. J	2.6 J	100 R	2.3 J	100 U	17	32	1000 U
Phenol	1	—	—	—	—	**24 J**	9.6 J	—	—	—	—	—	—	—	—	10 U	1 U	—	—
Pyrene	50	10.00 U	10 U	10 U	10 U	2 J	20	19 J	210 U	100 U	100 U	10.00 U	2.8 J	100 R	2.4 J	100 U	2.9 J	2 J	1000 U
Total CPAH	NC	ND	ND	ND	ND	5.7	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAH	NC	ND	ND	ND	ND	2132.7	1287.1	1429	1171	1009	933	174	727.5	779	672.9	1912	1767.9	4815	4940

Notes:
Hits only table
Units are in ug/l (micrograms per liter)
NA - Not Available
NC - No criteria
ND - Not detected
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technicaland Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-15
National Grid
Fulton, New York
Groundwater Samples - Semivolatile Organic Compounds

Location ID		MW-05	MW-05	MW-05	MW-06	MW-06	MW-06	MW-06	MW-07	MW-07	MW-07	MW-07	MW-07D	MW-07D	MW-07S	MW-08	MW-08	MW-08	MW-08
Sample Date		6/1/2001	7/12/2004	11/2/2005	7/16/1998	8/4/1999	7/9/2004	11/2/2005	7/16/1998	8/5/1999	11/1/2005	11/1/2005	7/9/2004	11/2/2005	7/9/2004	7/16/1998	7/16/1998	8/5/1999	5/31/2001
Depth Interval (ft)											11	7							
Sample Type		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N
Chemical Name	Action Level[1]																		
2,4-Dimethylphenol	50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrotoluene	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	NC	**87 J**	26.	43	530	200	10.00 U	10 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
2-Methylphenol	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	20	**33 J**	**29**	**41**	**270 J**	**110**	2. J	**22**	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Acenaphthylene	NC	**39 J**	10.	8.2 J	**270 J**	**90 J**	10.00 U	5.8 J	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Anthracene	50	100 U	3. J	4.1 J	**220 J**	**60 J**	10.00 U	9.2 J	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Benz(a)anthracene	0.002	100 U	10.00 R	10 U	**200 J**	**34 J**	10.00 U	**3.3 J**	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Benzo(a)pyrene	NC	100 U	10.00 R	10 U	190 J	34 J	10.00 U	10 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Benzo(b)fluoranthene	0.002	100 U	10.00 R	10 U	**190 J**	**36 J**	10.00 U	10 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Benzo(g,h,i)perylene	NC	100 U	10.00 R	10 U	100 J	200 U	10.00 U	10 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Benzo(k)fluoranthene	0.002	100 U	10.00 R	10 U	**72**	200 U	10.00 U	10 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
bis(2-ethylhexyl)phthalate	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbazole	NC	---	---	7.7 J	---	---	---	3.4 J	---	---	10 U	10 U	---	10 U	---	---	---	---	---
Chrysene	0.002	100 U	10.00 R	10 U	**180 J**	**35 J**	10.00 U	**2.9 J**	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Dibenz[a,h]anthracene	NC	100 U	10.00 R	10 U	100 U	200 U	10.00 U	10 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Dibenzofuran	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	100 U	2. J	**2.6 J**	**430**	**100**	1. J	19	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Fluorene	50	35 J	21.	30	**290 J**	**100**	1. J	24	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Indeno (1,2,3-cd)pyrene	0.002	100 U	10.00 R	10 U	**110 J**	200 U	10.00 U	10 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Naphthalene	10	**2100**	**760**	**1000**	**4800**	**900**	10.00 U	5.2 J	10 U	10 U	10 U	10 U	2. J	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Phenanthrene	50	**37 J**	21.	34	**680**	**240**	10.00 U	**62**	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Phenol	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyrene	50	100 U	1. J	2.1 J	**440 J**	**85 J**	10.00 U	19	10 U	10 U	10 U	10 U	10.00 U	10 U	10.00 U	10 U	10 U	10 UJ	10 U
Total CPAH	NC	ND	ND	ND	942	139	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAH	NC	2331	873	1165	8972	2024	4	172.4	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND

Notes:
Hits only table
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ND - Not detected
U - compound analyzed but not detected above the method detection limit.
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BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-15
National Grid
Fulton, New York
Groundwater Samples - Semivolatile Organic Compounds

	Location ID	MW-08	MW-08D	MW-08D	MW-08S	MW-09D	MW-09D	MW-09D	MW-09D	MW-09S	MW-09S	MW-09S	MW-09S	MW-09S	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11
	Sample Date	11/1/2005	7/8/2004	11/2/2005	7/8/2004	7/16/1998	8/5/1999	7/8/2004	11/2/2005	7/16/1998	8/5/1999	6/1/2001	7/8/2004	11/3/2005	7/16/1998	7/9/2004	11/1/2005	6/1/2001	7/12/2004	11/2/2005
	Depth Interval (ft)	11															11			10
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level[1]																			
2,4-Dimethylphenol	50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrotoluene	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	NC	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
2-Methylphenol	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	20	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Acenaphthylene	NC	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Anthracene	50	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Benz(a)anthracene	0.002	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Benzo(a)pyrene	NC	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Benzo(b)fluoranthene	0.002	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Benzo(g,h,i)perylene	NC	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Benzo(k)fluoranthene	0.002	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
bis(2-ethylhexyl)phthalate	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbazole	NC	10 U	---	11 U	---	---	---	---	10 U	---	---	---	---	10 U	---	---	10 U	---	---	11 U
Chrysene	0.002	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Dibenz[a,h]anthracene	NC	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Dibenzofuran	NC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	50	10 U	10.00 U	1.3 J	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Fluorene	50	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Indeno (1,2,3-cd)pyrene	0.002	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Naphthalene	10	10 U	10.00 U	11 U	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10 J	10.00 U	11 U
Phenanthrene	50	10 U	10.00 U	2.7 J	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	2 J	10.00 U	11 U
Phenol	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyrene	50	10 U	10.00 U	1.2 J	10.00 U	10 U	10 U	10.00 U	10 U	10 U	10 U	10 U	10.00 U	10 U	10 U	10.00 U	10 U	10.00 U	10.00 U	11 U
Total CPAH	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAH	NC	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND

Notes:
Hits only table
Units are in ug/l (micrograms per liter)
NA - Not Available
NC - No criteria
ND - Not detected
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
R - rejected data
[1] New York State Department of Environmental Conservation, Technicaland Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-15
National Grid
Fulton, New York
Groundwater Samples - Semivolatile Organic Compounds

Location ID		MW-11	MW-12D	MW-12D	MW-12D	MW-12S	MW-12S	MW-12S
Sample Date		11/2/2005	7/7/2004	7/7/2004	11/2/2005	7/7/2004	11/3/2005	11/3/2005
Depth Interval (ft)		5					12	8.5
Sample Type		N	FD	N	N	N	N	N
Chemical Name	Action Level[1]							
2,4-Dimethylphenol	50	—	—	—	—	—	—	—
2,4-Dinitrotoluene	5	—	—	—	—	—	—	—
2-Methylnaphthalene	NC	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
2-Methylphenol	1	—	—	—	—	—	—	—
4-Methylphenol	1	—	—	—	—	—	—	—
Acenaphthene	20	10 U	10. U	10.00 U	10 U	2. J	10 U	10 U
Acenaphthylene	NC	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
Anthracene	50	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
Benz(a)anthracene	0.002	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
Benzo(a)pyrene	NC	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
Benzo(b)fluoranthene	0.002	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
Benzo(g,h,i)perylene	NC	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
Benzo(k)fluoranthene	0.002	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
bis(2-ethylhexyl)phthalate	5	—	—	—	—	—	—	—
Carbazole	NC	10 U	—	—	10 U	—	10 U	10 U
Chrysene	0.002	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
Dibenz[a,h]anthracene	NC	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
Dibenzofuran	NC	—	—	—	—	—	—	—
Fluoranthene	50	10 U	10. U	10.00 U	10 U	1. J	10 U	10 U
Fluorene	50	10 U	10. U	10.00 U	10 U	2. J	10 U	10 U
Indeno (1,2,3-cd)pyrene	0.002	10 U	10. U	10.00 U	10 U	10.00 U	10 U	10 U
Naphthalene	10	10 U	10. U	10.00 U	10 U	2. J	10 U	10 U
Phenanthrene	50	10 U	10. U	10.00 U	10 U	4. J	10 U	10 U
Phenol	1	—	—	—	—	—	—	—
Pyrene	50	10 U	10. U	10.00 U	10 U	1. J	10 U	10 U
Total CPAH	NC	ND	ND	ND	ND	ND	ND	ND
Total PAH	NC	ND	ND	ND	ND	12	ND	ND

Notes:
Hits only table
Units are in ug/l (micrograms per liter)
NA - Not Available
NC - No criteria
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Table 4-16
National Grid
Fulton, New York
Groundwater Samples - Metals

	Location ID	MW-01	MW-01	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03	MW-04	MW-04	MW-05	MW-05
	Sample Date	7/24/1996	9/4/1996	7/24/1996	9/4/1996	7/24/1996	7/24/1996	9/4/1996	9/4/1996	7/24/1996	9/4/1996	7/24/1996	9/4/1996
	Depth Interval (ft)												
	Sample Type	N	N	N	N	FD	N	FD	N	N	N	N	N
Chemical Name	Action Level[1]												
Aluminum	NC	37000	11000	44000	170000	81000	110000	46000	68000	140000	130000	27000	38000
Antimony	3	60 UJ	60 U	60 UJ	60 U	60 UJ	60 UJ	60 U	60 U	60 UJ	60 U	60 UJ	60 U
Arsenic	25	**26**	10 U	**26**	**100**	**34**	**47**	20	**29**	**72**	**60**	15	23
Barium	1000	800	400	**1300**	**4900**	**1800**	**2400**	**1300**	**1600**	**3000**	**2700**	500	700
Beryllium	3	5 U	5 U	5 U	**8**	5 U	**5**	5 U	5 U	**6**	**6**	5 U	5 U
Cadmium	5	5 U	5 U	**7**	**31**	5 U	5 U	5 U	5 U	5 U	**7**	5 U	5 U
Calcium	NC	130000	86000	240000	570000	380000	500000	300000	330000	380000	370000	140000	210000
Chromium	50	**70 J**	30	**90 J**	**350**	**130 J**	**170 J**	**80**	**110**	**290 J**	**270**	50 J	**60**
Cobalt	NC	50 U	50 U	50 U	130	50 U	60	50 U	50 U	80	90	50 U	50 U
Copper	200	110 J	40	130 J	**650**	140 J	200 J	80	120	**440 J**	**380**	60 J	100
Iron	300	**69000**	**22000**	**82000**	**320000**	**130000**	**170000**	**72000**	**110000**	**350000**	**310000**	**80000**	**94000**
Lead	25	**30**	12	**57**	**260**	**77**	**110**	**45**	**64**	**370**	**320**	**110**	**120**
Magnesium	35000	***43000***	29000	***48000***	***140000***	***77000***	***110000***	***53000***	***69000***	***97000***	***90000***	27000	***39000***
Manganese	3000	**3200 J**	2100	**4500 J**	**15000**	**4300 J**	**5900 J**	**3300**	**3800**	**7900 J**	**7700**	**4600 J**	**6600**
Mercury	0.7	.2 UJ	.2 U	.5 J	**2**	.2 J	.2 UJ	.2 U	.2 U	.6 J	.7	.2 UJ	.2
Nickel	NC	110	40 U	70	270	100	140	60	90	200	180	40 U	60
Potassium	NC	13000	7000	15000	32000	15000	18000	10000	13000	22000	20000	6000	6000
Selenium	10	5 U	5 U	5	7	8	**11**	5	6	**15**	**14**	5 U	5 U
Silver	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Sodium	20000	**47000**	**38000**	**84000**	**74000**	**42000**	**43000**	**44000**	**45000**	**74000**	**67000**	**33000**	**28000**
Thallium	0.5	5 U	10 U	5 U	10 U	5 U	5 U	10 U	10 U	5 U	10 U	5 U	10 U
Vanadium	NC	60	50 U	70	270	130	180	80	110	240	220	50 U	70
Zinc	2000	150	60 J	190	800 J	290	400	170 J	250 J	610	510 J	110	150 J

Notes:
Hits only table
Units are in ug/l (micrograms per liter)
NA - Not Available
NC - No criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
[1] New York State Department of Environmental Conservation, Technicaland Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-17
National Grid
Fulton, New York
Groundwater Samples - Cyanide

	Location ID	MW-01	MW-01	MW-01	MW-02	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03	MW-03	MW-03
	Sample Date	7/24/1996	9/4/1996	11/3/2005	7/24/1996	9/4/1996	11/3/2005	7/24/1996	7/24/1996	9/4/1996	9/4/1996	11/3/2005	11/3/2005
	Depth Interval (ft)											8.5	12
	Sample Type	N	N	N	N	N	N	FD	N	FD	N	FD	N
Chemical Name	Action Level[1]												
Cyanide	200	**560 J**	**601 J**	10 U	140 J	190	100	**220 J**	**220 J**	**280**	**270**	**220**	**240**

	Location ID	MW-03	MW-04	MW-04	MW-04	MW-04	MW-04	MW-05	MW-05	MW-05	MW-06	MW-07	MW-07
	Sample Date	11/3/2005	7/24/1996	9/4/1996	11/2/2005	11/2/2005	11/2/2005	7/24/1996	9/4/1996	11/2/2005	11/2/2005	11/1/2005	11/1/2005
	Depth Interval (ft)	8.5			8	12	8					11	7
	Sample Type	N	N	N	N	N	FD	N	N	N	N	N	N
Chemical Name	Action Level[1]												
Cyanide	200	**210**	**5300 J**	**4400**	180	99	180	**590 J**	**660**	**310**	20	10 U	4.3 J

	Location ID	MW-07D	MW-08	MW-08D	MW-09D	MW-09S	MW-10	MW-11	MW-11	MW-12D	MW-12S	MW-12S
	Sample Date	11/2/2005	11/1/2005	11/2/2005	11/2/2005	11/3/2005	11/1/2005	11/2/2005	11/2/2005	11/2/2005	11/3/2005	11/3/2005
	Depth Interval (ft)		11				11	10	5		8.5	12
	Sample Type	N	N	N	N	N	N	N	N	N	N	N
Chemical Name	Action Level[1]											
Cyanide	200	5.5 J	68	20	53	50	21	130	130	36	90	67

Notes:
Hits only table
Units are in ug/i (micrograms per liter)
NA - Not Available
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
[1] New York State Department of Environmental Conservation, Technicaland Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised Jun
BOLD - Value exceeds Action Level
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Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-18
National Grid
Fulton, New York
Groundwater Samples - Pesticides PCBs

	Location ID	MW-01	MW-01	MW-02	MW-02	MW-03	MW-03	MW-03	MW-03	MW-04	MW-04	MW-05	MW-05
	Sample Date	7/24/1996	9/4/1996	7/24/1996	9/4/1996	7/24/1996	7/24/1996	9/4/1996	9/4/1996	7/24/1996	9/4/1996	7/24/1996	9/4/1996
	Depth Interval (ft)												
	Sample Type	N	N	N	N	N	FD	N	FD	N	N	N	N
Chemical Name	Action Level[1]												
Aldrin	NC	0.051 U	0.056 U	0.053 UJ	0.053 U	0.053 UJ	8 J	0.053 U	3.2 J	0.054 UJ	0.054 U	0.05 UJ	0.053 U
alpha-Hexachlorocyclohexane	0.01	0.051 U	0.056 U	0.053 UJ	0.007 NJ	0.053 UJ	59 U	0.053 U	53 U	0.054 UJ	0.054 U	0.051 UJ	0.053 U
Aroclor 1242	0.09	**1.4**	1.1 U	1.1 UJ	1.1 U	1.1 UJ	1200 U	1.1 U	1100 U	1.1 UJ	1.1 U	1 UJ	1.1 U
Dieldrin	0.004	0.1 U	0.11 U	0.11 UJ	0.11 U	UJ	**7.4 J**	**0.015 J**	**8 J**	0.011 UJ	0.11 U	0.1 UJ	0.11 U
Endosulfan I	NC	0.051 U	0.056 U	0.053 UJ	0.053 U	0.053 UJ	59 U	0.053 U	53 U	0.053 UJ	0.033 J	0.051 UJ	0.053 U
Endosulfan II	NC	0.051 U	0.11 U	0.006 BJ	0.11 U	0.11 UJ	120 U	0.11 U	12 J	0.099 NJ	0.04 J	0.1 UJ	0.038 J
Endosulfan Sulfate	NC	0.1 U	0.11 U	0.11 UJ	0.11 U	0.11 UJ	120 U	0.11 U	45 J	0.11 UJ	0.11 U	0.1 UJ	0.11 U
Endrin Aldehyde	0.5	0.1 U	0.11 U	0.11 UJ	0.11 U	0.11 UJ	120 U	0.11 U	**4.2 J**	0.11 UJ	0.11 U	0.1 UJ	0.11 U
Endrin Ketone	NC	0.1 U	0.11 U	0.11 UJ	0.11 U	0.11 UJ	23 J	0.11 U	20 J	0.11 UJ	0.11 U	0.1 UJ	0.11 U
gamma-Hexachlorocyclohexane	0.05	0.051 U	0.056 U	0.053 UJ	0.053 U	0.053 UJ	59 U	0.053 U	**7.8 J**	0.054 UJ	0.054 U	0.05 UJ	0.053 U
Heptachlor	0.04	0.051 U	0.009 UJ	0.053 UJ	0.053 U	0.053 UJ	**11 J**	0.053 U	53 U	0.054 UJ	0.054 U	0.051 UJ	0.053 U
Heptachlor Epoxide	0.03	0.051 U	0.007 UJ	0.053 UJ	0.053 U	0.053 UJ	59 U	0.053 U	53 U	0.054 UJ	**0.051 J**	0.051 UJ	0.013 BJ
Methoxychlor	35	0.51 U	0.56 U	0.53 UJ	0.53 U	0.53 UJ	590 U	0.53 U	530 U	0.22 NJ	0.54 U	0.5 UJ	0.53 U
p,p'-DDE	0.2	0.1 U	0.11 U	0.11 UJ	0.11 U	0.11 UJ	**22 J**	0.013 BJ	**8.6 J**	0.11 UJ	0.11 U	0.1 UJ	0.11 U
p,p'-DDT	0.2	0.1 U	0.11 U	0.008 BJ	0.11 U	0.11 UJ	**12 J**	0.11 U	110 U	0.11 UJ	0.11 U	0.1 UJ	0.032 J

Notes:
Hits only table
Units are in ug/l (micrograms per liter)
NA - Not Available
NC - No criteria
U - compound analyzed but not detected above the method detection limit.
J - indicates an estimated value
N - Sample recovery not within control limits
B - the reported value is less than the Contract Required Detection Limit (CRDL) but greater that the instrument Detection Limit (IDL) or Method Detection Limit.
[1] New York State Department of Environmental Conservation, Technicaland Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 199E
BOLD - Value exceeds Action Level
--- - Not Analyzed
Sample Type N - Normal
Sample Type FD - Field Duplicate

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Table 4-19
National Grid
Fulton, New York
Sediment Samples - BTEX

Chemical Name	Location ID / Sample Date / Action Level [1]	SD-2-10 5/24/2001	SD-2-22 5/24/2001	SD-3-25 5/24/2001	SD-4-0 5/24/2001	SD-7-5 5/24/2001	BK-01 5/24/2001	BK-02 5/24/2001	BK-03 5/24/2001	BK-04 5/24/2001
Benzene	0.06	0.012 U	0.014 U	0.013 U	0.012 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethylbenzene	5.5	0.012 U	0.014 U	0.013 U	0.012 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U
Toluene	1.5	0.012 U	0.014 U	0.013 U	0.012 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U
Xylene (total)	1.2	0.012 U	0.014 U	0.013 U	0.012 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U
Total BTEX	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
Units are in mg/kg (milligrams per kilogram)
NC - No Criteria
ND - Not detected
U - compound analyzed but not detected above the method detection limit.
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level
--- - Not Analyzed

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Table 4-20
National Grid
Fulton, New York
Sediment Samples - Semivolatile Organic Compounds

Location ID / Sample Date / Chemical Name	SD-2-10 5/24/2001	SD-2-22 5/24/2001	SD-3-25 5/24/2001	SD-4-0 5/24/2001	SD-7-5 5/24/2001	BK-01 5/24/2001	BK-02 5/24/2001	BK-03 5/24/2001	BK-04 5/24/2001
Benzo[a]anthracene**	0.17 J	0.059 J	0.062 J	0.13 J	0.088 J	0.44 U	0.42 U	0.45 U	0.37 U
Benzo[a]pyrene**	0.15 J *	0.052 J	0.44 U	0.099 J *	0.083 J *	1.1 *	0.42 U	0.45 U	0.73 *
Benzo[b]fluoranthene**	0.19 J	0.081 J	0.058 J	0.14 J	0.14 J	0.44 U	0.42 U	0.45 U	0.37 U
Benzo[g,h,i]perylene	0.087 J	0.46 U	0.44 U	0.067 J	0.062 J	0.44 U	0.42 U	0.45 U	0.37 U
Benzo[k]fluoranthene**	0.072 J	0.46 U	0.44 U	0.054 J	0.51 U	0.44 U	0.42 U	0.45 U	0.37 U
Chrysene**	0.16 J	0.066 J	0.051 J	0.12 J	0.086 J	0.44 U	0.42 U	0.45 U	0.37 U
2-Chloronaphthalene	0.41 U	0.46 U	0.44 U	0.4 U	0.51 U	0.44 U	0.42 U	0.45 U	0.37 U
Dibenz[a,h]anthracene**	0.41 U	0.46 U	0.44 U	0.4 U	0.51 U	0.44 U	0.42 U	0.45 U	0.37 U
Fluoranthene	0.26 J	0.11 J	0.093 J	0.25 J	0.14 J	0.44 U	0.42 U	0.45 U	0.37 U
Fluorene	0.41 U	0.46 U	0.44 U	0.4 U	0.51 U	0.44 U	0.42 U	0.45 U	0.37 U
Indeno[1,2,3-cd]pyrene**	0.078 J	0.46 U	0.44 U	0.061 J	0.055 J	0.44 U	0.42 U	0.45 U	0.37 U
2-Methylnaphthalene	0.41 U	0.46 U	0.44 U	0.4 U	0.51 U	0.44 U	0.42 U	0.45 U	0.37 U
Naphthalene	0.41 U	0.46 U	0.44 U	0.4 U	0.51 U	0.44 U	0.42 U	0.45 U	0.37 U
Phenanthrene	0.14 J	0.049 J	0.44 U	0.14 J	0.51 U	0.44 U	0.42 U	0.45 U	0.37 U
Pyrene	0.28 J	0.13 J	0.092 J	0.24 J	0.17 J	0.44 U	0.42 U	0.45 U	0.37 U
Total CPAH**	0.82	0.258	0.171	0.604	0.452	1.1	ND	ND	0.73
Total PAH	1.587	0.547	0.356	1.301	0.824	1.1	ND	ND	0.73

Notes:
Units are in mg/kg (milligrams per kilogram)
U - compound analyzed but not detected above the method detection limit.
J - estimated
B - blank contamination
NC - No Criteria
ND - Not detected
[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives, January 11, 2001.
BOLD - Value exceeds Action Level

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Table 4-21
National Grid
Fulton, New York
Sediment and Surface Soil Samples - Total Organic Carbon

Sample Location	Sample Date	TOC Concentration (ppm)
Sediment		
BK1	5/24/2001	8787
SD2-10	5/24/2001	6251
SD2-22	5/24/2001	5410
SD3-25	5/24/2001	6031
SD4-0	5/24/2001	12238
SD7-5	5/24/2001	17018
Surface Soils		
SS-10	5/14/2001	13629
SS-11	5/14/2001	62855
SS-12	5/14/2001	39093
SS-13	5/14/2001	39538
SS-14	5/14/2001	56457
SS-15	5/14/2001	42450
SS-16	5/14/2001	10332
SS-17	5/14/2001	26032
SS-18	4/16/2002	17238
SS-19	4/16/2002	29299
SS-20	4/16/2002	22385
SS-21	4/16/2002	30236
SS-22	4/16/2002	39434
SS-23	4/16/2002	15211
SS-24	4/16/2002	26258
SS-25	4/16/2002	17801
SS-26	4/16/2002	23825
SS-27	4/16/2002	11840