LITTLE FALLS (MILL ST.) NON-OWNED FORMER MGP SITE

LITTLE FALLS, NEW YORK

Site Characterization Report

July 2003

Prepared for:

Niagara Mohawk
A National Grid Company

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1.0 INTRODUCTION

1.1 GENERAL

This document, herein referred to as the Site Characterization Report (Report) for the Niagara Mohawk, a National Grid Company (NM NGrid) Little Falls (Mill Street) Non-owned Former Manufactured Gas Plant (MGP) Site, has been prepared by Foster Wheeler Environmental Corporation (Foster Wheeler Environmental) on behalf of NM NGrid. Preparation of this Report is in response to and in accordance with the requirements set forth in the New York State Department of Environmental Conservation (NYSDEC) Voluntary Consent Order (VCO) (Index D0-0001-0011) with NM NGrid, the NYSDEC-approved Work Plan dated August 2002, and the Generic Work Plan for Non-owned Former MGP Sites approved by the NYSDEC September 2002.

The Little Falls (Mill Street) Site consists of .56 acre lot parcel contained within a 6.5-acre lot area. The current property owner, SPX Corporation (Subsidiary of United Dominion Industries, Inc.) and the on-site facility operator (Feldmeier Equipment, Inc.) have been conducting investigations under a separate Voluntary Consent Agreement (VCA) D6-0001-99-11 with NYSDEC (Region 6). Several investigations have been conducted, since 1998, by the property owner and operator to characterize the subsurface soil and groundwater conditions. These Phase I and Phase II investigations were completed by consultants hired by SPX and conducted in response to potential property transfer of ownership from SPX to Feldmeier. The VCA between the property owner and the NYSDEC (Region 6) was executed on March 20, 2000.

Independent of the existing VCA between SPX and NYSDEC (Region 6), a VCO agreement (Index DO-0001-0011) between NM NGrid and NYSDEC (Bureau of Western Remedial Action) was executed on January 28, 2001. The area represented in the NM NGrid VCO only represents the .56 acre portion of the lot, which represents the portion of the Site historically identified for former MGP operations.

1.2 PURPOSE OF THIS REPORT

The purpose of this Report is to summarize the activities conducted as part of the Site Characterization investigation performed at the Little Falls (Mill Street) Non-owned Former MGP Site to support the project objectives presented below.

1.3 OBJECTIVES OF THE SITE CHARACTERIZATION INVESTIGATION

The overall objective of the Site Characterization is to generally characterize the nature and extent of distribution of any existing impacts at the Site and determine if further investigation and/or implementation of an IRM is warranted. Information presented in the Pathway Exposure Analysis will be utilized for evaluation of alternatives for supporting the proposed expansion of the current manufacturing building.

The following are the specific objectives of the Site Characterization effort:

- Evaluate whether chemical constituents of concern from past MGP operations are present in the environmental media at the Site;

- Determine if MGP-related chemical constituents or non-aqueous phase liquid (NAPL) are present in on-site soil or groundwater;
- Determine the general groundwater flow direction on-site;
- Evaluate data to determine if any impacts from past MGP operations are present; and
- Prepare a Pathway Exposure Analysis utilizing data from the SCR, to assist in evaluating alternatives for supporting the proposed expansion of the current manufacturing building.

1.4 SITE LOCATION AND BACKGROUND

The Little Falls (Mill Street) Site is a former MGP Site located at 545 E. Mill Street, Herkimer County, Little Falls, New York. It comprises approximately 0.56 acres, including a small portion of a parking lot and the western end of a manufacturing building. The Site is currently owned by SPX Corporation (a subsidiary of United Dominion Industries), which leases the property to Feldmeier Equipment, Inc. (Feldmeier) for the manufacture of stainless steel tanks for the dairy, food and pharmaceutical industry. The Site is bordered by the Mohawk River to the south, East Mill Street to the north, George Lumber & Building Materials to the west, and Feldmeier to the east. Burrows Paper Corporation lies to the east of Feldmeier (approximately 685 feet east of the Site). Figure 1-1 illustrates the location of the property on a portion of the USGS 7.5-minute Little Falls quadrangle topographic map.

Previous Investigations

Previous investigations, conducted by the landowner, included all areas currently owned by SPX Corporation (6.5 acres) and currently housing the Feldmeier operations. These previous investigations include areas inside the area investigated for this Site Characterization, as well as areas well outside of the historical location of the Former MGP facility and property boundaries (see Figure 1-2). Information contained in the following section discusses only the portions of the previous investigations, which fall within the boundaries of this Site Characterization. The previous investigations are summarized in the following paragraphs.

Delta Environmental Consultants, Inc. conducted a Phase I Environmental Site Assessment and a Phase II Environmental Assessment with Reports dated Nov. 1997 and June 1998, respectively. The investigations included the installation of four (4) direct-push borings within the perimeter of the Site and the collection of soil and groundwater samples from those direct-push borings. Semi-volatile organic compounds (SVOCs) were detected in soil samples collected from 3 of the 4 direct-push borings. Volatile organic compounds (VOCs) and/or SVOCs were detected in groundwater samples collected from three 3 of the 4 direct-push borings.

A second Phase I Environmental Assessment was performed by Buck Engineering, LLC and summarized in a report dated March 1998. All additional investigations were conducted under the VCA agreement executed between SPX Corporation and NYSDEC March 20, 2000. The VCA Investigative Report and Supplemental Report were completed September 2000 and June 2001, respectively. The scope of the investigations (within the area of the former MGP facility) included the advancement of three (3) soil borings and one (1) monitoring well (MW-1) on-Site. Soil samples collected for laboratory analysis were analyzed for metal, SVOCs, and VOCs on only a limited number of sampling intervals from each soil boring. These intervals collected for

laboratory analysis from soil borings SB-3, SB-4 and SB-5, at 6 to 6.8 feet below ground surface (bgs), 8 to 10 feet bgs (20 to 22 feet bgs for VOCs only), and 1 to 2 and 4 to 6.6 feet bgs (composited) respectively.

Data collected during three separate ground water sampling events, from the MW-1, located directly adjacent to the former holder (see Figures 1-2 and 1-3), showed elevated levels of BTEX compounds. The benzene concentrations were 71 ug/l, 45 ug/l and 47 ug/l in samples collected on April 17 2000, May 23, 2000, and April 24, 2001, respectively. Toluene concentrations were 13 ug/l, 6 ug/l and 3 ug/l respectively, and xylene concentrations were 36 ug/l, 7 ug/l and 11 ug/l, respectively.

The current Site owner (SPX Corporation) submitted to NYSDEC (Region 6 representatives Darrel Sweredoski and Phillip Waite) on January 2002, a Remediation Work Plan and Engineering Evaluation as part of the Voluntary Cleanup Program. The Work Plan, submitted for the Site owner SPX, proposes excavation "...of the location of the previous Gasometer" and the "...excavation will extend to the location of the bottom of the gasometer (estimated at 15–20 feet bgs)". Excavation limits will "...not extend off the property line to the south, nor beyond the eastern limit of the municipal storm sewer easement..." however excavation will "...extend 10' beyond the estimated gasometer foot print, but will be terminated if no contaminated soil is encountered. If contaminated soil is encountered to the north of the gasometer location, excavation will proceed until the contaminated soil/and or source is removed. (January 2002, Buck) Approval of the Remediation Work Plan for the Site owner by the NYSDEC (Phillip Waite of Region 6) is pending completion of this Site Characterization Report.

An additional investigation was conducted by Buck Engineering (April 2002) utilizing test pitting methodologies in an attempt to observe subsurface soil conditions and to locate the former MGP on-site holder. The location of the holder remnants was identified. Isolated subsurface MGP impacts directly adjacent to the former MGP holder (i.e., MGP stained soils and distinct MGP-type odor) were noted. Monitoring well MW–1, located directly adjacent to the former holder wall (as shown in Figure 1-2), was damaged and removed during the test pitting operation conducted by Buck Engineering. (No report was completed by Buck Engineering summarizing the April 2002 investigation findings).

1.5 EXISTING SITE CONDITIONS

As discussed above, the site comprises approximately 0.56 acres, encompassing a portion of a parking lot and the western end of the tank manufacturing building. See Figure 1-3 for current Site investigation and approximate location of former MGP structures.

The Site ground surface slopes to the south toward the Mohawk River, which is the southern boundary of the Site. The baseline survey conducted at the Site indicates that ground elevations range from about 354 feet above mean sea level (MSL) along the south boundary (top of river bank) of the Site, to 363 feet MSL in the northwest corner of the Site (see Figure 1-4).

The Site's surface is primarily covered with asphalt (or concrete flooring of the tank manufacturing building) except for the vegetated portion south of the parking area and manufacturing building (the north bank of the Mohawk River), and the landscaped strip of

shrubs, trees and grass on the west margin of the parking area (see Photo 12; Appendix G). Because of the topography of the Site and the asphalt/building cover, the ability of the water table underlying the Site to receive precipitation, infiltration, and recharge during and after rainfall events is limited. Precipitation is diverted via overland-flow toward the Mohawk River or to a storm drain.

A small (8 to 18-inch) diameter storm drain is also present at a depth of 1 to 3 feet below grade, trending approximately north-south along the outside edge of the tank manufacturing building. The shallow storm drain starts approximately 60-feet south of Mill Street, collects surface runoff from the parking lot (on-site only) and discharges to the Mohawk river via 18-inch diameter outfall. This drain facilitates the runoff of precipitation and the prevention of infiltration of precipitation to the water table.

As stated previously, surface drainage in the area is from north to south following the topography to the Mohawk River. A historic small surface stream is indicated on maps of the Site from the late 1800s to early 1900s. The stream flowed southeasterly to the Mohawk River. The stream was eventually channeled through stone culvert (tunnel) to facilitate road traffic and building construction on the Site. In recent years the tunnel flow was intercepted on East Mill Street and channeled through a north-south trending concrete culvert pipe approximately 5 to 12 feet below grade and approximately 100 feet west of the west side of the new tank building. The new concrete culvert collects water from the small stream, receives stormwater from catch basins along East Mill Street and discharges to the Mohawk River via a 5 by 7-foot diameter outfall. The outfall is constructed of poured concrete and massive blocks of cut rock and boulders make up the gabion walls.

A 6-foot high chain-link fence is located along the south margin of the parking lot with a gate separating the parking area from the vegetated area south of the tank manufacturing building. The fencing extends to the southwest corner of the parking lot, then northward to Mill Street.

No structures from the former MGP operations are visible above ground. Research of the location of the former MGP facility and associated structures suggest that the former building foundations from the MGP facility and the former holder are located under a portion of the New Tank Building constructed in 1985 by Feldmeier (see Figure 1-5).

1.5.1 General Site History

In 1869, Little Falls Gas Light Company built a coal gas plant on lot 21 (see Figure 1-5 for approximate location of old tax lots) situated between Mill Street and the Mohawk River. Research of 10 Sanborn Fire Insurance Maps (1884, 1891, 1897, 1900, 1906, 1911, 1918, 1928, 1948, and 1959), deeds, and other historical records provided information regarding the historical ownership and use of the property and surrounding properties along Mill Street. See Appendix H for copies of all Sanborn Maps related to the Site.

The former MGP consisted of a coal shed/house, shops, gas warehouse, purifiers and retorts (north end of the former MGP buildings), gasometer, storage, and a few unnamed buildings. The gasometer (depicted on the maps as having a diameter of approximately 40 feet) was located immediately adjacent to the Mohawk River. The gasholder is described as a 50,000 cubic foot

steel-tank, two-lift holder. Current records from Sanborn maps, tax and deed information show the former holder structure is located on South end of Lot 21.

The business name and ownership of the property changed several times over the years. The property first changed name/ownership in 1902 from Little Falls Gas Light Company to Herkimer County Light and Power Company. Utica Gas & Electric Co. was the owner of the property upon cessation of operations in 1907. Following the closure of the MGP facility, the retort house was utilized as an enclosure for the installation of a district governor to assist in controlling pressure for the local gas distribution system. The Utica Gas & Electric Co. retained ownership until 1946. Central New York Power Authority acquired the Utica Gas & Electric Company and property sometime during the early 1940s. From 1946 to 1950 Lot 21 ownership changed four times. The ownership changes were as follows: in 1946 Central New York Power Authority sold the lot to John and Sophia Macali, in 1949 Lot 21 was sold to Birger/Lunstrum Manufacturing Company, in 1950 to Charles and Lela Steel, and again in 1950 to John and Henry Becker. In 1954 John and Henry Becker sold Lot 21 and some adjoining property to Cherry Burrell Corporation. Cherry Burrell Corporation and its successors (Paxall Inc. and Carton Filler Acquisition Corporation) have owned the Site since 1954. Cherry Burrell Corporation, Paxall Inc. and Carton Filler Acquisition Corporation are all associated with SPX Corporation (a subsidiary of UDI).

As property changed ownership over the last 100 years, so did the types of business and the use of the property. Research of the Sanborn Maps shows portions of the old gas plant building were retained for use in the gas distribution system through the installation of the district governor. The property and former MGP buildings were also used as a service shop as of 1928 and as a car repair shop in 1948. Cherry Burrell (located on the adjacent property east of lot 21), through expansion of their operations in 1959, utilized the property as a parking lot. Cherry Burrell and the current business (operated by Feldmeier) located on Lot 21 and on lots directly east of the former MGP property, operate a tank manufacturing company for the dairy, pharmaceutical and food industries. See Figure 1-3 for historic features.

A tailrace is shown on the northern portion of the property parallel and adjacent to Mill Street from 1884 through 1928 (see Sanborn Maps in Appendix H). In 1891, on an adjacent property (approximately 165 to 180 feet to the west) along the Mohawk River, a "gasometer" (approximately 35 feet in diameter) is shown; however, it does not appear to be associated with the Site. The 1911 Sanborn Map, depicts this second gasometer as an "old gasometer not used" (see Figure 1-3).

Land uses on adjacent properties over the past 100 years have consisted of: a knitting mill works, sectional bookcase manufacturer, and lumber yard to the west; a knitting mill, box shop, Little Falls Fibre Co, Cherry Burrell (tank manufacturer), and Feldmeier (tank manufacturer) to the east; and a lumber yard, knitting mill, and paper manufacturing to the north.

In general, waterfront properties in the vicinity of the Site have remained industrial in land use for the past 100 years.

1.5.2 General Site Geology

The Site is located in the Mohawk River valley. The Mohawk River flows west to east from near Rome to its confluence with the Hudson River near Albany. During pre-glacial times in the region, block faulting lifted Precambrian and the overlying upper Cambrian rocks to the surface where they formed a topographic barrier preventing eastward flow of surface water. During the Pleistocene, glacial Lake Iroquois extended eastward to and spilled over the barrier, carving the deep gorge through which the Mohawk River now flows at Little Falls (Van Diver, 1980). The walls of the gorge rise to approximately 520 feet MSL on the south side of the river and 700 feet MSL on the north side of the river. The bedrock in the region is described as pyroxene-quartz syenitic gneiss (New York State Museum Service, 1970) and is exposed in various locations in the Site's vicinity.

The soil in the vicinity of the Site is described as Cut and Fill Land (Cu) (USDA, 1969). A detailed description of the geology beneath the Site is provided in Section 3.2.

1.6 REPORT ORGANIZATION

This Site Characterization Investigation Report is organized into the following seven sections outlined below:

- Section 1 – Provides an **Introduction** to the Site and presents the purpose and objectives of the Site Characterization Report. The section also provides background information regarding the past and current uses of the Site and previous investigations conducted at the Site.
- Section 2 - Presents the **Investigation Activities** for the Site Characterization Investigation; rationale for the tasks described.
- Section 3 - Presents the **Field Investigation Results.**
- Section 4 – Provides the results of the **Qualitative Human Health Evaluation.**
- Section 5 – Provides a **Summary** of the Site Characterization Investigation.
- Section 6 – Provides **Conclusions and Recommendations**.
- Section 7 – Provides **References** used for preparing this Site Characterization Report.

2.0 INVESTIGATION ACTIVITIES

2.1 GENERAL

This section describes the tasks performed by Foster Wheeler Environmental on behalf of NM NGrid, as part of the Site Characterization, the methods and/or procedures utilized and any modifications to the NYSDEC-approved Work Plan. Unless noted herein, activities were conducted in accordance with the NYSDEC-approved Work Plan dated August 2002 and the Generic Work Plan for Non-owned Former MGP Sites approved by the NYSDEC September 2002.

The Site Characterization Investigation included the installation of 15 soil borings, the excavation of five (5) test pits, the installation and development of six (6) groundwater monitoring wells, and the collection of soil and groundwater samples for off-site laboratory analysis by Severn Trent Laboratories, Inc., of Edison, New Jersey (STL Edison), a New York State Department of Health, Environmental Laboratory Approval Program (ELAP) certified laboratory. See Figure 1-4 for sampling locations.

Prior to the commencement of field activities, the Underground Facilities Protective Organization (UFPO) was contacted to mark out underground utilities at the Site. On October 1, 2002 a Site reconnaissance was performed that included the identification of utilities and a mark out of all soil boring and sampling locations. In attendance were the Foster Wheeler Environmental field investigation lead, Feldmeier plant manager and NYSDEC oversight representative. Each location was evaluated with respect to potential overhead and underground obstructions. Where necessary, current facility diagrams were utilized to evaluate the presence of any underground utility lines not located by the UFPO. Borings installed in the existing building on-site were cleared with the facility plant operations manager and any potential underground utilities were identified. NM NGrid and Foster Wheeler Environmental also identified a staging area for equipment and materials during the Site reconnaissance task.

Foster Wheeler Environmental personnel and Lyon Drilling Company, the drilling/test pit excavation/monitoring well installation subcontractor, mobilized personnel, equipment and supplies to the Site on October 2, 2002. Subsequent mobilizations for groundwater monitoring, well development and sampling are discussed in the appropriate sections below.

On December 9, 2002, following the completion of field activities at the Site, all soil borings, monitoring wells and test pit locations were surveyed for both horizontal location and elevation above mean sea level. The elevation of the top of the inner PVC riser for each monitoring well was also recorded. Survey data are provided in Appendix D.

2.2 SOIL INVESTIGATION

The soil investigation was conducted to generate soil quality and geologic data to:

- Determine the presence, concentration, and relative extent (horizontal and vertical) of potential MGP-related constituents in soil within the area: and

- Develop the Site conceptual model with regard to subsurface conditions, including the identification of subsurface structures (former holder), the nature and distribution of fill materials and other unconsolidated deposits and the nature of and depth to bedrock.

The soil investigation included the excavation of test pits and the advancement of soil borings. These activities were completed in accordance with the NYSDEC-approved Work Plan dated August 2002, and the Generic Work Plan for Non-owned Former MGP Sites approved by the NYSDEC September 2002. Subsurface soil samples were collected from soil borings and test pits. Visual observations and PID responses were typically used as a basis for selecting soil samples for analyses. Soil samples and associated Quality Assurance/Quality Control (QA/QC) samples collected for chemical analyses were submitted to STL Edison. Soil Analyses included:

- Benzene, toluene, ethylbenzene and xylenes (BTEX) by United States Department of Environmental Protection Agency (USEPA) Method 8260B;
- Polynuclear Aromatic Hydrocarbons (PAHs) by USEPA Method 8270C;
- Cyanide by USEPA Method 9010; and
- Total Organic Carbon

Soil sample analytical results are discussed in Section 3.2.4 and summarized in tabular format in Appendix E.

2.2.1 Soil Boring/Bedrock Coring

In order to evaluate the subsurface soil conditions and presence of MGP-type impacts at the Site, a total of 15 soil borings (SB-15 through SB-29) were drilled at the on-site locations both inside (see Photo 5; Appendix G) and outside of the Feldmeier plant, at the locations depicted on Figure 1-4. The depths of soil borings ranged from 2.3 feet bgs (SB-28) to 23.8 feet bgs (SB-17).

Soil borings were advanced using hollow-stem auger drilling methods. Prior to the start of drilling activities and between soil boring locations, drilling equipment was fully decontaminated via high pressure steam cleaning (see Photo 2; Appendix G). Air monitoring for oxygen, hydrogen sulfide, carbon monoxide and lower explosive limit (LEL) was conducted in the work zone during drilling (see Photo 1; Appendix G).

Split-spoon sampling was conducted on a continuous basis. All split spoons were field screened for visual and olfactory evidence of impact and were also screened with a photoionization detector (PID) for the presence of VOCs. In order to confirm the presence and nature of the bedrock underlying the Site, rock coring was completed at two locations (SB-22 and SB-25). At SB-22, the bedrock interface was encountered at 19 feet bgs and the borehole was cored to a total depth of 24 feet bgs (see Photo 4; Appendix G). At SB-25, bedrock was encountered at a depth of 16.7 feet bgs and the bedrock was cored to a depth of 17.2 feet bgs). Soil boring logs are presented in Appendix A.

A total of 56 soil samples were collected from the 15 soil boring locations. All of the 56 soil samples collected were submitted for analysis of BTEX; 53 samples were submitted for analysis of PAHs; and 51 samples were submitted for total cyanide analysis. In addition, at least one (1)

sample from each of the soil borings was submitted for TOC analysis. Quality assurance/quality control (QA/QC) samples collected included four (4) duplicates, one (1) matrix spike/matrix spike duplicate (MS/MSD), three (3) trip blanks and three (3) field/equipment blanks. Nine (9) soil borings (excluding those soil borings completed as monitoring wells) were properly abandoned with a bentonite-cement grout in accordance with NYSDEC protocols.

2.2.2 Test Pit Excavation

In order to visually inspect subsurface soils, and subsurface structures associated with former MGP operations at the Site, five (5) test pits (TP-1 through TP-5) were excavated (locations depicted on Figure 1-4) with a rubber tired backhoe. TP-1, TP-2 and TP-5 were located within the footprint of the expansion of the manufacturing building proposed by Feldmeier. These test pits were excavated to assess the soils with respect to potential construction worker exposure issues associated with the proposed building expansion. TP-3 and TP-4 were excavated to locate the perimeter of the former gasholder wall. Test pit logs are provided in Appendix C.

Test pitting operations were completed on October 7 and 8, 2002 using a rubber tire backhoe (see Photos 7 and 8: Appendix G). Material removed from the test pits was placed on the edge of the excavation on plastic sheeting. Soils excavated from each test pit area, upon completion, were then returned to the approximate depth from which they had been removed. Soil samples were collected from test pits TP-1 (from a depth of 13.5 feet bgs) and TP-2 (from a depth of 11.5 feet bgs), for BTEX, PAH, and Total Cyanide analyses due to visual indications of impact observed at these locations. The visually impacted soils observed in TP-2 and TP-1 appeared to be concentrated near the base (at 10 to 12 feet bgs) of the excavations.

Test pits installed in April, 2002 by Buck Engineering, identified a pipe gallery (several historic former MGP pipes running parallel) aligned north-south, approximately 20 to 25 feet from the New Tank Building wall (see figure 1-3). These test pits, excavated during the April 2002 investigation by Buck Engineering, were excavated between TP-2 and the holder wall and ran perpendicular from the New Tank Building. As of the preparation of this Report Buck Engineering has not generated a summary report and did not collect soil samples from the test pits. From observations performed by Foster Wheeler at the time of the Buck Engineering test pitting investigation, the visually impacted material, (stained with MGP related constituents) was observed starting at 6 to 7 feet bgs and continuing to the base of the excavation 11 to 13 feet bgs. Intermittent pockets of MGP impacted soils were observed directly adjacent to the pipe galleries. No free flowing NAPL was observed in the overburden soils. The historical former MGP wooden piping, observed in the pipe gallery, was disturbed during the test pitting operations, as a result of the disturbance, some free flowing residual amounts of DNAPL was observed in the piping.

As stated previously, the two test pits, TP-3 and TP-4 were excavated on the perimeter of the former holder location underlying the southwest corner of the Feldmeier new tank manufacturing building on-site. Two positions on the holder's perimeter were uncovered so that the diameter of the holder could be estimated and visual inspection of the structure's wall could be completed. Based on visual observation in the excavations, the former holder wall appears to be approximately 45 to 50 feet in diameter. The wall of the holder is constructed with an

approximate two and one-half foot thick wall of large hand cut stone block on the exterior and two layers of brick on the interior. Soil samples were not collected from these test pits.

The overall condition of the structure below ground surface appeared to be intact, no fractures or crumbling broken brick were observed in the exposed portion of the holder wall. The top of the wall, which had been removed or altered during past operations, was jagged and rough in appearance resulting from past alteration of the holder wall. The original top of the holder wall was not observed in the exposed portion of the holder wall.

Test pitting operations were also utilized for collection of information on the base of holders, but due to collapsing material and water filling the test pit, the bottom of the holder was not confirmed or observed during test pitting. Two borings, SB-23 inside the New Tank Building and SB-26 outside the New Tank Building, were advanced to the base of the holder. The base of the holder was confirmed in SB-23 at 16.1 feet below ground surface and in SB-26 at 15.3 feet below ground surface. The overall elevation of the holder floor has been identified at 339.37 feet MSL to 339.54 feet MSL.

TP-5 was advanced in the central portion of the parking lot. Anthropogenic fill materials encountered at this location (loose bricks and stone), and exposure of the large diameter (78 inch RCP) drainage pipe, prevented excavation beyond a depth of 10.4 feet bgs. Soil samples were not collected at this location and no MGP-type impacts were observed.

Following back filling of the test pits, and regrading of areas disturbed by the test pitting operations, all areas were restored to original condition (asphalt cap or grass seed replacement).

2.3 GROUNDWATER INVESTIGATION

The groundwater investigation was conducted to generate hydrogeologic and water quality data necessary to:

- Estimate horizontal groundwater flow direction;
- Identify the presence of potential MGP-related constituents and if present, their extent in groundwater; and
- Identify whether non-aqueous phase liquids (NAPLs) are present.

The groundwater investigation consisted of the following:

- Installing and developing six overburden monitoring wells;
- Obtaining water level measurements from the six new and one existing monitoring well; and
- Conducting groundwater sampling of the 6 new and one existing monitoring well.

Groundwater samples and associated Quality Assurance/Quality Control (QA/QC) samples collected for chemical analyses were submitted to STL Edison. Groundwater sample analyses included:

- Target compound list (TCL) volatile organic compounds by USEPA Method 8260B;

- TCL base-, neutral- and acid-extractable semivolatile organic compounds (BNAs) by USEPA Method 8270C;
- Target analyte list (TAL) metals and total cyanide by the appropriate USEPA Methods; and
- Water quality/natural attenuation parameters.

Groundwater sample analytical results are discussed in Section 3.3.2 and summarized in Tabular format in Appendix E.

2.3.1 Monitoring Well Installation

In order to generate site-specific hydrogeologic data (i.e., depth to groundwater, groundwater flow direction, groundwater gradient) and evaluate groundwater quality, six (6) groundwater monitoring wells (FWMW-1 (SB-17), FWMW-2 (SB-18), FWMW-3 (SB-20), FWMW-4 (SB-22), FWMW-5 (SB-29) and FWMW-6 (SB-25) were installed on-site (as illustrated on Figure 1-4). Monitoring wells were completed in accordance with the NYSDEC-approved Work Plan. The Work Plan for Site Characterization proposed the installation of eight (8) monitoring wells which were to include one (1) up-gradient (background) and two (2) along the southern boundary south of the former gas holder and purifier area. One (1) monitoring well was installed in the middle of the Site directly adjacent to the 5 foot diameter storm sewer, and one (1) directly adjacent to the potential location of the former MGP structures (i.e., purifier building etc.). Three (3) additional monitoring wells were to be coupled with three (3) of the newly installed wells, and advanced to bedrock so that one (1) shallow well at each pair was screened across the water table and that the second was keyed into the bedrock with a sump that would allow for the collection of DNAPL if present.

Based on field observations (i.e., limited groundwater above the bedrock interface, lack of NAPL at the bedrock interface), and with the approval of the NYSDEC, couplet wells were not installed. Monitoring well locations were modified to the present configuration.

Monitoring wells were constructed of 2-inch diameter schedule 40 PVC screen (10-slot) and riser. Upon completion of each soil boring, but prior to removing the auger from the ground, PVC well screen and riser were inserted into the borehole. Sand pack, sand pack seal and backfill materials were placed in the annulus of the well as the augers were retracted from the hole. In general, the sand pack extended from the bottom of the well to approximately 2 feet above the screened portion of the well. In general (unless otherwise noted on well construction diagrams) the sand pack was placed from the bottom of the borehole to approximately 2 feet above the screened section. All monitoring wells were screened to the top of the bedrock. Monitoring well construction diagrams are provided in Appendix B.

Monitoring wells were developed on October 14, 2002 by repeatedly pumping with a submersible pump. Because of the low yield of the wells, the wells were pumped dry, allowed to recover and then pumped again. This process was repeated until visual indication of turbidity was minimal. Monitoring well FWMW-5 was developed with a disposable bailer on October 30, 2002 as a result of the limitation of standing water inside the well. Development of this well involved removing groundwater until the well went dry, allowing the well to recharge, and repeating this process until visual indication of turbidity was minimal.

2.3.2 Groundwater Level Measurements

Groundwater level measurements were collected from on-site wells on October 29, 2002. Table 1 presents the groundwater elevation data in feet above MSL. Data used to evaluate hydrogeological parameters for the Site (groundwater flow direction, gradient etc) are discussed in Section 3.3.1.1.

TABLE 1
Groundwater Level Elevations

Location	Ref. Point (feet MSL)	October 29, 2002 (feet MSL)
FWMW-1	355.58	338.46
FWMW-2	361.92	352.65
FWMW-3	354.84	346.43
FWMW-4	354.36	337.66
FWMW-5	355.03	347.58
FWMW-6	354.00	338.55
MW-3	351.46	335.80

2.3.3 Groundwater Sampling

Groundwater samples were collected from the six newly installed monitoring wells (FWMW-1 through FWMW-6) and one (1) pre-existing monitoring well (MW-3) located on the southern margin of the Site, between October 29 and 31, 2002 (see Photos 9 and 10; Appendix G). Each well was screened with a PID immediately upon opening to measure the concentration of accumulated organic vapors, if any, present in the well. A minimum of 3- to 5- well volumes were purged from each well with a peristaltic pump while field parameters (pH, specific conductance, temperature, dissolved oxygen, and turbidity) were recorded after each well volume. Samples collected from FWMW-1 through FWMW-6 were analyzed for TCL VOCs, TCL BNAs, TAL metals (total), total cyanide and natural attenuation parameters.

Monitoring well MW-3 (installed by a contractor for the property owner SPX Corporation) was purged dry and did not recover allowing collection of only one 40-ml sample for TCL VOC analysis.

2.4 QUALITATIVE HUMAN EXPOSURE EVALUATION

A human exposure evaluation was performed to qualitatively assess human exposure pathways at the Site. The assessment identified elements necessary to establish a potentially complete exposure pathway, including source and location where exposure could occur, and feasible route of exposure at the exposure point. The planned future use of the Site as continuing industrial usage was also considered. Potentially complete exposure pathways were identified based on current and likely future land uses. The results of the human health exposure evaluation are provided in Section 4.

2.5 WASTE MANAGEMENT

Waste generated during the Site Characterization Investigation was placed into DOT-approved 55-gallon drums, which were properly labeled and staged along the southern margin of the parking lot for proper disposition by NM NGrid. At the request of NM NGrid, a characterization sample was collected from the stockpiled soils generated by Buck Engineering during a test pitting investigation conducted in April 2002 (see Photo 11: Appendix G). The characterization sample was collected on November 8, 2002 and was submitted to STL for analysis requested by the disposal facility. The analytical parameters were as follows: VOCs, PAHs, flash point, paint filter test, pH, reactive cyanide, and reactive sulfide.

All waste generated during the investigations were removed from the Site on January 15, 2003. Soil stockpiled along the southern edge of the parking area was loaded into two dump trucks and transported to High Acres Landfill. Solid waste drums 10 and 6 liquid waste drums were also shipped off-site to High Acres Landfill. All waste materials removed from the Site were recorded on non-hazardous Waste Manifests. Total tonnage of soil removed from the Site was approximately 35 tons.

2.6 SITE RESTORATION

Site restoration activities consisted of resurfacing of paved areas and lawn areas that were disturbed as a result of the Site Characterization drilling and test pitting operations. Resurfacing of areas that were damaged during previous test pitting, conducted by another consultant on behalf of property owner SPX Corporation, was completed on November 01, 2002. Grass areas south of the new tank building on-site, which were disturbed as a result of Site Characterization activities, were backfilled with native soil and smoothed to match the existing grade. A mixture of grass seed was placed on the freshly raked soil.

3.0 FIELD INVESTIGATION RESULTS

3.1 GENERAL

This section provides a discussion of the Site Characterization Investigation results. Analytical results are broken out into specific media and tabulated summaries are provided in Appendix E. Validation summaries/data usability summaries are presented in Appendix F. The analytical results are compared to NYSDEC recommended guidance values and/or standards. Site surface and subsurface soil concentrations were reviewed against the soil clean-up objectives recommended in the NYSDEC Division Technical and Administrative Guidance Memorandum HWR-94-4046, Determination of Soil Clean-up Objectives and Clean-up Levels (April 1995) [hereafter referred to as NYSDEC TAGM 4046 levels]. Groundwater analytical results were compared with levels specified in NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient WQ Values and Guidance Values (June 1998) for Class GA waters (NYSDEC Class GA Standards).

To assist in the comparison of results, the applicable NYSDEC guidance levels used for comparison are presented on the corresponding data tables in Appendix E. Compound concentrations exceeding these guidance values are highlighted with shading.

3.2 SOIL INVESTIGATION RESULTS

3.2.1 General

The following discussion of the geology beneath the Site describes characteristic and probable origin of geologic units encountered during field activities. Specifically, the geologic descriptions presented in this section are based on the following:

- Observations of subsurface materials encountered during test pit excavation and drilling activities conducted during the Site Characterization Investigation.
- Review of subsurface boring logs and test pit information generated during previous investigation conducted on or nearby the Site.

3.2.2 Overburden Geology

The Site geology is illustrated on cross-section transects (locations on Figure 3-1) through the site as depicted on Figures 3-2 and 3-3. Impacts observed during the investigation were limited to staining and what appears to be NAPL. Intervals where MGP-type impacts were observed are noted on the soil boring logs (Appendix A), and are discussed in the following subsections.

The subsurface investigation at the Site has supported the identification of two (2) discernible unconsolidated units underlying the Site and lying above bedrock; a fill unit and an underlying (where present) unit of native materials.

3.2.2.1 Fill Unit

Fill is present at the Site from the surface to depths of between 2.3 and 18.6 feet bgs. The fill material consists of common fill (imported clean fill consisting of sand, silt, gravel, etc.) and/or anthropogenic materials including coal, slag, concrete, brick, glass, metal, wood, etc. (see Photo 3; Appendix G). In general, the fill unit increases in thickness from north to south (i.e., toward the Mohawk River). The maximum fill thickness of 18.6 feet was observed in soil boring SB-17 in the southwest corner of the Site.

NAPL-type impacts were observed in the fill unit underlying the Site. These impacts included staining of the concrete floor of the former gasholder (approximately 15.3 feet bgs at soil boring SB-26) (see Photo 6: Appendix G). Other evidences of NAPL-type impacts included solidified tar (a piece of approx. ½ inch diameter), observed at SB-23 (inside the former gasholder) between 14 and 14.5 feet bgs. In addition, small (1-2 mm) NAPL deposits were observed at soil boring SB-26 between 16.4 and 16.7 feet bgs (at the bottom of the gas holder), and at soil boring SB-25 (monitoring well FWMW-6) between 6 and 7 feet bgs. Free flowing NAPL was not observed.

3.2.2.2 Native Soil

Underlying the fill unit is a layer of native materials consisting of fine sand, silt and some clay that appears to be free of anthropogenic materials. This native material may represent a flood plain deposit from the Mohawk River. Where encountered this unit was up to 8 feet thick (SB-22).

Stained soil, sheens and NAPL were observed in the native soil underlying the site. Black-gray staining was observed at test pits TP-1 and TP-2 at depths 13.5 and 11 feet bgs, respectively. Sheens were observed at SB-20 between 8 and 8.3 feet bgs (at the groundwater interface), and at SB-25 between 14 and 14.2 feet and between 16.2 and 16.5 feet bgs. NAPL deposits (1-2 mm in diameter) were observed at SB-21 between 8 and 9.25 feet bgs (at the groundwater interface). A 0.5-inch thick seam of soil mixed with NAPL-like material was observed at soil boring SB-25 at a depth of 16.7 feet bgs (at the bedrock interface). Free flowing NAPL was not observed.

3.2.3 Bedrock Geology

Bedrock was confirmed through rock coring at the terminal depths of soil borings SB-22 and SB-25. The bedrock was described as gray to grayish pink granite gneiss, which correlates with the syenitic gneiss described in the literature (New York State Museum and Science Service, 1970) and observed at outcrops north of the Site.

Residual MGP-type staining and odors were noted in the fractures within the bedrock between 19 and 24 feet bgs in SB-22 (monitoring well FWMW-4).

3.2.4 Soil Analytical Results

Fifty-eight (58) soil samples, 4 duplicates and 1 matrix spike/matrix spike duplicate (MS/MSD) were collected from 16 of the soil boring and/or test pit locations. Each of the soil samples was analyzed for BTEX parameters, 55 of the samples (plus 4 duplicates and 1 MS/MSD) were analyzed for PAH parameters, 53 of the samples (plus 4 duplicates and 1 MS/MSD) were submitted for cyanide (CN-) analysis and 18 samples (plus 2 duplicates) were collected for total organic carbon (TOC) analysis. Tabulated analytical results of soil samples are presented in Appendix E, Tables E-2 through E-5. Total BTEX, total PAH and total Cyanide concentrations are presented on Figure 3-4.

3.2.4.1 Soil BTEX Analytical Results

BTEX analyses indicated the presence of one or more BTEX compounds in 50 of the 58 subsurface soil samples submitted for analysis (see Appendix E, Table E-2). Individual BTEX constituent concentrations exceeding the NYSDEC TAGM 4046 comparison criteria occurred in 11 samples as follows: SB-20 at 14 to 14.3 feet bgs, SB-21 at 8 to 10 feet and 10 to 12 feet bgs, SB-22 at 10 to 12 feet and 18 to 19.1 feet bgs, SB-23 at 11 to 13 and 15 to 17 feet bgs, SB-25 at 16-16.7 feet bgs, SB-26 at 14-15.2 feet bgs, SB-29 at 6 to 8 feet bgs and at TP-01 at 13.5 feet bgs.

3.2.4.2 Soil PAH Analytical Results

PAH's were detected in each of the soil samples submitted for analysis except for the sample collected from 12 to 14 feet bgs at soil boring SB-18 (see Appendix E, Table E-3). Forty-four (44) of the 55 samples submitted for PAH analysis had at least one compound concentration exceeding its respective NYSDEC TAGM 4046 comparison criteria. These samples were collected from varying depths at soil borings SB-15 and SB-16 and, SB-19 through SB-29. The total PAH concentration ranged from background up to 9,682 mg/kg (reported in the sample collected from SB22 from a depth of 8 to10 feet bgs).

3.2.4.3 Soil Cyanide Analytical Results

Total cyanide was reported in 26 subsurface soil samples. The total cyanide concentrations ranged from below background up to 81.6 mg/kg encountered in the sample collected from a depth of 8 to 10 feet bgs in SB-22. Neither standards nor guidance values for cyanide concentrations in soil have been adopted by NYSDEC.

3.2.4.4 Soil TOC Analytical Results

TOC concentrations ranged from 2,220 mg/kg (SB-29; 10 to 12 feet bgs) to 167,000 mg/kg (SB-21; 10 to 12 feet bgs).

3.3 GROUNDWATER INVESTIGATION RESULTS

3.3.1 Hydrogeology

The following discussion of hydrogeology describes the groundwater flow system below the Site, including probable effect of seasonal changes on the Mohawk River level imposed by the New York State Canal Corporation. The river level at the Site is artificially raised and lowered by approximately nine feet each year. The high level is maintained between approximately May and November (summer season), with the low level occurring between December and April.

3.3.1.1 Groundwater Flow System

A water table is present within a thin unit of unconsolidated, granular soil deposits that overlie bedrock in the Site locale. The saturated media include fill, sands, and silts that are heterogeneous, thin, and discontinuous. The unconsolidated saturated media is very limited, and is not capable of functioning as a supply of potable water. Groundwater flow within this unit, although locally distorted due to heterogeneities and bedrock surface undulations, is typically toward the Mohawk River.

A total of six- (6) groundwater monitoring wells were installed as part of the Site Characterization investigation (FWMW-1 through FWMW-6). Water levels were gauged at each of these locations and at a preexisting monitoring well MW-3 on October 29, 2002. Groundwater elevation data were used to prepare a potentiometric surface map (see Figure 3-5) for the October 2002 event. Groundwater elevation data for FWMW-5 and MW-3 were not utilized for the interpretation because FWMW-5 was not developed at the time of data collection, and because groundwater at MW-3 did not recover after purging/sampling activities indicating that the data was not representative of static conditions.

The groundwater table is approximately 7 to 17.5 feet bgs depending upon the media proximity to the Mohawk River. The interpretation, presented in Figure 3-5, indicates a south-southeast groundwater flow direction, toward the Mohawk River. The hydraulic gradient was calculated to be approximately 0.0875 feet per foot (ft/ft), based on the groundwater elevation measurements collected in October 2002 groundwater sampling event.

The Village of Little Falls provides water service to the Site and vicinity. The unconsolidated saturated media at the Site does not appear to be capable of functioning as a water supply source (aquifer). Direct inspection of the down-gradient border has shown that no water supply wells are currently in operation.

3.3.1.2 Groundwater Quality

3.3.2 Groundwater Analytical Results

Seven (7) monitoring wells, FWMW-1 through FWMW-6 and MW-3, were sampled in October 2002, with a duplicate sample (FWMW-1D) collected from well FWMW-1. Monitoring wells FWMW-1 through FWMW-6 were sampled for target compound list (TCL) VOCs, TCL BNAs, and total cyanide. In addition the samples were analyzed for methane, ethane and ethylene, ferrous iron, alkalinity, total organic carbon, nitrogen-nitrate, biological oxygen demand (BOD), chloride, sulfate, orthophosphate, metals, nitrogen-ammonia, and chemical oxygen demand (COD).

Tabulated analytical results for the groundwater-sampling event are presented in Appendix E, Tables E-6 through E-9. Total VOC, total BNA and total Cyanide concentrations are depicted on Figure 3-6.

3.3.2.1 Groundwater VOC Analytical Results

Eight volatile organic compounds were identified in groundwater samples collected during the October 2002 sampling event (see Appendix E, Table E-6). BTEX constituents were detected in groundwater samples collected from monitoring wells FWMW-1, FWMW-3, FWMW-4, FWMW-5 and FWMW-6. The highest concentrations of BTEX compounds (benzene: 91 ug/l; toluene: 11 ug/l; ethylbenzene: 28 ug/l; total xylenes: 25 ug/l) were reported in the groundwater sample collected from FWMW-6, which is located hydraulically down-gradient of the former gasholder. Benzene concentrations exceeding NYSDEC Class GA Standards were reported in groundwater samples collected from FWMW-1, FWMW-2, FWMW-3, FWMW-4 and FWMW-6. Other BTEX parameters if present, were at concentrations below NYSDEC Class GA Standards.

In addition to BTEX compounds, chloroform was reported in groundwater samples collected from FWMW-2, FWMW-4 and FWMW-6. Tetrachloroethene and trichloroethene were reported in the groundwater sample collected from MW-3, and cis-1, 2, -dichloroethene was reported in the groundwater sample collected from FWMW-6. All non-BTEX compounds reported were at concentrations below their respective NYSDEC Class GA Standards (see Appendix E, Table E-6).

3.3.2.2 Groundwater BNA Analytical Results

Twenty-four BNAs (see tables in Appendix E for complete list) were reported in groundwater samples collected from the Site. One or more of these compounds were identified in groundwater samples collected from monitoring wells FWMW-1, FWMW-3, FWMW-4, FWMW-5, and FWMW-6 (Appendix E, Table E-7). The highest total BNA concentration was reported in a groundwater sample collected from monitoring well FWMW-1 (340 ug/l) attributed entirely to bis(2-ethylhexyl)phthalate. The most numerous BNA compounds, at concentrations exceeding NYSDEC WQ Values (includes naphthalene, acenaphthene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and

benzo(g,h,i)perylene) were reported in the groundwater sample collected from monitoring well FWMW-6 (hydraulically down-gradient of the former holder location). Concentrations of individual BNAs exceeding NYSDEC WQ Values were reported in groundwater samples collected from FWMW-1, FWMW-4, FWMW-5 and FWMW-6.

3.3.2.3 Groundwater Total Metals Analytical Results

Eighteen TAL metals were detected in groundwater samples collected during the October 2002 groundwater sampling event at the Site (see Appendix E, Table E-8). Nine metals were reported in groundwater samples collected from each of the monitoring wells sampled (FWMW-1 through FWMW-6). Iron, copper, lead, magnesium, manganese, sodium, and arsenic occurred in at least one of the groundwater samples at concentrations greater than NYSDEC Class GA Standards. Analytical results for TAL metals can be attributable to high background due to heavy industrialization of this Site and surrounding areas and is not directly related to former MGP operations.

3.3.2.4 Groundwater Cyanide Analytical Results

Total cyanide (see Appendix E, Table E-9) was reported at detectable concentrations in groundwater samples collected from monitoring wells FWMW-3, FWMW-4, FWMW-5 and FWMW-6. The total cyanide concentration in the groundwater sample FWMW-4 (0.25 mg/l) slightly exceeded the NYSDEC Class GA Standard for total cyanide of 200 ug/l.

3.3.2.5 Groundwater TOC Analytical Results

Total organic carbon concentrations ranged from 1.8 to 38.0 mg/l (Appendix E, Table E-9). The highest TOC concentration was reported in the groundwater sample collected from FWMW-6.

3.3.2.6 Groundwater Water Quality/Natural Attenuation Analytical Results

The remaining various water quality/natural attenuation parameters are summarized in Appendix E, Table E-9. The maximum concentrations of these parameters and the monitoring well associated with the maximum include: alkalinity (584 mg/l; FWMW-6), ammonia (2.7 mg/l; FWMW-2), chemical oxygen demand (143 mg/l; FWMW-2), chloride (1370 mg/l; exceeds NYSDEC WQ Value of 250,000 ug/l), conductivity (4.95 micro-siemens per centimeter [mS/cm]), dissolved oxygen (10.26 mg/l), methane (300 ug/l), nitrate (1.1 mg/l), ortho-phosphate (0.18 mg/l), pH (7.35 standard units [su]), oxidation-reduction potential (range –110 to 101 millivolts [mv]), sulfate (186 mg/l), total dissolved solids (2910 mg/l), turbidity (481 nephelometric turbidity units [NTU]).

4.0 QUALITATIVE HUMAN HEALTH EVALUATION

4.1 GENERAL

The conceptual Site model presented in this section was developed for the Pathway Exposure Analysis and describes the potential for adverse human health and ecological effects associated with exposure to potential MGP-related impacts at the Site. The Pathway Exposure Analysis will use information regarding current and foreseeable land use scenarios, and available data for the site, to evaluate the potential of exposure for human and ecological receptors. This evaluation will be based on characterization of the environmental setting of the Site and identification of potential chemicals of concern. The results of the Pathway Exposure Analysis can then be used to evaluate potential remedial alternatives, as presented in the Remedial Action Scenario (RAS). This section describes the initial identification of potentially complete exposure pathways within a conceptual Site model.

4.2 ENVIRONMENTAL SETTING

The Little Falls (Mill Street) Site is a former MGP Site located at 545 E. Mill Street, Herkimer County, Little Falls, New York. It comprises approximately 0.56 acres including a small portion of a parking lot and the western end of a manufacturing building. The Site is currently owned by SPX Corporation (a subsidiary of United Domain Industries), which leases the property to Feldmeier Equipment, Inc. (Feldmeier) for the manufacture of stainless steel tanks for the food and pharmaceutical industry. The Site is bordered by the Mohawk River to the south, East Mill Street to the north, George Lumber & Building Materials to the west and Feldmeier to the east. Burrows Paper Corporation lies to the east of Feldmeier (approximately 685 feet east of the Site). Figure 1-1 illustrates the location of the property on a portion of the USGS 7.5 minute Little Falls quadrangle topographic map.

No structures from the former MGP operations are visible above ground. Research of the location of the former MGP facility and associated structures suggest that the former building foundations from the MGP facility and the former holder are located under a portion of the new tank building installed in 1985 by Feldmeier.

4.3 POTENTIAL CONSTITUENTS OF CONCERN

As previously discussed, the Site Characterization analytical program was designed to provide an initial characterization of potential impacts from MGP-related constituents at the Site.

Soil samples were analyzed for BTEX parameters, PAH parameters, and cyanide. MGP-type impacts (staining, NAPL, odor, sheen, chunks of solidified tar) were observed at many locations. Based on a review of these data and evaluation of the history of the site, potential constituents of concern for soil are BTEX compounds, PAHs, and cyanide.

Groundwater monitoring wells were sampled for TCL VOCs, TCL BNAs, and total cyanide. Based on a review of these data, potential constituents of concern for groundwater include VOCs (BTEX, chloroform, tetrachloroethene, trichloroethene, and cis-1,2,-dichloroethene), SVOCs (bis(2-ethylhexyl)phthalate. naphthalene, acenaphthene, benzo(a)anthracene, chrysene,

benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and benzo(g,h,i)perylene), metals (iron, copper, lead, magnesium, manganese, sodium, and arsenic) and cyanide.

4.4 POTENTIAL EXPOSURE POINTS, RECEPTORS, AND ROUTES OF EXPOSURE

An initial step in evaluating potential human exposure is the identification of complete exposure pathways. For an exposure pathway to be complete, the following three elements must exist: 1) the presence of contaminants in environmental media; 2) locations where human or ecological exposure to these media could occur; and 3) routes of exposure where constituents from these media could be taken up. The conceptual Site model is a graphical representation of the interaction between the potential sources of contaminants at the Site and the environmental media to which people and ecological receptors may be potentially exposed.

4.4.1 Definition of Areas On/off-site

The Site will be divided into four distinct areas (see Figure 4-1). They are as follows:

- Area A – Bounded to the north by Mill Street, to the south by the Mohawk River, to the east by the City of Little Falls right of way, and to the west by the fence line separating the properties owned by George Lumber Inc. and Cherry Burrel Corp. This area historically has not had any MGP building or activities located on it. Historical information has indicated a former Mill works wooden bookshelf manufacturer was located on this Site.
- Area B – Bounded to the north by Mill Street to the south by the southern margin of the foot print of the proposed building expansion, to the east by the current Feldmeier building "new tank building" and to the west by the City of Little Falls right of way. This area represents the portion of the Site proposed for redevelopment, through expansion of the current manufacturing facility, by erecting the proposed building in this section. The only remaining section of the former MGP facility, as indicated from historical records, not covered by the present new tank building, is located in the middle of Area B along the wall of the new tank building. Also contained in this area are portions of the north-south pipe gallery 25 feet west of the new tank building wall.
- Area C – Bounded to the north by the proposed building expansion area, to the south by the Mohawk River, to the east by a line trending north-south between Feldmeier and the Mohawk River, located approximately 100 feet southeast of the southwest corner of the "new tank building", and to the west by the City of Little Falls right-of-way. This section represents the area which contains the former holder structure, a portion of the pipe gallery and the strip of unpaved area to the south of the new tank building. This area is not proposed at part of the Site redevelopment.
- Area D- Will be all off-site areas including north of Mill Street west of the western property boundary (boundary line between George Lumber and Cherry Burrel Corporation) and south in the Mohawk River. Area D represents all off-site areas not associated with former MGP operations and not part of this Site Characterization.

4.4.2 Conceptual Site Model

The conceptual Site model is a graphical representation of the interaction between the potential sources of contaminants at the Site and the environmental media to which people and ecological receptors may be potentially exposed. The conceptual Site model first considers the primary sources and primary release mechanisms (current and historical) that caused the contamination to be present at the Site. Then, the transport and migration mechanisms for the contaminants are evaluated to form a link from the contaminated media (or secondary sources) to the exposure media. Finally, the exposure media may be contacted by the potential receptors and how those exposure media may be contacted (i.e., an exposure route) are determined. See Figure 4-2 (conceptual Site model).

As previously described, potential constituents of concern have been detected in soils and groundwater. Potential human exposure to these media could occur via ingestion, dermal absorption, and/or inhalation of particulates or volatiles released to the air. Current potential receptors include a utility worker, trespasser/recreational receptor, and ecological receptors. Future receptors may include an industrial worker (assumed to work in the future building expansion), and a construction worker (assumed to work during the future construction of the building expansion).

Based on the existing data and site knowledge, the potentially complete human exposure pathways at the Site are:

Potential inhalation of particulates or volatiles – Potential inhalation of volatilized or particulate emissions may occur by the utility worker, trespasser/recreational receptor, construction worker, or industrial worker in Areas A, B, C, or D, as shown on Figure 4-1. The potential for mitigation of this pathway will be discussed in the Pathway Exposure Analysis.

Potential direct contact with soil – Potential direct contact with contaminated surface and/or subsurface soil could occur by the utility worker, trespasser/recreational receptor, or construction worker in Areas A, B, C, or D, as shown on Figure 4-1. The potential for mitigation of this pathway will be discussed in the Pathway Exposure Analysis.

Potential direct contact with NAPL – Potential direct contact with NAPL could occur by the utility worker or construction worker in Areas A, B, or C, as shown on Figure 4-1. The potential for mitigation of this pathway will be discussed in the Pathway Exposure Analysis.

Potential direct contact with groundwater – The Site is supplied by the municipal water system and an assumption of no potable or industrial usage of groundwater was made. Thus exposure to groundwater via ingestion is unlikely for all receptors. However, potential direct contact with groundwater could occur by the utility worker or construction worker in Areas A, B, or C, as shown on Figure 4-1. The potential for mitigation of this pathway will be discussed in the Pathway Exposure Analysis.

Potential direct contact with surface water and sediment – Potential direct contact with surface water and sediment in the general vicinity of the Site may occur by the trespasser/recreational receptor or ecological receptor in Area D, as shown on Figure 4-1. The potential for mitigation of this pathway will be discussed in the Pathway Exposure Analysis.

4.5 SUMMARY

The Pathway Exposure Analysis will be performed in parallel with development of the RAS and will include a review of geologic and hydrogeologic conditions, analytical testing results (i.e., parameter, concentration, depth), refinement of the conceptual Site model showing the complete human exposure pathways, and a spatial analysis of site-related constituents with respect to discharge boundaries and/or surface water and subsurface pathways. The conceptual Site model is the starting point for the Pathway Exposure Analysis.

The Pathway Exposure Analysis will use the conceptual Site model and evaluate the complete exposure pathways associated with the baseline condition (i.e., no action) and, thereafter, with each of the potential remedial alternatives presented in the RAS. This evaluation will form the basis for comparing each potential remedial alternative with respect to protecting human health and the environment.

5.0 SUMMARY

5.1 GENERAL

Investigations conducted at the Site have delineated the nature and extent of potential MGP-impacts in Soil and Groundwater.

Using available Site and regional information, a comprehensive conceptual model of the Site has been developed. The conceptual model coupled with the analytical results and additional observational data have been used to develop a Qualitative Human Health Evaluation, which are summarized below.

5.2 HYDROGEOLOGIC CONCEPTUAL MODEL

The geology beneath the Site consists of two general unconsolidated units lying above Precambrian aged syenitic gneiss bedrock. In general the upper unit is a fill unit comprising either of common fill (sand, silt, gravel, etc.) and/or anthropogenic materials including coal, slag, concrete, brick, glass, metal, wood, etc. The lower unconsolidated unit is a layer of native materials consisting of fine sand, silt and some clay that appears to be free of anthropogenic materials. At the north Site boundary, bedrock is near the ground surface. The thickness of unconsolidated materials increases toward the south to the bank of the Mohawk River at the Site's southern boundary.

5.3 NATURE AND EXTENT OF MGP MATERIALS

Potential MGP-related constituents have impacted soil and groundwater at the Site. Impact to soil and groundwater under the Site appears to be limited to PAH and VOC concentrations that may or may not be related to former MGP-activities. Free flowing NAPL was not encountered during the investigation. In the few instances where tar was observed, it was present as globules disseminated in the soil, or in one case, a ½ inch hardened chunk of tar, in the common fill inside the former gas holder.

Residual NAPL, present in the unconsolidated units above the water table, provides a continuing source of VOCs and PAHs to groundwater as infiltrating precipitation dissolves these constituents and transports them to the water table. Similarly, where residual NAPL is present below the water table, constituents are dissolved and transported with groundwater flow through advection and dispersion.

The following subsections summarize the extent of media containing the highest concentrations of potential MGP-related constituents.

5.3.1 Subsurface Soils

Subsurface soils locally contain elevated levels of PAH and BETX. Elevated PAH and BETX concentrations were associated with observed residual NAPL; however, samples where no evidence of impact was observed also contained elevated PAH and/or VOC concentrations exceeding NYSDEC TAGM 4046 comparison criteria. In general, the soils exhibiting sheens or residual NAPL were observed:

- MGP-type impacts (staining, DNAPL, odor, sheen) were observed in approximately half of the soil boring/sampling locations, and were generally limited to the vicinity in and around the former holder.
- Free flowing NAPL was not observed during the Site Characterization Investigation.
- Impacts were typically limited to MGP-type odors; however, small beads of stained soil were observed in three soil boring locations and a solid ½ inch size ball of tar was also observed in a soil boring sample (SB–24) within the perimeter of the former holder at a depth of approximately13 feet bgs. Stained concrete was also observed in a sample collected from the bottom of the holder at a second soil boring drilled inside the holder but outside the building (SB-23).
- Total cyanide was reported in 26 subsurface soil samples, with concentrations ranging from background to 81.6 mg/kg.
- Total organic carbon (TOC) concentrations ranged from 2.2% to 16.7%.
- Laboratory analysis of soil samples reported one or more BTEX compounds (benzene, toluene, ethylbenzene and toluene) were at concentrations above NYSDEC Technical and Administrative Guidance Memorandum # 4046 (TAGM 4046) levels in 11 of the soil samples submitted for BTEX analysis.
- Polycyclic Aromatic Hydrocarbon (PAH) compounds at concentrations exceeding NYSDEC TAGM 4046 levels were detected in one or more samples collected from each of the soil boring and/or test pit locations.

5.3.2 Groundwater

- No impacts to groundwater were identified through screening with the PID .
- No LNAPL or DNAPL were observed during groundwater sampling activities.
- Benzene, toluene, etylbenzene and xylenes were detected in the groundwater sample collected from FWMW-6 at concentrations exceeding their respective NYSDEC Class GA Standards.
- Benzene concentrations exceeding NYSDEC Class GA Standards were also reported in groundwater samples collected from FWMW-1, FWMW-2, FWMW-3, and FWMW-4.
- Other VOCs detected in the groundwater samples were present at concentrations below NYSDEC Class GA Standards.

- Twenty-four base, neutral and acid-extractable semi-volatile organic compounds (BNAs) were reported in groundwater samples collected from the Site.
- Concentrations of individual BNAs exceeding NYSDEC Class GA Standards were reported in groundwater samples collected from FWMW-1, FWMW-4, FWMW-5 and FWMW-6.
- Nine TAL metals were reported in groundwater samples collected from each of the monitoring wells sampled (FWMW-1 through FWMW-6). Presence of TAL metals across the Site and surrounding areas can be attributable to high background levels.
- Each groundwater sample well had levels of one of the following metals at concentrations exceeding NYSDEC Class GA Standards but may be associated with background: iron, copper, lead, magnesium, manganese, sodium, and/or arsenic.
- The total cyanide concentration in the groundwater sample FWMW-4 (0.25 mg/l) exceeded the NYSDEC Class GA Standard for total cyanide of 200 ug/l.

The depth to bedrock ranged from just below asphalt in the northern part of the study area to approximately 23.8 feet bgs on the southern margin of the Site. The saturated unconsolidated media is located at the very base of the unconsolidated unit at or slightly above the soil/bedrock interface. Regional shallow groundwater flow, as well as that shown in the on-site monitoring wells, trends south towards the Mohawk River.

5.4 QUALITATIVE HUMAN HEALTH EVALUATION

The Qualitative Human Health Evaluation considered BETX, PAHs, and cyanide to be constituents of interest in soil, and groundwater at the Site. Several potential human exposure pathways are present in soil, and groundwater. However, these potential pathways are, or will be, mitigated by site-specific conditions or future mitigative measures combined with land use restrictions.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

Based on the information summarized in this Site Characterization Report, the nature and extent of the MGP-related constituents within the soil, and groundwater are generally well understood as are the on-land potential exposure routes to human populations. Data generated during the performance of this Site Characterization and the conclusions are presented below.

- Two potential sources of MGP-related materials are present within the Site. Examples of potential sources include MGP-related materials in and around former MGP buildings (former gas holder and purifier buildings/retort house) and former utilities/structures (pipe gallery west of the new tank building).
- Groundwater concentrations of MGP-related constituents, while causing light exceedances of NYSDEC Class GA Standards and/or Guidance Values for groundwater quality criteria in groundwater appears to be isolated to the very base of unconsolidated units directly above the bedrock.
- NAPL is present in the subsurface soils adjacent to the new Tank Building within the foot print of the proposed expansion area. However, the NAPL impacts appear to be isolated and limited to the areas directly adjacent to the former MGP piping (Pipe gallery). Additional NAPL impacts were identified south of the proposed building expansion foot print in the area directly south and south west of the former holder structure (as shown in Area C on Figure 4 -1).
- The presence of NAPL, although limited to the deep overburden, and fractures in the bedrock identified from cores collected during the Site Characterization, suggests a potential impact of the Mohawk River. Information regarding the bedrock unit, although limited, based on observations of cores collected during the investigation, demonstrate certain fractures within the bedrock contained some free phase NAPL within the fractures. Further investigation of the bedrock unit may be necessary.
- Potential exposure of workers to the Site soils can me mitigated during construction activities by implementing safe work rules (i.e. Comply with OSHA work rules for contaminated Sites). Potential exposure by casual contact to Site soils by the general public or excluding any intrusive activity is minimal due to the coverage of the Site by more than 95% asphalt and concrete and the depth of the impacted materials. To limit exposure of the general public during construction or intrusive activities soils excavated from the Site potentially impact by MGP-related constituents would be covered over or implementation of other appropriate mitigative measures.
- Groundwater from the Site is not currently used as a source for drinking water. The potential future use of the groundwater as a drinking water source will be prevented by imposition of land use restrictions in accordance with the VCO. Direct contact with Site groundwater by the general public is not likely because of the depth below the surface to groundwater, and potential exposure to groundwater by Site workers would be mitigated by implementing safe work rules.

One objective of the Site Characterization, outlined in Section 1.2 and reiterated throughout the report, is expedited review of impacts to the subsurface soils and groundwater on-site to support the proposed property transfer of ownership, and eventual expansion of the manufacturing building facilities. Area B, as discussed in Section 4.0 and as shown on Figure 4-1, demonstrates the area of the proposed building expansion. Figure 6-1 shows the dimensions of the proposed building expansion as designed by Feldmeier. To specifically address this area of the Site, and to expedite and support future construction activities in this area, RAOs, if necessary, were under discussion and evaluation during the preparation of the Site Characterization Report. Based on information developed in this Site Characterization Report and past investigations, RAOs, if necessary, specific to the proposed building expansion area, are being developed in advance of the evaluation of all areas of the Site. Upon completion of the RAOs, if necessary, for the proposed building expansion area a Remedial Action Selection (RAS) Report will be developed in support of these activities.

6.2 RECOMMENDATIONS

To evaluate potential data gaps and to meet both expedited RAOs, for the building expansion area and RAOs for the Site on whole, additional investigation activities outlined below will be required prior to development of a RAS Report.

- A Pathway Exposure Analysis is being developed as a separate document and will include a review of geologic and hydrogeologic conditions, analytical testing results (i.e., parameter, concentration, depth), refinement of the conceptual Site model, including the assessment of potential human exposure pathways, and a spatial analysis of site-related constituents with respect to discharge boundaries and/or surface water and subsurface pathways. The pathway exposure analysis will assist in determining the pathways (if any) need to be addressed.
- Address overburden soils (on-site) as one operable unit, and address bedrock and groundwater as a second separate operable unit. This separation of overburden soils and bedrock into two separate operable units will allow the preparation of RAOs for the overburden soils and preparation of an RAS report to support the transfer of ownership and eventual proposed building expansion.
- Additional investigation of potential off-site impacts will be required in order to characterize the impacts to the Mohawk River sediments and assess possible migration through the bedrock unit. Additional investigation of the bedrock and groundwater will provide information on the impacts to the Mohawk River and ecological receptors. As part of the investigation of off-site areas, sediment sampling will be required to evaluate the presence of MGP related constituents in the sediment.
- Address of the off-site former holder (identified in historical documents only) will require additional investigation to evaluate the association, if any, with the former MGP operations. The off-site former holder is shown on Sanborn Maps between the years of 1891 to 1906 and appears to be approximately 165 west of the on-site former holder (identified during the NM Site Characterization). Sanborn Maps between the years of the 1911 to 1928 show the off-site former holder as "unused gasometer". After 1928 the off-site former holder no longer appears on the Sanborn Maps. Additional investigation will be performed to evaluate the

presence, location/orientation and subsurface soil conditions in the vicinity of this off-site former holder. See figure 1-3 for the approximate location of the former holders.

- The additional investigation information will be used to further assess the distribution and mobility of NAPL in this area, and provide a basis of addressing off-site impacts, if any.

These identified data gaps need to be addressed prior to development of a final RAS for the entire Site. Development of an RAS for the overburden soils will be completed independent of the scope of the investigation and activities, which will be required for the off-site and river sampling. To facilitate the implementation of the off-site and river sampling activities, a Work Plan will be prepared for submission to the NYSDEC for review.

7.0 REFERENCES

Foster Wheeler Environmental Corporation, 2002, *Work Plan for Site Characterization, Little Falls (Mill Street) Non-Owned Former Manufactured Gas Plant (MGP) Site*, Niagara Mohawk Power Corporation, Syracuse, New York, August 2002.

Foster Wheeler Environmental Corporation, 2002, *Generic Work Plan for Non-owned Former MGP Sites*, Niagara Mohawk Power Corporation, Syracuse, New York, September 2002.

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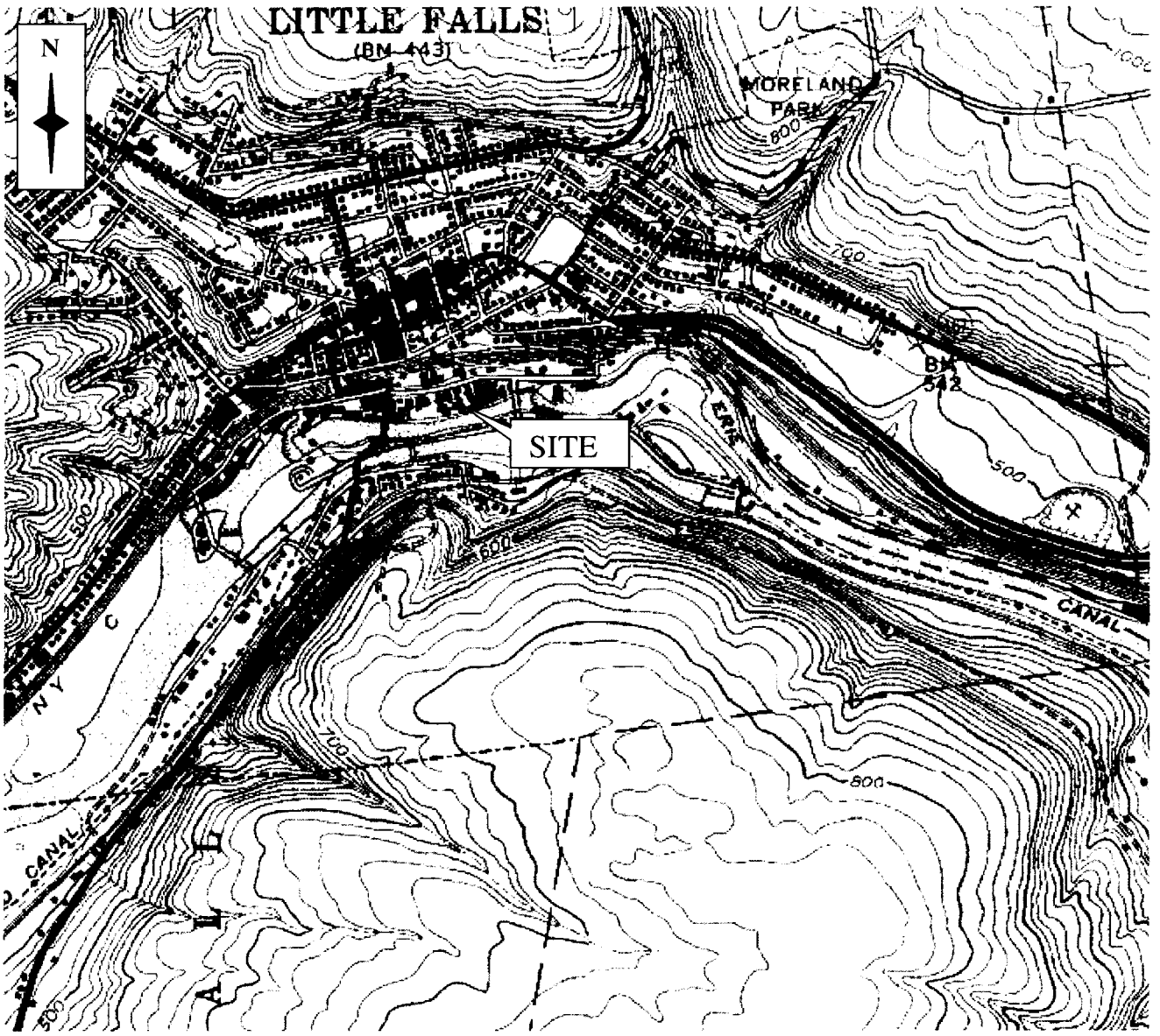
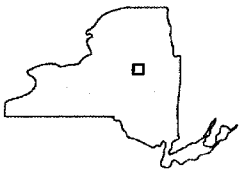
Figures



Scale 1:25,000

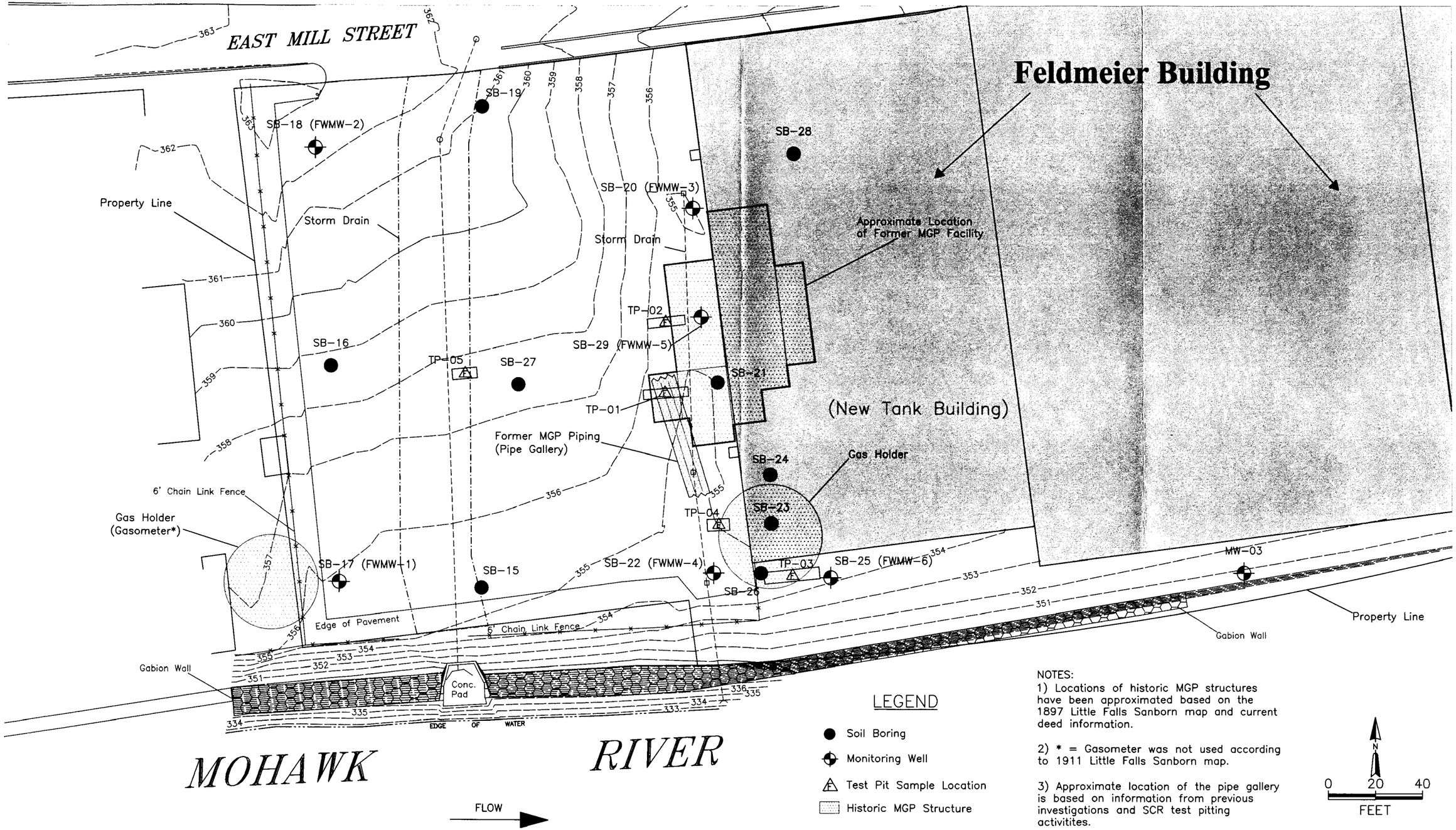
FIGURE 1-1

SITE LOCATION MAP
NIAGARA MOHAWK, A NATIONAL GRID COMPANY
HERKIMER COUNTY
LITTLE FALLS (MILL STREET), NEW YORK
SITE



Prepared by: Foster Wheeler Environmental Corporation
Source: Little Falls, NY 7.5 Minute Series Topographic Quadrangle

Niagara Mohawk
A **National Grid** Company



LEGEND

- Soil Boring
- Monitoring Well
- Test Pit Sample Location
- Historic MGP Structure

NOTES:

1) Locations of historic MGP structures have been approximated based on the 1897 Little Falls Sanborn map and current deed information.

2) * = Gasometer was not used according to 1911 Little Falls Sanborn map.

3) Approximate location of the pipe gallery is based on information from previous investigations and SCR test pitting activitites.

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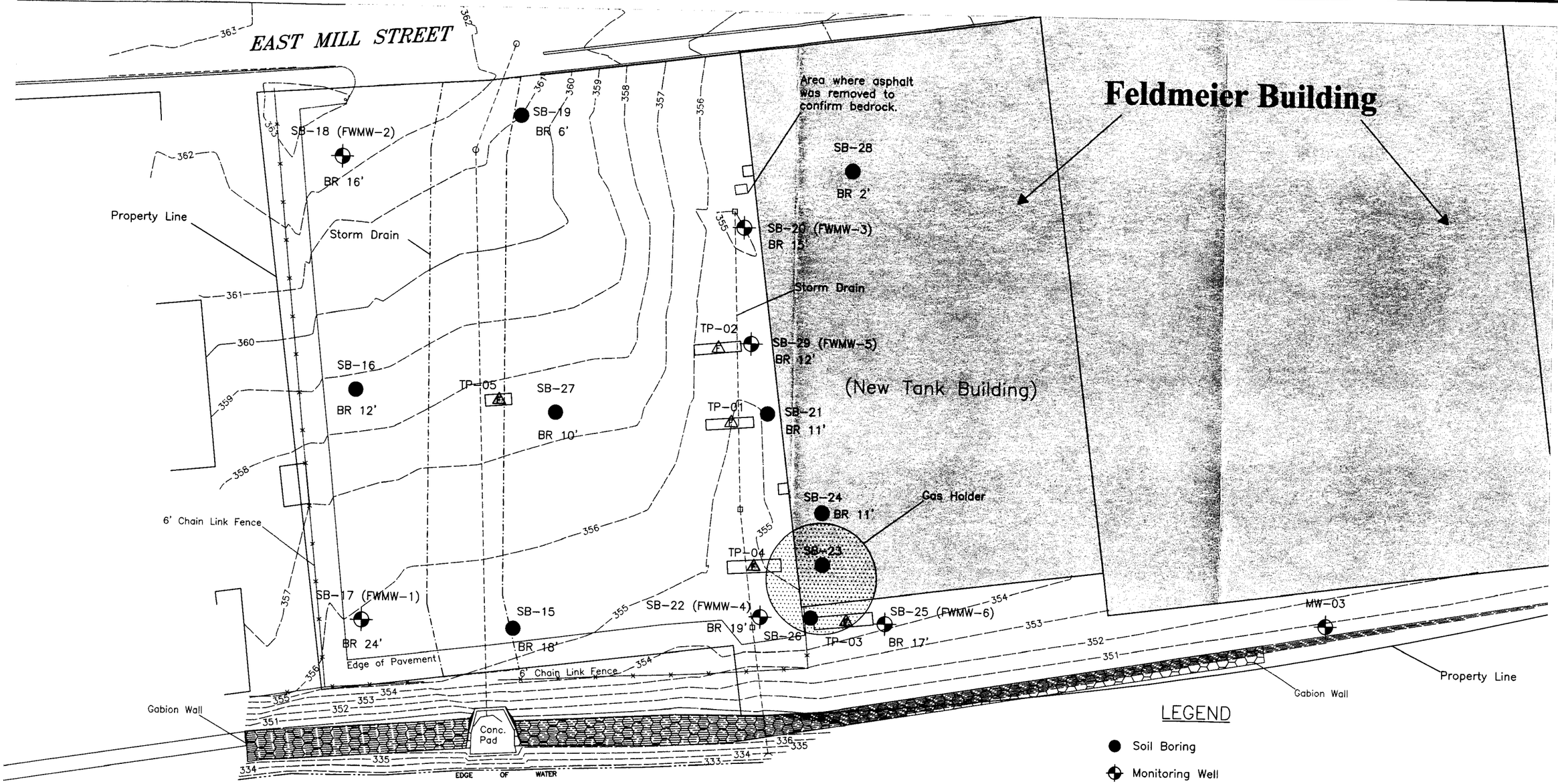
FEET

FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Historic MGP Structures
Little Falls (Mill St.) Site

Niagara Mohawk
A National Grid Company

DWN.:	DATE:	PROJECT NO.:
MK	2/7/03	2450.0005
CHKD:	REV.:	FIGURE NO.:
DES.:	APPD:	1-3



FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Basemap
Little Falls (Mill St.), NY
Site Investigation

Niagara Mohawk
A National Grid Company

DWN.:	DATE:	PROJECT NO.:
MK	12/17/02	2450.0005
CHKD.: JI	REV.:	FIGURE NO.: 1-4
DES.:	APPD:	

EAST MILL STREET

Feldmeier Building

(New Tank Building)

Current Property Line

19

20

21

22

27

28

Storm Drain

Storm Drain

Approximate Location of Former MGP Facility

Gas Holder

6' Chain Link Fence

Gas Holder (Gasometer*)

Edge of Pavement

5' Chain Link Fence

Gabion Wall

Current Property Line

Gabion Wall

Conc. Pad

EDGE OF WATER

MOHAWK RIVER

FLOW

LEGEND

- Historic MGP Structure
- Current Structure
- Parcel Boundary

NOTES:

1) Locations of historic MGP structures have been approximated based on the 1892 Little Falls Sanborn map.

2) * = Gasometer was not used according to the 1911 Little Falls Sanborn map.

N

0 20 40

FEET

FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:

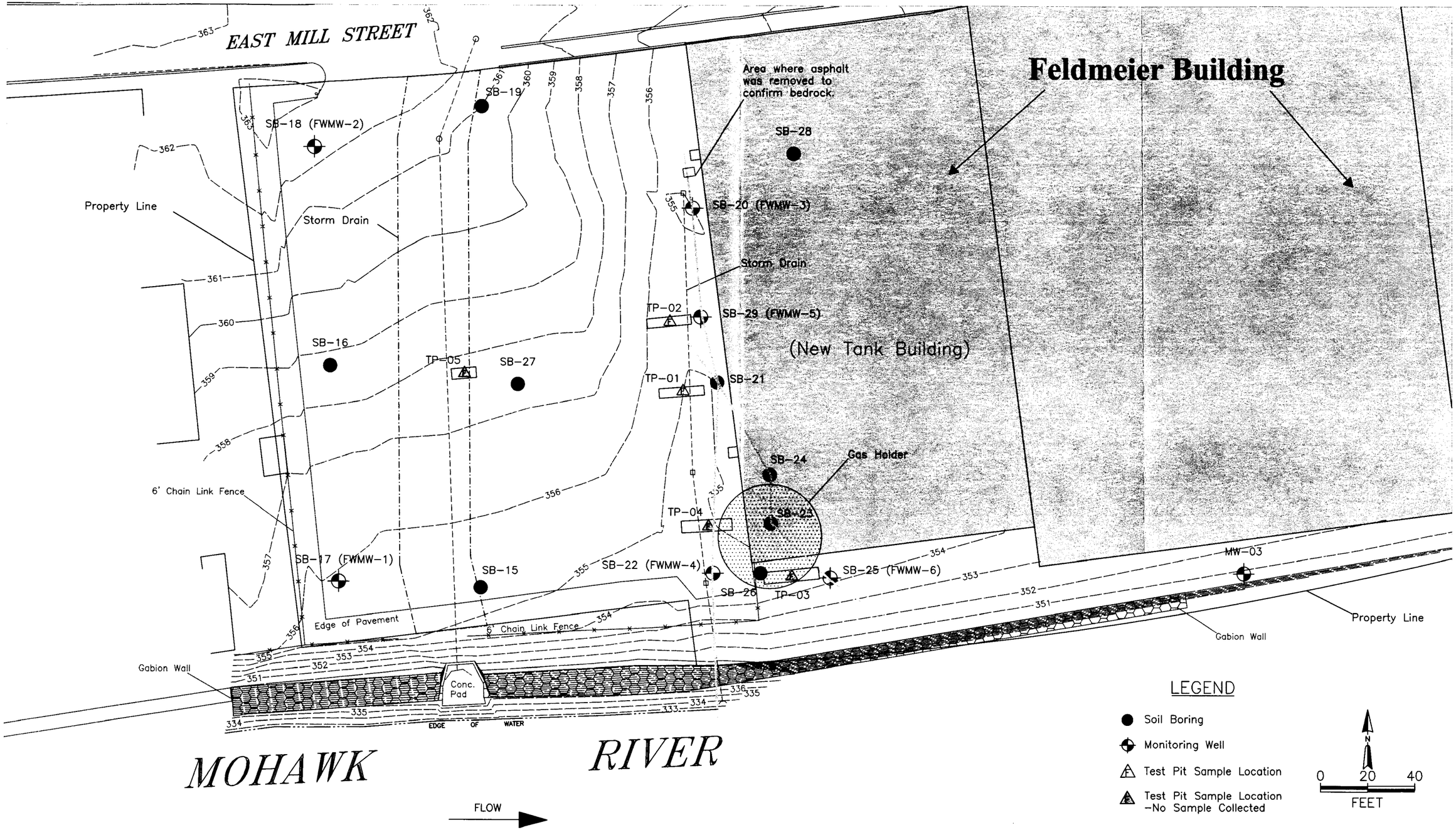
Historic Tax Lots and Current Features
Little Falls (Mill St.) Site

Niagara Mohawk
A National Grid Company

DWN.:	DATE:
MK	2/7/03
CHKD:	REV.:
DES.:	APPD:

PROJECT NO.: 2450.0005

FIGURE NO.: 1-5

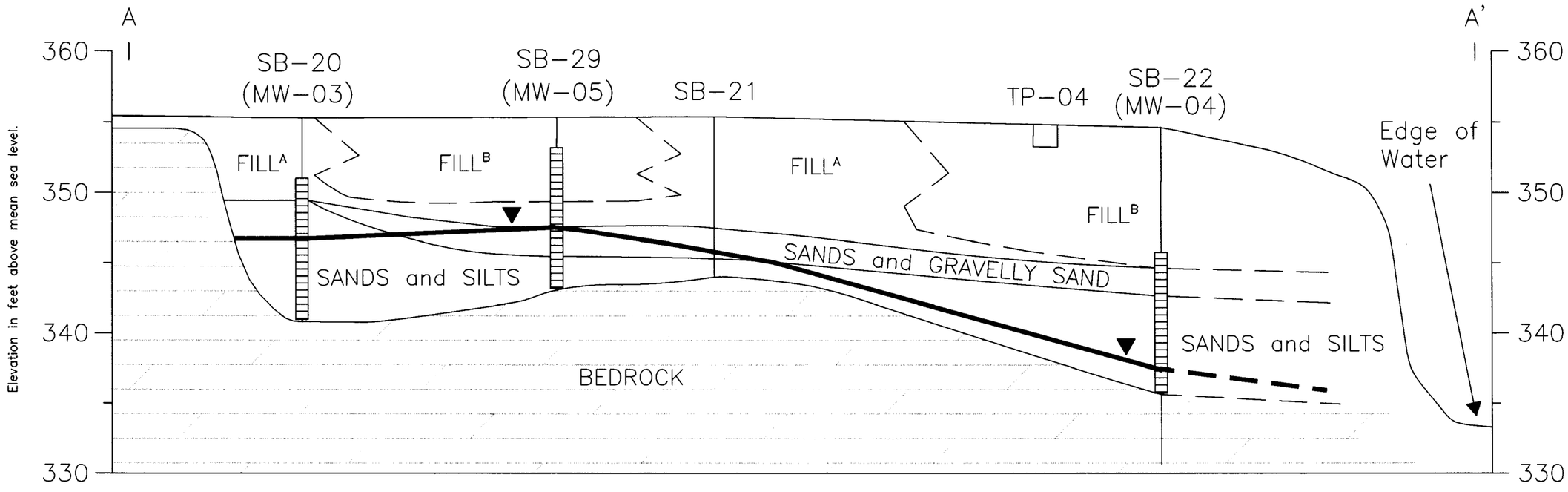


FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Cross-Section Lines
Little Falls, (Mill St.), NY
Site Investigation

Niagara Mohawk
A National Grid Company

DWN.: MK	DATE: 12/18/02	PROJECT NO.: 2450.0005	
CHKD: JI	REV.:	FIGURE NO.: 3-1	
DES.:	APPD:		



LEGEND:

▼ Groundwater Elevation

Screened Interval

A – Fill Material – Composed of anthropogenic materials, construction debris (coal, slag, brick, concrete, etc.)

B – Fill Material – "Common Fill" composed of gravel and sand non–native to the site.

0 10 20
FEET
Horizontal Scale

NOTES:

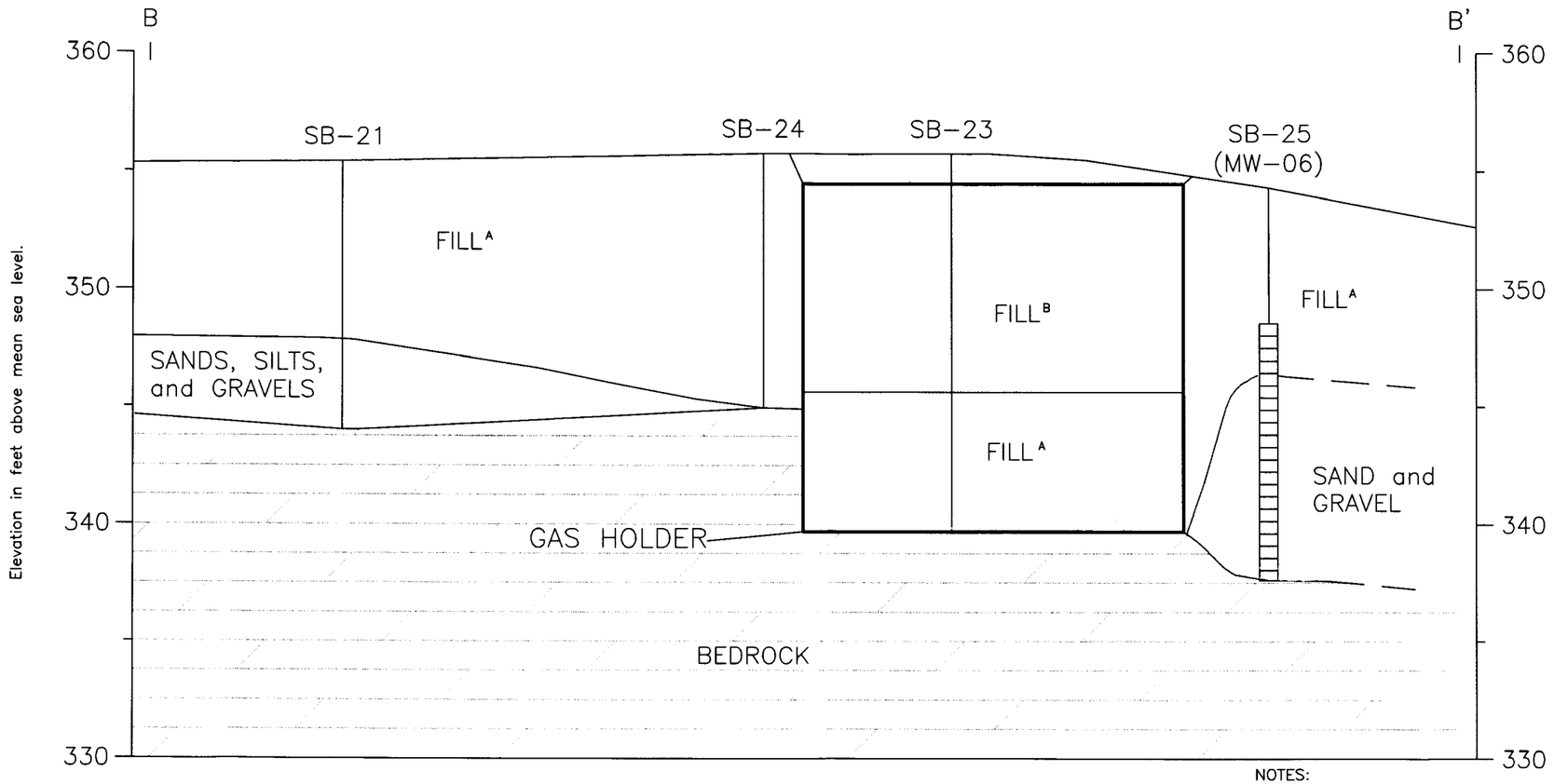
1. Dashed lines represent extrapolated lithologic boundaries.
2. Vertical datum shown hereon is NGVD88 and was obtained through GPS observations on October 1, 2002.
3. Water level measurements were taken on 10/29/02.
4. Water level shown at soil boring location SB–21 was extrapolated.

FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Cross–Section A–A'
Little Falls (Mill St.), NY
Site Investigation

Niagara Mohawk
A National Grid Company

DWN.: MK	DATE: 12/19/02	PROJECT NO.: 2450.0005	
CHKD: JI	REV.:	FIGURE NO.: 3–2	
DES.:	APPD:		



LEGEND:

DNAPL

Screened Interval

A – Fill Material composed of anthropogenic materials, construction debris (ie. coal, slag, brick, concrete, etc.)

B – Fill Material – "Common Fill" composed of gravel and sand non-native to the site.

0 7.5 15
FEET

Horizontal Scale

NOTES:

1. Dashed lines represent extrapolated lithologic boundaries.

2. Vertical datum shown hereon is NGVD88 and was obtained through GPS observations on October 1, 2002.

3. Shaded areas indicate intervals displaying apparent evidence of NAPL impacts based on visual field observations.

4. Top of gas holder is approximated. Actual location is between 3 and 4 feet below ground surface.

FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Cross-Section B-B'
Little Falls (Mill St.), NY
Site Investigation

Niagara Mohawk
A National Grid Company

DWN.: MK	DATE: 12/19/02	PROJECT NO.: 2450.0005	
CHKD: JI	REV.:	FIGURE NO.: 3-3	
DES.:	APPD:		

SB-19	DATE	10/07/2002	10/07/2002
	UNITS		
Starting Depth	(feet)	0	2
Ending Depth	(feet)	2	4
Total BTEX	(ug/kg)	4.6	ND
Total PAH	(ug/kg)	397	22972*
Total Cyanide	(mg/kg)	ND	ND

TP-02	DATE	10/07/2002
	UNITS	
Starting Depth	(feet)	11
Ending Depth	(feet)	11
Total BTEX	(ug/kg)	3
Total PAH	(ug/kg)	11894*
Total Cyanide	(mg/kg)	0.69

SB-20 (FWMW-3)	DATE	10/07/2002	10/08/2002	10/08/2002	10/08/2002
	UNITS				
Starting Depth	(feet)	4	6	10	14
Ending Depth	(feet)	6	8	12	14.3
Total BTEX	(ug/kg)	4.6	1.9	7.7	2020*
Total PAH	(ug/kg)	12034	58650	91267	2609
Total Cyanide	(mg/kg)	ND	10.1	5.8	13.2

SB-29 (FWMW-5)	DATE	10/14/2002	10/14/2002	10/14/2002	10/14/2002	10/14/2002
	UNITS					
Starting Depth	(feet)	0	4	6	8	10
Ending Depth	(feet)	2	6	8	10	12
Total BTEX	(ug/kg)	ND	34.9	137*	18.3	0.9
Total PAH	(ug/kg)	7666*	38520*	311750*	13600*	3609*
Total Cyanide	(mg/kg)	ND	1.2	2.4	4.6	2.5

SB-18 (FWMW-2)	DATE	10/04/2002	10/04/2002	10/04/2002
	UNITS			
Starting Depth	(feet)	6	12	14
Ending Depth	(feet)	8	14	16
Total BTEX	(ug/kg)	ND	1.4	ND
Total PAH	(ug/kg)	22044*	ND	47
Total Cyanide	(mg/kg)	ND	ND	ND

TP-01	DATE	10/07/2002
	UNITS	
Starting Depth	(feet)	13.5
Ending Depth	(feet)	13.5
Total BTEX	(ug/kg)	130.5*
Total PAH	(ug/kg)	1725*
Total Cyanide	(mg/kg)	0.9

SB-21	DATE	10/08/2002	10/08/2002	10/08/2002	10/08/2002	10/08/2002
	UNITS					
Starting Depth	(feet)	0	4	6	8	10
Ending Depth	(feet)	2	6	8	10	12
Total BTEX	(ug/kg)	15.9	ND	7.8	233.9*	36700*
Total PAH	(ug/kg)	17243*	11061*	37457*	300600*	2125400*
Total Cyanide	(mg/kg)	ND	ND	28.5	ND	ND

SB-16	DATE	10/02/2002	10/03/2002	10/03/2002
	UNITS			
Starting Depth	(feet)	2	4	6
Ending Depth	(feet)	4	6	8
Total BTEX	(ug/kg)	1.4	2.7	4.7
Total PAH	(ug/kg)	8763*	150370*	70440*
Total Cyanide	(mg/kg)	ND	ND	ND

SB-24	DATE	10/10/2002	10/10/2002	10/10/2002	10/10/2002	10/10/2002
	UNITS					
Starting Depth	(feet)	1	3	5	7	9
Ending Depth	(feet)	3	5	7	9	10.8
Total BTEX	(ug/kg)	3.9	4.8	8.7	7.3	33.1
Total PAH	(ug/kg)	144810*	33860*	NA	686100*	874900*
Total Cyanide	(mg/kg)	ND	1.4	NA	28.6	18.3

SB-27	DATE	10/11/2002	10/11/2002	10/11/2002	10/11/2002
	UNITS				
Starting Depth	(feet)	0	2	4	10
Ending Depth	(feet)	2	4	6	10.2
Total BTEX	(ug/kg)	3.8	4.5	3.8	0.6
Total PAH	(ug/kg)	4238*	3992*	52510*	45000*
Total Cyanide	(mg/kg)	ND	ND	ND	ND

SB-23	DATE	10/09/2002	10/09/2002	10/09/2002	10/09/2002
	UNITS				
Starting Depth	(feet)	3	11	13	15
Ending Depth	(feet)	5	13	15	17
Total BTEX	(ug/kg)	1.2	147000*	167.1	25650*
Total PAH	(ug/kg)	1776*	NA	308900*	569000*
Total Cyanide	(mg/kg)	NA	NA	10.6	ND

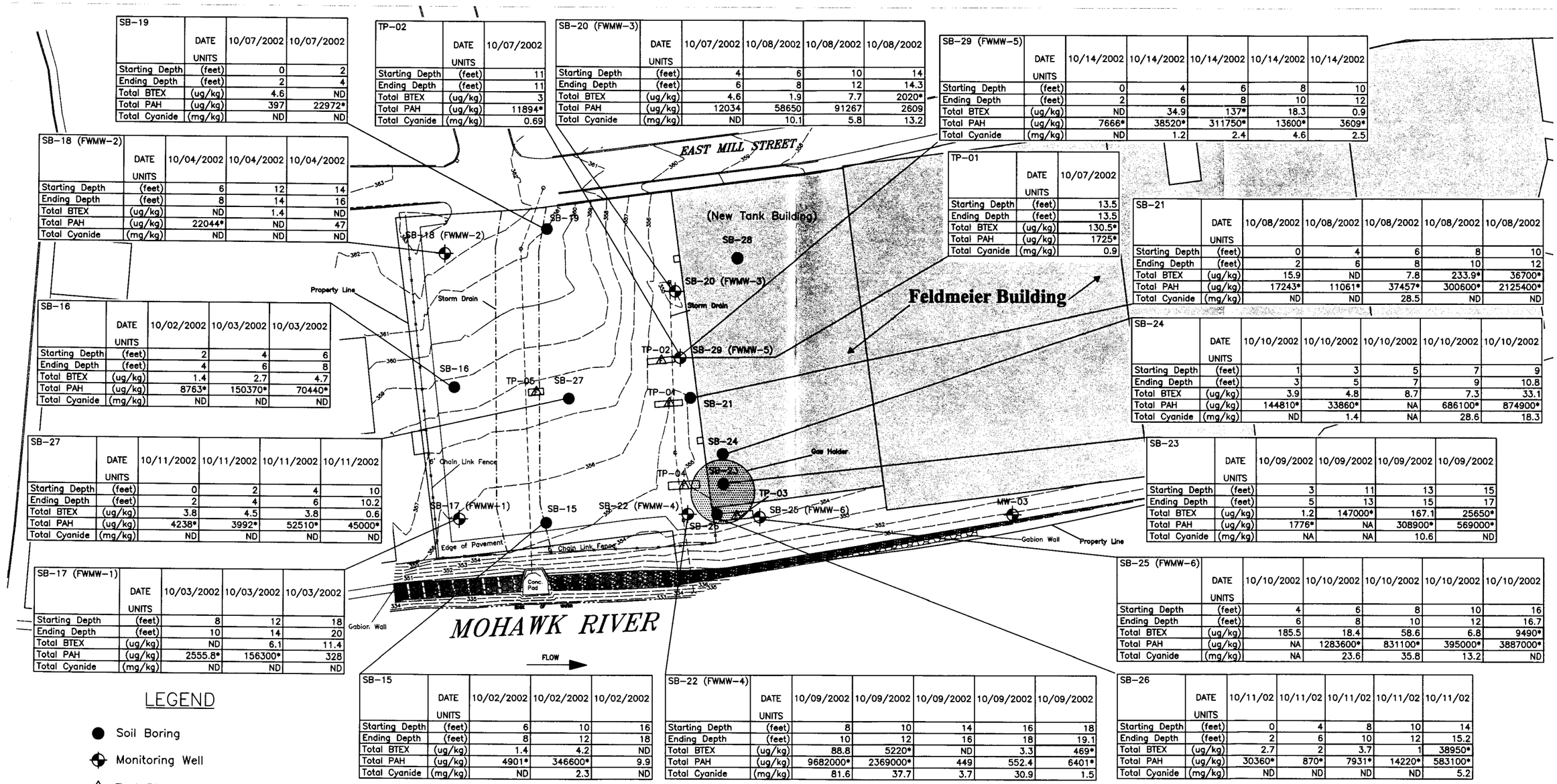
SB-17 (FWMW-1)	DATE	10/03/2002	10/03/2002	10/03/2002
	UNITS			
Starting Depth	(feet)	8	12	18
Ending Depth	(feet)	10	14	20
Total BTEX	(ug/kg)	ND	6.1	11.4
Total PAH	(ug/kg)	2555.8*	156300*	328
Total Cyanide	(mg/kg)	ND	ND	ND

SB-25 (FWMW-6)	DATE	10/10/2002	10/10/2002	10/10/2002	10/10/2002	10/10/2002
	UNITS					
Starting Depth	(feet)	4	6	8	10	16
Ending Depth	(feet)	6	8	10	12	16.7
Total BTEX	(ug/kg)	185.5	18.4	58.6	6.8	9490*
Total PAH	(ug/kg)	NA	1283600*	831100*	395000*	3887000*
Total Cyanide	(mg/kg)	NA	23.6	35.8	13.2	ND

SB-15	DATE	10/02/2002	10/02/2002	10/02/2002
	UNITS			
Starting Depth	(feet)	6	10	16
Ending Depth	(feet)	8	12	18
Total BTEX	(ug/kg)	1.4	4.2	ND
Total PAH	(ug/kg)	4901*	346600*	9.9
Total Cyanide	(mg/kg)	ND	2.3	ND

SB-22 (FWMW-4)	DATE	10/09/2002	10/09/2002	10/09/2002	10/09/2002	10/09/2002
	UNITS					
Starting Depth	(feet)	8	10	14	16	18
Ending Depth	(feet)	10	12	16	18	19.1
Total BTEX	(ug/kg)	88.8	5220*	ND	3.3	469*
Total PAH	(ug/kg)	9682000*	2369000*	449	552.4	6401*
Total Cyanide	(mg/kg)	81.6	37.7	3.7	30.9	1.5

SB-26	DATE	10/11/02	10/11/02	10/11/02	10/11/02	10/11/02
	UNITS					
Starting Depth	(feet)	0	4	8	10	14
Ending Depth	(feet)	2	6	10	12	15.2
Total BTEX	(ug/kg)	2.7	2	3.7	1	38950*
Total PAH	(ug/kg)	30360*	870*	7931*	14220*	583100*
Total Cyanide	(mg/kg)	ND	ND	ND	ND	5.2



LEGEND

- Soil Boring
- Monitoring Well
- Test Pit Sample Location
- ND = Compound not detected
- NA = Not analyzed
- Total BTEX compounds exceeding TAGM 4046 recommended clean up objective

* Exceedance of at least 1 NYSDEC TAGM 4046 recommended soil clean up objective.

NOTE: Total concentrations include estimated "J" values.

N

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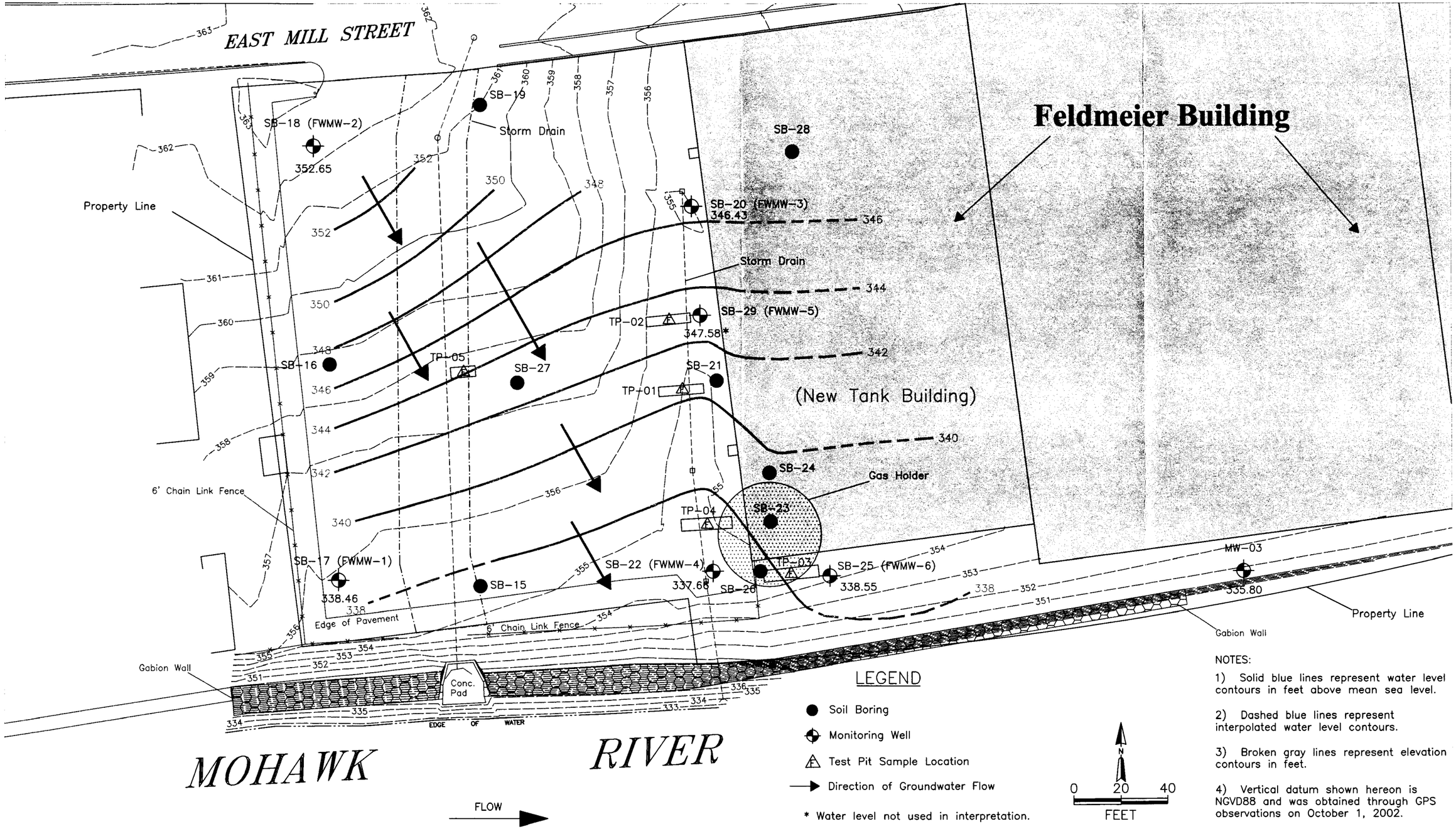
FEET

FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Subsurface Soil Data
Little Falls (Mill St.), NY
Site Investigation

Niagara Mohawk
A National Grid Company

DWN.:	DATE:	PROJECT NO.:
MK	12/27/02	2450.0005
CHKD.: JI	REV.:	FIGURE NO.: 3-4
DES.:	APPD:	



NOTES:

1) Solid blue lines represent water level contours in feet above mean sea level.

2) Dashed blue lines represent interpolated water level contours.

3) Broken gray lines represent elevation contours in feet.

4) Vertical datum shown hereon is NGVD88 and was obtained through GPS observations on October 1, 2002.

FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Potentiometric Surface Map
Little Falls (Mill St.), NY
Site Investigation

Niagara Mohawk
A National Grid Company

DWN.:	DATE:	PROJECT NO.:
MK	12/18/02	2450.0005
CHKD.: JI	REV.:	FIGURE NO.: 3-5
DES.:	APPD:	

SB-18 (FWMW-2) DATE	CONSTITUENT	UNITS	CONCENTRATION
10/31/02	Total VOCs	(ug/l)	1.9
10/31/02	Total BNAs	(ug/l)	ND
10/31/02	Total Cyanide	(mg/l)	ND

SB-20 (FWMW-3) DATE	CONSTITUENT	UNITS	CONCENTRATION
10/31/02	Total VOCs	(ug/l)	3.7*
10/31/02	Total BNAs	(ug/l)	6.7
10/31/02	Total Cyanide	(mg/l)	0.092

SB-29 (FWMW-5) DATE	CONSTITUENT	UNITS	CONCENTRATION
10/31/02	Total VOCs	(ug/l)	0.6
10/31/02	Total BNAs	(ug/l)	17.2*
10/31/02	Total Cyanide	(mg/l)	0.095

SB-25 (FWMW-6) DATE	CONSTITUENT	UNITS	CONCENTRATION
10/30/02	Total VOCs	(ug/l)	156.5*
10/30/02	Total BNAs	(ug/l)	276.7*
10/30/02	Total Cyanide	(mg/l)	0.098

MW-3 DATE	CONSTITUENT	UNITS	CONCENTRATION
10/31/02	Total VOCs	(ug/l)	2.6
10/31/02	Total BNAs	(ug/l)	NA
10/31/02	Total Cyanide	(mg/l)	NA

SB-17 (FWMW-1) DATE	CONSTITUENT	UNITS	CONCENTRATION
10/29/02	Total VOCs	(ug/l)	20
10/29/02	Total BNAs	(ug/l)	240*
10/29/02	Total Cyanide	(mg/l)	ND

SB-22 (FWMW-4) DATE	CONSTITUENT	UNITS	CONCENTRATION
10/30/02	Total VOCs	(ug/l)	18.4*
10/30/02	Total BNAs	(ug/l)	37*
10/30/02	Total Cyanide	(mg/l)	0.25

EAST MILL STREET

SB-18 (FWMW-2)

SB-19

SB-20 (FWMW-3)

SB-28

SB-29 (FWMW-5)

Feldmeier Building

(New Tank Building)

Property Line

Storm Drain

Storm Drain

SB-16

TP-05

SB-27

TP-02

TP-01

SB-21

SB-24

Gas Holder

SB-23

TP-04

6' Chain Link Fence

Edge of Pavement

SB-17 (FWMW-1)

SB-15

SB-22 (FWMW-4)

Edge of Pavement

SB-26

TP-03

SB-25 (FWMW-6)

MW-03

6' Chain Link Fence

Gabion Wall

Property Line

Conc. Pad

EDGE OF WATER

MOHAWK RIVER

FLOW

LEGEND

- Soil Boring
- Monitoring Well
- Test Pit Sample Location

ND = Compound not detected

NA = Not tested for this compound

0 20 40 FEET

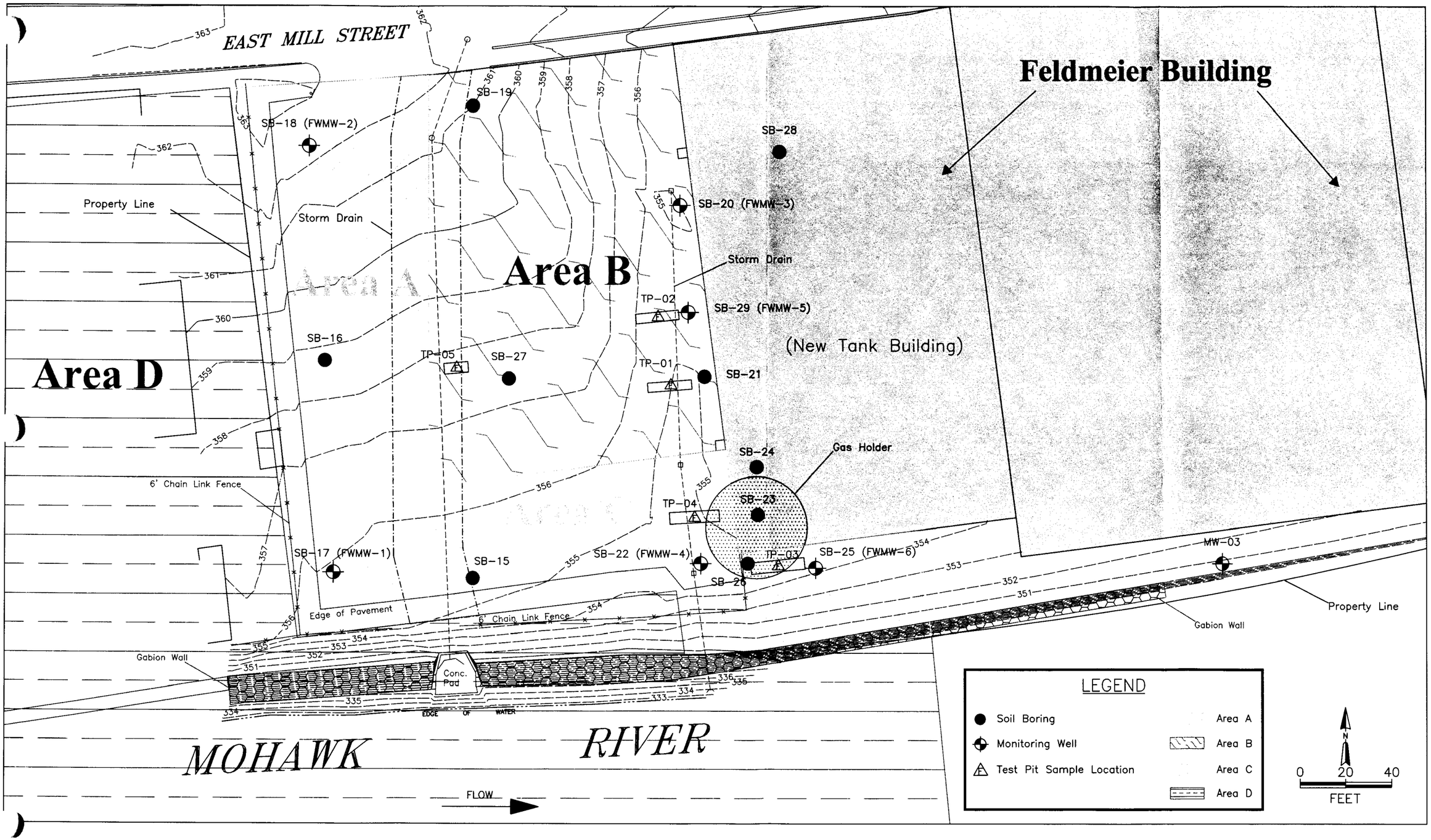
* At least one compound exceeds its respective NYSDEC class GA standard

FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Groundwater Data
Little Falls (Mill St.), NY
Site Investigation

Niagara Mohawk
A National Grid Company

DWN.:	DATE:	PROJECT NO.:
MK	12/23/02	2450.0005
CHKD:	REV.:	
DES.:	APPD:	FIGURE NO.: 3-6



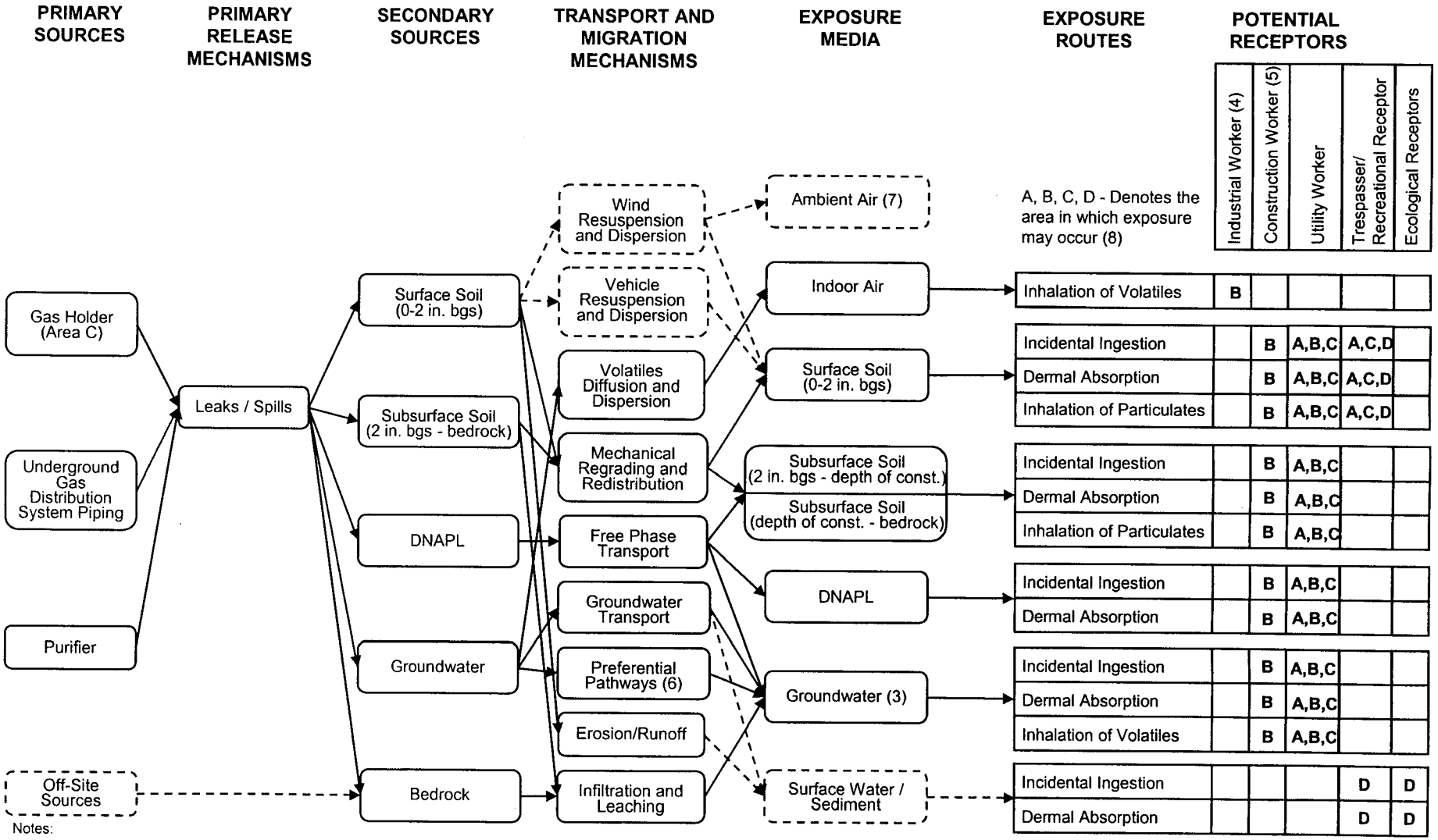
FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Operable Areas
Little Falls (Mill St.), NY
Site Investigation

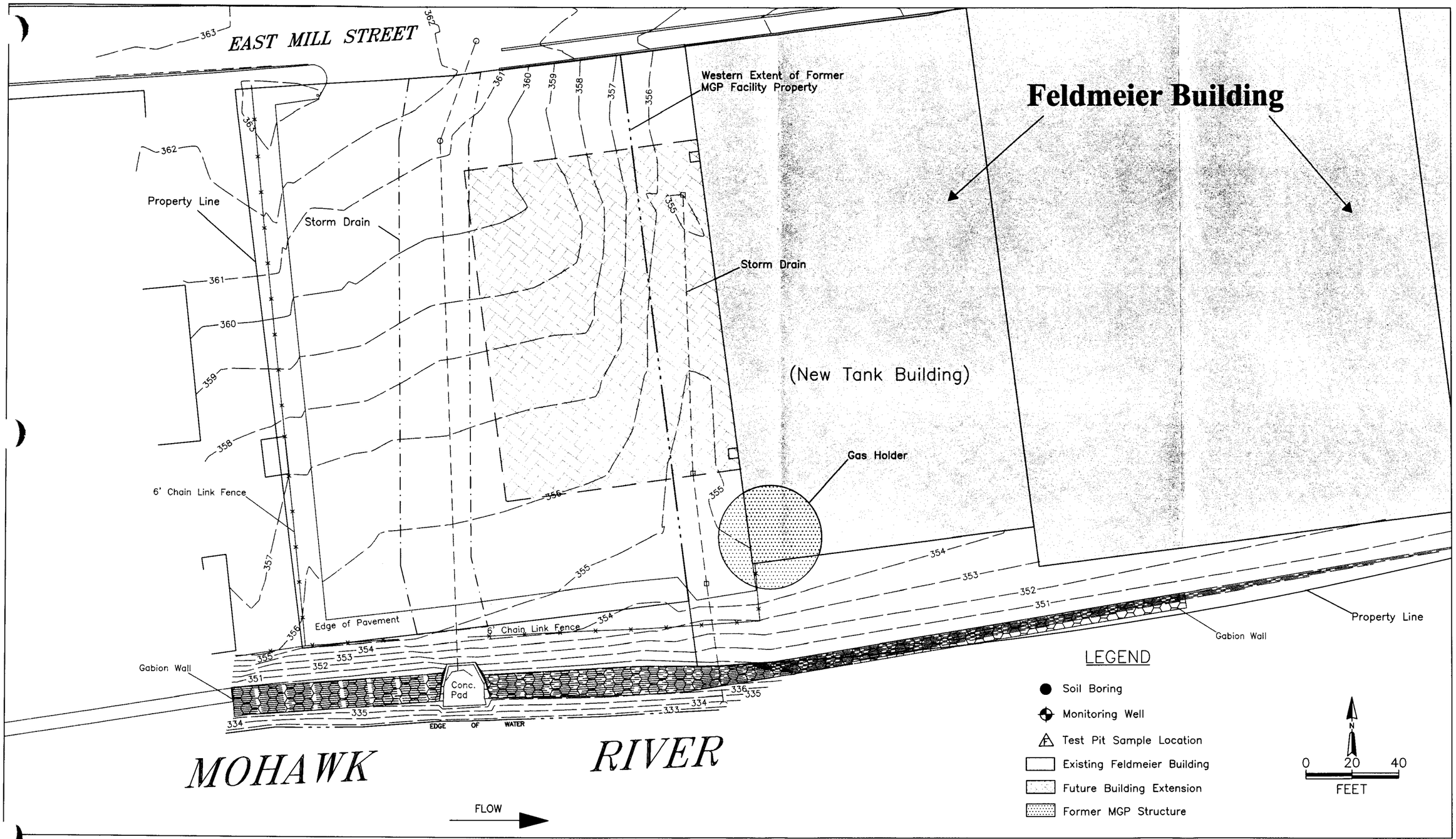
Niagara Mohawk
A National Grid Company

DWN.:	DATE:	PROJECT NO.:
MK	12/27/02	2450.0005
CHKD:	REV.:	FIGURE NO.:
DES.:	APPD:	4-1

Figure 4-2
Conceptual Site Model for
Little Falls (Mill St.) Non-owned Former MGP Site



Notes:
(1) Dashed linkages or components or italicized exposure routes are considered possible but not likely to be significant or have not been confirmed.
(2) bgs = below ground surface
(3) Site is supplied by municipal water system, thus, an assumption of no potable or industrial usage of groundwater was made.
(4) Industrial worker is assumed to work in the future building expansion.
(5) Construction worker is assumed to work during the future construction of the building expansion.
(6) Preferential pathways include storm water sewer, underground utility corridors, and old piping.
(7) Airborne particulates inhalation addressed under surface soil.
(8) See Figure 4-1 and section 4.4.1 for description of Areas A, B, C, D



FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE:
Proposed Building Extension
Little Falls (Mill St.) Site

Niagara Mohawk
A **National Grid** Company

DWN.:	DATE:	PROJECT NO.:
MK	2/6/03	2450.0005
CHKD:	REV.:	FIGURE NO.:
DES.:	APPD:	6-1

Appendix A
Soil Boring Logs

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: J. Imhoff/M. Kohberger
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 2" and 3" Split Spoons

BORING NUMBER: **SB-15**
DATE STARTED: 10/2/02
DATE COMPLETED: 10/2/02
GROUNDWATER DEPTH: 17.15'
GROUND SURFACE ELEVATION: 355.54' MSL

SAMPLE ID	DEPTH (feet) 0	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	1		0.4	NA (Clean Fill)	SAND and GRAVEL; asphalt base (top 0.2'). Brown fine SAND and GRAVEL; hard (bottom 0.2').	1335	10/2/02	0.0	Augered to 1.0'. Top 0.7' - Asphalt.
		18							
	2	31							2" split spoon.
		8			Same as above.				
	3	15	0.5	NA (Clean Fill)		1350	10/2/02	0.0	Clean fill from installation of storm sewer: as per Feldmeier plant mgr. 2" split Spoon.
		15							
	4	17							
		12			Same as above.				
	5	12	0.6	NA (Clean Fill)		1355	10/2/02	0.0	
		7							
	6	4							3" split spoon.
		4			Brown medium SAND and rounded Gravel; brick fragments; poorly sorted; loose.				
SB-15-6-8	7	4	1.2	NA (Fill)		1414	10/2/02	0.0	
		3							
	8	4							3" split spoon.
		6			Fine SAND, some Gravel; brick fragments; some coal; matted fibrous material.				
	9	3	1.5	NA (Fill)		1425	10/2/02	0.0	
		4							
	10	3							3" split spoon.
		6			Black to gray ash, coal and SLAG.				
SB-15-10-12	11	3	1.6	NA (Fill)		1440	10/2/02	0.0	
		4							
	12	3							3" split spoon
		1			Black to gray ash, coal and SLAG.				
	13	1	0.5	NA (Fill)		1455	10/2/02	0.0	
		1							
	14	3							3" split spoon.
		4			Brown, fine SAND and SILT; little Gravel; trace Clay; loose; damp.				
	15	2	0.5	SM		1505	10/2/02	0.0	
		2							
	16	1							3" split spoon.
		2			Brown, fine SAND and SILT; moderate plasticity; damp (upper 0.9').				Depth to water: 17.15'.
SB-15-16-18	17	2	1.2	SM		1525	10/2/02	0.0	
		2			Brown, fine SAND; damp (bottom 0.3').				
	18	1							Weathered bedrock at 17.7'.
		50/0.1'							
	19								Auger Refusal/boring terminated at 18.5'.
	20								

NOTES: Auger refusal at 18.5' (bedrock).
NA - Not Applicable
MSL - Mean sea level.

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: J. Imhoff/M. Kohberger
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 2" and 3" Split Spoons

BORING NUMBER: **SB-16**
DATE STARTED: 10/2/02
DATE COMPLETED: 10/3/02
GROUNDWATER DEPTH: NA
GROUND SURFACE ELEVATION: 358.83' MSL

SAMPLE ID	DEPTH (feet) 0	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	1		0.6	NA (Clean Fill)	Brown, fine SAND, some well rounded Gravel.	N/A	10/2/02	NA	Augered to 1.0'. Top 0.8' - Asphalt.
		9							
	2	22							
SB-16-2-4		22	0.5	NA (Clean Fill)	Brown, fine SAND and GRAVEL.	1755	10/2/02	NA	
	3	9							
		6							
	4	3							
SB-16-4-6		15	0.6	NA (Fill)	Brown, fine SAND; brick fragments; wood fragments; matted fibrous material.	825	10/3/02	NA	
	5	31							
		24							
	6	16							
SB-16-6-8		26	0.6	NA (Fill)	Brown, fine to medium SAND and GRAVEL; GRAVEL, brick fragments.	844	10/3/02	NA	
	7	18							
		10							
	8	6							
		1	0.3	NA (Fill)	Fine SAND; brick fragments.	855	10/3/02	NA	
	9	6							
		14							
	10	50/.4							
		7	0.3	NA (Fill)	Brown, fine SAND; brick fragments; large cobble (0.25') diameter.	905	10/3/02	NA	
	11	3							
		7							Weathered bedrock at 11.7'.
	12	25							
									Augered to 12.5'.
	13	17							
									Auger refusal/boring terminated at 13'.
	14								
	15								
	16								
	17								
	18								
	19								
	20								

NOTES: NA - Not Applicable
Relocated SB-16 after 2-4' sample. Moved approximately 3' west to resume boring and sampling on 10/3/02.
MSL - Mean sea level.

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: J. Imhoff/M. Kohberger
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 2" and 3" Split Spoons

BORING NUMBER: **SB-17 (FWMW-1)**
DATE STARTED: 10/3/02
DATE COMPLETED: 10/3/02
GROUNDWATER DEPTH: 17.0'
GROUND SURFACE ELEVATION: 355.75' MSL

SAMPLE ID	DEPTH (feet) 0	BLOWS per 6"	RECOVERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	1	17	0.8	NA (Fill)	Black, fine SAND, some Gravel.	1200	10/3/02	0.0	Augered to 0.5'. Top 0.5' ASPHALT. FILL 2" split spoons.
	2	14 9							
	3	6 3	0.9	NA (Fill)	Brown, fine SAND, little Silt, little Gravel, trace Clay; brick fragments; well rounded granite pebbles.	1220	10/3/02	0.0	FILL 2" split spoons.
	4	1 3							
	5	1 3	0.4	NA (Fill)	Dark brown, medium SAND, little Gravel; brick fragments.	NA	10/3/02	0.0	FILL 3" split spoon.
	6	2 2							
	7	3 2	1.0	NA (Fill)	Brown, medium SAND and coarse brick fragments; wood fragments.	1235	10/3/02	0.0	FILL 3" split spoon. Smell of wood coming out of hole.
	8	1 3							
SB-17-8-10 SB-17-8-10D	9	WR 2	1.0	NA (Fill)	Same as above.	1245 1245	10/3/02 10/3/02	0.0 0.0	FILL 3" split spoon.
	10	2 2							
	11	3 3	1.3	NA (Fill)	Medium sand to gravel sized brick fragments, coal, and SLAG.	1250	10/3/02	0.0	FILL 3" split spoon.
	12	5 4							
SB-17-12-14	13	3 3	1.5	NA (Fill)	Brown to olive brown, fine SAND, little Gravel; Slag; coal; brick fragments; dry to damp.	1305	10/3/02	0.0	FILL 3" split spoon.
	14	4 8							
	15	4 3	1.3	NA (Fill)	Brown to dark brown, fine SAND, little Gravel; granite; brick fragments; coal; damp.	NA	10/3/02	0.0	FILL 3" split spoon.
	16	8 6							
	17	1 2	1.6	NA (Fill)	Same as above. Damp to wet (top 1.0'). Wet (bottom 0.6').	1330	10/3/02	0.0	FILL Depth to water: 17'. 3" split spoon.
	18	2 2							
SB-17-18-20	19	1 1	2.0	NA (Fill) SM	Same as above (top 0.6'). Very dark brown to black, fine SAND, trace Silt; wet (bottom 1.4').	1340	10/3/02	0.0	
	20	1 2							

NOTES: WR = Weight of Rod
SB-17-8-10D is the duplicate of SB-17-8-10.
MS/MSD collected at 12-14' depth (SB-17-12-14).
MSL - Mean sea level.

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: J. Imhoff/M. Kohberger
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 2" and 3" Split Spoons

BORING NUMBER: **SB-17 (FWMW-1)**
DATE STARTED: 10/3/02
DATE COMPLETED: 10/3/02
GROUNDWATER DEPTH: 17.0'
ELEVATION: 355.75' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	20								
		WR			Black, fine SAND, trace Silt; wet; organic (top				
	21	WR	2.0	SM	6"). Black, fine SAND and SILT, little to some	NA	10/3/02	0.0	
		1			Clay; organic (roots and wood) (middle 11").				
	22	2			Black, fine SAND, trace Silt (bottom 7").				3" split spoon.
		1							
	23	2	2.0	SM	Same as above.	NA	10/3/02	0.0	
		3							
	24	50/0.4'							3" split spoon.
									Weathered bedrock at 23.8'.
	25								
	26								
	27								
	28								
	29								
	30								
	31								
	32								
	33								
	34								
	35								
	36								
	37								
	38								
	39								
	40								

NOTES: WR = Weight of Rod
SB-17-8-10D is the duplicate of SB-17-8-10.
MS/MSD collected at 12-14' depth (SB-17-12-14).
MSL - Mean sea level.

LOG OF BORING

PROJECT: **NiMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: J. Imhoff/M. Kohberger
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-18 (FWMW-2)**
DATE STARTED: 10/4/02
DATE COMPLETED: 10/4/02
GROUNDWATER DEPTH: 12.0'
GROUND SURFACE ELEVATION: 362.13' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0								
	1	7	0.8	NA (Fill)	Brown, fine SAND, some well rounded Gravel; brick fragments.	805	10/4/02	N/A	Augered to 0.5'. Top 0.3' - Asphalt.
		7							
	2	8							
		13							
	3	7	0.8	NA (Fill)	Brown, fine to medium SAND, some Gravel, little Silt in lower 0.2'; brick fragments; trace coal.	NA	10/4/02	N/A	
		8							
	4	7							
		12							
	5	9	0.9	NA (Fill)	Dark brown, fine to medium SAND, little Silt, little Gravel (includes rounded quartzite gravel); brick fragments; heavy gauge wire.	825	10/4/02	N/A	
		15							
	6	15							
		8							
SB-18-6-8	7	10	1.0	NA (Fill)	Dark brown to brown SAND, little Gravel; broken glass (pane glass).	840	10/4/02	N/A	
		11							
	8	9							
		6							
	9	4	1.0	ML	Dark gray, fine SAND and SILT, some Clay; damp; loose.	850	10/4/02	N/A	
		4							
	10	2							
		1							
	11	2	0.5	ML	Gray to brown, fine SAND and SILT, trace Clay; saturated; loose.	900	10/4/02	N/A	
		4							
	12	5							
SB-18-12-14	13	NA	1.8	ML	Gray, fine SAND and SILT, trace Clay; damp; moderate plasticity; grading to light gray SILT and CLAY (13').	915	10/4/02	N/A	Depth to Water: 12.0' Sample taken from top of sand/silt - silt/clay contact (13.0').
	14								
		2							
SB-18-14-16	15	2	0.8	ML	Dark gray, fine to medium SAND and SILT, little Clay; little organic Silt.	930	10/4/02	N/A	
		2							
	16	50/0.1'							Weathered bedrock/Boring terminated at 15.6'.
	17								
	18								
	19								
	20								

NOTES: PID not functional.
NA - Not Applicable
MSL - Mean Sea Level
N/A - Not Available

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: J. Imhoff/M. Kohberger
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-19**
DATE STARTED: 10/7/02
DATE COMPLETED: 10/7/02
GROUNDWATER DEPTH: NA
GROUND SURFACE ELEVATION: 360.95' MSL

SAMPLE ID	DEPTH (feet) 0	BLOWS per 6"	RECOVERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
SB-19-0-2	1	16 26	0.7	NA (Fill)	Brown, fine to medium SAND and GRAVEL; brick fragments.	925	10/7/02	36.5	Augered to 1.0'.
SB-19-2-4	3	7 33 10 4	0.7	NA (Fill)	Same as above.	930	10/7/02	15.2	
	5	15 50/.2	0.0	NA (Fill)	NA	NA	10/7/02	NA	Rock in basket, no recovery.
	6								Auger refusal/boring terminated at 5.8' (bedrock).
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								

NOTES: PID probably responding to humidity.
MSL - Mean sea level.

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: J. Imhoff/M. Kohberger
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-20 (FWMW-3)**
DATE STARTED: 10/7/02
DATE COMPLETED: 10/8/02
GROUNDWATER DEPTH: 8.0'
GROUND SURFACE ELEVATION: 355.31' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0								
	1			NA (Fill)	Brown, fine SAND and GRAVEL; brick fragments; loose.				Augered to 2.0'. Top 0.3' ASPHALT.
	2								
SB-20-2-4	3	1 2 6 3	0.7	NA (Fill)	Brown, fine to medium SAND and GRAVEL; brick fragments; slag; wood fragments; loose; damp.	1215	10/7/02	NA	
	4								
SB-20-4-6	5	NA	0.3	NA (Fill)	Brown, fine SAND and SILT, some Gravel; brick fragments; loose.	1228	10/7/02	NA	
	6								
SB-20-6-8	7	5 4 4 8	0.9	ML	Olive gray SILT, some fine Sand, some sub-rounded Gravel; medium stiff; moist.	820	10/8/02	0.0	
	8								
	9	16 43 40 46	0.3	ML	Brown SILT, some fine Sand, some sub-angular Gravel; wet.	NA	10/8/02	0.0	Depth to Water: 8.0' Slight sheen.
	10								
SB-20-10-12	11	1 3 6 3	0.3	ML	Brown SILT, trace fine Sand; soft; wet.	850	10/8/02	0.0	
	12								
	13	WR WR WR 2	0.9	ML	Brown SILT, some Clay, trace fine Sand; moderate plasticity; soft; wet.	910	10/8/02	0.0	Wood in basket.
	14								
SB-20-14-14.3	15	50/0.3	0.3	ML	Olive gray SILT, some Clay; moderate plasticity; soft; wood fragments at the bottom of the spoon.	925	10/8/02	0.0	Slight MGP-type odor. Split spoon refusal/weathered bedrock @ 14.3. Auger refusal @ 14.7'. Note: PID = 0.0 ppm
	16								
	17								
	18								
	19								
	20								

NOTES: PID not working on 10/7/02. PID working okay on 10/8/02.
MSL - Mean sea level.
WR - Weight of rod.

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: J. Imhoff/M. Kohberger
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-21**
DATE STARTED: 10/8/02
DATE COMPLETED: 10/8/02
GROUNDWATER DEPTH: 8.7'
GROUND SURFACE ELEVATION: 355.40' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0								
SB-21-0-2	1	6	0.8	NA (Fill)	Brown, fine SAND and GRAVEL; trace brick fragments; loose; moist.	1600	10/8/02	0.0	Augered to 0.5'. Top 0.5' - Asphalt.
	2	7 9							
	3	9 8	1.0	NA (Fill)	Brown, fine SAND, some Gravel, trace Silt; loose; moist.	1615	10/8/02	0.0	
	4	9 15							
SB-21-4-6	5	9 10	0.9	NA (Fill)	Black SILT, some fine Sand, trace Gravel; brick fragments; slag; loose; moist.	1624	10/8/02	0.0	
	6	8 5							
SB-21-6-8	7	1 2	1.0	ML	Brown to olive gray SILT, some fine Sand, trace Gravel; trace wood and brick fragments; loose; wet.	1634	10/8/02	0.0	
	8	3 3							
SB-21-8-10	9	5 3	1.25	SW	Dark gray, fine SAND and GRAVEL; loose; wet; grading to brown, organic SILT and fine SAND; wood fragments; loose; wet.	1650	10/8/02	0.0	Depth to Water: 8.7' 1-2 mm intermittent pockets of NAPL stained soil. Strong MGP-type odor in lower 0.5' of spoon. Note: PID=0.0 ppm.
	10	2 1							
SB-21-10-12	11	6 5	1.0	ML	Black organic SILT, trace Gravel; wood fragments; loose; wet (upper 0.5').	1712	10/8/02	0.0	
	12	50/0.4'			Olive gray SILT, some fine Sand; loose; wet (lower 0.5').				Auger refusal/boring terminated at 11.4' (bedrock).
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								

NOTES: MSL - Mean sea level.
NA - Not Applicable

PAGE 1 OF 1

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: T. Wollen
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-22 (FWMW-4)**
DATE STARTED: 10/9/02
DATE COMPLETED: 10/9/02
GROUNDWATER DEPTH: 12'
GROUND SURFACE ELEVATION: 354.63' MSL

SAMPLE ID	DEPTH (feet) 0	BLOWS per 6"	RECOVERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	1	10	1.0	NA (Clean Fill)	Dark brown to black, fine to medium SAND, some Gravel; loose; dry.	820	10/9/02	0.0	Augered to 0.5'. Top 0.5' ASPHALT
	2	12 15							
	3	8 19	1.1	NA (Clean Fill)	Same as above.	840	10/9/02	0.0	
	4	35 40							
	5	20 16	0.3	NA (Clean Fill)	Same as above.	850	10/9/02	0.0	
	6	15 25							
	7	5 2	0.3	NA (Clean Fill)	Same as above.	910	10/9/02	0.0	
	8	4 2							
SB-22-01	9	3 4	1.0	NA (Clean Fill)	Dark brown, coarse GRAVEL, some Sand, intermingled white Clay (top 0.3'); slag; loose; moist.	920	10/9/02	0.0	Slight MGP-type odor.
	10	5 8							
SB-22-02	11	4 7	1.5	GM	Dark brown SLAG and coarse GRAVEL, some Sand, trace Clay; dry to moist (upper 1.1'). Light brown SAND, some GRAVEL; slag; slight cohesiveness; dry to moist (bottom 0.4').	940	10/9/02	0.0	Slight MGP-type odor (upper 0.9').
	12	9 8							
	13	2 6	0.2	SM	Light brown, fine SAND and SILT; cohesive; wet.	950	10/9/02	0.0	Depth to water: 12' Slight MGP-type odor.
	14	7 5							
SB-22-03	15	1 2	1.3	SP	Brown fine SAND, trace fines; loose; moist to wet.	1000	10/9/02	0.0	Coal and slag in sampler.
	16	2 1							
SB-22-04	17	1 1	1.5	SP	Same as above.	1010	10/9/02	0.0	
	18	1 1							
SB-22-05	19	3 50/0.2	0.5	SP	Dark brown to black fine SAND, trace fines; cohesive; wet to saturated.	1030	10/9/02	0.0	Moderate MGP-type odor. Auger refusal/bedrock interface at 19'. Rock cored from 19-24' bgs.
	20	NA NA		NA	Gray granite gneiss grading to pink granite gneiss.				

NOTES: MSL - Mean sea level
NA - Not Applicable

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: T. Wollen
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons then NX Rock Coring (19-24')

BORING NUMBER: **SB-22 (FWMW-4)**
DATE STARTED: 10/9/02
DATE COMPLETED: 10/9/02
GROUNDWATER DEPTH: 12'
GROUND SURFACE ELEVATION: 354.63' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	20								
		NA			Gray granite gneiss grading to pink granite gneiss as above.				
	21	NA							
		NA							Granite gneiss is moderately fractured/jointed with evidence of MGP-type impact (stains/ odors) on fracture/joint surfaces.
No Samples	22	NA	5.0	NA	RQD = 76% (Good Rock Quality)				
		NA				1150	10/9/02	NA	
	23	NA							
		NA							
	24	NA							
	25								Boring terminated at 24 feet bgs.
	26								
	27								
	28								
	29								
	30								
	31								
	32								
	33								
	34								
	35								
	36								
	37								
	38								
	39								
	40								

NOTES: MSL - Mean sea level
NA - Not Applicable
Upon completion of rock coring, hole was damaged and was abandoned.
Soil boring was redrilled to bedrock surface @ 18.8' bgs for installation of monitoring well FWMW-4.
RQD - Rock Quality Designation (sum length of all core pieces >100mm (4") in length/total length of core run x 100%).

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: T. Wollen
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-23**
DATE STARTED: 10/9/02
DATE COMPLETED: 10/9/02
GROUNDWATER DEPTH: 13'
GROUND SURFACE ELEVATION: 355.73' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0								
	1				CONCRETE				Augered to 1.0'.
		13			Intermingled light gray to brown SAND and GRAVEL, some fines; loose; dry.				
	2	24	0.8	NA (Clean Fill)		2010	10/9/02	0.0	
		17							
	3	20							
		1			Light gray to brown SAND and GRAVEL, trace fines; loose; dry.				
SB-23-01	4	24	0.8	NA (Clean Fill)		2015	10/9/02	0.0	
		24							
	5	24							
		12			Same as above.				
	6	19	0.4	NA (Clean Fill)		2020	10/9/02	0.0	
		50/0.4							
	7								
		9			Same as above. Material contains large cobbles.				
	8	16	0.3	NA (Clean Fill)		2050	10/9/02	0.0	Recovery low due to cobbles.
		19							
	9								
		9			Same as above.				
	10	3	0.2	NA (Clean Fill)		2110	10/9/02	0.0	Top 0.5' - Cobble
		13							Augered through.
	11	6							Cobble in spoon.
		4			Cobbles; brick fragments; debris; sand. Lower 0.2' contains tar; plyable; moist; some is hard and not plyable.				
SB-23-02	12	14	0.6	NA (Fill)		2120	10/9/02	0.0	Slight MGP-type odor.
		1							
	13	8							
		6			Same as above plus coarse black rock, light brown Gravel; saturated; chunk of tar about 1" diameter.				Depth to Water: 13'
SB-23-03	14	14	0.5	NA (Fill)		2135	10/9/02	0.0	Slight MGP-type odor.
		10							
	15	9							
		4			Coarse Gravel; black debris; saturated.				Moderate odor; sticky.
SB-23-04	16	16	0.5	NA (Fill)		2155	10/9/02	0.0	Boring terminated at base of gas holder (16.1 feet bgs)
	17								
	18								
	19								
	20								

NOTES: MSL - Mean sea level

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: T. Wollen
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-24**
DATE STARTED: 10/10/02
DATE COMPLETED: 10/10/02
GROUNDWATER DEPTH: 10'
GROUND SURFACE ELEVATION: 355.74' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0				CONCRETE				Augered to 0.8'.
	1								
SB-24-01		10	1.2	NA (Fill)	Fine SAND and coarse GRAVEL grading from dark brown to light brown; brick fragments; loose; dry.	1005	10/10/02	0.0	
	2	10							
		20							
	3	14							
SB-24-02		9	0.6	NA (Fill)	Same as above; brown; dry.	1010	10/10/02	0.0	
	4	6							
		3							
	5	2							
SB-24-03		2	0.5	NA (Fill)	Black, fine SAND, little fines; slag; coal; loose; dry.	1020	10/10/02	0.0	Brick in basket.
	6	1							
		1							
	7	1							
SB-24-04		WR	0.6	NA (Fill)	Dark brown to black, coarse SAND and GRAVEL; slag; loose; moist.	1030	10/10/02	0.0	Slag in sample.
	8	WR							
		WR							
	9	4							
SB-24-05		WR	0.8	NA (Fill)	Same as above; wet.	1040	10/10/02	0.0	Slight MGP-type odor. No MGP-type impacts observed.
	10	2							
		3							
	11	50/0.4							
	12								Auger refusal/boring terminated at 10.8' (bedrock).
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								

NOTES: MSL - Mean sea level.
WR - Weight of rods.

PAGE 1 OF 1

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: T. Wollen
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-25 (FWMW-6)**
DATE STARTED: 10/10/02
DATE COMPLETED: 10/10/02
GROUNDWATER DEPTH: 10'
GROUND SURFACE ELEVATION: 354.30' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0								
		10			Dark brown to black, fine SAND, some Gravel; dry.				
	1	10	1.0	NA (Clean Fill)		1405	10/10/02	0.0	
		12							
	2	11							
		16			Dark brown to black, fine SAND and GRAVEL; loose; dry.				
	3	11	1.3	NA (Fill)		1420	10/10/02	0.0	Some brick fragments in sample.
		19							
	4	14							
		3			Dark brown to black, coarse GRAVEL and SAND; loose; dry.				
SB-25-01	5	3	0.3	NA (Fill)		1425	10/10/02	0.0	Stone fragments in shoe. Slight MGP-type odor.
		2							
	6	6							
		3			Dark brown to black, coarse GRAVEL and SAND; slag and coke; dry to moist.				
SB-25-02	7	5	1.0	NA (Fill)		1435	10/10/02	0.0	Slight MGP-type odor. 1-2 mm intermittent pockets of NAPL stained soil.
		6							
	8	4							
		5			Same as above.				
SB-25-03	9	8	1.1	SP	Brown, fine SAND in bottom 0.3' of sample.	1440	10/10/02	0.0	Slight to moderate MGP-type odor.
		10							
	10	3							
		3			Brown, fine SAND, trace Gravel; trace slag; soft; wet.				
SB-25-04	11	3	1.3	SP		1450	10/10/02	0.0	Depth to Water: 10' Slight MGP-type odor. Slag in sample.
SB-25-04DUP		3							
	12	8							
		12			Same as above.				
	13	16	0.2	SP		1510	10/10/02	0.0	
		13							
	14	10							
		13			Same as above.				
	15	14	0.2	SP		1520	10/10/02	0.0	Pocket of sheen.
		12							
	16	36							
SB-25-05		10	0.5	SP	Same as above.	NA	10/10/02	N/A	Sheen (bottom 0.3'), 0.5 inch layer of NAPL stained soil at soil/bedrock interface. Auger refusal at 16.7' (bedrock)
	17	50/0.2			Granitic gneiss (16.7 - 17.2')				
	18								
									Cored bedrock from 16.7 to 17.2' to confirm.
	19								
	20								

NOTES: MSL - Mean sea level
SB-25-04DUP is the duplicate of SB-25-04.
NA - Not Applicable
N/A - Not Available

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: T. Wollen
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-26**
DATE STARTED: 10/11/02
DATE COMPLETED: 10/11/02
GROUNDWATER DEPTH: 12'
GROUND SURFACE ELEVATION: 354.67' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECOVERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0								
SB-26-01		1	0.9	NA (Clean Fill)	Dark brown, fine SAND and coarse GRAVEL; loose; moist.	920	10/11/02	0.0	
	1	1							
		5							
	2	6							
		5	0.3	NA (Fill)	Same as above.	930	10/11/02	0.0	Glass in sample.
	3	20							
		50/0.4'							
	4								
SB-26-02		10	0.9	NA (Fill)	Light brown SAND and coarse GRAVEL; trace brick fragments; loose; dry.	940	10/11/02	0.0	
	5	12							
		19							
	6	20							
		9	0.2	NA (Fill)	Same as above; no brick fragments; moist.	955	10/11/02	0.0	
	7	8							
		8							
	8	6							
SB-26-03		5	0.3	NA (Fill)	Same as above.	1005	10/11/02	0.0	
	9	6							
		6							
	10	7							
SB-26-04		3	0.3	NA (Fill)	Same as above; moist to wet at base.	1010	10/11/02	0.0	Broken cobble in shoe.
	11	10							
		10							
	12	4							
		WR	0.1	NA (Fill)	Wood fragments; saturated.	1020	10/11/02	0.0	Strong MGP-type odor; 1-2 mm intermittent pockets of NAPL stained soil. Note - PID = 0.0 ppm.
	13	WR							
		10							
	14	12							
SB-26-05		WR	0.3	NA (Fill)	Black SAND; debris; wood fragments; loose; saturated; bottom 0.3' has green blue/green stained concrete.	1050	10/11/02	N/A	Auger refusal/boring terminated at 15.3', bottom of holder.
	15	2							
		19							
	16								
	17								
	18								
	19								
	20								

NOTES: Soil boring located outside building, inside gas holder.
WR - Weight of rod.
MSL - Mean sea level.
N/A - Not Available
NA- Not Applicable

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: T. Wollen
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-27**
DATE STARTED: 10/11/02
DATE COMPLETED: 10/11/02
GROUNDWATER DEPTH: NA
GROUND SURFACE ELEVATION: 357.03' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0								
SB-27-01	1	18	1.0	NA (Clean Fill)	Light brown, fine to coarse SAND and coarse GRAVEL; loose; dry.	1335	10/11/02	0.0	Augered to 0.5'. Top 0.5' - Asphalt.
	2	16 12							
SB-27-02	3	3 10	0.9	NA (Clean Fill)	Same as above.	1340	10/11/02	0.0	
	4	5 4							
SB-27-03	5	2 3	0.6	NA (Fill)	Light brown to dark brown, fine to coarse SAND, some Gravel; loose; dry.	1350	10/11/02	0.0	Brick fragments in sample.
	6	3 2							
	7	1 1	0.3	NA (Fill)	Medium brown, fine SAND; wood; brick fragments; glass; moist.	1405	10/11/02	0.0	
	8	1 2							
	9	1 7	1.0	NA (Fill)	Medium brown, fine to medium SAND; cohesive; moist. (comprised of 80% brick fragments).	1410	10/11/02	0.0	
	10	9 8							
SB-27-04	11	50/0.2	0.3	SP	Medium brown, fine SAND.	1420	10/11/02	0.0	Auger refusal/boring terminated at 10.2' (bedrock).
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								

NOTES: Bedrock encountered at 10.2'.
MSL - Mean sea level.
NA - Not applicable.

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: T. Wollen
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-28**
DATE STARTED: 10/11/02
DATE COMPLETED: 10/11/02
GROUNDWATER DEPTH: NA
GROUND SURFACE ELEVATION: 355.81' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0								
	1	N/A	0.0	NA (Fill)	COBBLES and Gravel (Subfloor fill material).		10/11/02	N/A	Augered 0.9' through concrete. No samples collected.
	2								
	3								Auger refusal/boring terminated at 2.3' (bedrock).
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								

NOTES: Boring inside building.
MSL - Mean sea level.
NA - Not applicable
N/A - Not Avaliable

LOG OF BORING

PROJECT: **NIMO/National Grid**
PROJECT NO: 2450.0005
LOCATION: Little Falls (Mill St.), NY
GEOLOGIST: T. Wollen
DRILLER: Lyon Drilling
DRILLING/SAMPLING METHOD: 4 1/4" Hollow Stem Auger - 3" Split Spoons

BORING NUMBER: **SB-29 (FWMW-5)**
DATE STARTED: 10/14/02
DATE COMPLETED: 10/14/02
GROUNDWATER DEPTH: 6'
GROUND SURFACE ELEVATION: 355.37' MSL

SAMPLE ID	DEPTH (feet)	BLOWS per 6"	RECO-VERY (feet)	USCS CLASS.	MATERIAL DESCRIPTION	COLLECTION Time	COLLECTION Date	PID ppm	COMMENTS
	0								
SB-29-01	1	5	1.0	NA (Clean Fill)	Brown, fine to coarse SAND, some Gravel; loose; dry.	1635	10/14/02	0.0	Augered to 0.5'. Top 0.5' - Asphalt.
	2	4 6							
	3	3 4	1.0	NA (Clean Fill)	Same as above.	1645	10/14/02	0.0	
	4	5 15							
SB-29-02	5	10 8	0.4	NA (Clean Fill)	Dark brown, medium to coarse SAND, some Gravel; loose; dry.	1655	10/14/02	0.0	Duplicate sample collected.
	6	12 12							
SB-29-03	7	5 36	0.5	SP	Dark brown to black, medium to fine SAND, some Gravel; slag; loose; wet.	1720	10/14/02	0.0	Possible pipe fragments in shoe.
	8	14 5							
SB-29-04	9	1 1	1.9	SP	Gray, fine to medium SAND, trace Gravel; loose; moist to wet; some clay globs at base of sample.	1735	10/14/02	0.0	Slight MGP-type odor at bottom of split spoon. Duplicate sample collected.
	10	7 6							
SB-29-05	11	8 11	1.9	SP	Same as above; SAND, trace fines; wet.	1750	10/14/02	0.0	Slight MGP-type odor.
	12	11 8							
	13								Auger refusal/Boring terminated at 12.3'. (bedrock).
	14								
	15								
	16								
	17								
	18								
	19								
	20								

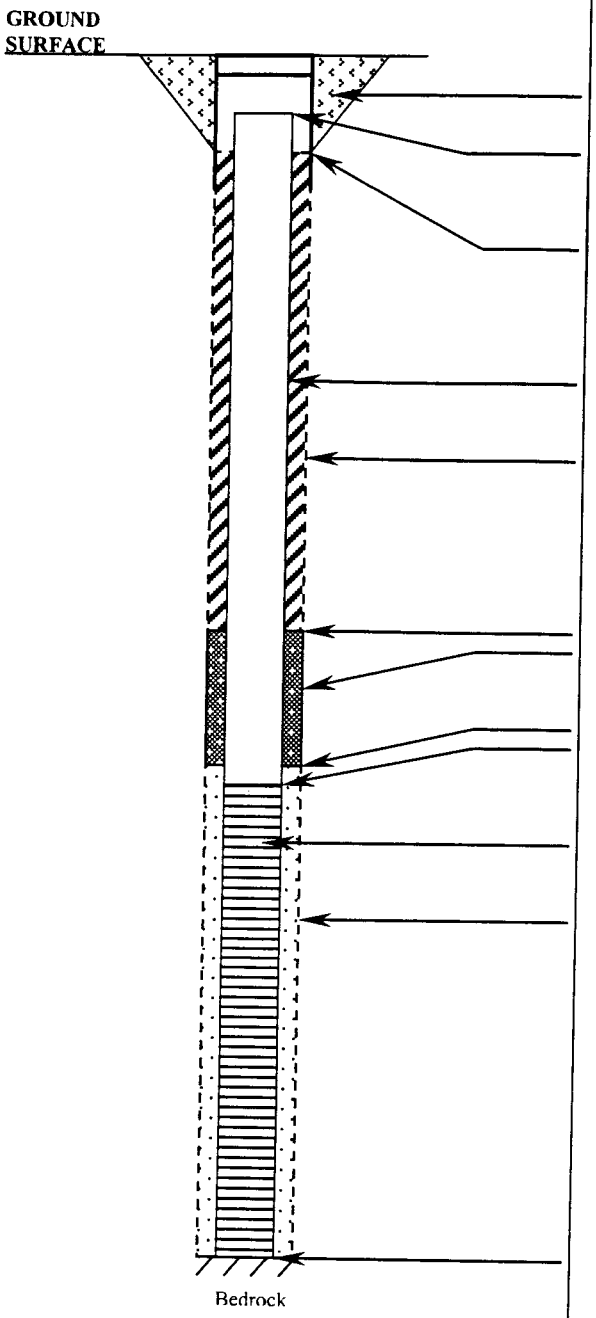
NOTES: MSL - Mean sea level.
NA - Not Applicable

Appendix B
Monitoring Well Construction Diagrams

UNCONSOLIDATED
MONITORING WELL CONSTRUCTION DIAGRAM

WELL NO. FWMW-1 (SB-17)

PROJECT: NM NGrid Little Falls (Mill Street)	DRILLER: Harry Lyon
PROJECT NO.: 2450.0005.0003.00001	DRILLING METHOD: Hollow Stem Auger
DATE: 10/3/02 BORING NO.: SB-17	DEVELOPMENT METHOD: Repeated Pumping
ELEVATION: 355.75 feet MSL	
LOGGED BY: John T. Imhoff	



NOT TO SCALE

ELEVATION OF TOP OF SURFACE CASING: NA
TYPE OF SURFACE SEAL: Concrete
GROUND SURFACE ELEVATION: 355.75
ELEVATION OF TOP OF RISER: 355.58

I.D. OF SURFACE CASING: 8-in.
TYPE OF SURFACE CASING: 1-ft. steel skirt on 8-in. dia. flush mount pro-cover.

RISER PIPE I.D. 2-in.
TYPE OF RISER PIPE: Sch. 40 PVC (Johnson)

BOREHOLE DIAMETER: 8.5-in.

TYPE OF BACKFILL: Bentonite-cement grout

DEPTH TOP OF SEAL: 9.4-ft.
TYPE OF SEAL: NA Pure Gold ™ Medium Bentonite Chips
DEPTH TOP OF SAND PACK: 11.5-ft.
DEPTH TOP OF SCREEN: 13.3-ft.

TYPE OF SCREEN: 2-in. Sch. 40 PVC (Johnson)
SLOT SIZE X LENGTH: 10-slot x 10 ft.
TYPE OF SAND PACK: US Silica #00N

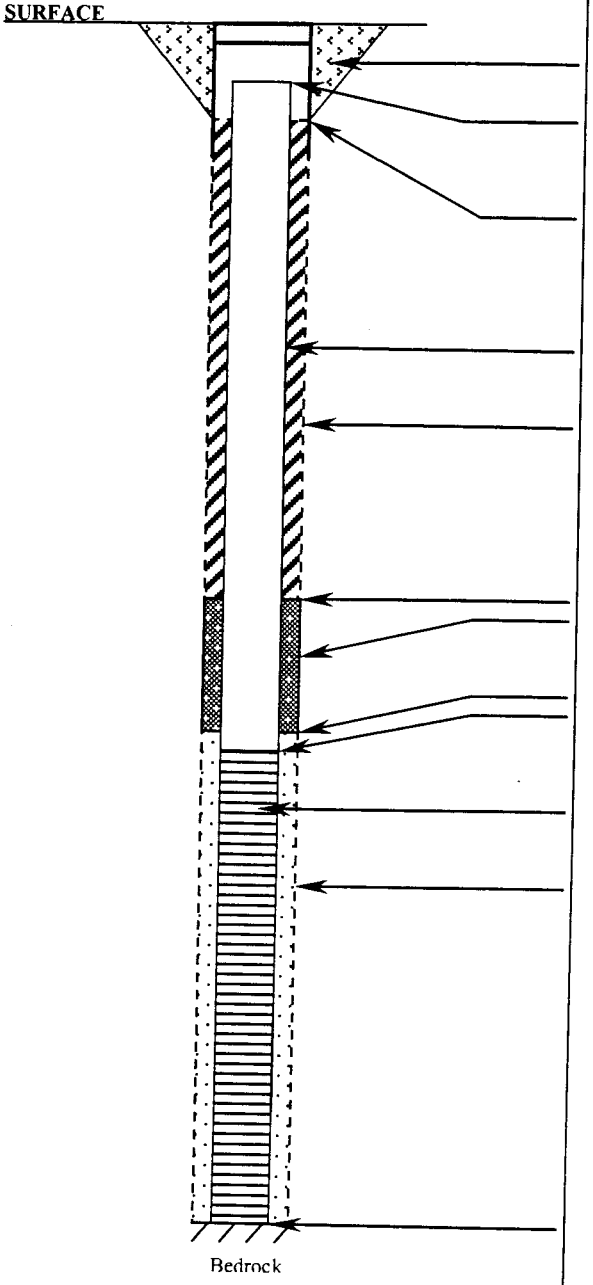
DEPTH BOTTOM OF SCREEN: 23.3-ft.
DEPTH BOTTOM OF WELL: 23.5-ft.
DEPTH BOTTOM OF SAND PACK: 23.8-ft.
TYPE OF BACKFILL BELOW OBSERVATION WELL:

DEPTH OF HOLE: 23.8-ft.

UNCONSOLIDATED
MONITORING WELL CONSTRUCTION DIAGRAM

WELL NO. FWMW-2 (SB-18)

PROJECT	NM NGrid Little Falls (Mill Street)	DRILLER	Harry Lyon
PROJECT NO.	2450.0005.0003.00001	DRILLING METHOD	Hollow Stem Auger
DATE	10/4/02	BORING NO.:	SB-18
ELEVATION	362.13 feet MSL	DEVELOPMENT METHOD	Repeated Pumping
LOGGED BY	John T. Imhoff		



NOT TO SCALE

ELEVATION OF TOP OF SURFACE CASING: NA
TYPE OF SURFACE SEAL: Concrete
GROUND SURFACE ELEVATION: 362.13
ELEVATION OF TOP OF RISER: 361.92

I.D. OF SURFACE CASING: 8-in.
TYPE OF SURFACE CASING: 1-ft. steel skirt on 8-in. dia. flush mount pro-cover.

RISER PIPE I.D. 2-in.
TYPE OF RISER PIPE: Sch. 40 PVC (Johnson)

BOREHOLE DIAMETER: 8.5-in.

TYPE OF BACKFILL: Bentonite-cement grout

DEPTH TOP OF SEAL: 6.1-ft.
TYPE OF SEAL: NA Pure Gold ™ Medium Bentonite Chips
DEPTH TOP OF SAND PACK: 8.2-ft.
DEPTH TOP OF SCREEN: 10.3-ft.

TYPE OF SCREEN: 2-in. Sch. 40 PVC (Johnson)
SLOT SIZE X LENGTH: 10-slot x 5 ft.
TYPE OF SAND PACK: US Silica #00N

DEPTH BOTTOM OF SCREEN: 15.3-ft.
DEPTH BOTTOM OF WELL: 15.5-ft.

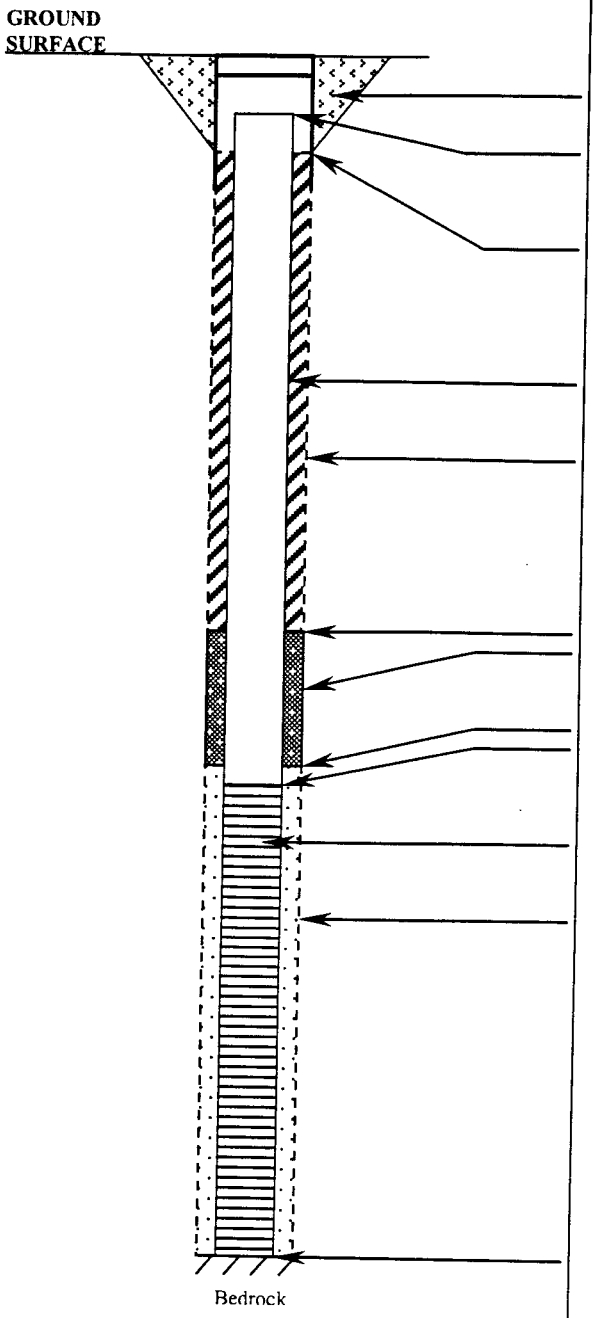
DEPTH BOTTOM OF SAND PACK: 15.5-ft.
TYPE OF BACKFILL BELOW OBSERVATION WELL: Native Material

ELEVATION/DEPTH OF HOLE: 15.5-ft.

UNCONSOLIDATED
MONITORING WELL CONSTRUCTION DIAGRAM

WELL NO. FWMW-3
SB-20

PROJECT: NM NGrid Little Falls (Mill Street)	DRILLER: Harry Lyon
PROJECT NO.: 2450.0005.0003.00001	DRILLING METHOD: Hollow Stem Auger
DATE: 10/8/02 BORING NO.: SB-20	DEVELOPMENT METHOD: Repeated Pumping
ELEVATION: 355.31 feet MSL	
LOGGED BY: Matthew Kohberger	



NOT TO SCALE

ELEVATION OF TOP OF SURFACE CASING: NA
TYPE OF SURFACE SEAL: Concrete
GROUND SURFACE ELEVATION: 355.31
ELEVATION OF TOP OF RISER: 354.84

I.D. OF SURFACE CASING: 8-in.
TYPE OF SURFACE CASING: 1-ft. steel skirt on 8-in. dia. flush mount pro-cover.

RISER PIPE I.D. 2-in.
TYPE OF RISER PIPE: Sch. 40 PVC (Johnson)

BOREHOLE DIAMETER: 8.5-in.

TYPE OF BACKFILL: NA Pure Gold ™ Medium Bentonite Chips
DEPTH TOP OF SEAL: 1.5-ft.
TYPE OF SEAL: NA Pure Gold ™ Medium Bentonite Chips
DEPTH TOP OF SAND PACK: 2.7-ft.
DEPTH TOP OF SCREEN: 4.5-ft.

TYPE OF SCREEN: 2-in. Sch. 40 PVC (Johnson)
SLOT SIZE X LENGTH: 10-slot x 10 ft.
TYPE OF SAND PACK: US Silica #00N

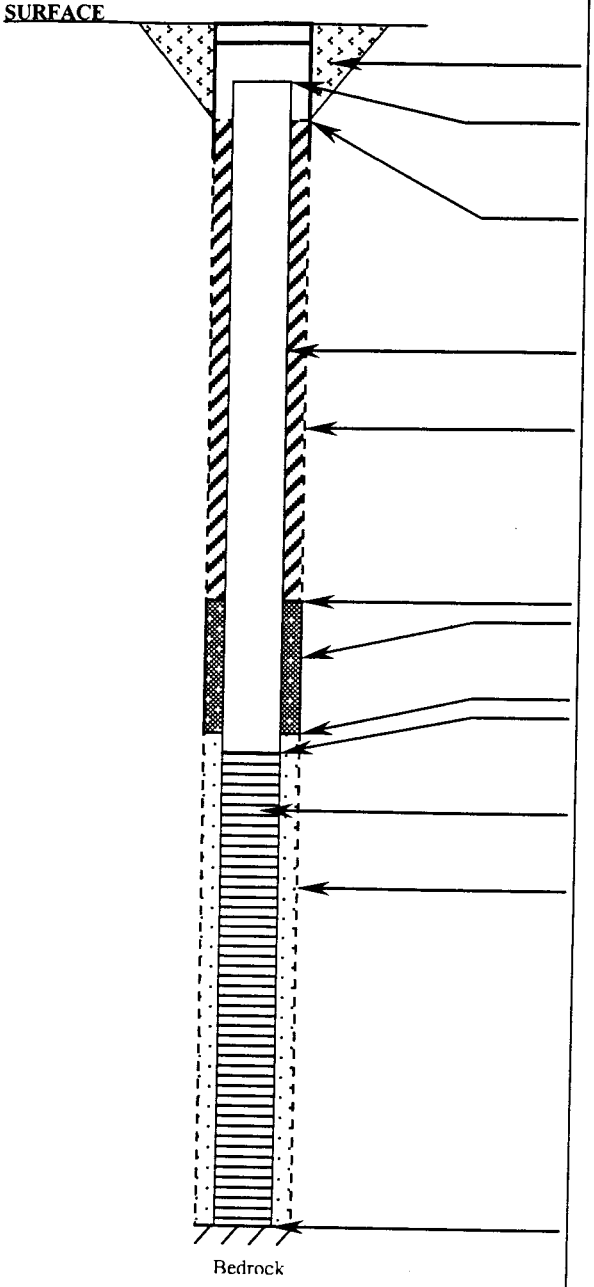
DEPTH BOTTOM OF SCREEN: 14.5-ft.
DEPTH BOTTOM OF WELL: 14.7-ft.
DEPTH BOTTOM OF SAND PACK: 14.7-ft.
TYPE OF BACKFILL BELOW OBSERVATION WELL:

DEPTH OF HOLE: 14.7-ft.

UNCONSOLIDATED
MONITORING WELL CONSTRUCTION DIAGRAM

WELL NO. FWMW-4 (SB-22)

PROJECT	NM NGrid Little Falls (Mill Street)	DRILLER	Harry Lyon
PROJECT NO.	2450.0005.0003.00001	DRILLING METHOD	Hollow Stem Auger
DATE	10/9/02	BORING NO.: SB-22	
ELEVATION	354.63 feet MSL	DEVELOPMENT METHOD	Repeated Pumping
LOGGED BY	Thomas J. Wollen		



NOT TO SCALE

ELEVATION OF TOP OF SURFACE CASING: NA
TYPE OF SURFACE SEAL: Concrete
GROUND SURFACE ELEVATION: 354.63
ELEVATION OF TOP OF RISER: 354.36

I.D. OF SURFACE CASING: 8-in.
TYPE OF SURFACE CASING: 1-ft. steel skirt on 8-in. dia. flush mount pro-cover.

RISER PIPE I.D. 2-in.
TYPE OF RISER PIPE: Sch. 40 PVC (Johnson)

BOREHOLE DIAMETER: 8.5-in.

TYPE OF BACKFILL: Bentonite-cement grout

DEPTH TOP OF SEAL: 4.0-ft.
TYPE OF SEAL: NA Pure Gold ™ Medium Bentonite Chips
DEPTH TOP OF SAND PACK: 6.0-ft.
DEPTH TOP OF SCREEN: 8.6-ft.

TYPE OF SCREEN: 2-in. Sch. 40 PVC (Johnson)
SLOT SIZE X LENGTH: 10-slot x 10 ft.
TYPE OF SAND PACK: US Silica #00N

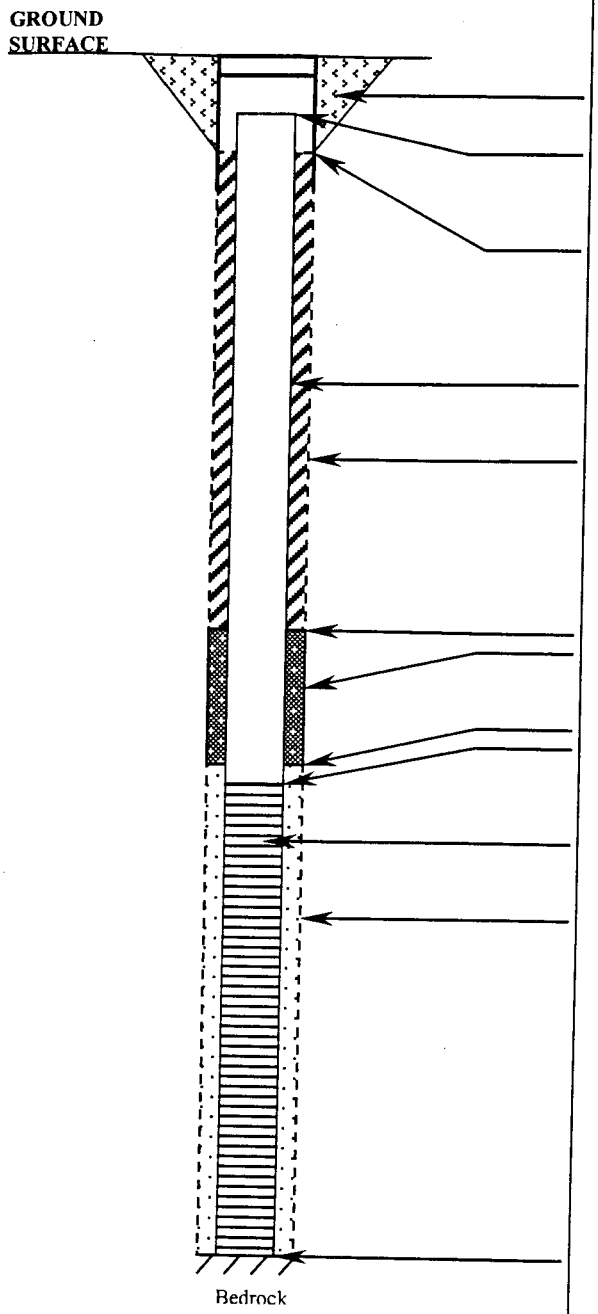
DEPTH BOTTOM OF SCREEN: 18.6-ft.
DEPTH BOTTOM OF WELL: 18.8-ft.
DEPTH BOTTOM OF SAND PACK: 18.8-ft.
TYPE OF BACKFILL BELOW OBSERVATION WELL:

DEPTH OF HOLE: 18.8-ft.

UNCONSOLIDATED
MONITORING WELL CONSTRUCTION DIAGRAM

WELL NO. FWMW-5 (SB-29)

PROJECT: NM NGrid Little Falls (Mill Street)	DRILLER: Harry Lyon
PROJECT NO.: 2450.0005.0003.00001	DRILLING METHOD: Hollow Stem Auger
DATE: 10/14/02 BORING NO.: SB-29	DEVELOPMENT METHOD: Repeated Bailing
ELEVATION: 355.37 feet MSL	
LOGGED BY: Thomas J. Wollen	



NOT TO SCALE

ELEVATION OF TOP OF SURFACE CASING: NA
TYPE OF SURFACE SEAL: Concrete
GROUND SURFACE ELEVATION: 355.37
ELEVATION OF TOP OF RISER: 355.03

I.D. OF SURFACE CASING: 8-in.
TYPE OF SURFACE CASING: 1-ft. steel skirt on 8-in. dia. flush mount pro-cover.

RISER PIPE I.D. 2-in. dia.
TYPE OF RISER PIPE: Sch. 40 PVC (Johnson)

BOREHOLE DIAMETER: 8.5-in.

TYPE OF BACKFILL: Pure Gold ™ Medium Bentonite Chips
DEPTH TOP OF SEAL: 0.5-ft.
TYPE OF SEAL: NA Pure Gold ™ Medium Bentonite Chips
DEPTH TOP OF SAND PACK: 1.0-ft.
DEPTH TOP OF SCREEN: 1.8-ft.

TYPE OF SCREEN: 2-in. Sch. 40 PVC (Johnson)
SLOT SIZE X LENGTH: 10-slot x 10 ft.
TYPE OF SAND PACK: US Silica #00N

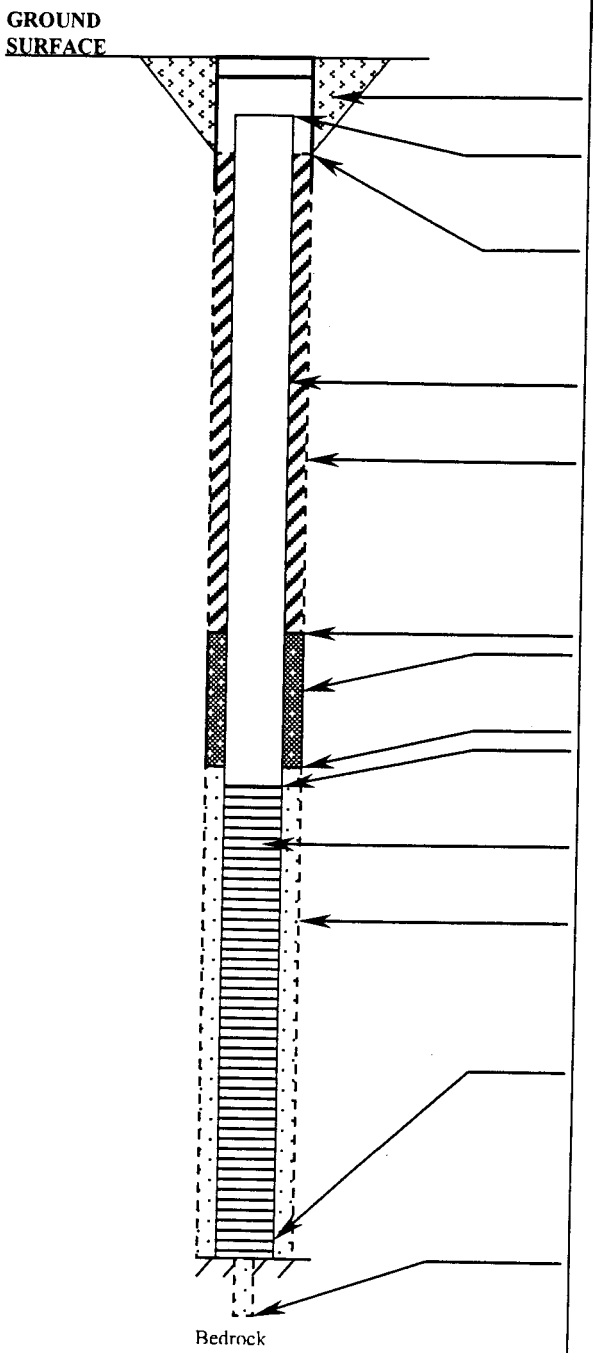
DEPTH BOTTOM OF SCREEN: 11.8-ft.
DEPTH BOTTOM OF WELL: 11.8-ft.
DEPTH BOTTOM OF SAND PACK: 12.0-ft.
TYPE OF BACKFILL BELOW OBSERVATION WELL:

DEPTH OF HOLE: 12.0-ft.

UNCONSOLIDATED
MONITORING WELL CONSTRUCTION DIAGRAM

WELL NO. FWMW-6 (SB-25)

PROJECT: NM NGrid Little Falls (Mill Street)	DRILLER: Harry Lyon
PROJECT NO.: 2450.0005.0003.00001	DRILLING METHOD: Hollow Stem Auger
DATE: 10/10/02 BORING NO.: SB-25	DEVELOPMENT METHOD: Repeated Bailing
ELEVATION: 354.30 feet MSL	
LOGGED BY: Thomas J. Wollen	



NOT TO SCALE

ELEVATION OF TOP OF SURFACE CASING: NA
TYPE OF SURFACE SEAL: Concrete
GROUND SURFACE ELEVATION: 354.30
ELEVATION OF TOP OF RISER: 354.00

I.D. OF SURFACE CASING: 8-in.
TYPE OF SURFACE CASING: 1-ft. steel skirt on 8-in. dia. flush mount pro-cover.

RISER PIPE I.D. 2-in.
TYPE OF RISER PIPE: Sch. 40 PVC (Johnson)

BOREHOLE DIAMETER: 8.5-in.

TYPE OF BACKFILL: N/A

DEPTH TOP OF SEAL: 0.5-ft.
TYPE OF SEAL: NA Pure Gold ™ Medium Bentonite Chips
DEPTH TOP OF SAND PACK: 4.2-ft.
DEPTH TOP OF SCREEN: 6.2-ft.

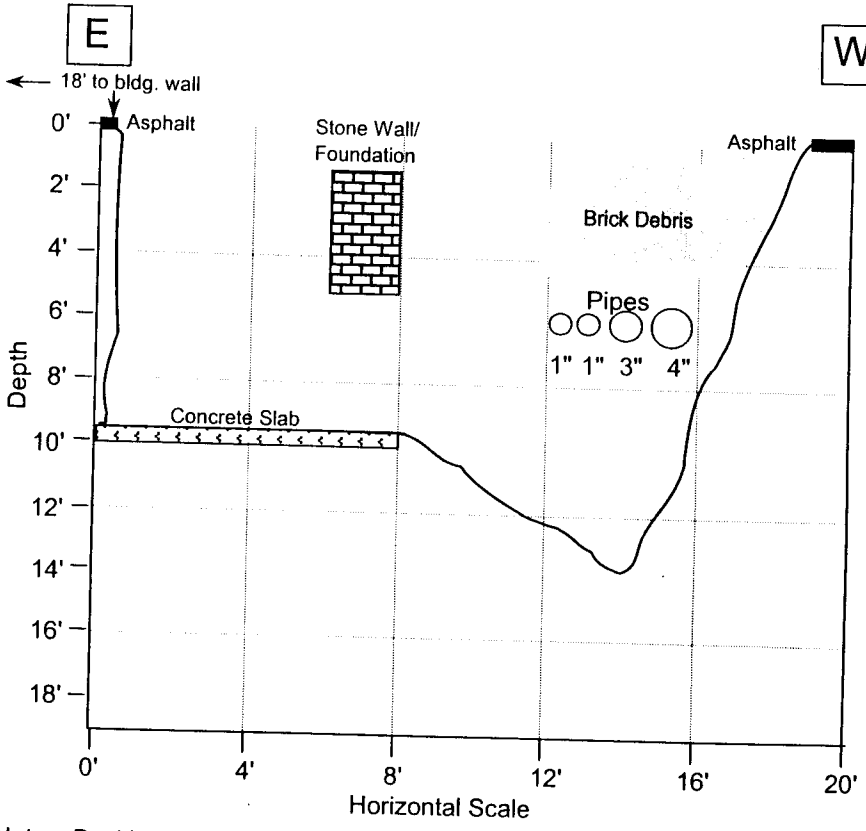
TYPE OF SCREEN: 2-in. Sch. 40 PVC (Johnson)
SLOT SIZE X LENGTH: 10-slot x 10 ft.
TYPE OF SAND PACK: US Silica #00N

DEPTH BOTTOM OF SCREEN: 16.2-ft.
DEPTH BOTTOM OF WELL: 16.4-ft.
DEPTH BOTTOM OF SAND PACK: 16.7-ft.
TYPE OF BACKFILL BELOW OBSERVATION WELL: Native material.

DEPTH OF HOLE*: 17.2-ft.

Note: *Bedrock at 16.7-ft. Rock cored to 17.2-ft. to confirm.

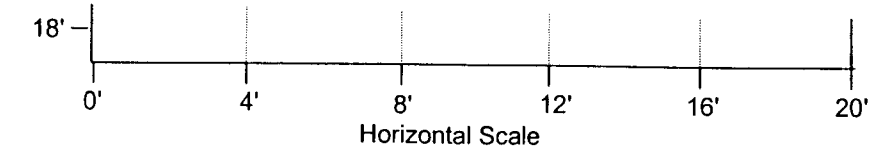
Appendix C
Test Pit Logs



DESCRIPTION OF MATERIAL	PID	Sample
0.0-0.25' - Asphalt	NA	
0.25-1.0' - Brown f-m SAND; and GRAVEL		
1.0-3.8' - Drk brn, f-m SAND; some Gravel; little Cobbles (well rounded); upper 0.5' is darker (former working surface?).	NA	
3.8-10.5' - Very dark brown to black SAND and GRAVEL (fill); includes bricks (Cobble size), slag, Boulders. 3' x 5' 8" rock slab encountered @ 7'.	NA	
10.5-13.5' - Olive brown to olive gray f. SAND; and SILT; little Clay. MGP-type impacted material (gray-black staining) with slight odor, no tar observed. No sheen.	NA	TP-1(13.5') collected @ 1550

Notes: Backhoe could not reach bedrock surface.

Water Influx:
Seepage: NA
Static: NA



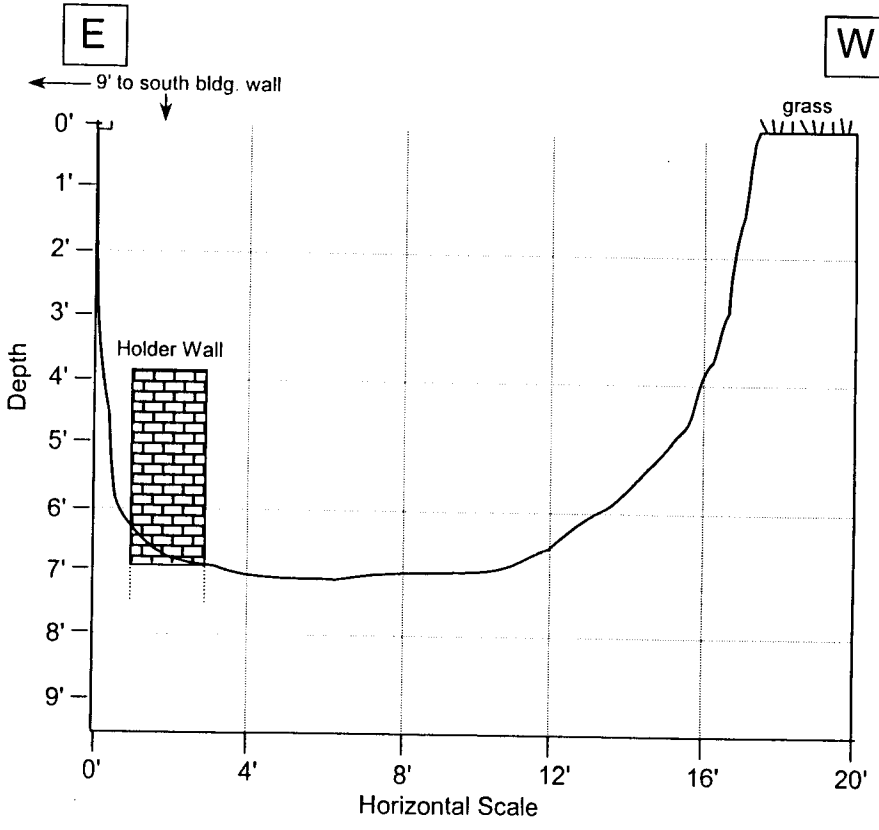
present in 1" thick seam at 11 feet bgs. No tar or sheen observed.

Water Influx:
Seepage: 9'
Static: 9'

Notes: Bedrock surface was not attained because of backhoe reach and the influx of water/slough of sidewall material into the test pit.

FOSTER WHEELER ENVIRONMENTAL CORPORATION
TEST PIT LOG

Project:	NM NGrid - Little Falls	Start Time:	0800	End Time:	1000
Test Pit No.	TP-3	Final Length	17'	Weather:	Sunny
Date:	10/8/2002	Final Depth	7'	Surface Conditions:	Grass, dry
Logged By:	T. Wollen	Final Width	4'		
Pit Orientation:	East - West				



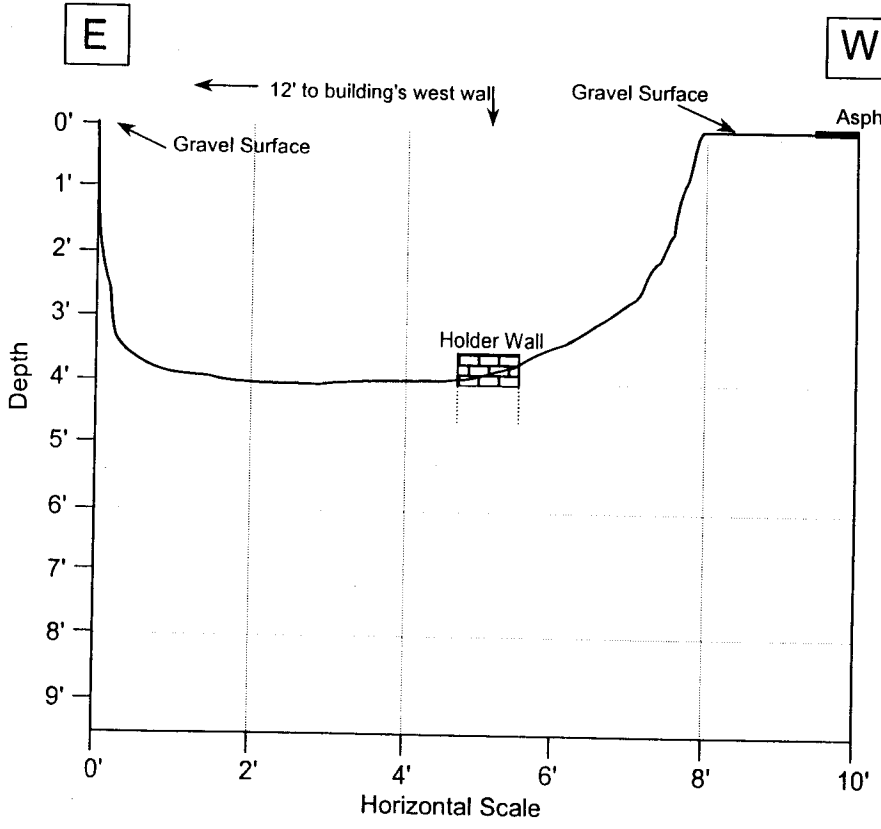
DESCRIPTION OF MATERIAL	PID	Sample
0.0-0.25' - Grass Sod at Surface 0.25-7' - Brown f. SAND; some Gravel; little Cobbles(Clean Fill). No odors, no staining.	NA	No Samples Collected

Notes:

Water Influx:
Seepage: NA
Static: NA

FOSTER WHEELER ENVIRONMENTAL CORPORATION
TEST PIT LOG

Project:	NM NGrid - Little Falls	Start Time:	1000	End Time:	1100
Test Pit No.	TP-4	Final Length	8'	Weather:	Partly Cloudy, 40s
Date:	10/8/2002	Final Depth	4'	Surface Conditions:	Gravel fill from previous excavation
Logged By:	T. Wollen	Final Width	4'		
Pit Orientation:	East - West				



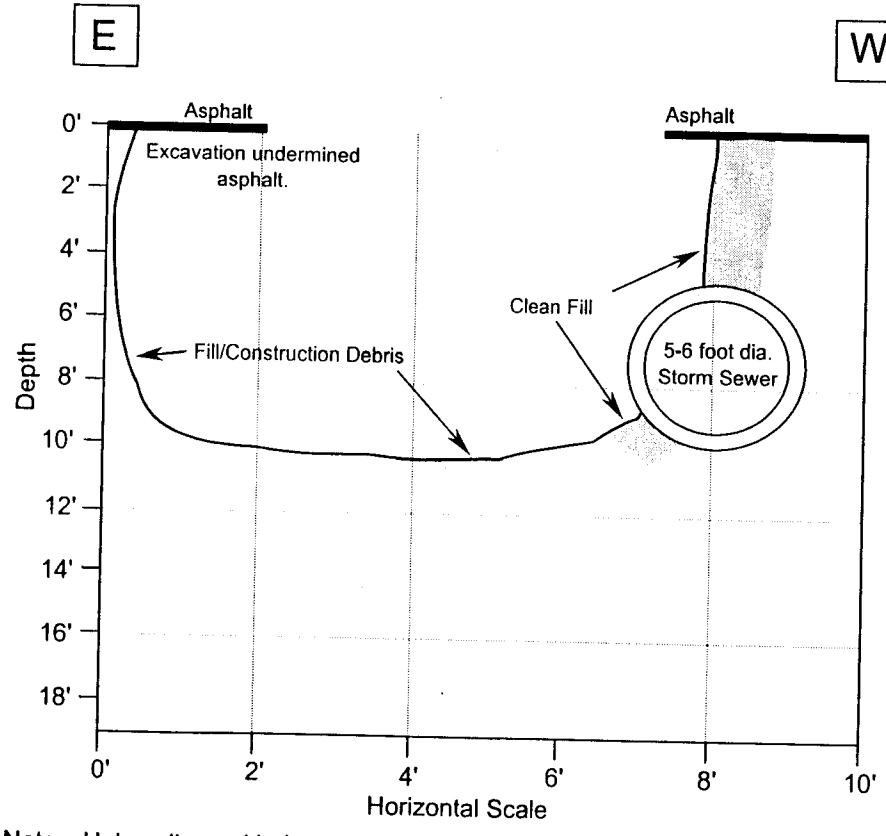
DESCRIPTION OF MATERIAL	PID	Sample
0-4' - Brown f. SAND; some Gravel; little Cobbles (Clean Fill). No odors, no staining.	NA	No Samples Collected

Notes: Test pit completed in area previously test pitted by Buck Engineering in April 2002. No impacted material observed.

Water Influx:
Seepage: NA
Static: NA

FOSTER WHEELER ENVIRONMENTAL CORPORATION
TEST PIT LOG

Project:	NM NGrid - Little Falls	Start Time:	1305	End Time:	1520
Test Pit No.	TP-5	Final Length	8'	Weather:	Sunny, nice day
Date:	10/8/2002	Final Depth	10.4'	Surface Conditions:	Asphalt, dry.
Logged By:	T. Wollen	Final Width	4'		
Pit Orientation:	East - West				



DESCRIPTION OF MATERIAL	PID	Sample
0-0.25' - Asphalt		
0.25-10.2' - Variable mix of clean fill in vicinity of 5-6 foot diameter storm sewerpipe and fill/construction debris (concrete and brick) in matix of Brown m. SAND. No odors, no staining.	NA	No Samples Collected

Notes: Hole collapsed below 5'. Maximum depth attained - 10.4'.

Water Influx:
Seepage: NA
Static: NA

Appendix D
Survey Data

APPENDIX D

SURVEY DATA

SUMMARY OF BORINGS, MONITORING WELLS AND TEST PITS (FEET ABOVE MSL)			
SOIL BORING/TEST PIT NO.	MONITORING WELL NO.	GROUND ELEVATION	TOP OF CASING ELEVATION
SB-17	FWMW-1	355.75	355.58
SB-18	FWMW-2	362.13	361.92
SB-20	FWMW-3	355.31	354.84
SB-22	FWMW-4	354.63	354.36
SB-29	FWMW-5	355.37	355.03
SB-25	FWMW-6	354.30	354.00
MW-3 (Existing)	MW-3 (Existing)	351.73	351.46
SB-15	--	355.54	--
SB-16	--	358.83	--
SB-19	--	360.95	--
SB-21	--	355.40	--
SB-23	--	355.73	--
SB-24	--	355.74	--
SB-26	--	354.67	--
SB-27	--	357.03	--
SB-28	--	355.81	--
TP-1	--	355.5 (Avg. Elev.)	--
TP-2	--	355.6 (Avg. Elev.)	--
TP-3	--	354.3 (Avg. Elev.)	--
TP-4	--	355.0 (Avg. Elev.)	--
TP-5	--	357.5 (Avg. Elev.)	--

Notes:

MW Monitoring Well
SB Soil Boring
TP Test Pit Excavation
-- Not Applicable

Appendix E
Tabulated Analytical Results

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB15-6-8 381203 10/02/02 SOLID 1.0 ug/Kg	SB15-10-12 381204 10/02/02 SOLID 1.0 ug/Kg	SB15-16-18 381205 10/02/02 SOLID 1.0 ug/Kg	SB16-2-4 381206 10/02/02 SOLID 1.0 ug/Kg	SB16-4-6 381207 10/03/02 SOLID 1.0 ug/Kg
Benzene	60	0.4 J	1.4	1.2 U	0.4 J	0.5 J
Toluene	1500	1.0 J	2.2 J	5.9 U	1.0 J	1.7 J
Ethylbenzene	5500	4.1 U	5.0 U	4.7 U	4.0 U	4.2 U
Xylene(Total)	1200	5.1 U	0.6 J	5.9 U	5.0 U	0.5 J

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB16-6-8 381208 10/03/02 SOLID 1.0 ug/Kg	SB17-8-10 381210 10/03/02 SOLID 1.0 ug/Kg	SB17-8-10D 381211 10/03/02 SOLID 1.0 ug/Kg	SB17-12-14 381213 10/03/02 SOLID 1.0 ug/Kg	SB17-18-20 381214 10/03/02 SOLID 1.0 ug/Kg
Benzene	60	1.2	1.3 U	1.3 U	4.8	9.9
Toluene	1500	2.0 J	6.5 UJ	6.4 U	1.3 J	1.5 J
Ethylbenzene	5500	0.3 J	5.2 UJ	5.1 U	4.6 U	5.0 U
Xylene(Total)	1200	1.2 J	6.5 UJ	6.4 U	5.8 U	6.3 U

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB18-6-8 381538 10/04/02 SOLID 1.0 ug/Kg	SB18-12-14 381539 10/04/02 SOLID 1.0 ug/Kg	SB18-14-16 381540 10/04/02 SOLID 1.0 ug/Kg	SB-19_0-2 382308 10/07/02 SOLID 1.0 ug/Kg	SB-19_2-4 382309 10/07/02 SOLID 1.0 ug/Kg
Benzene	60	1.2 U	1.2 U	1.1 U	0.9 J	1.0 U
Toluene	1500	5.8 UJ	1.4 J	5.5 UJ	0.7 J	5.3 U
Ethylbenzene	5500	4.6 UJ	4.9 U	4.4 UJ	0.8 J	4.2 U
Xylene(Total)	1200	5.8 UJ	6.1 U	5.5 UJ	2.2 J	5.3 U

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-20_4-6 382302 10/07/02 SOLID 1.0 ug/Kg	SB-20_6-8 382303 10/08/02 SOLID 1.0 ug/Kg	SB-20_10-12 382304 10/08/02 SOLID 1.0 ug/Kg	SB-20_14-14.3 382305 10/08/02 SOLID 50.0 ug/Kg	SB-21_0-2 382310 10/08/02 SOLID 1.0 ug/Kg
Benzene	60	3.0	1.1 J	3.4	1300	12
Toluene	1500	1.6 J	0.8 J	4.3 J	830 U	2.6 J
Ethylbenzene	5500	3.8 U	4.5 U	4.8 UJ	420 J	0.4 J
Xylene(Total)	1200	4.8 U	5.6 U	6.0 UJ	300 J	0.9 J

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-21_4-6 382311 10/08/02 SOLID 1.0 ug/Kg	SB-21_6-8 382312 10/08/02 SOLID 1.0 ug/Kg	SB-21_8-10 382313 10/08/02 SOLID 1.0 ug/Kg	SB-21_10-12 382314 10/08/02 SOLID 100.0 ug/Kg	SB-22-01_8-10 382849 10/09/02 SOLID 1.0 ug/Kg
Benzene	60	1.2 R	4.2 J	91	3700	7.6
Toluene	1500	6.0 R	3.6 J	44 J	1100 J	13
Ethylbenzene	5500	4.8 R	5.2 R	8.9 J	7900	2.2 J
Xylene(Total)	1200	6.0 R	6.5 R	90 J	24000	66

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-22-02_10-12 382850 10/09/02 SOLID 50.0 ug/Kg	SB-22-03_14-16 382851 10/09/02 SOLID 1.0 ug/Kg	SB-22-04_16-18 382852 10/09/02 SOLID 1.0 ug/Kg	SB-22-05_18-19.1 382853 10/09/02 SOLID 1.0 ug/Kg	SB-23-01 382854 10/09/02 SOLID 1.0 ug/Kg
Benzene	60	1300	1.2 U	2.0	190	0.5 J
Toluene	1500	1600	6.1 U	1.3 J	25	0.7 J
Ethylbenzene	5500	120 J	4.9 U	5.0 U	210	4.0 U
Xylene(Total)	1200	2200	6.1 U	6.2 U	44	5.0 U

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-23-02 382855 10/09/02 SOLID 5000.0 ug/Kg	SB-23-03 382856 10/09/02 SOLID 1.0 ug/Kg	SB-23-04 382857 10/09/02 SOLID 50.0 ug/Kg	SB-24-01_1-3 383230 10/10/02 SOLID 1.0 ug/Kg	SB-24-02_3-5 383231 10/10/02 SOLID 1.0 ug/Kg
Benzene	60	30000	15	1800	1.3 J	3.5
Toluene	1500	44000 J	46	650 J	2.6 J	1.3 J
Ethylbenzene	5500	47000 U	6.1	17000	4.4 R	4.3 U
Xylene(Total)	1200	73000	100	6200	5.5 R	5.4 U

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-24-03_5-7 383232 10/10/02 SOLID 1.0 ug/Kg	SB-24-04_7-9 383233 10/10/02 SOLID 1.0 ug/Kg	SB-24-05_9-10.8 383234 10/10/02 SOLID 1.0 ug/Kg	SB-25-01_4-6 383224 10/10/02 SOLID 1.0 ug/Kg	SB-25-02_6-8 383225 10/10/02 SOLID 1.0 ug/Kg
Benzene	60	3.8	5.3	16	46	5.0
Toluene	1500	2.8 J	2.0 J	8.7	56	5.1 J
Ethylbenzene	5500	4.6 U	4.6 UJ	0.6 J	3.5 J	0.4 J
Xylene(Total)	1200	2.1 J	5.8 UJ	7.8	80	7.9

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-25-03_8-10 383226 10/10/02 SOLID 1.0 ug/Kg	SB-25-04_10-12 383227 10/10/02 SOLID 1.0 ug/Kg	SB-25-05_16-16.7 383228 10/10/02 SOLID 50.0 ug/Kg	SB-25-04Dup10-12 383229 10/10/02 SOLID 1.0 ug/Kg	SB-26-01_0-2 383235 10/11/02 SOLID 1.0 ug/Kg
Benzene	60	16	2.9	880	6.4	1.5
Toluene	1500	17	2.1 J	910	3.9 J	1.2 J
Ethylbenzene	5500	1.6 J	4.6 U	4300	4.7 U	4.4 U
Xylene(Total)	1200	24	1.8 J	3400	1.8 J	5.5 U

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-26-02_4-6 383236 10/11/02 SOLID 1.0 ug/Kg	SB-26-03_8-10 383237 10/11/02 SOLID 1.0 ug/Kg	SB-26-04_10-12 383238 10/11/02 SOLID 1.0 ug/Kg	SB-26-05_14-15.2 383239 10/11/02 SOLID 50.0 ug/Kg	SB-27-01_0-2 383240 10/11/02 SOLID 1.0 ug/Kg
Benzene	60	0.6 J	1.9	1.0 J	3000	1.8
Toluene	1500	1.4 J	1.8 J	5.3 U	950	2.0 J
Ethylbenzene	5500	4.2 U	4.0 U	4.2 U	16000	4.0 U
Xylene(Total)	1200	5.3 U	4.9 U	5.3 U	19000	5.1 U

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-27-02_2-4 383241 10/11/02 SOLID 1.0 ug/Kg	SB-27-03_4-6 383242 10/11/02 SOLID 1.0 ug/Kg	SB-27-04_10-10.2 383243 10/11/02 SOLID 1.0 ug/Kg	SB-29-01 384038 10/14/02 SOLID 1.0 ug/Kg	SB-29-02 384039 10/14/02 SOLID 1.0 ug/Kg
Benzene	60	2.2	2.2	0.6 J	1.1 R	25 J
Toluene	1500	2.3 J	1.6 J	5.3 UJ	5.3 R	9.9 J
Ethylbenzene	5500	4.0 UJ	4.2 UJ	4.3 UJ	4.2 R	4.3 R
Xylene(Total)	1200	5.0 UJ	5.2 UJ	5.3 UJ	5.3 R	5.4 R

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-29-02_DUP 384040 10/14/02 SOLID 1.0 ug/Kg	SB-29-03 384041 10/14/02 SOLID 1.0 ug/Kg	SB-29-04 384042 10/14/02 SOLID 1.0 ug/Kg	SB-29-04_DUP 384043 10/14/02 SOLID 1.0 ug/Kg	SB-29-05 384044 10/14/02 SOLID 1.0 ug/Kg
Benzene	60	18 J	130	17	5.4 J	0.9 J
Toluene	1500	17 J	7.0 J	1.3 J	5.8 R	5.8 U
Ethylbenzene	5500	5.8 R	5.0 UJ	4.6 U	4.6 R	4.7 U
Xylene(Total)	1200	7.3 R	6.2 UJ	5.7 U	5.8 R	5.8 U

See Table E-1 for abbreviations and qualifiers.

TABLE E-2
BTEX Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	TP-01_13.5 382306 10/07/02 SOLID 1.0 ug/Kg	T2-2_11 382307 10/07/02 SOLID 1.0 ug/Kg
Benzene	60	82	3.0 J
Toluene	1500	6.5	6.2 UJ
Ethylbenzene	5500	14	5.0 UJ
Xylene(Total)	1200	28	6.2 UJ

See Table E-1 for abbreviations and qualifiers.

TABLE E-3
PAH Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB15-6-8 381203 10/02/02 SOLID 1.0 ug/Kg	SB15-10-12 381204 10/02/02 SOLID 10.0 ug/Kg	SB15-16-18 381205 10/02/02 SOLID 1.0 ug/Kg	SB16-2-4 381206 10/02/02 SOLID 1.0 ug/Kg	SB16-4-6 381207 10/03/02 SOLID 5.0 ug/Kg	SB16-6-8 381208 10/03/02 SOLID 5.0 ug/Kg
Naphthalene	13000	18 J	740 J	410 U	33 J	970 J	410 J
Acenaphthylene	41000	78 J	160 J	410 U	120 J	2400	580 J
Acenaphthene	50000	30 J	1700 J	410 U	43 J	1200 J	650 J
Fluorene	50000	45 J	1200 J	410 U	57 J	1900 J	850 J
Phenanthrene	50000	460	13000	9.9 J	730	19000	8000
Anthracene	50000	160 J	5800	410 U	230 J	5000	2200
Fluoranthene	50000	850	26000	410 U	1400	21000	12000
Pyrene	50000	930	28000	410 U	1500	35000	12000
Benzo(a)anthracene	224 or MDL	410	36000	41 U	740	11000	6000
Chrysene	600	470	35000	410 U	860	12000	6000
Benzo(b)fluoranthene	1100	550	52000	41 U	1100	13000	6500
Benzo(k)fluoranthene	1100	250	26000	41 U	450	5500	3000
Benzo(a)pyrene	62 or MDL	390	50000	41 U	790	10000	5400
Indeno(1,2,3-cd)pyrene	3200	130 J	34000	41 U	310 J	5300	3000
Dibenz(a,h)anthracene	14 or MDL	36 UJ	11000	41 U	110 J	1600	950
Benzo(g,h,i)perylene	50000	130 J	26000	410 U	290 J	5500	2900

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB17-8-10 381210 10/03/02 SOLID 1.0 ug/Kg	SB17-8-10D 381211 10/03/02 SOLID 1.0 ug/Kg	SB17-12-14 381213 10/03/02 SOLID 5.0 ug/Kg	SB17-18-20 381214 10/03/02 SOLID 1.0 ug/Kg	SB18-6-8 381538 10/04/02 SOLID 1.0 ug/Kg	SB18-12-14 381539 10/04/02 SOLID 1.0 ug/Kg
Naphthalene	13000	72 J	290 J	400 J	440 U	230 J	430 U
Acenaphthylene	41000	70 J	190 J	2500	13 J	200 J	430 U
Acenaphthene	50000	9.8 J	280 J	400 J	180 J	84 J	430 U
Fluorene	50000	14 J	370 J	1600 J	13 J	180 J	430 U
Phenanthrene	50000	220 J	3200	14000	19 J	1500	430 U
Anthracene	50000	49 J	880	6400	13 J	310 J	430 U
Fluoranthene	50000	330 J	4300	26000	28 J	2900	430 U
Pyrene	50000	330 J	4600	26000	44 J	2400	430 U
Benzo(a)anthracene	224 or MDL	160	2400	14000	18 J	1700	43 U
Chrysene	600	220 J	2600	14000	440 U	2000	430 U
Benzo(b)fluoranthene	1100	270	2800	16000	44 U	2900	43 U
Benzo(k)fluoranthene	1100	96	1200	7500	44 U	1600	43 U
Benzo(a)pyrene	62 or MDL	190	2300	13000	44 U	2300	43 U
Indeno(1,2,3-cd)pyrene	3200	220	1500	7100	44 U	1800	43 U
Dibenz(a,h)anthracene	14 or MDL	65	430	1700	44 U	440	43 U
Benzo(g,h,i)perylene	50000	240 J	1400	5700	440 U	1500	430 U

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB18-14-16 381540 10/04/02 SOLID 1.0 ug/Kg	SB-19_0-2 382308 10/07/02 SOLID 1.0 ug/Kg	SB-19_2-4 382309 10/07/02 SOLID 1.0 ug/Kg	SB-20_4-6 382302 10/07/02 SOLID 1.0 ug/Kg	SB-20_6-8 382303 10/08/02 SOLID 1.0 ug/Kg	SB-20_10-12 382304 10/08/02 SOLID 2.0 ug/Kg
Naphthalene	13000	20 J	10 J	72 J	73 J	470	220 J
Acenaphthylene	41000	440 U	350 U	420	130 J	1100	710 J
Acenaphthene	50000	440 U	350 U	210 J	36 J	290 J	67 J
Fluorene	50000	440 U	350 U	280 J	65 J	920	570 J
Phenanthrene	50000	16 J	55 J	3000	800	5600	7500
Anthracene	50000	440 U	14 J	820	320 J	3400	5000
Fluoranthene	50000	11 J	61 J	3600	1300	7500	15000
Pyrene	50000	440 U	91 J	3600	1600	7900	14000
Benzo(a)anthracene	224 or MDL	44 U	35 U	2000	1300	5400	9900
Chrysene	600	440 U	41 J	2000	1200	4700	9000
Benzo(b)fluoranthene	1100	44 U	67	2800	2000	8000	9800
Benzo(k)fluoranthene	1100	44 U	35 U	1100	880	3000	3500
Benzo(a)pyrene	62 or MDL	44 U	41	1800	1400	6600	7400
Indeno(1,2,3-cd)pyrene	3200	44 U	35 U	630	440	2400	4200
Dibenz(a,h)anthracene	14 or MDL	44 U	35 U	170	140	670	1200
Benzo(g,h,i)perylene	50000	440 U	17 J	470	350 J	1700	3200

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-20_14-14.3 382305 10/08/02 SOLID 1.0 ug/Kg	SB-21_0-2 382310 10/08/02 SOLID 1.0 ug/Kg	SB-21_4-6 382311 10/08/02 SOLID 1.0 ug/Kg	SB-21_6-8 382312 10/08/02 SOLID 1.0 ug/Kg	SB-21_8-10 382313 10/08/02 SOLID 10.0 ug/Kg	SB-21_10-12 382314 10/08/02 SOLID 50.0 ug/Kg
Naphthalene	13000	500 J	210 J	130 J	340 J	12000	5400 J
Acenaphthylene	41000	580 U	380	300 J	570	16000	51000
Acenaphthene	50000	1700	63 J	49 J	47 J	8700	50000
Fluorene	50000	300 J	110 J	92 J	110 J	5300 J	110000
Phenanthrene	50000	42 J	1300	940	990	26000	320000
Anthracene	50000	580 U	550	280 J	660	16000	170000
Fluoranthene	50000	25 J	2300	1300	3700	29000	330000
Pyrene	50000	28 J	2500	1300	4200	81000	320000
Benzo(a)anthracene	224 or MDL	58 U	1700	880	3600	27000	180000
Chrysene	600	14 J	1600	1000	3400	30000	140000
Benzo(b)fluoranthene	1100	58 U	2400	1400	6200	18000	150000
Benzo(k)fluoranthene	1100	58 U	1000	520	2400	6900	56000
Benzo(a)pyrene	62 or MDL	58 U	1800	1100	4800	15000	120000
Indeno(1,2,3-cd)pyrene	3200	58 U	650 J	740	3100	4000	58000
Dibenz(a,h)anthracene	14 or MDL	58 U	180 J	240	840	2200	19000
Benzo(g,h,i)perylene	50000	580 U	500 J	790	2500	3500 J	46000

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-22-01_8-10 382849 10/09/02 SOLID 100.0 ug/Kg	SB-22-02_10-12 382850 10/09/02 SOLID 50.0 ug/Kg	SB-22-03_14-16 382851 10/09/02 SOLID 1.0 ug/Kg	SB-22-04_16-18 382852 10/09/02 SOLID 1.0 ug/Kg	SB-22-05_18-19.1 382853 10/09/02 SOLID 1.0 ug/Kg
Naphthalene	13000	240000	42000	30 J	32 J	500
Acenaphthylene	41000	180000 J	53000	20 J	26 J	560
Acenaphthene	50000	42000 J	11000 J	12 J	9.4 J	890
Fluorene	50000	250000	66000	420 U	29 J	1100
Phenanthrene	50000	1400000	280000	64 J	110 J	780
Anthracene	50000	640000	140000	24 J	38 J	380 J
Fluoranthene	50000	1700000	350000	82 J	100 J	660
Pyrene	50000	1300000	320000	60 J	73 J	470 J
Benzo(a)anthracene	224 or MDL	840000	240000	51	49	240
Chrysene	600	750000	220000	32 J	31 J	210 J
Benzo(b)fluoranthene	1100	720000	220000	34 J	31 J	190
Benzo(k)fluoranthene	1100	390000	100000	15 J	44 U	99
Benzo(a)pyrene	62 or MDL	580000	170000	25 J	24 J	150
Indeno(1,2,3-cd)pyrene	3200	320000	76000	42 U	44 U	80
Dibenz(a,h)anthracene	14 or MDL	90000	24000	42 U	44 U	24 U
Benzo(g,h,i)perylene	50000	240000	57000	420 U	440 U	68 J

See Table E-1 for abbreviations and qualifiers.

TABLE E-3
PAH Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-23-01 382854 10/09/02 SOLID 1.0 ug/Kg	SB-23-03 382856 10/09/02 SOLID 5.0 ug/Kg	SB-23-04 382857 10/09/02 SOLID 10.0 ug/Kg	SB-24-01_1-3 383230 10/10/02 SOLID 5.0 ug/Kg	SB-24-02_3-5 383231 10/10/02 SOLID 1.0 ug/Kg	SB-24-04_7-9 383233 10/10/02 SOLID 20.0 ug/Kg
Naphthalene	13000	10 J	25000	23000	870 J	240 J	3800 J
Acenaphthylene	41000	23 J	16000	14000	2900 J	440 J	11000 J
Acenaphthene	50000	12 J	4100	11000	560 J	160 J	3100 J
Fluorene	50000	40 J	21000	30000	980 J	240 J	8200 J
Phenanthrene	50000	270 J	48000	91000	7700 J	2700 J	49000 J
Anthracene	50000	100 J	24000	38000	4000 J	840 J	26000 J
Fluoranthene	50000	330 J	36000	82000	18000 J	4300 J	71000 J
Pyrene	50000	260 J	34000	69000	20000 J	4900 J	92000 J
Benzo(a)anthracene	224 or MDL	140	23000	44000	15000 J	3100 J	79000 J
Chrysene	600	130 J	21000	40000	14000 J	3400 J	66000 J
Benzo(b)fluoranthene	1100	130	18000	42000	24000 J	4000 J	120000 J
Benzo(k)fluoranthene	1100	64	11000	19000	10000 J	1600 J	41000 J
Benzo(a)pyrene	62 or MDL	120	15000	33000	16000 J	3300 J	80000 J
Indeno(1,2,3-cd)pyrene	3200	70	6400	17000	5200 J	2200 J	17000 J
Dibenz(a,h)anthracene	14 or MDL	16 J	2000	4000	1800 J	640 J	17000 J
Benzo(g,h,i)perylene	50000	61 J	4400	12000	3800 J	1800 J	12000 J

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-24-05_9-10.8 383234 10/10/02 SOLID 20.0 ug/Kg	SB-25-02_6-8 383225 10/10/02 SOLID 20.0 ug/Kg	SB-25-03_8-10 383226 10/10/02 SOLID 20.0 ug/Kg	SB-25-04_10-12 383227 10/10/02 SOLID 10.0 ug/Kg	SB-25-04Dup10-12 383229 10/10/02 SOLID 5.0 ug/Kg
Naphthalene	13000	12000 J	25000 J	4000 J	6300 J	1800 J
Acenaphthylene	41000	3100 J	32000 J	24000 J	13000 J	5000 J
Acenaphthene	50000	10000 J	8600 J	3100 J	3000 J	1400 J
Fluorene	50000	8800 J	46000 J	10000 J	14000 J	5200 J
Phenanthrene	50000	48000 J	130000 J	54000 J	55000 J	27000 J
Anthracene	50000	23000 J	72000 J	29000 J	28000 J	12000 J
Fluoranthene	50000	71000 J	140000 J	70000 J	38000 J	20000 J
Pyrene	50000	88000 J	170000 J	110000 J	57000 J	25000 J
Benzo(a)anthracene	224 or MDL	91000 J	130000 J	92000 J	40000 J	19000 J
Chrysene	600	86000 J	110000 J	87000 J	36000 J	16000 J
Benzo(b)fluoranthene	1100	130000 J	130000 J	130000 J	40000 J	22000 J
Benzo(k)fluoranthene	1100	56000 J	53000 J	61000 J	17000 J	9200 J
Benzo(a)pyrene	62 or MDL	120000 J	120000 J	100000 J	31000 J	16000 J
Indeno(1,2,3-cd)pyrene	3200	62000 J	55000 J	26000 J	7000 J	3200 J
Dibenz(a,h)anthracene	14 or MDL	21000 J	20000 J	11000 J	3200 J	1400 J
Benzo(g,h,i)perylene	50000	45000 J	42000 J	20000 J	6500 J	2700 J

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-25-05_16-16.7 383228 10/10/02 SOLID 100.0 ug/Kg	SB-26-01_0-2 383235 10/11/02 SOLID 1.0 ug/Kg	SB-26-02_4-6 383236 10/11/02 SOLID 1.0 ug/Kg	SB-26-03_8-10 383237 10/11/02 SOLID 1.0 ug/Kg	SB-26-04_10-12 383238 10/11/02 SOLID 1.0 ug/Kg
Naphthalene	13000	41000 J	120 J	350 UJ	70 J	140 J
Acenaphthylene	41000	120000 J	120 J	350 UJ	140 J	260 J
Acenaphthene	50000	210000 J	270 J	350 UJ	31 J	250 J
Fluorene	50000	360000 J	270 J	350 UJ	80 J	410 J
Phenanthrene	50000	640000 J	3000 J	98 J	640 J	1800 J
Anthracene	50000	420000 J	920 J	29 J	300 J	720 J
Fluoranthene	50000	410000 J	4400 J	140 J	1200 J	1900 J
Pyrene	50000	590000 J	4900 J	130 J	1200 J	2000 J
Benzo(a)anthracene	224 or MDL	280000 J	2800 J	82 J	720 J	1200 J
Chrysene	600	260000 J	2900 J	80 J	740 J	1200 J
Benzo(b)fluoranthene	1100	200000 J	3300 J	90 J	760 J	1200 J
Benzo(k)fluoranthene	1100	84000 J	1400 J	36 J	370 J	590 J
Benzo(a)pyrene	62 or MDL	180000 J	2700 J	74 J	700 J	1100 J
Indeno(1,2,3-cd)pyrene	3200	38000 J	1500 J	50 J	440 J	640 J
Dibenz(a,h)anthracene	14 or MDL	18000 J	460 J	13 J	120 J	200 J
Benzo(g,h,i)perylene	50000	36000 J	1300 J	48 J	420 J	610 J

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-26-05_14-15.2 383239 10/11/02 SOLID 20.0 ug/Kg	SB-27-01_0-2 383240 10/11/02 SOLID 1.0 ug/Kg	SB-27-02_2-4 383241 10/11/02 SOLID 1.0 ug/Kg	SB-27-03_4-6 383242 10/11/02 SOLID 2.0 ug/Kg	SB-27-04_10-10.2 383243 10/11/02 SOLID 5.0 ug/Kg
Naphthalene	13000	26000 J	39 J	58 J	170 J	320 J
Acenaphthylene	41000	5400 J	73 J	140 J	470 J	610 J
Acenaphthene	50000	23000 J	49 J	27 J	420 J	440 J
Fluorene	50000	37000 J	61 J	47 J	500 J	620 J
Phenanthrene	50000	110000 J	580 J	290 J	4800 J	5400 J
Anthracene	50000	47000 J	180 J	150 J	1600 J	1700 J
Fluoranthene	50000	86000 J	670 J	510 J	8000 J	7000 J
Pyrene	50000	78000 J	730 J	870 J	10000 J	7200 J
Benzo(a)anthracene	224 or MDL	36000 J	320 J	320 J	4700 J	3900 J
Chrysene	600	34000 J	350 J	320 J	5200 J	4000 J
Benzo(b)fluoranthene	1100	30000 J	480 J	520 J	6100 J	5400 J
Benzo(k)fluoranthene	1100	14000 J	190 J	210 J	2800 J	1900 J
Benzo(a)pyrene	62 or MDL	27000 J	300 J	290 J	4500 J	3600 J
Indeno(1,2,3-cd)pyrene	3200	14000 J	89 J	100 J	1600 J	1300 J
Dibenz(a,h)anthracene	14 or MDL	3700 J	37 J	35 UJ	450 J	410 J
Benzo(g,h,i)perylene	50000	12000 J	90 J	140 J	1200 J	1200 J

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-29-01 384038 10/14/02 SOLID 1.0 ug/Kg	SB-29-02 384039 10/14/02 SOLID 2.0 ug/Kg	SB-29-02_DUP 384040 10/14/02 SOLID 2.0 ug/Kg	SB-29-03 384041 10/14/02 SOLID 10.0 ug/Kg	SB-29-04 384042 10/14/02 SOLID 1.0 ug/Kg
Naphthalene	13000	27 J	260 J	360 J	1900 J	300 J
Acenaphthylene	41000	360 U	600 J	760 J	4300 J	230 J
Acenaphthene	50000	100 J	140 J	110 J	850 J	1600
Fluorene	50000	150 J	230 J	190 J	2800 J	1000
Phenanthrene	50000	1400	2400	2200	22000	1600
Anthracene	50000	330 J	940	870	10000	670
Fluoranthene	50000	1500	5500	5400	53000	2000
Pyrene	50000	980	4600	4500	42000	1300
Benzo(a)anthracene	224 or MDL	620	3700	4000	33000	980
Chrysene	600	630	3400	3400	28000	720
Benzo(b)fluoranthene	1100	620	5000	4900	34000	910
Benzo(k)fluoranthene	1100	230	2100	2500	16000	490
Benzo(a)pyrene	62 or MDL	450	4000	4000	29000	830
Indeno(1,2,3-cd)pyrene	3200	270	2600	2700	16000	440
Dibenz(a,h)anthracene	14 or MDL	79	750	770	4900	130
Benzo(g,h,i)perylene	50000	280 J	2300	2400	14000	400 J

See Table E-1 for abbreviations and qualifiers.

TABLE E-3
PAH Compounds - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	New York TAGM Rec. Soil Cleanup Objective Criteria (ug/kg)	SB-29-04_DUP 384043 10/14/02 SOLID 1.0 ug/Kg	SB-29-05 384044 10/14/02 SOLID 1.0 ug/Kg	TP-01_13.5 382306 10/07/02 SOLID 1.0 ug/Kg	T2-2_11 382307 10/07/02 SOLID 1.0 ug/Kg
Naphthalene	13000	670	48 J	410 U	84 J
Acenaphthylene	41000	600	55 J	26 J	350 J
Acenaphthene	50000	1700	310 J	240 J	1100
Fluorene	50000	2100	140 J	300 J	1600
Phenanthrene	50000	4100	350 J	64 J	1200
Anthracene	50000	1900	160 J	94 J	630
Fluoranthene	50000	5200	540	310 J	1500
Pyrene	50000	3700	360 J	210 J	1400
Benzo(a)anthracene	224 or MDL	2800	300	92	880
Chrysene	600	2200	260 J	88 J	680
Benzo(b)fluoranthene	1100	2600	320	90	740
Benzo(k)fluoranthene	1100	1200	160	40 J	330
Benzo(a)pyrene	62 or MDL	2200	270	84	640
Indeno(1,2,3-cd)pyrene	3200	1200	160	45	340
Dibenz(a,h)anthracene	14 or MDL	340	46	41 U	120
Benzo(g,h,i)perylene	50000	1000	130 J	42 J	300 J

See Table E-1 for abbreviations and qualifiers.

TABLE E-4
Total Cyanide - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB15-6-8 381203 10/02/02 SOLID	SB15-10-12 381204 10/02/02 SOLID	SB15-16-18 381205 10/02/02 SOLID	SB16-2-4 381206 10/02/02 SOLID	SB16-4-6 381207 10/03/02 SOLID
Total Cyanide	NA	0.5 U	2.3	0.5 U	0.5 U	0.5 U

See Table E-1 for abbreviations and qualifiers

TABLE E-4
Total Cyanide - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB16-6-8 381208 10/03/02 SOLID	SB17-8-10 381210 10/03/02 SOLID	SB17-8-10D 381211 10/03/02 SOLID	SB17-12-14 381213 10/03/02 SOLID	SB17-18-20 381214 10/03/02 SOLID
Total Cyanide	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table E-1 for abbreviations and qualifiers

TABLE E-4
Total Cyanide - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB18-6-8 381538 10/04/02 SOLID	SB18-12-14 381539 10/04/02 SOLID	SB18-14-16 381540 10/04/02 SOLID	SB-19_0-2 382308 10/07/02 SOLID	SB-19_2-4 382309 10/07/02 SOLID
Total Cyanide	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table E-1 for abbreviations and qualifiers

TABLE E-4
Total Cyanide - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-20_4-6 382302 10/07/02 SOLID	SB-20_6-8 382303 10/08/02 SOLID	SB-20_10-12 382304 10/08/02 SOLID	SB-20_14-14.3 382305 10/08/02 SOLID	SB-21_0-2 382310 10/08/02 SOLID
Total Cyanide	NA	0.5 U	10.1	5.8	13.2	0.5 U

See Table E-1 for abbreviations and qualifiers

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-21_4-6 382311 10/08/02 SOLID	SB-21_6-8 382312 10/08/02 SOLID	SB-21_8-10 382313 10/08/02 SOLID	SB-21_10-12 382314 10/08/02 SOLID	SB-22-01_8-10 382849 10/09/02 SOLID
Total Cyanide	NA	0.5 U	28.5	0.5 U	0.5 U	81.6 J

See Table E-1 for abbreviations and qualifiers

TABLE E-4
Total Cyanide - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-22-02_10-12 382850 10/09/02 SOLID	SB-22-03_14-16 382851 10/09/02 SOLID	SB-22-04_16-18 382852 10/09/02 SOLID	SB-22-05_18-19.1 382853 10/09/02 SOLID	SB-23-03 382856 10/09/02 SOLID
Total Cyanide	NA	37.7 J	3.7 J	30.9 J	1.5 J	10.6 J

See Table E-1 for abbreviations and qualifiers

TABLE E-4
Total Cyanide - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-24-01_1-3 383230 10/10/02 SOLID	SB-24-02_3-5 383231 10/10/02 SOLID	SB-24-04_7-9 383233 10/10/02 SOLID	SB-24-05_9-10.8 383234 10/10/02 SOLID	SB-25-02_6-8 383225 10/10/02 SOLID
Total Cyanide	NA	0.5 U	1.4	28.6	18.3	23.6

See Table E-1 for abbreviations and qualifiers

TABLE E-4
Total Cyanide - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-25-03_8-10 383226 10/10/02 SOLID	SB-25-04_10-12 383227 10/10/02 SOLID	SB-25-04Dup10-12 383229 10/10/02 SOLID	SB-25-05_16-16.7 383228 10/10/02 SOLID	SB-26-01_0-2 383235 10/11/02 SOLID
Total Cyanide	NA	35.8	5.2	13.2	0.5 U	0.5 U

See Table E-1 for abbreviations and qualifiers

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-26-02_4-6 383236 10/11/02 SOLID	SB-26-03_8-10 383237 10/11/02 SOLID	SB-26-04_10-12 383238 10/11/02 SOLID	SB-26-05_14-15.2 383239 10/11/02 SOLID	SB-27-01_0-2 383240 10/11/02 SOLID
Total Cyanide	NA	0.5 U	0.5 U	0.5 U	5.2	0.5 U

See Table E-1 for abbreviations and qualifiers

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-27-02_2-4 383241 10/11/02 SOLID	SB-27-03_4-6 383242 10/11/02 SOLID	SB-27-04_10-10.2 383243 10/11/02 SOLID	SB-29-01 384038 10/14/02 SOLID	SB-29-02 384039 10/14/02 SOLID
Total Cyanide	NA	0.5 U	0.5 U	0.5 U	0.5 U	1.2

See Table E-1 for abbreviations and qualifiers

TABLE E-4
Total Cyanide - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-29-02_DUP 384040 10/14/02 SOLID	SB-29-03 384041 10/14/02 SOLID	SB-29-04 384042 10/14/02 SOLID	SB-29-04_DUP 384043 10/14/02 SOLID	SB-29-05 384044 10/14/02 SOLID
Total Cyanide	NA	0.5 U	2.4	4.5	4.6	2.5

See Table E-1 for abbreviations and qualifiers

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	TP-01_13.5 382306 10/07/02 SOLID	T2-2_11 382307 10/07/02 SOLID
Total Cyanide	NA	0.9	0.69

See Table E-1 for abbreviations and qualifiers

TABLE E-5
Total Organic Carbon - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB15-16-18 381205 10/02/02 SOLID	SB16-6-8 381208 10/03/02 SOLID	SB17-18-20 381214 10/03/02 SOLID	SB18-12-14 381539 10/04/02 SOLID	SB-19_2-4 382309 10/07/02 SOLID
Total Organic Carbon	NA	48000	39800	14600	22500	21100

See Table E-1 for abbreviations and qualifiers.

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-20_14-14.3 382305 10/08/02 SOLID	SB-21_10-12 382314 10/08/02 SOLID	SB-22-04_16-18 382852 10/09/02 SOLID	SB-23-03 382856 10/09/02 SOLID	SB-24-05_9-10.8 383234 10/10/02 SOLID
Total Organic Carbon	NA	32400	167000	10400	13500	117000

See Table E-1 for abbreviations and qualifiers.

TABLE E-5
Total Organic Carbon - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-25-04_10-12 383227 10/10/02 SOLID	SB-25-05_16-16.7 383228 10/10/02 SOLID	SB-25-04Dup10-12 383229 10/10/02 SOLID	SB-26-05_14-15.2 383239 10/11/02 SOLID
Total Organic Carbon	NA	45200	113000	45200	100000

See Table E-1 for abbreviations and qualifiers.

TABLE E-5
Total Organic Carbon - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	SB-27-04_10-10.2 383243 10/11/02 SOLID	SB-29-02 384039 10/14/02 SOLID	SB-29-02_DUP 384040 10/14/02 SOLID	SB-29-05 384044 10/14/02 SOLID	TP-01_13.5 382306 10/07/02 SOLID
Total Organic Carbon	NA	63900	98900	100000	2220	5500

See Table E-1 for abbreviations and qualifiers.

TABLE E-5
Total Organic Carbon - Subsurface Soils
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/kg	New York TAGM Rec. Soil Cleanup Objective Criteria (mg/kg)	T2-2_11 382307 10/07/02 SOLID
Total Organic Carbon	NA	26700

See Table E-1 for abbreviations and qualifiers.

TABLE E-6
Volatile Organic Compounds - Groundwater
NM NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	NYSDEC Quality Standards/ Guidance Values Class GA ug/L	FWMW-1 387007 10/29/02 WATER 1.0 ug/L	FWMW-1D 387008 10/29/02 WATER 1.0 ug/L	FWMW-2 387792 10/31/02 WATER 1.0 ug/L	MW-3 387793 10/31/02 WATER 1.0 ug/L	FWMW-3 387794 10/31/02 WATER 1.0 ug/L
Chloromethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
VinylChloride	2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
MethyleneChloride	5	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Acetone	50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
CarbonDisulfide	NC	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	5	5.0 U	5.0 U	1.9 J	5.0 U	5.0 U
Chloroform	7	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	5.0 R	5.0 R	5.0 R
2-Butanone	50	5.0 R	5.0 R	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	5	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U
CarbonTetrachloride	5	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	0.4	5.0 U	5.0 U	1.0 U	1.9	1.0 U
Trichloroethene	5	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	50	5.0 U	5.0 U	3.0 U	3.0 U	3.0 U
1,1,2-Trichloroethane	1	3.0 U	3.0 U	1.0 U	1.0 U	0.7 J
Benzene	1	20 J	4.7 J	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	5.0 U	4.0 U	4.0 U	4.0 U
Bromoform	50	4.0 U	4.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	NC	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	50	5.0 U	5.0 U	1.0 U	0.7 J	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U
Toluene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	5	5.0 U	5.0 U	4.0 U	4.0 U	4.0 U
Ethylbenzene	5	4.0 U	4.0 U	5.0 U	5.0 U	5.0 U
Styrene	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylene(Total)	5	5.0 U	5.0 U			

See Table E-1 for abbreviations and qualifiers

TABLE E-6
Volatile Organic Compounds - Groundwater
NM NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	NYSDEC Quality Standards/ Guidance Values Class GA ug/L	FWMW-4 387420 10/30/02 WATER 1.0 ug/L	FWMW-5 387795 10/31/02 WATER 1.0 ug/L	FWMW-6 387418 10/30/02 WATER 1.0 ug/L
Chloromethane	5	5.0 U	5.0 U	5.0 U
Bromomethane	5	5.0 U	5.0 U	5.0 U
VinylChloride	2	5.0 U	5.0 U	5.0 U
Chloroethane	5	5.0 U	5.0 U	5.0 U
MethyleneChloride	5	3.0 U	3.0 U	3.0 U
Acetone	50	5.0 U	5.0 U	5.0 U
CarbonDisulfide	NC	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	5	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	5	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	5	5.0 U	5.0 U	0.6 J
Chloroform	7	3.5 J	5.0 U	0.9 J
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U
2-Butanone	50	5.0 R	5.0 R	5.0 R
1,1,1-Trichloroethane	5	5.0 U	5.0 U	5.0 U
CarbonTetrachloride	5	2.0 U	2.0 U	2.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	5.0 U	5.0 U	5.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	1	3.0 U	3.0 U	3.0 U
Benzene	1	8.2	0.6 J	91
trans-1,3-Dichloropropene	0.4	5.0 U	5.0 U	5.0 U
Bromoform	50	4.0 U	4.0 U	4.0 U
4-Methyl-2-Pentanone	NC	5.0 U	5.0 U	5.0 U
2-Hexanone	50	5.0 U	5.0 U	5.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U
Toluene	5	1 J	5.0 U	11
Chlorobenzene	5	5.0 U	5.0 U	5.0 U
Ethylbenzene	5	3 J	4.0 U	28
Styrene	5	5.0 U	5.0 U	5.0 U
Xylene(Total)	5	2.7 J	5.0 U	25

See Table E-1 for abbreviations and qualifiers

TABLE E-7
BNAs - Groundwater
NM NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	NYSDEC Quality Standards/ Guidance Values Class GA ug/L	FWMW-1 387007 10/29/02 WATER 2.0 ug/L	FWMW-1D 387008 10/29/02 WATER 5.0 ug/L	FWMW-2 387792 10/31/02 WATER 1.0 ug/L	FWMW-3 387794 10/31/02 WATER 1.0 ug/L	FWMW-4 387420 10/30/02 WATER 1.0 ug/L
Phenol	NC	20 U	53 U	10 U	10 U	10 U
2-Chlorophenol	NC	20 U	53 U	10 U	10 U	10 U
2-Methylphenol	NC	20 U	53 U	10 U	10 U	0.4 J
4-Methylphenol	NC	20 U	53 U	10 U	10 U	0.4 J
2-Nitrophenol	50	20 U	53 U	10 U	10 U	10 U
2,4-Dimethylphenol	5	20 U	53 U	10 U	10 U	0.4 J
2,4-Dichlorophenol	NC	20 U	53 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	NC	20 U	53 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	NC	20 U	53 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	10	81 U	210 U	41 U	42 U	41 U
2,4-Dinitrophenol	NC	81 U	210 U	41 U	42 U	41 U
4-Nitrophenol	NC	81 U	210 U	41 U	42 U	41 U
4,6-Dinitro-2-methylphenol	1	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8	20 U	53 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether	3	20 U	53 U	10 U	10 U	10 U
1,3-Dichlorobenzene	3	20 U	53 U	10 U	10 U	10 U
1,4-Dichlorobenzene	5	20 U	53 U	10 U	10 U	10 U
1,2-Dichlorobenzene	NC	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
bis(2-chloroisopropyl)ether	5	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	0.4	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
Hexachloroethane	50	20 U	53 U	10 U	10 U	10 U
Nitrobenzene	5	20 U	53 U	10 U	10 U	10 U
Isophorone	5	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethoxy)methane	10	20 U	53 U	10 U	0.9 J	15 U
1,2,4-Trichlorobenzene	5	20 U	53 U	10 U	10 U	10 U
Naphthalene	0.5	4.0 U	10 U	2.0 U	0.3 JN	2.0 U
4-Chloroaniline	NC	20 U	53 U	10 U	10 U	3.8 J
Hexachlorobutadiene	5	20 UJ	53 UJ	10 UJ	10 UJ	10 UJ
2-Methylnaphthalene	10	20 U	53 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	5	40 U	100 U	20 U	21 U	20 U
2-Chloronaphthalene	50	20 U	53 U	10 U	10 U	10 U
2-Nitroaniline	NC	20 U	53 U	10 U	10 U	3.5 J
Dimethylphthalate	5	4.0 U	10 U	2.0 U	2.1 U	2.0 U
Acenaphthylene	5	40 U	100 U	20 U	21 U	20 U
2,6-Dinitrotoluene						
3-Nitroaniline						

See Table E-1 for abbreviations and qualifiers

TABLE E-7
BNAs - Groundwater
NM NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	NYSDEC Quality Standards/ Guidance Values - Class GA ug/L	FWMW-1 387007 10/29/02 WATER 2.0 ug/L	FWMW-1D 387008 10/29/02 WATER 5.0 ug/L	FWMW-2 387792 10/31/02 WATER 1.0 ug/L	FWMW-3 387794 10/31/02 WATER 1.0 ug/L	FWMW-4 387420 10/30/02 WATER 1.0 ug/L
Acenaphthene	20	20 U	53 U	10 U	3.1 J	1.7 J
Dibenzofuran	NC	20 U	53 U	10 U	10 U	1.9 J
2,4-Dinitrotoluene	5	4.0 U	10 U	2.0 U	2.1 U	2.0 U
Diethylphthalate	50	20 U	53 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	NC	20 U	53 U	10 U	10 U	10 U
Fluorene	50	20 U	53 U	10 U	0.4 J	2.4 J
4-Nitroaniline	5	40 U	100 U	20 U	21 U	20 U
N-Nitrosodiphenylamine	50	20 U	53 U	10 U	1.5 JN	10 U
4-Bromophenyl-phenylether	NC	20 U	53 U	10 U	10 U	10 U
Hexachlorobenzene	0.04	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
Phenanthrene	50	20 U	53 U	10 U	10 U	1.9 J
Anthracene	50	20 U	53 U	10 U	10 U	0.6 J
Carbazole	NC	20 U	53 U	10 U	0.5 J	4 J
Di-n-butylphthalate	50	20 U	53 U	10 U	10 U	10 U
Fluoranthene	50	20 U	53 U	10 U	10 U	0.6 J
Pyrene	50	20 U	53 U	10 U	10 U	0.4 J
Butylbenzylphthalate	50	20 U	53 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	5	40 U	100 U	20 U	21 U	20 U
Benzo(a)anthracene	0.002	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
Chrysene	0.002	20 U	53 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	5	240 J	340 J	10 U	10 U	10 U
Di-n-octylphthalate	50	20 U	53 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.002	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
Benzo(k)fluoranthene	0.002	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
Benzo(a)pyrene	ND	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	0.002	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
Dibenz(a,h)anthracene	NC	2.0 U	5.3 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	NC	20 U	53 U	10 U	10 U	10 U

See Table E-1 for abbreviations and qualifiers

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	NYSDEC Quality Standards/ Guidance Values Class GA ug/L	FWMW-5 387795 10/31/02 WATER 1.0 ug/L	FWMW-6 387418 10/30/02 WATER 1.0 ug/L
Phenol	NC	10 U	10 U
2-Chlorophenol	NC	10 U	10 U
2-Methylphenol	NC	10 U	0.6 J
4-Methylphenol	NC	10 U	1.5 J
2-Nitrophenol	NC	10 U	10 U
2,4-Dimethylphenol	50	10 U	10 U
2,4-Dichlorophenol	5	10 U	10 U
4-Chloro-3-methylphenol	NC	10 U	10 U
2,4,6-Trichlorophenol	NC	10 U	10 U
2,4,5-Trichlorophenol	NC	10 U	10 U
2,4-Dinitrophenol	10	42 U	40 U
4-Nitrophenol	NC	42 U	40 U
4,6-Dinitro-2-methylphenol	NC	42 U	40 U
Pentachlorophenol	NC	42 U	40 U
bis(2-Chloroethyl)ether	1	1.0 U	1.0 U
1,3-Dichlorobenzene	3	10 U	10 U
1,4-Dichlorobenzene	3	10 U	10 U
1,2-Dichlorobenzene	3	10 U	10 U
bis(2-chloroisopropyl)ether	5	10 U	10 U
N-Nitroso-di-n-propylamine	NC	1.0 U	1.0 U
Hexachloroethane	5	1.0 U	1.0 U
Nitrobenzene	0.4	1.0 U	1.0 U
Isophorone	50	10 U	10 U
bis(2-Chloroethoxy)methane	5	10 U	10 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U
Naphthalene	10	10 U	27
4-Chloroaniline	5	10 U	10 U
Hexachlorobutadiene	0.5	2.1 U	2.0 U
2-Methylnaphthalene	NC	10 U	13
Hexachlorocyclopentadiene	5	10 UJ	10 UJ
2-Chloronaphthalene	10	10 U	10 U
2-Nitroaniline	5	21 U	20 U
Dimethylphthalate	50	10 U	10 U
Acenaphthylene	NC	0.4 J	18
2,6-Dinitrotoluene	5	2.1 U	2.0 U
3-Nitroaniline	5	.21 U	20 U

See Table E-1 for abbreviations and qualifiers

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	NYSDEC Quality Standards/ Guidance Values Class GA ug/L	FWMW-5 387795 10/31/02 WATER 1.0 ug/L	FWMW-6 387418 10/30/02 WATER 1.0 ug/L
Acenaphthene	20	2.9 J	49
Dibenzofuran	NC	0.5 J	29
2,4-Dinitrotoluene	5	2.1 U	2.0 U
Diethylphthalate	50	10 U	10 U
4-Chlorophenyl-phenylether	NC	10 U	10 U
Fluorene	50	1 J	42
4-Nitroaniline	5	21 U	20 U
N-Nitrosodiphenylamine	50	10 U	10 U
4-Bromophenyl-phenylether	NC	10 U	10 U
Hexachlorobenzene	0.04	1.0 U	1.0 U
Phenanthrene	50	1.3 J	36
Anthracene	50	0.8 J	10 J
Carbazole	NC	0.8 J	36
Di-n-butylphthalate	50	10 U	10 U
Fluoranthene	50	2.4 J	5.3 J
Pyrene	50	1.7 J	4.4 J
Butylbenzylphthalate	50	10 U	10 U
3,3'-Dichlorobenzidine	5	21 U	20 U
Benzo(a)anthracene	0.002	1.4 N	1.4 N
Chrysene	0.002	0.9 J	1 J
bis(2-Ethylhexyl)phthalate	5	10 U	10 U
Di-n-octylphthalate	50	10 U	10 U
Benzo(b)fluoranthene	0.002	0.9 J	0.8 J
Benzo(k)fluoranthene	0.002	0.6 J	0.4 J
Benzo(a)pyrene	ND	0.8 J	0.7 J
Indeno(1,2,3-cd)pyrene	0.002	0.4 J	0.3 J
Dibenz(a,h)anthracene	NC	1.0 U	1.0 U
Benzo(g,h,i)perylene	NC	0.4 J	0.3 J

See Table E-1 for abbreviations and qualifiers

TABLE E-8
TAL Metals - Groundwater
NM NGrid Little Falls (East Mill Street) Site
Page 1 of 2

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	NYSDEC Water Quality Standards/Guidance Values ug/l	FWMW-1 387007 10/29/02 WATER NA ug/l	FWMW-1D 387008 10/29/02 WATER NA ug/l	FWMW-2 387792 10/31/02 WATER NA ug/l	FWMW-3 387794 10/31/02 WATER NA ug/l	FWMW-4 387420 10/30/02 WATER NA ug/l
Aluminum	NC	1050	1190	7150	248	15900
Antimony	3	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Arsenic	25	3.4 U	3.4 U	5.7	3.4 U	21.6
Barium	1000	254	260	429	71.2 B	177 B
Beryllium	3	0.10 U	0.10 U	0.36 B	0.10 U	1.1 B
Cadmium	5	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Calcium	NC	129000	130000	277000	128000	167000
Chromium	50	2.8 U	2.8 U	11.3	2.8 U	31.9
Cobalt	NC	3.5 U	3.5 U	16.3 B	3.5 U	11.3 B
Copper	200	3.7 B	4.2 B	74.2	2.1 U	626
Iron	300	9490 J	9830 J	16100 J	419 J	31200 J
Lead	25	5.2	4.3	19.6	2.5 B	65.6
Magnesium	35000	41500	41600	27100	13900	39100
Manganese	300	393	394	1970	298	721
Mercury	0.7	0.10 U	0.10 U	0.10 U	0.10 U	0.42
Nickel	100	4.7 B	4.0 B	12.4 B	3.9 U	34.2 B
Potassium	NC	7200	7300	8860	6730	14600
Selenium	10	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Silver	50	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Sodium	20000	109000	110000	676000	29200	15400
Thallium	0.5	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
Vanadium	NC	5.1 U	5.1 U	15.1 B	5.1 U	35.2 B
Zinc	2000	23.9 B	27.5 B	93.3	13.0 B	260

See Table E-1 for abbreviations and qualifiers

TABLE E-8
TAL Metals - Groundwater
NM NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor Units	NYSDEC Water Quality Standards/Guidance Values ug/l	FWMW-5 387795 10/31/02 WATER NA ug/l	FWMW-6 387418 10/30/02 WATER NA ug/l
Aluminum	NC	295	1030
Antimony	3	3.9 U	3.9 U
Arsenic	25	3.4 U	44.8
Barium	1000	55.4 B	94.5 B
Beryllium	3	0.10 U	0.10 U
Cadmium	5	0.40 U	0.40 U
Calcium	NC	145000	214000
Chromium	50	2.8 U	4.2 B
Cobalt	NC	3.5 U	3.5 U
Copper	200	2.1 U	63.0
Iron	300	1480 J	4520 J
Lead	25	2.2 U	6.1
Magnesium	35000	14100	32200
Manganese	300	303	3740
Mercury	0.7	0.10 U	0.10 U
Nickel	100	3.9 U	4.0 B
Potassium	NC	3010 B	8970
Selenium	10	3.9 U	3.9 U
Silver	50	0.70 U	0.70 U
Sodium	20000	8820	39100
Thallium	0.5	4.4 U	4.4 U
Vanadium	NC	5.1 U	5.1 U
Zinc	2000	11.3 B	60.5

See Table E-1 for abbreviations and qualifiers

TABLE E-9
Groundwater Quality/Natural Attenuation Parameters - Groundwater
NM NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - See Parameter	NYSDEC Quality Standards/ Guidance Values Class GA ug/L	FWMW-1 387007 10/29/02 WATER	FWMW-1D 387008 10/29/02 WATER	FWMW-2 387792 10/31/02 WATER	FWMW-3 387794 10/31/02 WATER	FWMW-4 387420 10/30/02 WATER	FWMW-5 387795 10/31/02 WATER	FWMW-6 387418 10/30/02 WATER
Alkalinity - mg/l	NC	494	494	72.0	77.0	394	75.0	584
Ammonia - mg/l	2000	0.34	0.33	2.7	0.1 U	0.44	0.1 U	0.41
BOD - mg/l	NC	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
COD - mg/l	NC	138 J	66.2 J	143	16.8	69.2	14.7	48.3
Chloride - mg/l	250,000	175	175	1370	22.5	7.5	12.0	108
Conductivity - mS/cm	NC	1.54	NA	4.95	0.639	0.765	0.628	1.48
Cyanide, Total - mg/l	200	0.01 U	0.01 U	0.01 U	0.092	0.25	0.095	0.098
Dissolved Oxygen-mg/l	NC	0.64	NA	10.26	5.41	0.94	9.31	7.71
Ethane - ug/L	NC	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U
Ethene - ug/L	NC	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U
Ferrous Iron - mg/l	NC	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methane - ug/L	NC	280 J	110 J	100	29	22	5.0 U	300
Nitrate - mg/l	NC	0.13	0.14	0.1 U	0.15	1.1	0.1 U	0.1 U
OrthoPhosphate - mg/l	NC	0.092	0.089	0.18	0.03 U	0.031	0.04	0.1
pH - standard units	NC	6.94	NA	7	6.84	7.35	7.08	6.93
Oxidation-Reducion Potential - mV	NC	-110	NA	-66	28	101	-42	-69
Sulfate - mg/l	NC	66.1	64.1	59.5	62.7	186	80.8	129
TotalDissolvedSolids - mg/l	NC	831	854	2910	536	674	514	955
Turbidity - NTU	NC	26.4	NA	481	138	28.3	36.4	454
TotalOrganicCarbon - mg/l	NC	7.8 J	4.5 J	9.5	2.9	19.6	1.8	38.0

See Table E-1 for abbreviations and qualifiers

TABLE E-10
BTEX Compounds - Quality Assurance/Quality Control
NM-NGrid Little Falls (East Mill Street) Site

Sample ID	Trip_Blank	FB10302	FW-FB-02	FW-TB-02	FW-TB-03	FW-FB-03
Lab Sample Number	381212	381209	383222	383223	384036	384037
Sampling Date	09/30/02	10/03/02	10/11/02	10/11/02	10/14/02	10/14/02
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Xylene(Total)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

See Table E-1 for abbreviations and qualifiers.

TABLE E-11
PAH Compounds - Quality Assurance/Quality Control
NM-NGrid Little Falls (East Mill Street) Site

Sample ID	FB10302	FW-FB-02
Lab Sample Number	381209	383222
Sampling Date	10/03/02	10/11/02
Matrix	WATER	WATER
Dilution Factor	1.0	1.0
Units	ug/L	ug/L
Naphthalene	0.2 U	12 U
Acenaphthylene	0.2 U	12 U
Acenaphthene	0.4 U	12 U
Fluorene	0.2 U	12 U
Phenanthrene	0.2 U	0.5 J
Anthracene	0.3 U	12 U
Fluoranthene	0.3 U	12 U
Pyrene	0.2 U	12 U
Benzo(a)anthracene	0.2 U	1.2 U
Chrysene	0.2 U	12 U
Benzo(b)fluoranthene	0.4 U	1.2 U
Benzo(k)fluoranthene	0.091 U	1.2 U
Benzo(a)pyrene	0.4 U	1.2 U
Indeno(1,2,3-cd)pyrene	0.8 U	1.2 U
Dibenz(a,h)anthracene	0.6 U	1.2 U
Benzo(g,h,i)perylene	1.0 U	12 U

See Table E-1 for abbreviations and qualifiers.

TABLE E-12
Total Cyanide - Quality Assurance/Quality Control
NM-NGrid Little Falls (East Mill Street) Site

Sample ID	FW-FB-02	FW-FB-03
Lab Sample Number	383222	384037
Sampling Date	10/11/02	10/14/02
Matrix	WATER	WATER
Dilution Factor - NA		
Units	mg/l	mg/l
Total Cyanide	0.01 U	0.01 U

See Table E-1 for abbreviations and qualifiers

TABLE E-13
Total Organic Carbon - Quality Assurance/Quality Control
NM-NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - mg/l	FB10302 381209 10/03/02 WATER mg/l	FW-FB-02 383222 10/11/02 WATER mg/l
Total Organic Carbon	1.0 U	1.0 U

See Table E-1 for abbreviations and qualifiers.

TABLE E-14
Volatile Organic Compounds - Quality Assurance/Quality Control
NM NGrid Little Falls (East Mill Street) Site

Sample ID	FB-103002	Trip_Blank	Trip_Blank
Lab Sample Number	387419	387009	387421
Sampling Date	10/30/02	10/29/02	10/25/02
Matrix	WATER	WATER	WATER
Dilution Factor	1.0	1.0	1.0
Units	ug/L	ug/L	ug/L
Chloromethane	5.0 U	5.0 U	5.0 U
Bromomethane	5.0 U	5.0 U	5.0 U
VinylChloride	5.0 U	5.0 U	5.0 U
Chloroethane	5.0 U	5.0 U	5.0 U
MethyleneChloride	3.0 U	3.0 U	3.0 U
Acetone	5.0 U	5.0 U	5.0 U
CarbonDisulfide	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	5.0 U	5.0 U	5.0 U
Chloroform	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	2.0 U	2.0 U	2.0 U
2-Butanone	5.0 R	5.0 R	5.0 R
1,1,1-Trichloroethane	5.0 U	5.0 U	5.0 U
CarbonTetrachloride	2.0 U	2.0 U	2.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	3.0 U	3.0 U	3.0 U
Benzene	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U
Bromoform	4.0 U	4.0 U	4.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U
Toluene	5.0 U	5.0 U	5.0 U
Chlorobenzene	5.0 U	5.0 U	5.0 U
Ethylbenzene	4.0 U	4.0 U	4.0 U
Styrene	5.0 U	5.0 U	5.0 U
Xylene(Total)	5.0 U	5.0 U	5.0 U

See Table E-1 for abbreviations and qualifiers

TABLE E-15
BNAs - Quality Assurance/Quality Control
NM NGrid Little Falls (East Mill Street) Site

Sample ID	FB-103002
Lab Sample Number	387419
Sampling Date	10/30/02
Matrix	WATER
Dilution Factor	1.0
Units	ug/L
Phenol	10 U
2-Chlorophenol	10 U
2-Methylphenol	10 U
4-Methylphenol	10 U
2-Nitrophenol	10 U
2,4-Dimethylphenol	10 U
2,4-Dichlorophenol	10 U
4-Chloro-3-methylphenol	10 U
2,4,6-Trichlorophenol	10 U
2,4,5-Trichlorophenol	10 U
2,4-Dinitrophenol	40 U
4-Nitrophenol	40 U
4,6-Dinitro-2-methylphenol	40 U
Pentachlorophenol	40 U
bis(2-Chloroethyl)ether	1.0 U
1,3-Dichlorobenzene	10 U
1,4-Dichlorobenzene	10 U
1,2-Dichlorobenzene	10 U
bis(2-chloroisopropyl)ether	10 U
N-Nitroso-di-n-propylamine	1.0 U
Hexachloroethane	1.0 U
Nitrobenzene	1.0 U
Isophorone	10 U
bis(2-Chloroethoxy)methane	10 U
1,2,4-Trichlorobenzene	1.0 U
Naphthalene	10 U
4-Chloroaniline	10 U
Hexachlorobutadiene	2.0 U
2-Methylnaphthalene	10 U
Hexachlorocyclopentadiene	10 UJ
2-Chloronaphthalene	10 U
2-Nitroaniline	20 U
Dimethylphthalate	10 U
Acenaphthylene	10 U
2,6-Dinitrotoluene	2.0 U
3-Nitroaniline	20 U

See Table E-1 for abbreviations and qualifiers

Sample ID	FB-103002
Lab Sample Number	387419
Sampling Date	10/30/02
Matrix	WATER
Dilution Factor	1.0
Units	ug/L
Acenaphthene	10 U
Dibenzofuran	10 U
2,4-Dinitrotoluene	2.0 U
Diethylphthalate	10 U
4-Chlorophenyl-phenylether	10 U
Fluorene	10 U
4-Nitroaniline	20 U
N-Nitrosodiphenylamine	10 U
4-Bromophenyl-phenylether	10 U
Hexachlorobenzene	1.0 U
Phenanthrene	10 U
Anthracene	10 U
Carbazole	10 U
Di-n-butylphthalate	10 U
Fluoranthene	10 U
Pyrene	10 U
Butylbenzylphthalate	10 U
3,3'-Dichlorobenzidine	20 U
Benzo(a)anthracene	1.0 U
Chrysene	10 U
bis(2-Ethylhexyl)phthalate	10 U
Di-n-octylphthalate	10 U
Benzo(b)fluoranthene	1.0 U
Benzo(k)fluoranthene	1.0 U
Benzo(a)pyrene	1.0 U
Indeno(1,2,3-cd)pyrene	1.0 U
Dibenz(a,h)anthracene	1.0 U
Benzo(g,h,i)perylene	10 U

See Table E-1 for abbreviations and qualifiers

TABLE E-16
TAL Metals - Quality Assurance/Quality Control
NM NGrid Little Falls (East Mill Street) Site

Sample ID	FB-103002
Lab Sample Number	387419
Sampling Date	10/30/02
Matrix	WATER
Dilution Factor	NA
Units	ug/l
Aluminum	77.4 U
Antimony	3.9 U
Arsenic	3.4 U
Barium	0.80 U
Beryllium	0.10 U
Cadmium	0.40 U
Calcium	74.5 U
Chromium	2.8 U
Cobalt	3.5 U
Copper	2.1 U
Iron	39.7 J
Lead	2.2 U
Magnesium	70.0 U
Manganese	2.9 U
Mercury	0.10 U
Nickel	3.9 U
Potassium	106 U
Selenium	3.9 U
Silver	0.70 U
Sodium	361 U
Thallium	4.4 U
Vanadium	5.1 U
Zinc	7.2 B

See Table E-1 for abbreviations and qualifiers

TABLE E-17
Groundwater Quality/Natural Attenuation Parameters - Quality Assurance/Quality Control
NM NGrid Little Falls (East Mill Street) Site

Sample ID Lab Sample Number Sampling Date Matrix Dilution Factor - NA Units - See Parameter	FB-103002 387419 10/30/02 WATER	Trip_Blank 387421 10/25/02 WATER
Alkalinity - mg/l	5.0 U	NR
Ammonia - mg/l	0.1 U	NR
BOD - mg/l	5.0 U	NR
Chloride - mg/l	5.0 U	NR
COD - mg/l	10.0 U	NR
Ethane - ug/L	5.0 U	5.0 U
Ethene - ug/L	5.0 U	5.0 U
FerrousIron - mg/l	0.1 U	NR
Methane - ug/L	5.0 U	5.0 U
Nitrate - mg/l	0.1 U	NR
OrthoPhosphate - mg/l	0.03 U	NR
Sulfate - mg/l	5.0 U	NR
TotalCyanide - mg/l	0.01 U	NR
TotalDissolvedSolids - mg/l	51.0	NR
TotalOrganicCarbon - mg/l	1.0 U	NR

See Table E-1 for abbreviations and qualifiers