

New York State Electric & Gas Corporation

Former Off-site Gasholder Associated with the Homer Former MGP Site Cortland, New York

INVESTIGATION SUMMARY SEPTEMBER 2006







Mr. William Ports New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7017

RE: Former Off-site Gasholder Location 43 and 45 Charles Street Cortland, New York Investigation Summary

Dear Mr. Ports:

On behalf of New York State Electric & Gas Corporation (NYSEG), URS Corporation (URS) is pleased to present the New York State Department of Environmental Conservation (NYSDEC) with this summary letter report of the investigation work completed in November 2005, April 2006, and June 2006 at the above referenced site.

NYSEG is investigating this site at the request of the NYSDEC who discovered the possible existence of a former gasholder while reviewing historic Sanborn maps of the Cortland area. The objective of the investigation was to determine if physical remnants of the former gasholder or any associated piping remain onsite and to establish the nature and extent of any environmental impacts resulting from the operation of the former gasholder.

In November 2005, the first phase of work for this investigation was completed in general accordance with the *Investigation Work Plan* for the site submitted to the NYSDEC and approved in October 2005. The initial scope consisted of the following seven tasks:

- Task 1 Geophysical Survey
- Task 2 Test Trench Excavation
- Task 3 Geoprobe® Soil Borings
- Task 4 Monitoring Well Installation (including development)
- Task 5 Groundwater Sampling
- Task 6 Soil Vapor/Indoor Air Sampling
- Task 7 Site Survey

All Tasks except Task 6 had been completed by November 2005 and the results were summarized in a letter report submitted to the NYSDEC on February 13, 2006. NYSDEC reviewed the report and, subsequent to discussions with NYSEG and URS, requested the advancement of four additional soil borings to further delineate the western boundary of soil contamination. Also, NYSDEC requested the collection of six surface soil samples for laboratory analysis, one from each of the front yards at 43 and 45 Charles Street and two from the backyard at each property. Concurrently, the homeowner at 45 Charles Street requested that NYSEG investigate and collect samples from several discolored

stones present in the basement wall, which is of stone and mortar construction. NYSEG agreed to investigate the discolored stones and subsequently collected samples during the investigation in June 2006.

Tasks 1 through 5, Task 7, and the above-mentioned additional tasks have been completed at this time. Task 6 still has not been completed, and its necessity is to be determined based on further review of the results presented herein and future discussions between URS, NYSEG, the NYSDEC, and the New York State Department of Health (NYSDOH). Various changes in the scope of the investigation were necessitated by changes in field conditions. These were discussed and agreed with NYSEG and NYSDEC in the field.

SITE BACKGROUND

In 1858, the Homer & Cortland Gas Light Company (H&CGL) constructed and operated a manufactured gas plant (MGP) at what is now 216 South Main Street (Route 11) in the Village of Homer, Cortland County, New York. Coal gas and carbureted water gas were produced at the MGP from 1858 until 1932. Based on the property deed, as recorded in Liber 43/Page 574 of the City of Cortland records, in May 1867 H&CGL acquired one third of an acre of land, in the City of Cortland, and constructed a 22,000 cubic foot gasholder on the property (the site) as part of a distribution network for the MGP. Figure 1 shows the site location in relation to the former MGP. Historical records and Sanborn maps indicate that the remote gasholder was located at the approximate location shown on Figure 2. Historical records also indicate that in July 1867, H&CGL acquired the rights from a property east of the site to install a gas pipeline extending from the former gasholder east through the property (eight feet south of a house) to North Church Street.

New York State Gas and Electric (a predecessor to NYSEG) acquired the MGP on Route 11 from H&CGL in 1911. In February 1913, H&CGL sold the one third of an acre upon which the gasholder was located to Edward S. Dalton and L.R. Chase. Sanborn maps from 1915 and 1926 indicate the gasholder was no longer present and the residences currently located at 43 and 45 Charles Street existed at that time. Based on the information available, the site boundary has been approximated as the property lines of 43 and 45 Charles Street and is depicted on Figure 2.

The area surrounding the site is an urban setting and has been for well over 100 years. No investigation work that NYSEG or URS is aware of has been completed at the site prior to this effort.

INITIAL INVESTIGATION ACTIVITIES

The first phase of investigation work activities started at the site on November 7 and concluded on November 17, 2005. Site photographs taken during investigation work activities have been included as Appendix A. The activities associated with each of the completed scope items are discussed below.

Geophysical Survey

<u>Activities Completed</u>

On November 7-8, 2005 Geophysical Applications, Inc., under direction of and with assistance from URS, established a reference grid. The reference grid was approximately 105 feet by 80 feet, and grid points were marked with spray paint or chalk every five feet. Geophysical Applications, Inc. acquired subsurface data across the site using ground penetrating radar (GPR) along traverses located 2.5 feet apart. GPR data were recorded using a GSSI model SIR-2000 radar instrument, with a 400 megahertz (MHz) antenna. A vertical scale of 60 nanoseconds was used during this survey. This time interval was selected to enhance deeper reflectors (up to ten feet below ground surface (bgs)) while maintaining the resolution of smaller near-surface buried objects. A report summarizing field activities/results was prepared by Geophysical Applications, Inc. and is attached as Appendix B.

Work Scope Changes

The *Investigation Workplan* indicated that an electromagnetic conductivity survey would be conducted in addition to the GPR survey. Surface obstructions at the site (i.e., houses, trees, fences, etc.) severely restricted accessibility for establishing the number and appropriate spacing of parallel traverses that are needed for effective use of an electromagnetic conductivity meter (EM-31). Based on recommendations from the geophysical contractor, it was determined that the resolution of the data that could be obtained from the limited number and length of traverses that could be performed would be too poor to generate useful information. Therefore, an electromagnetic conductivity survey was not completed.

Test Trenches

On November 9, 2005, Nature's Way Environmental Consultants & Contractors, Inc. (Nature's Way) arrived on site with a mini excavator (Komatsu PC40R) and began the test trench excavation program under the direction of URS. The objective of the test trenches was to investigate anomalies identified by GPR and investigate the possible presence of the former gasholder.

Activities Completed

The results of the ground penetrating radar were reviewed in the field and various anomalies were identified to target test trench locations. A widespread, persistent flat reflector at depths varying from one to three feet bgs was observed in the western portion of the site between the two homes. This reflector was interpreted as being the potential pad of the former gasholder.

Three test trenches were excavated at the locations shown on Figure 2. The trench locations were selected based on anomalies observed during the geophysical survey (i.e., TP-01 was excavated in the vicinity of a couple of small reflectors observed between 1 and 2 feet bgs and TP-03 was excavated in the area of the widespread reflector interpreted as being the potential pad of the former gasholder). The trenches were excavated perpendicular to the suspected walls of the former gasholder with total lengths ranging from approximately 14 to 17 feet.

TP-01 was excavated in the backyard at 43 Charles Street, TP-02 was excavated in the backyard at 45 Charles Street, and TP-03 was excavated in the front yard between the two properties. TP-01 was excavated to 7.5 feet bgs, TP-02 to 7.0 feet bgs, and TP-03 to 10.5 feet bgs. Three samples were collected from each test trench (i.e., from 2.5, 5.0, and 7.5 feet bgs at TP-01; from 2.5, 5.5, and 7.0 feet bgs at TP-02; and 2.5, 5.5, and 10.5 feet bgs at TP-03). The samples were bagged and checked for headspace readings with a photoionization detector (PID), placed in jars, and submitted to Severn Trent Laboratories for analysis. After the samples were collected, the test trenches were backfilled with the excavated material and compacted in lifts with the excavator bucket. Test trench logs are included as Appendix C. A NYSEG landscaping crew returned to the site in the spring to properly re-grade and seed the disturbed areas.

Work Scope Changes

The *Investigation Work Plan* indicated that up to five test trenches would be excavated to approximately five feet bgs with two samples for laboratory analysis collected from each test trench. After discussions at the site between URS, NYSEG, and the NYSDEC, this number was reduced to three test trenches due to physical constraints limiting access for the excavator. However, the test trenches were excavated deeper than originally proposed and three samples were collected from each test trench instead of two.

Geoprobe® Soil Borings and Piezometer Installation

From November 10 through 14, 2005, Nature's Way was on-site with a skid-steer mounted Geoprobe® sampling unit.

Activities Completed

A total of 11 borings, SB-01 through SB-11, were advanced and sampled using a 2-inch-diameter, 4-foot-long Macrocore sampler at the locations presented on Figure 2. At SB-11, sampler refusal was encountered at 11 feet bgs during four repeated attempts (SB-11-1 through SB-11-4). Soil samples were collected for laboratory analysis from all borings except SB-02, which was terminated at 15 feet bgs, after dry material from 8 to 12 feet bgs began collapsing into the hole causing sampler refusal and preventing the collection of a representative sample.

The borings were advanced and sampled to depths ranging from 11 to 23 feet bgs. In most cases soil samples were difficult to recover below 20 feet bgs due to the saturated and loose nature of the materials encountered and borehole collapse. At each boring, soil was continuously sampled, screened with a PID, and logged. Samples were selected for analysis based on visual, olfactory, and PID results. In general, one sample was selected for analysis from the most contaminated zone, and one sample was selected from beneath this zone, if present, at each borehole. All boreholes were backfilled with bentonite. Excess soil cuttings were containerized in 55-gallon drums. Boring logs are included in Appendix D.

Borings SB-06 through SB-09 were completed as piezometers PZ-01 through PZ-04, respectively. The piezometers were:

- Constructed of one-inch-diameter polyvinyl chloride (PVC) flush-threaded screen and riser.
- Equipped with a 10-foot, 0.010-inch slot screen installed to total depths ranging from 22.4 to 23.7 feet bgs.
- Installed through the Macrocore sampled boreholes by advancing 2-inch drive casing to the required depth, inserting the appropriate length of screen and riser, and then retracting the casing while emplacing the sand pack.

At three of the piezometer locations (PZ-01, PZ-03, and PZ-04) the 2-inch drive casing was advanced deeper (and, therefore, the piezometers were installed deeper) than the soils were sampled. This was necessary because the saturated gravel and sand materials encountered at depths of approximately 16 feet bgs collapsed into the boreholes inhibiting the collection of representative samples below 20 feet bgs. The piezometers were installed deeper in the gravel and sand unit (to depths of approximately 24 feet bgs) to ensure the presence of a sufficient water column for the collection of groundwater samples. Well sand (Filpro size #00N) was emplaced in all four piezometers up to 7 feet bgs. The remainder of the piezometer boreholes were then backfilled with bentonite and hydrated. Piezometer construction details are included as Appendix E. On November 15, 2005, Nature's Way installed concrete flush-mount surface road boxes at the piezometer locations and demobilized from the site.

URS developed all four piezometers to visual clarity. Piezometer development logs are included as Appendix F. Investigation-derived wastes (soil, purge water, macrocore liners, and personal protective equipment) were containerized in 55-gallon drums and transferred to the NYSEG property on Route 11 for later characterization and disposal.

Work Scope Changes

The *Investigation Work Plan* indicated that 12 soil borings would be advanced with up to two samples collected for laboratory analysis from each boring. Based on field conditions and space limitations the total number of borings was reduced to 11. Two samples were to be collected per hole primarily to delineate the vertical extent of observed contamination. At several locations two samples were submitted for laboratory analysis even though there was no indication of contamination. These changes were discussed in the field during work activities and agreed upon by all parties (URS, NYSEG, and NYSDEC).

The *Investigation Work Plan* indicated that three pairs of shallow (20 feet bgs) and deep (50 feet bgs) monitoring wells would be installed using conventional hollow stem auger drilling methods. During field activities it was determined (by URS and NYSEG, and agreed upon by the NYSDEC) that four piezometers installed in the Geoprobe® boreholes would be sufficient for obtaining groundwater samples based on the following:

- Groundwater was observed to be relatively shallow (i.e., soils were saturated at 15 to 16 feet bgs).
- The Geoprobe® rig was able to access areas a conventional drill rig could not.
- Minimal soil contamination was observed at shallow depths; therefore, deep groundwater contamination was not expected.

Groundwater Sampling and Elevation

On November 16, 2005, URS purged and sampled the four piezometers using low-flow sampling techniques. Purge logs have been included as Appendix G. All development and purge water was containerized in a 55-gallon drum and transferred to the NYSEG property on Route 11 for later characterization and disposal. Prior to sampling, a complete round of water levels (PZ-01 through PZ-04) was collected.

Surveying

On November 17, 2005, NYSEG surveyors obtained horizontal coordinates and vertical elevations for the test trenches, soil borings and piezometer locations. Survey results are summarized in Table 1

ADDITIONAL INVESTIGATION ACTIVITIES

The additional surface and subsurface soil sampling was conducted on April 26, 2006. On June 12, 2006, the basement at 45 Charles Street was investigated and samples were collected from the discolored stones found there. Site photographs taken during investigation work activities have been included as Appendix A. The activities associated with each of these items are discussed below.

Geoprobe® Soil Borings and Surface Soil Sampling

On April 26, 2006, environmental contractor TREC Environmental was on site with a track-mounted Geoprobe® sampling unit.

Activities Completed

A total of six borings, SB-12 through SB-17, were advanced and sampled using a 2-inch-diameter, 4-foot-long Macrocore sampler at the locations presented on Figure 2. Soil samples were collected for laboratory analysis from all borings.

The borings were advanced and sampled to depths ranging from 15.7 to 16 feet bgs. At each boring, soil was continuously sampled, screened with a PID, and logged. Samples were selected for analysis based on visual, olfactory, and PID results. In general, one sample was selected for analysis from the most contaminated zone, and one sample was selected from beneath this zone, if present, at each borehole. Originally, four borings were proposed for this phase of work; however, based on field conditions encountered, two additional borings were added and one sample was collected from each of these borings for laboratory analysis from the interval containing the most contamination based on visual, olfactory, and PID results. All boreholes were backfilled with excess soil cuttings and bentonite. Boring logs are included in Appendix D.

Six surface soil samples were collected from the locations shown on Figure 2. Surface vegetation was peeled back, and samples for laboratory analysis were collected from 0 to 2 inches below the root zone.

Basement Investigation and Scrape Sampling

On June 12, 2006, at the request of the homeowner at 45 Charles Street, representatives from URS, NYSEG, NYSDEC, and NYSDOH met at the residence to evaluate a black coating observed on select stones in the basement. The homeowner's attorney was also present. The basement walls are of stone and mortar construction. There appeared to be five affected stones (Stones #1 through #5) in the basement walls, all of which are located in an approximately 10 foot by 10 foot room in the northeast corner of the basement: three on the north facing wall and two on the south facing wall. A crawlspace, open to the basement, is located south of the room with the discolored stones. Stones #1 and #2 had a dry black crackly coating and were located on the northern wall, approximately 5 feet apart and 2 to 3.5 feet above the basement floor. Stone #3, also on the north basement wall adjacent to and east of Stone #2, had a dry dusty black mold-like or mildew-like appearance. Stones #4 and #5 were located on the southern wall of the room on an inside corner of the basement wall (i.e., directly behind these stones, the basement wall continues to run north to south). Both of these stones also exhibited the same dry black crackly appearance as Stones #1 and #2 and were located next to each other approximately 3.5 and 2.5 feet above the basement floor, respectively. The locations of the discolored stones are depicted on Figure 3.

After investigating the discolored stones in the basement wall, it was determined that sufficient material for laboratory analysis was present. Subsequently, samples of the material coating the stones were scraped from Stones #1, #2, #4 and #5 using pre-cleaned hand tools. Scrapings were collected onto poly sheeting taped to the wall and then funneled into the sampling jars to be submitted for analysis. During sampling, the surface material collected came off the impacted stones as a fine-grained powder. As sampling depth increased, up to approximately 1/4" deep, the sample material became coarse and contained more of the rock matrix. It was decided to analyze the surface material (up to approximately 1/16" deep) and the deeper material (from approximately 1/16" to 1/4") as two separate samples. In order to generate sufficient sample volume for the analyses, the surface material from all four stones was composited to create one sample, designated Scrape #1. Similarly, the deeper material at all four stones was composited to create a sample designated Scrape #2. To establish background, an additional sample was collected from stones located above the ground surface within the same room. A masonry bit was used to drill into the stones and the resulting powder was collected as Scrape #3. The stones used for the Scrape #3 sample were not discolored. All three samples were submitted to Severn Trent Laboratories (STL) for analysis.

SUBSURFACE CONDITIONS

The various subsurface conditions encountered across the site are summarized below. Test trench, soil boring, and piezometer locations are presented on Figure 2. Test trench logs are included as Appendix C. Boring logs and piezometer construction details are included as Appendix D and E, respectively.

Test Trenches

At TP-01, soils consisted primarily of brown clayey silt with cobbles and coarse gravel; a thin ash layer (less than 6 inches thick) was encountered at approximately a one-foot depth. The soils were generally moist, non-plastic, and medium dense with no obvious layering features. One small piece

of cast iron pipe and one firebrick also were observed in the excavated soils; however, the depth from which the pipe and firebrick came could not be ascertained. Obviously reworked soil and urban fill materials appeared to terminate at 1.5 feet bgs. No odors or staining were observed in the test pit. PID screening results for all soil samples were zero.

Soils at TP-02 consisted primarily of brown/gray clayey silt with cobbles and gravel. One piece of scrap metal and trace red brick were observed near the surface, and the cobbles appeared to become more numerous with depth. The soils were generally moist, non-plastic, and medium dense with no obvious layering features. Obviously reworked soil and urban fill materials appeared to terminate at 1.5 feet bgs. No ash was observed in this trench. No odors or staining were observed. PID screening results for all soil samples were zero.

Results of the geophysical survey indicated a widespread, persistent flat reflector at depths varying from one to three feet bgs in the western portion of the site between the two homes. Originally this was thought to be the potential pad of the former gasholder. TP-03 was excavated to investigate this hypothesis, but nothing was detected at this depth in the excavation other than a consistent layer of ash, and it was suspected that the metals content of the ash material may have caused the observed anomaly. Soils at TP-03 consisted primarily of brown to gray brown clayey silt with cobbles and gravel; however there was a thicker (approximately 6 inches thick) ash and mortar layer encountered at approximately 1.5 feet bgs. At approximately 6 feet bgs there was significantly more fill material including glass, bottles, bricks, firebrick, ash, and metal pipe. Additionally, one ceramic-coated piece of metal and one group of approximately four to five cobbles, encased in a weathered, glassy looking tar and without any odor, were observed. This tar had much different appearance than the black material observed on the stones within the basement at 45 Charles Street; it had a shiny appearance whereas the basement stones were dull and crackly looking. The fill debris continued to the bottom of the excavation at approximately 10.5 feet bgs. A slight MGP-type odor was detected on two pieces of brick found at the bottom of the test pit. PID screening results for all soil samples were zero. Because the site area is situated in an urban setting and filling operations associated with anthropogenic activities have occurred over and beyond the past 100 years, the origin of the fill could not be determined.

Soil Borings

At borings SB-01, SB-02, SB-03, SB-07, SB-09, SB-10, SB-12, SB-13, and SB-15, soils consisted primarily of brown clayey silt and cobbles with gravel to approximately 12 to 16 feet bgs. The upper soil unit was typically dry to moist, non-plastic, and medium dense. Beneath this unit was gray brown silty sand and gravel. Saturated soils were encountered between 15 and 16 feet bgs. The lower unit appeared moist to wet, non-plastic, and medium dense to loose. At SB-04, the lower unit was encountered much shallower at approximately 4 feet bgs.

At SB-05, ash and fill material predominated and a slight undifferentiated odor and dark staining were observed on a thin band (1 to 2 inches thick) of material at 11 feet bgs. No fill materials were observed in this boring beyond 13 feet bgs. At SB-06, a brown silty sand and gravel zone (from 4 to 10.5 feet bgs) was encountered within the brown clayey silt with cobbles and gravel unit that extended to 16 feet bgs where gray brown gravel and silty sand was present.

At SB-08, thin layers of ash were interspersed in the brown clayey silt with cobbles unit to approximately 10 feet bgs. At 10 to 10.2 feet bgs, a slightly stained silt layer with a musty decay odor was observed. No signs of contamination or fill material were indicated beneath this point. The subsurface material at SB-11 was predominantly ash, cinder and coal to approximately 10 feet bgs. Then there was a thin 2-to-3-inch-thick layer of dark stained silt with a decay odor underlain by more ash and gravel. This boring was attempted four times (SB-11-1 through SB-11-4) with consistent refusals at 11 feet bgs. There was no clear indication of what caused the refusal.

At locations SB-14, SB-16, and SB-17, fill materials consisting primarily of ash, cinder, coal fragment, gravel, and sand also were encountered to a depth of 11 to 12 feet bgs. At SB-14 and SB-17, a layer of stained silt with MGP-type odors was encountered from 11 to 12 feet bgs and 9.5 to 10 feet bgs, respectively. All three of these borings were terminated in saturated silty gravel at 16 feet bgs.

Fill materials that were encountered in the soil borings are not necessarily associated with former gasholder operations. Bricks, concrete, cinders, ash, and coal are also common fill materials associated with urban environments. Considering that this location was used only for gas storage – not its manufacture – it's probably that the fill materials resulted from over 100 years of urbanized use of the property and surrounding areas.

Groundwater Occurrence and Flow Direction

In November 2005, groundwater was observed between approximately 14 and 15 feet bgs in the piezometers. Figure 4 presents the groundwater elevation contour map. A very flat horizontal gradient of approximately 0.002 foot/foot was indicated, with a flow direction to the east.

LABORATORY ANALYTICAL RESULTS

All of the samples collected for laboratory analysis were submitted to STL. Additional sample volumes collected for natural oxidant demand (NOD) analysis were sent to Carus Chemical Company. Upon receipt of the laboratory reports, URS completed Analytical Data Assessment Summaries. Generally, a data assessment summary addresses quality control deficiencies resulting in qualification of data. The data assessments for the soil samples, groundwater samples, scrape samples, and field quality control (QC) samples (trip blanks/rinse blanks/matrix spike (MS)/matrix spike duplicate (MSD)) collected on November 9-16, 2005, April 26, 2006, and June 12, 2006 at the site have been included as Appendix H. The laboratory data were generally found to meet QA/QC goals, with the exception of the results for total phenolics in the groundwater samples, which were rejected because they were not recovered (i.e., 0% recovery) in the MS/MSD analyses. The rejection of these data are not likely to impact conclusions regarding the site because no other organic compounds were detected in the groundwater samples.

Test Trench Soil Samples

All samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total phenolics, total metals and total cyanide. In addition, the sample from TP-01 at 5.0 feet bgs was analyzed for total organic carbon (TOC) and NOD. Test trench locations

and the analytical results for compounds that exceeded NYSDEC *Technical and Administrative Guidance Memorandum* #4046 (TAGM) recommended soil cleanup objectives (RSCOs) are listed on Figure 5. Table 2 shows all detected compounds and RSCO exceedances are circled.

Organic Compounds

No VOCs were detected at concentrations above the RSCOs in any test trench. The SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene were each detected at concentrations exceeding the RSCOs in at least one test trench sample. All seven of these compounds are polycyclic aromatic hydrocarbons (PAHs).

In TP-01 and TP-02, the highest detected contaminant concentrations were observed between 2.5 and 5.0 feet bgs (see Figure 5). Only benzo(a)pyrene exceeded the RSCOs in TP-01 (at 7.5 feet bgs), at a concentration of 88 micrograms per kilogram ($\mu g/kg$). Benzo(a)pyrene and dibenzo(a,h)anthracene both exceeded the RSCOs in TP-02 (at 7.0 feet bgs) at concentrations of 150 and 29 $\mu g/kg$, respectively.

In TP-01, the total SVOCs dropped from 20,241 μ g/kg at 2.5 feet bgs, to 848 μ g/kg at 7.5 feet bgs. In TP-02, the total SVOCs reduced from 48,560 μ g/kg at 2.5 feet bgs to 1,349 μ g/kg and 1,416 μ g/kg at 5.5 and 7.5 feet bgs, respectively. This indicates that contaminant concentrations decrease with depth in test trenches TP-01 and TP-02. The concentrations of total SVOCs observed in shallow soils from TP-01 and TP-02 are similar to what could be expected to be normal background concentrations of PAHs in an urban environment.

At TP-03, however, SVOC concentrations increased with depth. Fill materials (ash, cinder, debris) also were observed to increase with depth. In the 2.5-foot and 5.5-foot samples, the total SVOC concentrations were 18,260 and 47,630 μ g/kg, respectively. These results were similar to those observed in the upper soils at TP-01 and TP-02 where results ranged from 1,349 to 48,560 μ g/kg total SVOCs. The TP-03 sample from 10.5 feet bgs exhibited the highest total SVOC concentrations of all the test trench samples collected at 157,000 μ g/kg, most of which (150,900 μ g/kg) are PAHs.

Metals

The analytical results for the test trench soil samples indicate exceedances of the RSCOs for several metals in all samples collected. The metals that consistently exceeded the RSCOs (i.e., beryllium, chromium, iron, nickel, and zinc) exhibit very little variability in concentration from one sampling location to another. With the exception of zinc, the concentrations of the metals detected fall within the ranges reported as Eastern USA background (TAGM #4046).

Arsenic, cadmium, copper, and mercury were detected at concentrations exceeding the RSCOs in the TP-03 sample from 10.5 feet bgs. Mercury also slightly exceeded the RSCOs in the TP-01 and TP-02 samples from 2.5 feet bgs.

Miscellaneous Parameters

No cyanide was detected in any test trench sample. The TOC sample results from TP-01 at 5.0 feet bgs range from 8,700 to 12,000 milligrams per kilogram (mg/kg). NOD is a measure of the amount of naturally occurring organic and inorganic material that competes with contamination for oxidation reagents. NOD results were calculated by the laboratory (Carus Chemical Company), based on permanganate soil groundwater oxidant demand (PSOD). PSOD is measure of the amount of permanganate consumed by a given soil sample over a given period of time. At a high dose of permanganate (33.9 grams per kilogram (g/kg)),it was determined that the PSOD of the soil sample (and its duplicate) ranged from 35.4 to 26.1 g/kg for a 48-our period.

Geoprobe® Soil Samples

During the initial investigation in November 2005, a total of 17 samples were collected from the 11 borings and submitted for analysis of VOCs, SVOCs, total phenolics, total metals and total cyanide. Also, one additional sample at SB-07 (from 13 to 15 feet bgs) was analyzed for TOC and NOD. As agreed upon by the NYSDEC, the ten samples collected from additional borings advanced in April 2006 were submitted for analysis of benzene, toluene, ethylbenzene, and xylene (BTEX), PAHs,and total cyanide only. Soil boring locations and their corresponding analytical results for compounds that exceed RSCOs are depicted on Figure 6. Table 3 shows all compounds that were detected in the soil borings and compares them to RSCOs.

Volatile Organic Compounds

VOCs were detected at concentrations exceeding the RSCOs in only one of the samples collected, at SB-14 from 11 to 12 feet bgs, where ethylbenzene, toluene and xylene were each detected at a concentration exceeding their respective RSCOs. Another sample at this location, from 14 to 15 feet bgs, indicated no VOCs above the RSCOs.

Semi-Volatile Organic Compounds

SVOCs were detected at concentrations exceeding RSCOs at eight borings (i.e., SB-04, SB-05, SB-08, SB-11-1, SB-12, SB-14, SB-15, and SB-17). At SB-04, SB-12, and SB-15 the concentrations were relatively low and total SVOCs were reported at 11,970 μ g/kg, 2,928 μ g/kg, and 30,930 μ g/kg, respectively. This is similar to the maximum total SVOCs observed in TP-01 (20,241 μ g/kg), only at greater depths below the ground surface. Between depths of 9 to 12 feet bgs at SB-05, SB-08, SB-11-1, and SB-14 where staining was observed, total SVOC concentrations were more elevated than elsewhere on the site: 3,068,600 μ g/kg at SB-05 from 11 to 12 feet bgs; 3,983,620 μ g/kg at SB-08 from 10 to 12 feet bgs; 564,000 μ g/kg at SB-11-1 from 9 to 11 feet bgs; and 474,700 μ g/kg at SB-14 from 11 to 12 feet bgs. At SB-17, although some staining was observed from 9.5 to 10 feet bgs, total SVOC concentrations in the sample from 9 to 11 feet bgs were much lower, at 4,260 μ g/kg, and slightly more elevated in the deeper sample collected from 12 to 14 feet bgs, at 17,250 μ g/kg (although it should be noted that samples from SB-12 through SB-17 were analyzed for PAHs only). Generally, observed concentrations decreased drastically in soils sampled beneath the stained layer. At SB-05, total SVOC concentrations dropped two orders of magnitude between the sample from 11 to 12 feet bgs (3,068,600 μ g/kg) and the sample from 15 to 16 feet bgs (54,680 μ g/kg). Similarly, at

SB-08 from 10 to 12 feet bgs, 20 compounds exceeded RSCOs and total SVOCs were 3,983,620 μ g/kg. However, from 18 to 20 feet bgs, no compounds exceeded RSCOs and total SVOCs were 769 μ g/kg. At SB-11, four refusals were encountered at approximately 11 feet bgs, so soils could not be collected below that depth. No SVOCs exceeded RSCOs in any sample collected from the water bearing silty fine to coarse gravel observed across the site at an approximate depth of 16 feet bgs.

Metals

Metals results were similar to those observed in the test trench samples and are presumed to primarily represent background concentrations of area soils (see Figure 6).

Miscellaneous Parameters

Cyanide was detected in four samples at concentrations of 1.0 mg/kg in SB-08 from 10 to 12 feet bgs; 1.2 mg/kg in SB-11-1 from 9 to 11 feet bgs; 1.0 mg/kg in SB-12 from 14 to 15 feet bgs; and 4.0 mg/kg in SB-17 from 9 to 11 feet bgs. These concentrations were just over the analytical detection limits; however, there are no established RSCOs for cyanide in subsurface soil. The TOC result from the sample at SB-07 from 13 to 15 was 920 mg/kg. The laboratory (Carus Chemical Company) calculated the PSOD results. Based on a high dose of permanganate (28.9 g/kg), it was determined that the PSOD of the soil sample was 3.4 g/kg. Generally, sites with a PSOD of less than 35.0 g/kg at 48 hours for the high permanganate dose are favorable for the application of in-situ chemical oxidation with permanganate.

Groundwater Samples

Four groundwater samples collected from the piezometers were analyzed for VOCs, SVOCs, total metals, soluble iron, total cyanide, and total phenolics. The groundwater sample analytical results were compared to groundwater standards found in the NYSDEC Technical Operations and Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" issued in June 1998 and updated in April 2000 (see Figure 7 and Table 4). Results were non detect for all parameters, except for the metals, which were consistent in all four samples. Only iron and sodium were detected at concentrations above NYSDEC groundwater quality criteria. Sodium values were consistent across all four piezometers with concentrations ranged from 56,500 to 68,500 micrograms per liter (μ g/L). Iron concentrations only slightly exceeded the guideline value of 300 μ g/L at 1,200 and 324 μ g/L in piezometers PZ-03 and PZ-04, respectively. Neither metal is a concern because they likely represent naturally occurring background concentrations.

Scrape Samples

The two samples, Scrape #1 and Scrape #2, both indicated low concentrations of BTEX compounds and elevated concentrations of SVOCs. The concentrations in the deeper sample, Scrape #2, were much lower than those in the surface sample (Scrape #1). Scrape #2 had additional rock matrix material mixed in with the coating on the rock. Scrape #3 is the background sample collected from stones above grade; some low levels of SVOCs were detected in the sample. There are no applicable

regulatory criteria for this type of sample. The analytical results are presented on Table 5. Photographs are included in Appendix A.

During sampling, the coating was noted to be dry and have a slight odor upon scraping. The odor was that of sulfur. The grout in several areas on the basement walls has been repointed at some time in the past. The grout was removed around some of the edges of the four stones sampled and the discoloring was observed beneath the grout (which overlapped the edges of the stones) and appeared to be present to the edges of the impacted stones. The grout itself was not coated, indicating the discoloring is not seeping through the stones and into the basement. The coating encompassed the entire surface area of the stones on which it was present. It was approximately the same thickness across the entire surface of each stone. There were no evident drip marks or moist areas on the stones. Prior to sampling there was no odor in the basement. Given the observations discussed above, and the elevation and location of the discolored stones with regard to observed soil contamination, it is the contention of URS and NYSEG that the discoloring has been present on the stones for quite some time and is not a recent occurrence. URS and NYSEG believe the stones with discoloration may have:

- Been sealed with a tar-based waterproofing compound by a previous homeowner or a
 tar-based waterproofing compound may have been applied to the basement stones during
 the home's original construction, and somehow these particular stones were coated on
 both sides or put in place backwards.
- Originated from the original gas holder foundation, and been found and used during the home's construction.

In an attempt to determine the source or origin of the discolored material on the stones, NYSEG sent the analytical results from the scrape samples to NewFields Environmental Forensics Practice (NewFields) in Rockland, Massachusetts. NewFields reported that the samples from Scrape #1 and Scrape #2 contained coal tar but they were not able to determine if the coal tar originated from the former gas holder or if it was from various other tar sources commonly encountered in residential properties (e.g. waterproofing sealer, tar paper, insecticides, and others). NewFields report is included as Appendix I.

Surface Soil Samples

The surface soil samples were analyzed for SVOCs that were detected in all six surface soils at concentrations above the RSCOs. The compounds benzo(a)anthracene, benzo(a)pyrene, and dibenzo(a,h)anthracene were detected at concentrations exceeding RSCOs in all six samples. Total PAH concentrations ranged from 3,200 μ g/kg at location SS-05 to 83,600 μ g/kg at location SS-01. The presence of SVOCs in surface soils in urban areas is not uncommon. Therefore, these SVOCs are not likely site-related; rather, they are most likely attributable to urban sources such as exhaust particulates from vehicular traffic or historic coal burning furnaces. Analytical results are presented on Table 6.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this investigation, the following conclusions have been reached:

- The site area is situated in an urban setting and filling operations associated with anthropogenic activities have occurred over and beyond the past 100 years. The exact origin of the fill could not be differentiated as part of the investigation.
- VOCs were detected at concentrations exceeding the RSCOs in only one of the samples collected, at SB-14 from 11 to 12 feet bgs. Sampling points surrounding this location did not detect any VOCs at concentrations exceeding RSCOs, indicating it is an isolated occurrence.
- Several SVOCs, consisting primarily of PAHs, were detected in the test trenches and soil borings at concentrations exceeding the RSCOs (see Table 2 and 3).
- Widespread, low level concentrations of SVOCs were indicated in test trenches TP-01 and TP-02, with a slight observable decrease in concentration with depth (i.e., concentrations were generally higher from 2.5 to 5.5 feet bgs and lower at 7.0 feet bgs). At TP-03, however, concentrations of SVOCs increased with depth in the fill debris.
- Although the shallow soils did not always exhibit typical fill characteristics, the widespread nature and depth of contamination detected indicate that fill materials most likely extend to a depth of approximately 5 feet bgs across the site.
- The area with the most frequent detections of SVOCs and the highest concentrations is the western side of the site in the vicinity of SB-05, SB-08, SB-11, SB-14, and SB-17 where ash/fill materials were observed to depths greater than 12 feet bgs. A thin layer, approximately 0.2 to 1.0 feet in thickness, of stained silt was observed in all of these borings at depths ranging from 9.5 to 12 feet bgs. Total SVOC concentrations ranged from 4,260 to 3,983,620 µg/kg at depths from 9 to 12 feet bgs in these borings. SVOC concentrations generally decreased below these depths. All these boring/sampling locations are presumed to be within the footprint of the former gasholder, indicating the location of the former gasholder is probably more to the west than initially postulated.
- Lower concentrations of SVOCs also were detected at a depth of 12 to 13.5 feet bgs in boring SB-04 on the eastern side of the site.
- No SVOCs exceeded the RSCOs in any sample collected from the water bearing silty fine to coarse gravel observed across the site at an approximate depth of 16 feet bgs.
- There were minimal to no odors in the areas investigated.
- No visible MGP wastes (coal tar, spent oxide chips, etc.) were observed nor were any elevated levels of cyanide detected.
- Groundwater at the site was observed to occur at a depth of about 14 to 15 feet, with flow to the east and a very flat horizontal gradient of approximately 0.002 foot/foot.

- No VOCs or SVOCs were detected in the groundwater samples indicating the groundwater has not been impacted.
- No direct evidence of the former gasholder was found during this investigation.
- The SVOCs observed appear to be mostly related to the ash fill material rather than typical MGP wastes. It is well known and documented that SVOCs are typically found in urban settings and ash is known to contain elevated levels of SVOCs.

The following recommendations are offered for consideration by the Department:

• Based upon the results presented herein, no further work at this site is recommended.

Please call me with any questions or comments at (716) 856-5636.

Sincerely,

URS Corporation

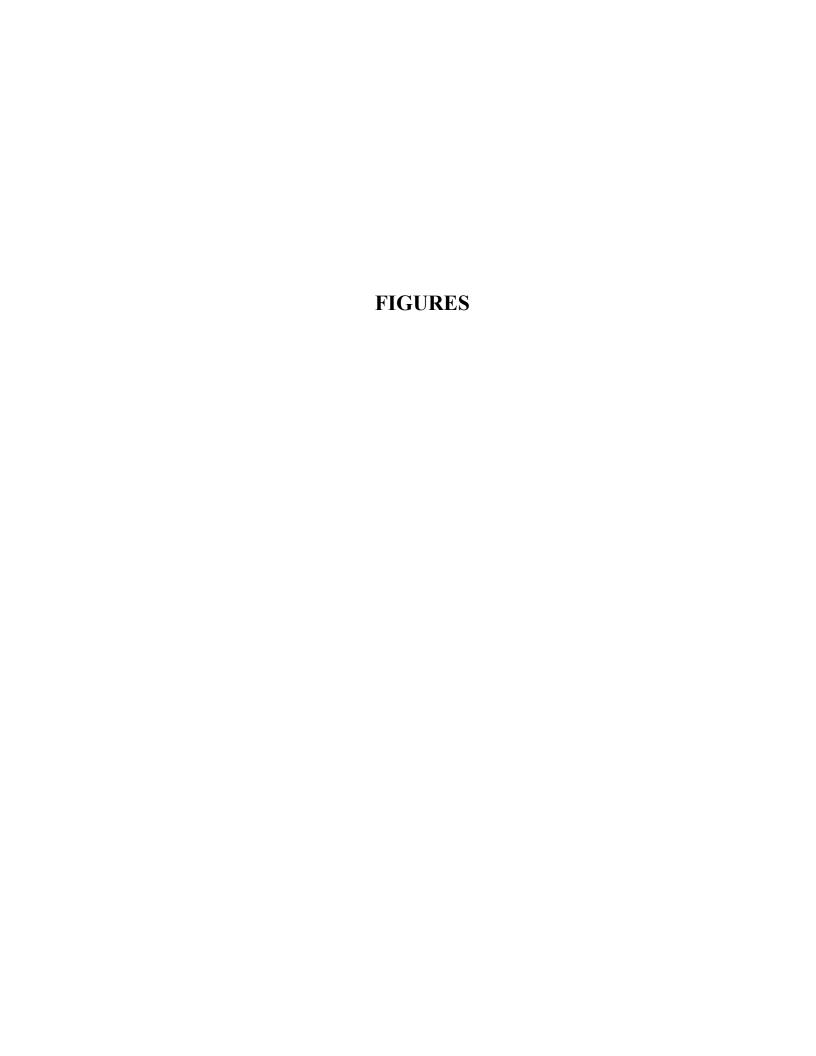
Michael Gutmann Project Manager

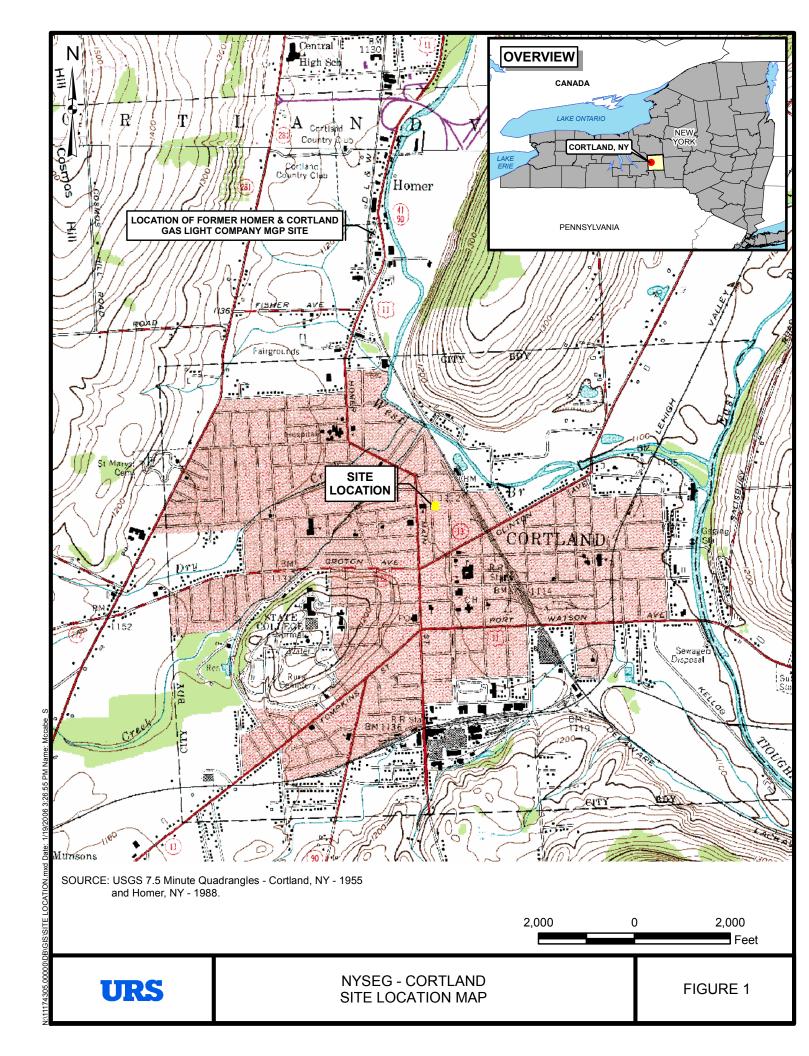
Enclosure

cc: Tracy Blazicek (NYSEG)

Julia Guastella (NYSDOH)

File: 11174305\ C-1



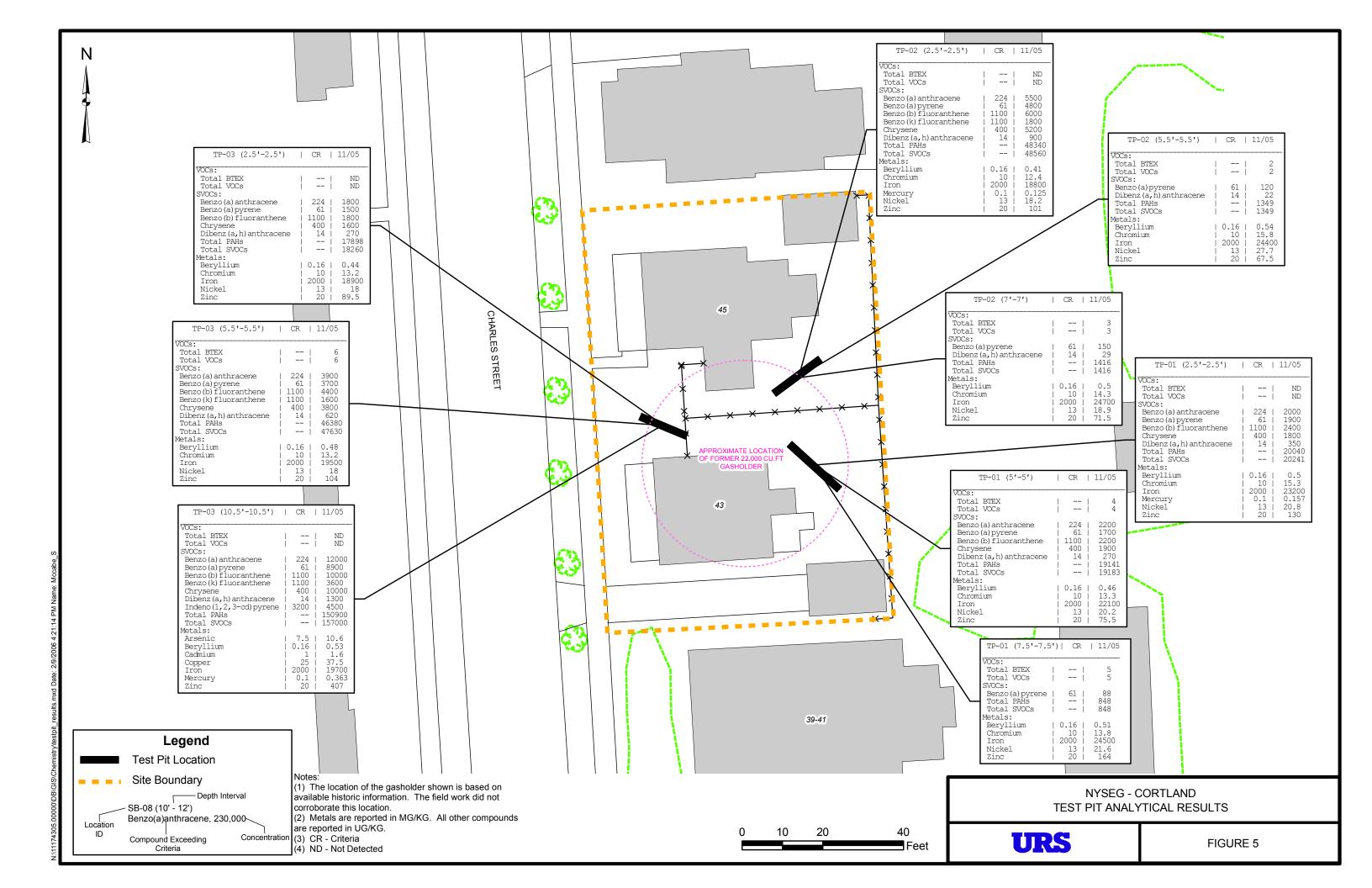


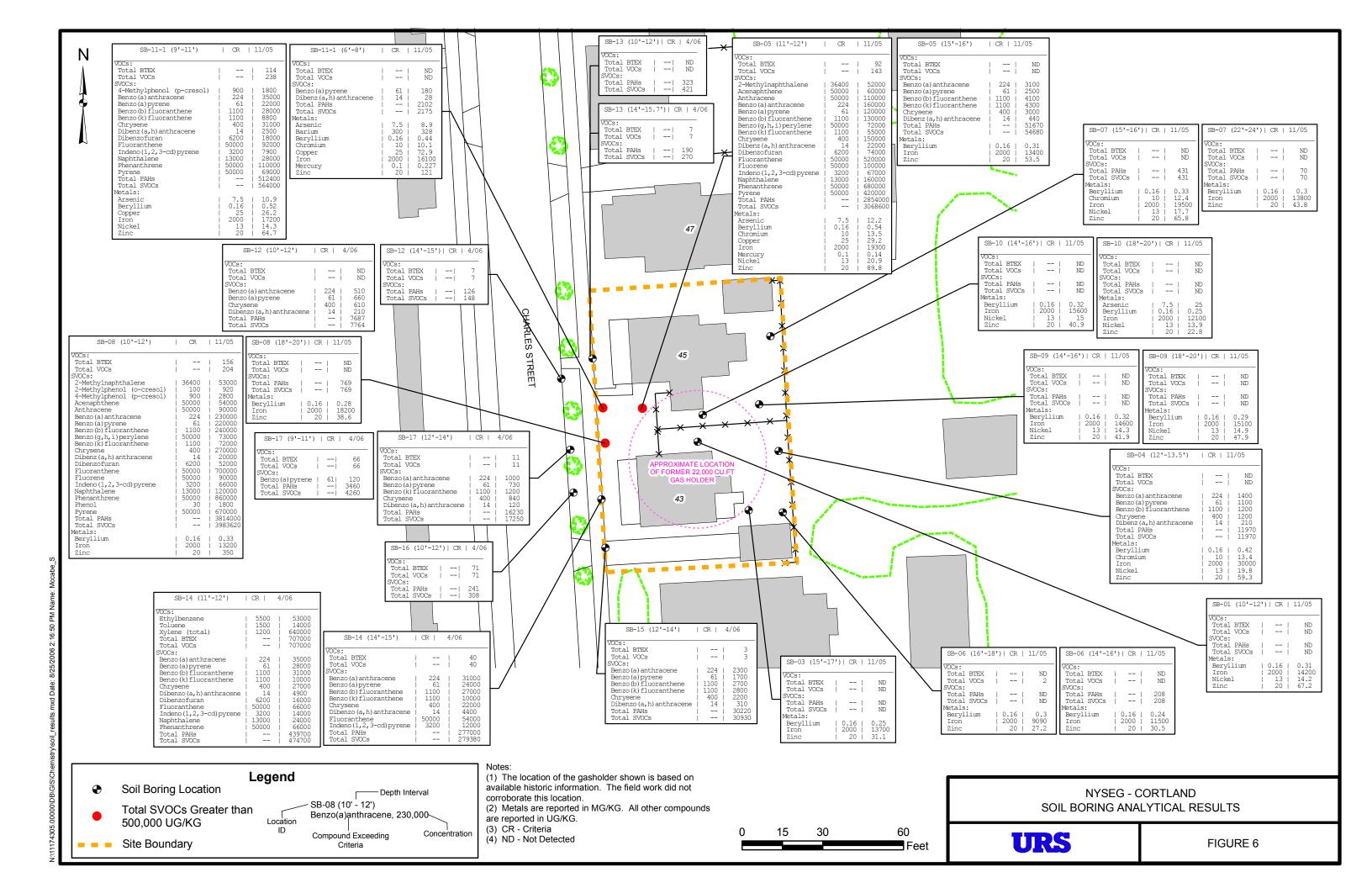


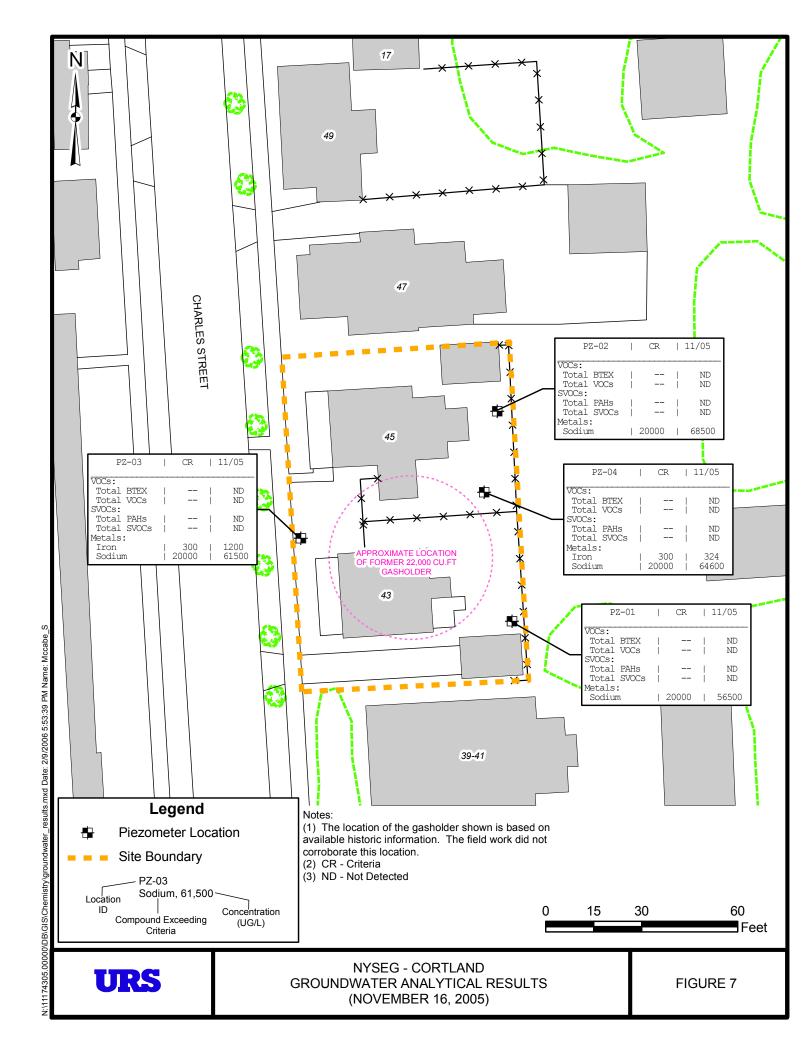
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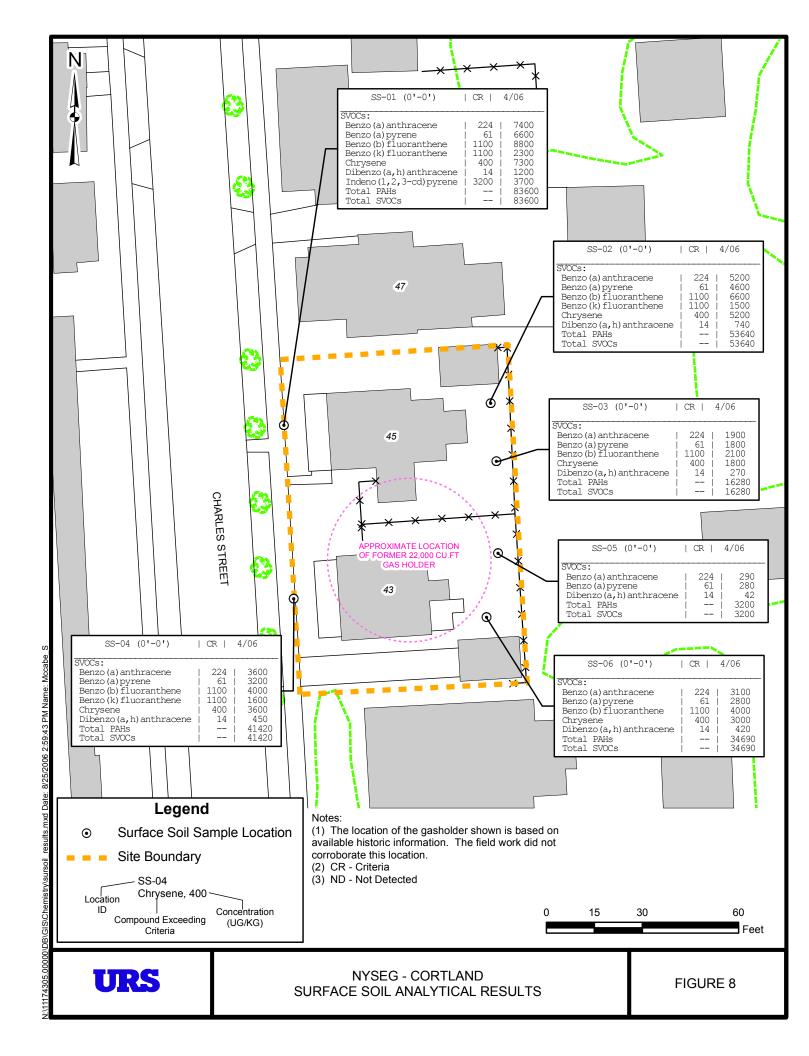


(NOVEMBER 16, 2005)









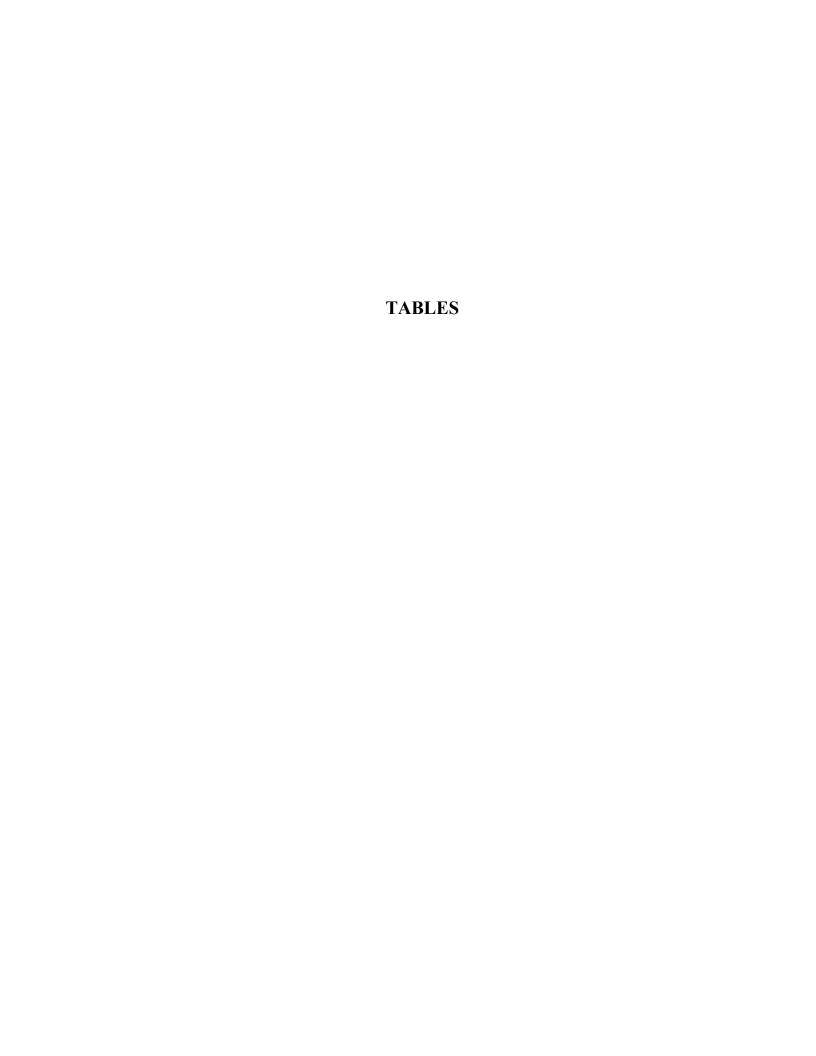


TABLE 1 **SURVEY INFORMATION NYSEG - CORTLAND**

Location ID	Туре	Northing	Easting	Ground Elevation (ft)
PZ-01	Piezometer	949239.66	929013.36	1118.56
PZ-02	Piezometer	949305.17	929008.71	1119.11
PZ-03	Piezometer	949265.49	928947.38	1118.77
PZ-04	Piezometer	949279.89	929004.64	1119.10
SB-01	Borehole	949265.96	928981.76	1119.29
SB-02	Borehole	949239.27	929012.44	1118.59
SB-03	Borehole	949240.51	929000.69	1118.86
SB-04	Borehole	949262.45	929011.79	1118.76
SB-05	Borehole	949278.47	928961.18	1118.57
SB-06	Borehole	949239.66	929013.36	1118.56
SB-07	Borehole	949305.17	929008.71	1119.11
SB-08	Borehole	949265.49	928947.38	1118.77
SB-09	Borehole	949279.89	929004.64	1119.10
SB-10	Borehole	949275.91	928983.61	1119.51
SB-11-1	Borehole	949278.57	928946.46	1118.74
SB-11-2	Borehole	949277.44	928947.39	1118.71
SB-11-3	Borehole	949279.88	928950.45	1118.74
SB-11-4	Borehole	949276.90	928951.88	1118.58
SB-12	Borehole	949289.48	928931.04	NA
SB-13	Borehole	949296.99	928942.67	NA
SB-14	Borehole	949244.64	928945.99	NA
SB-15	Borehole	949226.66	928947.48	NA
SB-16	Borehole	949247.10	928935.59	NA
SB-17	Borehole	949263.10	928934.38	NA
SS-01	Surface Survey	949301.73	928942.47	NA
SS-02	Surface Survey	949308.63	929007.17	NA
SS-03	Surface Survey	949290.48	929008.94	NA
SS-04	Surface Survey	949247.42	928945.60	NA
SS-05	Surface Survey	949261.59	929009.49	NA
SS-06	Surface Survey	949241.61	929005.86	NA
TP-01	Test Pit	949259	928999	1118.86

TABLE 1 **SURVEY INFORMATION NYSEG - CORTLAND**

Location ID	Туре	Northing	Easting	Ground Elevation (ft)
TP-02	Test Pit	949281	928995	1119.20
TP-03	Test Pit	949269	928961	1118.66

Loc	ation ID			TP-01	TP-01	TP-01	TP-01	TP-02
Sa	mple ID			TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5
N	//atrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				2.5-2.5	5.0-5.0	5.0-5.0	7.5-7.5	2.5-2.5
Date	Sampled			11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)			
Volatile Organic Comp	ounds							
Toluene	UG/KG	1500	-	6 U	2 J	4 J	5 J	6 U
Total BTEX	UG/KG	-	-	ND	2	4	5	ND
Total Volatile Organic Compounds	UG/KG	10000	-	ND	2	4	5	ND
Semivolatile Organic Con	npounds							
2-Methylnaphthalene	UG/KG	36400	-	23 J	380 U	1,800 U	380 U	1,900 U
Acenaphthene	UG/KG	50000	-	29 J	380 U	1,800 U	380 U	1,900 U
Acenaphthylene	UG/KG	41000	-	240 J	170 J	300 J	380 U	580 J
Anthracene	UG/KG	50000	-	320 J	150 J	300 J	380 U	660 J
Benzo(a)anthracene	UG/KG	224 or MDL	-	2,000	1,100	2,200	110 J	5,500
Benzo(a)pyrene	UG/KG	61 or MDL	-	1,900	970	1,700 J	88 J	4,800
Benzo(b)fluoranthene	UG/KG	1100	-	2,400	1,200	2,200	110 J	6,000
Benzo(g,h,i)perylene	UG/KG	50000	-	1,200	630	1,100 J	52 J	2,600
Benzo(k)fluoranthene	UG/KG	1100	-	630	360 J	790 J	33 J	1,800 J
bis(2-Ethylhexyl)phthalate	UG/KG	50000	-	380 U	380 U	1,800 U	380 U	1,900 U
Carbazole	UG/KG	50000	-	130 J	42 J	1,800 U	380 U	220 J
Chrysene	UG/KG	400	-	1,800	990	1,900	94 J	5,200
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	-	350 J	190 J	270 J	380 U	900 J
Dibenzofuran	UG/KG	6200	-	48 J	380 U	1,800 U	380 U	1,900 U
Fluoranthene	UG/KG	50000	-	3,600	1,600	3,400	160 J	8,400
Fluorene	UG/KG	50000	-	86 J	31 J	1,800 U	380 U	100 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loc	ation ID			TP-01	TP-01	TP-01	TP-01	TP-02
Sar	nple ID			TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5
N	latrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				2.5-2.5	5.0-5.0	5.0-5.0	7.5-7.5	2.5-2.5
Date	Sampled			11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)			
Semivolatile Organic Com	pounds							
Indeno(1,2,3-cd)pyrene	UG/KG	3200	-	1,100	560	1,000 J	51 J	2,500
Naphthalene	UG/KG	13000	-	85 J	50 J	1,800 U	380 U	1,900 U
Phenanthrene	UG/KG	50000	-	1,200	410	1,000 J	380 U	2,200
Pyrene	UG/KG	50000	-	3,100	1,400	2,900	150 J	7,100
Total Polycyclic Aromatic Hydrocarbons	UG/KG	-	-	20,040	9,811	19,060	848	48,340
Total Semivolatile Organic Compounds	UG/KG	5.00E+05	-	20,241	9,853	19,060	848	48,560
Metals								
Aluminum	MG/KG	SB	33000	12,500 J	10,400 J	11,700 J	13,200 J	9,740 J
Arsenic	MG/KG	7.5	3-12	6.9	4.4	5.2	6.2	5.8
Barium	MG/KG	300	15-600	75.8 J	55.3 J	59.0 J	59.0 J	56.3 J
Beryllium	MG/KG	0.16	0-1.75	0.50	0.41	0.46	0.51	0.41
Cadmium	MG/KG	1	0.1-1	0.42	0.26	0.26	0.53	0.32
Calcium	MG/KG	SB	130-35000	2,900 J	2,390 J	2,700 J	1,940 J	9,690 J
Chromium	MG/KG	10	1.5-40	15.3	12.1	13.3	13.8	12.4
Cobalt	MG/KG	30	2.5-60	9.5	7.5	9.0	9.2	7.4
Copper	MG/KG	25	1-50	24.5	24.0	19.3	20.3	20.4
Iron	MG/KG	2000	2000- 550000	23,200 J	21,400 J	22,100 J	24,500 J	18,800 J
Lead	MG/KG	SB	500	74.6 J	32.1 J	30.2 J	34.3 J	43.0 J
Magnesium	MG/KG	SB	100-5000	3,640 J	3,310 J	3,710 J	3,440 J	4,260 J
Manganese	MG/KG	SB	50-5000	961 J	688 J	880 J	1,050 J	697 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Locat	tion ID			TP-01	TP-01	TP-01	TP-01	TP-02	
Sam	ple ID			TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5	
Matrix Depth Interval (ft)			Soil	Soil	Soil	Soil	Soil		
			2.5-2.5	5.0-5.0	5.0-5.0	7.5-7.5	2.5-2.5		
Date S	ampled			11/09/05	11/09/05	11/09/05	11/09/05	11/09/05	
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)				
Metals									
Mercury	MG/KG	0.1	0.001-0.2	0.157	0.048	0.053	0.051	0.125	
Nickel	MG/KG	13	0.5-25	20.8	17.9	20.2	21.6	18.2	
Potassium	MG/KG	SB	8500-43000	880	650	771	713	619	
Vanadium	MG/KG	150	1-300	19.9	14.0	16.7	19.1	13.7	
Zinc	MG/KG	20	9-50	130 J	74.1 J	75.5 J	164 J	101 J	
Miscellaneous Parameters									
Total Organic Carbon (TOC)	MG/KG	-	-	NA	12,000	8,700	NA	NA	

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised). Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	ation ID			TP-02	TP-02	TP-03	TP-03	TP-03
San	nple ID			TP-02-5.5	TP-02-7.0	TP-03-2.5	TP-03-5.5	TP-03-10.5
M	latrix			Soil	Soil	Soil	Soil	Soil
Depth I	nterval (ft	:)		5.5-5.5	7.0-7.0	2.5-2.5	5.5-5.5	10.5-10.5
Date :	Sampled			11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compo	unds							
Toluene	UG/KG	1500	-	2 J	3 J	6 U	6	6 U
Total BTEX	UG/KG	-	-	2	3	ND	6	ND
Total Volatile Organic Compounds	UG/KG	10000	-	2	3	ND	6	ND
Semivolatile Organic Com	pounds							
2-Methylnaphthalene	UG/KG	36400	-	380 U	430 U	33 J	180 J	1,100 J
Acenaphthene	UG/KG	50000	-	380 U	430 U	46 J	230 J	1,100 J
Acenaphthylene	UG/KG	41000	-	380 U	430 U	210 J	620 J	3,200
Anthracene	UG/KG	50000	-	380 U	23 J	340 J	750 J	7,400
Benzo(a)anthracene	UG/KG	224 or MDL	-	140 J	190 J	1,800	3,900	12,000
Benzo(a)pyrene	UG/KG	61 or MDL	-	120 J	150 J	1,500	3,700	8,900
Benzo(b)fluoranthene	UG/KG	1100	-	200 J	170 J	1,800	4,400	10,000
Benzo(g,h,i)perylene	UG/KG	50000	-	73 J	30 J	790	2,400	4,900
Benzo(k)fluoranthene	UG/KG	1100	-	190 J	65 J	650	1,600 J	3,600
bis(2-Ethylhexyl)phthalate	UG/KG	50000	-	380 U	430 U	94 J	1,900 U	2,200 U
Carbazole	UG/KG	50000	-	380 U	430 U	160 J	750 J	2,000 J
Chrysene	UG/KG	400	-	120 J	140 J	1,600	3,800	10,000
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	-	22 J	29 J	270 J	620 J	1,300 J
Dibenzofuran	UG/KG	6200	-	380 U	430 U	75 J	320 J	3,000
Fluoranthene	UG/KG	50000	-	190 J	260 J	3,500	8,500	29,000
Fluorene	UG/KG	50000	-	380 U	430 U	120 J	340 J	4,900

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

)							
Sample ID					TP-03-2.5	TP-03-5.5	TP-03-10.5
			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-7.0	2.5-2.5	5.5-5.5	10.5-10.5
Date Sampled					11/09/05	11/09/05	11/09/05
ito I		Criteria (2)					
s							
KG 3	200	-	68 J	78 J	800	2,200	4,500
KG 13	3000	-	380 U	430 U	72 J	620 J	1,100 J
KG 50	0000	-	46 J	51 J	1,500	5,300	27,000
KG 50	0000	-	180 J	230 J	2,900	7,400	22,000
KG	-	-	1,349	1,416	17,898	46,380	150,900
KG 5.00	0E+05	-	1,349	1,416	18,260	47,630	157,000
/KG	SB	33000	15,200 J	14,200 J	11,100 J	10,900 J	5,990 J
/KG	7.5	3-12	5.2	4.6	5.6	7.2	10.6
/KG 3	300	15-600	31.5 J	70.7 J	84.4 J	76.1 J	62.6 J
KG 0).16	0-1.75	0.54	0.50	0.44	0.48	0.53
/KG	1	0.1-1	0.28	0.23 U	0.30	0.25	1.6
/KG	SB	130-35000	1,160 J	3,310 J	2,640 J	4,760 J	3,440 J
/KG	10	1.5-40	15.8	14.3	13.2	13.2	8.8
/KG	30	2.5-60	10.6	9.9	7.5	8.1	6.0
/KG	25	1-50	19.0	14.0	19.9	24.6	37.5
/KG ²	000	2000- 550000	24,400 J	24,700 J	18,900 J	19,500 J	19,700 J
/KG	SB	500	13.1 J	18.0 J	84.3 J	150 J	598 J
/KG	SB	100-5000	4,180 J	3,960 J	3,040 J	3,330 J	1,250 J
/KG	SB	50-5000	549 J	1,040 J	571 J	744 J	470 J
	oled Cri ds SikG Sik	Criteria (1) Crit	Criteria (1) Criteria (2)	Since Sinc	11/09/05 11/09/05/06 11/09/05/06 11/09/05/06 11/09/05/06 11/09/05/06 11/09/05/06 11/09/05/06 11/09/05/06 11/09/05/06 11/09/05/06/05/06/05/06/05/06/05/06/05/06/05/06/05/06/05/06/05/06/05/06/06/05		

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Locat	tion ID			TP-02	TP-02	TP-03	TP-03	TP-03	
	ple ID			TP-02-5.5	TP-02-7.0	TP-03-2.5	TP-03-5.5	TP-03-10.5	
Matrix Depth Interval (ft)			Soil	Soil	Soil	Soil	Soil 10.5-10.5		
			5.5-5.5	7.0-7.0	2.5-2.5	5.5-5.5			
	ampled	<u>, </u>		11/09/05	11/09/05	11/09/05	11/09/05	11/09/05	
, · · ,		Criteria (1)	Criteria (2)						
Metals									
Mercury	MG/KG	0.1	0.001-0.2	0.047	0.022	0.097	0.058	0.363	
Nickel	MG/KG	13	0.5-25	27.7	18.9	18.0	18.0	11.9	
Potassium	MG/KG	SB	8500-43000	622	726	696	702	393	
Vanadium	MG/KG	150	1-300	16.0	20.3	16.5	21.5	16.0	
Zinc	MG/KG	20	9-50	67.5 J	71.5 J	89.5 J	104 J	407 J	
Miscellaneous Parameters									
Total Organic Carbon (TOC)	MG/KG	-	-	NA	NA	NA	NA	NA	

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised). Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-01	SB-03	SB-04	SB-04	SB-05
Sam	ple ID			SB01-10-12	SB03-15-17	DUP-01	SB04-12-13.5	SB05-11-12
Ma	atrix			Soil	Soil	Soil	Soil	Soil
Depth Ir	:)		10.0-12.0	15.0-17.0	12.0-13.5	12.0-13.5	11.0-12.0	
Date S	ampled			11/10/05	11/10/05	11/10/05	11/10/05	11/10/05
Parameter	Units	Criteria (1)	Criteria (2)			Field Duplicate (1-1)		
Volatile Organic Compou	ınds							
Acetone	UG/KG	200	-	27 U	27 U	26 U	26 U	41
Benzene	UG/KG	60	-	5 U	5 U	5 U	5 U	8
Carbon disulfide	UG/KG	2700	-	5 U	5 U	5 U	5 U	2 J
Ethylbenzene	UG/KG	5500	-	5 U	5 U	5 U	5 U	12
Isopropylbenzene (Cumene)	UG/KG	2300	-	5 U	5 U	5 U	5 U	5 U
Methyl ethyl ketone (2- Butanone)	UG/KG	300	-	27 U	27 U	26 U	26 U	8 J
Styrene	UG/KG	-	-	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	UG/KG	1400	-	5 U	5 U	5 U	5 U	5 U
Toluene	UG/KG	1500	-	5 U	5 U	5 U	5 U	10
Xylene (total)	UG/KG	1200	-	16 U	16 U	16 U	16 U	62
Total BTEX	UG/KG	-	-	ND	ND	ND	ND	92
Total Volatile Organic Compounds	UG/KG	10000	-	ND	ND	ND	ND	143
Semivolatile Organic Comp	ounds							
1,1'-Biphenyl	UG/KG	50000	-	360 U	350 U	1,700 U	1,700 U	12,000
2,4-Dimethylphenol	UG/KG	50000	-	360 U	350 U	1,700 U	1,700 U	3,600 J
2-Methylnaphthalene	UG/KG	36400	-	360 U	350 U	1,700 U	1,700 U	52,000
2-Methylphenol (o-cresol)	UG/KG	100 or MDL	-	360 U	350 U	1,700 U	1,700 U	11,000 U
4-Methylphenol (p-cresol)	UG/KG	900	-	360 U	350 U	1,700 U	1,700 U	11,000 U
Acenaphthene	UG/KG	50000	-	360 U	350 U	1,700 U	1,700 U	60,000
Acenaphthylene	UG/KG	41000	-	360 U	350 U	130 J	120 J	28,000

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	ation ID			SB-01	SB-03	SB-04	SB-04	SB-05
San	nple ID			SB01-10-12	SB03-15-17	DUP-01	SB04-12-13.5	SB05-11-12
М	atrix			Soil	Soil	Soil	Soil	Soil
Depth I	nterval (ft	:)		10.0-12.0	15.0-17.0	12.0-13.5	12.0-13.5	11.0-12.0
Date 9	Sampled			11/10/05	11/10/05	11/10/05	11/10/05	11/10/05
Parameter	Units	Criteria (1)	Criteria (2)			Field Duplicate (1-1)		
Semivolatile Organic Com	pounds							
Anthracene	UG/KG	50000	-	360 U	350 U	250 J	180 J	110,000
Benzo(a)anthracene	UG/KG	224 or MDL	-	360 U	350 U	1,400 J	1,200 J	160,000
Benzo(a)pyrene	UG/KG	61 or MDL	-	360 U	350 U	1,100 J	1,100 J	120,000
Benzo(b)fluoranthene	UG/KG	1100	-	360 U	350 U	1,200 J	1,200 J	130,000
Benzo(g,h,i)perylene	UG/KG	50000	-	360 U	350 U	620 J	560 J	72,000
Benzo(k)fluoranthene	UG/KG	1100	-	360 U	350 U	650 J	630 J	55,000
Carbazole	UG/KG	50000	-	360 U	350 U	1,700 U	1,700 U	73,000
Chrysene	UG/KG	400	-	360 U	350 U	1,200 J	1,000 J	150,000
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	-	360 U	350 U	170 J	210 J	22,000
Dibenzofuran	UG/KG	6200	-	360 U	350 U	1,700 U	1,700 U	74,000
Fluoranthene	UG/KG	50000	-	360 U	350 U	2,100	1,600 J	520,000 D
Fluorene	UG/KG	50000	-	360 U	350 U	1,700 U	1,700 U	100,000
Indeno(1,2,3-cd)pyrene	UG/KG	3200	-	360 U	350 U	590 J	530 J	67,000
Naphthalene	UG/KG	13000	-	360 U	350 U	1,700 U	1,700 U	160,000
Phenanthrene	UG/KG	50000	-	360 U	350 U	620 J	360 J	680,000 D
Phenol	UG/KG	30 or MDL	-	360 U	350 U	1,700 U	1,700 U	55,000 U
Pyrene	UG/KG	50000	-	360 U	350 U	1,900	1,500 J	420,000 D
Total Polycyclic Aromatic Hydrocarbons	UG/KG	-	-	ND	ND	11,930	10,190	2,854,000
Total Semivolatile Organic Compounds	UG/KG	5.00E+05	-	ND	ND	11,930	10,190	3,068,600

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

L	ocation ID			SB-01	SB-03	SB-04	SB-04	SB-05
	Sample ID			SB01-10-12	SB03-15-17	DUP-01	SB04-12-13.5	SB05-11-12
	Matrix			Soil	Soil	Soil 12.0-13.5	Soil 12.0-13.5 11/10/05	Soil
Dept	th Interval (ft)		10.0-12.0	15.0-17.0 11/10/05			11.0-12.0
Da	te Sampled			11/10/05		11/10/05		11/10/05
Parameter	Units	Criteria (1)	Criteria (2)			Field Duplicate (1-1)		
Metals								
Aluminum	MG/KG	SB	33000	6,230 J	6,070 J	10,300 J	10,100 J	9,790 J
Arsenic	MG/KG	7.5	3-12	3.7	2.3	5.2	5.3	12.2
Barium	MG/KG	300	15-600	31.3 J	28.6 J	45.6 J	51.3 J	51.5 J
Beryllium	MG/KG	0.16	0-1.75	0.31	0.25	0.42	0.42	0.54
Cadmium	MG/KG	1	0.1-1	0.23 U	0.23 U	0.33	0.29	0.38 U
Calcium	MG/KG	SB	130-35000	61,400	27,600	2,590 J	23,200 J	72,400
Chromium	MG/KG	10	1.5-40	8.5	7.9	13.4	12.8	13.5
Cobalt	MG/KG	30	2.5-60	5.7	4.9	8.9	8.3	7.8
Copper	MG/KG	25	1-50	21.8	7.3	16.8	22.2	29.2
Iron	MG/KG	2000	2000- 550000	14,200 J	13,700 J	30,000 J	23,100 J	19,300 J
Lead	MG/KG	SB	500	8.7	3.6	13.5	12.0	390
Magnesium	MG/KG	SB	100-5000	15,700 J	5,560 J	3,090 J	8,810 J	22,200 J
Manganese	MG/KG	SB	50-5000	484 J	290 J	829 J	989 J	403 J
Mercury	MG/KG	0.1	0.001-0.2	0.018 U	0.019 U	0.051	0.041	0.140
Nickel	MG/KG	13	0.5-25	14.2	11.3	19.4	19.8	20.9
Potassium	MG/KG	SB	8500-43000	786	593	502	791	1,020
Sodium	MG/KG	SB	6000-8000	163 U	164 U	142 U	160 U	316
Vanadium	MG/KG	150	1-300	9.2	8.3	16.4	14.6	23.7
Zinc	MG/KG	20	9-50	67.2	31.1	59.3	58.3	89.8

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised). Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-01	SB-03	SB-04	SB-04	SB-05
Sam	ple ID			SB01-10-12	SB03-15-17	DUP-01	SB04-12-13.5 Soil	SB05-11-12 Soil
Ma	ıtrix			Soil	Soil	Soil		
Depth Interval (ft)			10.0-12.0	15.0-17.0	12.0-13.5	12.0-13.5	11.0-12.0	
Date S	ampled			11/10/05 11/10/05 11/10/05 11/10/05				11/10/05
Parameter	Units Criteria Criteria (1) (2)					Field Duplicate (1-1)		
Miscellaneous Paramet	ers							
Cyanide	MG/KG	-	-	1.1 U	0.85 U	1.0 U	0.97 U	1.8 U
Cyanide, Amenable To Chlorination	MG/KG	-	-	0.98 U	1.1 U	0.84 U	1.1 U	1.4 U
Total Organic Carbon (TOC)	MG/KG	-	-	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-05	SB-06	SB-06	SB-07	SB-07
Sam	ple ID			SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
Ma	atrix			Soil	Soil	Soil	Soil	Soil
Depth Ir	terval (ft	:)		15.0-16.0	14.0-16.0	16.0-18.0	13.0-15.0 11/11/05	15.0-16.0 11/11/05
Date S	ampled			11/10/05	11/11/05	11/11/05		
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
Acetone	UG/KG	200	-	26 U	25 U	27 U	NA	27 U
Benzene	UG/KG	60	-	5 U	5 U	5 U	NA	5 U
Carbon disulfide	UG/KG	2700	-	5 U	5 U	5 U	NA	5 U
Ethylbenzene	UG/KG	5500	-	5 U	5 U	5 U	NA	5 U
Isopropylbenzene (Cumene)	UG/KG	2300	-	5 U	5 U	5 U	NA	5 U
Methyl ethyl ketone (2- Butanone)	UG/KG	300	-	26 U	25 U	27 U	NA	27 U
Styrene	UG/KG	-	-	5 U	5 U	5 U	NA	5 U
Tetrachloroethene	UG/KG	1400	-	5 U	5 U	2 J	NA	5 U
Toluene	UG/KG	1500	-	5 U	5 U	5 U	NA	5 U
Xylene (total)	UG/KG	1200	-	16 U	15 U	16 U	NA	16 U
Total BTEX	UG/KG	-	-	ND	ND	ND	NA	ND
Total Volatile Organic Compounds	UG/KG	10000	-	ND	ND	2	NA	ND
Semivolatile Organic Comp	ounds							
1,1'-Biphenyl	UG/KG	50000	-	1,800 U	340 U	360 U	NA	350 U
2,4-Dimethylphenol	UG/KG	50000	-	1,800 U	340 U	360 U	NA	350 U
2-Methylnaphthalene	UG/KG	36400	-	810 J	340 U	360 U	NA	350 U
2-Methylphenol (o-cresol)	UG/KG	100 or MDL	-	1,800 U	340 U	360 U	NA	350 U
4-Methylphenol (p-cresol)	UG/KG	900	-	1,800 U	340 U	360 U	NA	350 U
Acenaphthene	UG/KG	50000	-	750 J	340 U	360 U	NA	350 U
Acenaphthylene	UG/KG	41000	-	780 J	340 U	360 U	NA	350 U

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised). Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	ation ID			SB-05	SB-06	SB-06	SB-07	SB-07
San	nple ID			SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
M	atrix			Soil	Soil	Soil	Soil	Soil
Depth I	nterval (fi	t)		15.0-16.0	14.0-16.0	16.0-18.0	13.0-15.0	15.0-16.0
Date :	Sampled			11/10/05	11/11/05	11/11/05	11/11/05	11/11/05
Parameter	Units	Criteria (1)	Criteria (2)					
Semivolatile Organic Com	pounds							
Anthracene	UG/KG	50000	-	1,800	340 U	360 U	NA	350 U
Benzo(a)anthracene	UG/KG	224 or MDL	-	3,100	30 J	360 U	NA	52 J
Benzo(a)pyrene	UG/KG	61 or MDL	-	2,500	19 J	360 U	NA	44 J
Benzo(b)fluoranthene	UG/KG	1100	-	4,100	28 J	360 U	NA	67 J
Benzo(g,h,i)perylene	UG/KG	50000	-	1,600 J	340 U	360 U	NA	26 J
Benzo(k)fluoranthene	UG/KG	1100	-	4,300	340 U	360 U	NA	72 J
Carbazole	UG/KG	50000	-	1,000 J	340 U	360 U	NA	350 U
Chrysene	UG/KG	400	-	3,000	26 J	360 U	NA	42 J
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	-	440 J	340 U	360 U	NA	350 U
Dibenzofuran	UG/KG	6200	-	1,200 J	340 U	360 U	NA	350 U
Fluoranthene	UG/KG	50000	-	8,600	45 J	360 U	NA	76 J
Fluorene	UG/KG	50000	-	1,800	340 U	360 U	NA	350 U
Indeno(1,2,3-cd)pyrene	UG/KG	3200	-	1,400 J	340 U	360 U	NA	22 J
Naphthalene	UG/KG	13000	-	1,400 J	34 J	360 U	NA	350 U
Phenanthrene	UG/KG	50000	-	9,800	26 J	360 U	NA	30 J
Phenol	UG/KG	30 or MDL	-	1,800 U	340 U	360 U	NA	350 U
Pyrene	UG/KG	50000	-	6,300	340 U	360 U	NA	350 U
Total Polycyclic Aromatic Hydrocarbons	UG/KG	-	-	51,670	208	ND	NA	431
Total Semivolatile Organic Compounds	UG/KG	5.00E+05	-	54,680	208	ND	NA	431

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

	Location ID			SB-05	SB-06	SB-06	SB-07	SB-07
	Sample ID			SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
	Matrix			Soil	Soil	Soil	Soil	Soil
Dej	pth Interval (ft)		15.0-16.0	14.0-16.0	16.0-18.0	13.0-15.0 11/11/05	15.0-16.0 11/11/05
D	ate Sampled			11/10/05	11/11/05	11/11/05		
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Aluminum	MG/KG	SB	33000	6,020 J	4,970 J	4,270 J	NA	8,580 J
Arsenic	MG/KG	7.5	3-12	4.8	2.6	2.8	NA	3.6
Barium	MG/KG	300	15-600	34.7 J	25.8 J	24.2 J	NA	38.0 J
Beryllium	MG/KG	0.16	0-1.75	0.31	0.24	0.30	NA	0.33
Cadmium	MG/KG	1	0.1-1	0.24	0.18 U	0.20 U	NA	0.23
Calcium	MG/KG	SB	130-35000	76,800	33,900	199,000	NA	39,400
Chromium	MG/KG	10	1.5-40	9.3	6.2	5.8	NA	12.4
Cobalt	MG/KG	30	2.5-60	5.3	4.0	3.6	NA	7.2
Copper	MG/KG	25	1-50	16.3	8.2	12.1	NA	22.7
Iron	MG/KG	2000	2000- 550000	13,400 J	11,500 J	9,090 J	NA	19,500 J
Lead	MG/KG	SB	500	68.2	5.2	3.9	NA	10.7
Magnesium	MG/KG	SB	100-5000	15,300 J	4,130 J	11,000 J	NA	9,770 J
Manganese	MG/KG	SB	50-5000	426 J	639 J	414 J	NA	515 J
Mercury	MG/KG	0.1	0.001-0.2	0.026	0.038	0.017 U	NA	0.016 U
Nickel	MG/KG	13	0.5-25	12.7	10.8	9.0	NA	17.7
Potassium	MG/KG	SB	8500-43000	756	460	694	NA	813
Sodium	MG/KG	SB	6000-8000	155 U	125 U	159	NA	147 U
Vanadium	MG/KG	150	1-300	10.2	6.8	6.1	NA	12.2
Zinc	MG/KG	20	9-50	53.5	30.5	27.2	NA	65.8

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised). Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-05	SB-06	SB-06	SB-07	SB-07
Sam	ple ID			SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
Ma	trix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				15.0-16.0	14.0-16.0	16.0-18.0	13.0-15.0	15.0-16.0
Date S	ampled			11/10/05	11/11/05	11/11/05 11/11/05 1		
Parameter	units Criteria Criteria (1) (2)							
Miscellaneous Paramet	ers							
Cyanide	MG/KG	-	-	1.1 U	0.82 U	1.1 U	NA	1.0 U
Cyanide, Amenable To Chlorination	MG/KG	-	-	1.0 U	0.93 U	0.81 U	NA	0.82 U
Total Organic Carbon (TOC)	MG/KG	-	-	NA	NA	NA	920	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-07	SB-08	SB-08	SB-09	SB-09
Sam	ple ID			SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
M	atrix			Soil	Soil	Soil	Soil	Soil
Depth I	nterval (ft	:)		22.0-24.0	10.0-12.0	18.0-20.0	14.0-16.0	18.0-20.0
Date S	Sampled			11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compo	unds							
Acetone	UG/KG	200	-	28 U	30	26 U	26 U	28 U
Benzene	UG/KG	60	-	6 U	15	5 U	5 U	6 U
Carbon disulfide	UG/KG	2700	-	6 U	3 J	5 U	5 U	6 U
Ethylbenzene	UG/KG	5500	-	6 U	24	5 U	5 U	6 U
Isopropylbenzene (Cumene)	UG/KG	2300	-	6 U	6	5 U	5 U	6 U
Methyl ethyl ketone (2- Butanone)	UG/KG	300	-	28 U	30 U	26 U	26 U	28 U
Styrene	UG/KG	-	-	6 U	9	5 U	5 U	6 U
Tetrachloroethene	UG/KG	1400	-	6 U	6 U	5 U	5 U	6 U
Toluene	UG/KG	1500	-	6 U	19	5 U	5 U	6 U
Xylene (total)	UG/KG	1200	-	17 U	98	16 U	16 U	16 U
Total BTEX	UG/KG	-	-	ND	156	ND	ND	ND
Total Volatile Organic Compounds	UG/KG	10000	-	ND	204	ND	ND	ND
Semivolatile Organic Com	pounds							
1,1'-Biphenyl	UG/KG	50000	-	380 U	13,000	350 U	350 U	370 U
2,4-Dimethylphenol	UG/KG	50000	-	380 U	1,100 J	350 U	350 U	370 U
2-Methylnaphthalene	UG/KG	36400	-	380 U	53,000	350 U	350 U	370 U
2-Methylphenol (o-cresol)	UG/KG	100 or MDL	-	380 U	920 J	350 U	350 U	370 U
4-Methylphenol (p-cresol)	UG/KG	900	-	380 U	2,800 J	350 U	350 U	370 U
Acenaphthene	UG/KG	50000	-	380 U	54,000	350 U	350 U	370 U
Acenaphthylene	UG/KG	41000	-	380 U	39,000	24 J	350 U	370 U

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	ation ID			SB-07	SB-08	SB-08	SB-09	SB-09
San	nple ID			SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
M	atrix			Soil	Soil	Soil	Soil	Soil
Depth I	nterval (fi	t)		22.0-24.0	10.0-12.0	18.0-20.0	14.0-16.0	18.0-20.0
Date :	Sampled			11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units	Criteria (1)	Criteria (2)					
Semivolatile Organic Compounds								
Anthracene	UG/KG	50000	-	380 U	90,000	31 J	350 U	370 U
Benzo(a)anthracene	UG/KG	224 or MDL	-	22 J	230,000 D	59 J	350 U	370 U
Benzo(a)pyrene	UG/KG	61 or MDL	-	380 U	220,000 D	48 J	350 U	370 U
Benzo(b)fluoranthene	UG/KG	1100	-	19 J	240,000 D	60 J	350 U	370 U
Benzo(g,h,i)perylene	UG/KG	50000	-	380 U	73,000	24 J	350 U	370 U
Benzo(k)fluoranthene	UG/KG	1100	-	380 U	72,000	350 U	350 U	370 U
Carbazole	UG/KG	50000	-	380 U	45,000	350 U	350 U	370 U
Chrysene	UG/KG	400	-	380 U	270,000 D	57 J	350 U	370 U
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	-	380 U	20,000	350 U	350 U	370 U
Dibenzofuran	UG/KG	6200	-	380 U	52,000	350 U	350 U	370 U
Fluoranthene	UG/KG	50000	-	29 J	700,000 D	140 J	350 U	370 U
Fluorene	UG/KG	50000	-	380 U	90,000	25 J	350 U	370 U
Indeno(1,2,3-cd)pyrene	UG/KG	3200	-	380 U	66,000	21 J	350 U	370 U
Naphthalene	UG/KG	13000	-	380 U	120,000	350 U	350 U	370 U
Phenanthrene	UG/KG	50000	-	380 U	860,000 D	150 J	350 U	370 U
Phenol	UG/KG	30 or MDL	-	380 U	1,800 J	350 U	350 U	370 U
Pyrene	UG/KG	50000	-	380 U	670,000 D	130 J	350 U	370 U
Total Polycyclic Aromatic Hydrocarbons	UG/KG	-	-	70	3,814,000	769	ND	ND
Total Semivolatile Organic Compounds	UG/KG	5.00E+05	-	70	3,983,620	769	ND	ND

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

	Location ID			SB-07	SB-08	SB-08	SB-09	SB-09
	Sample ID			SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
	Matrix			Soil	Soil	Soil 18.0-20.0	Soil 14.0-16.0	Soil
De	pth Interval (ft)		22.0-24.0	10.0-12.0			18.0-20.0
D	ate Sampled			11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units	Criteria (1)	Criteria (2)					
Metals	Metals							
Aluminum	MG/KG	SB	33000	6,040 J	4,550 J	6,280 J	7,550 J	7,570 J
Arsenic	MG/KG	7.5	3-12	2.8	5.2	4.2	3.1	3.1
Barium	MG/KG	300	15-600	27.6 J	40.1 J	44.5 J	39.4 J	28.8 J
Beryllium	MG/KG	0.16	0-1.75	0.30	0.33	0.28	0.32	0.29
Cadmium	MG/KG	1	0.1-1	0.20 U	0.27 U	0.22 U	0.20 U	0.20 U
Calcium	MG/KG	SB	130-35000	66,400	11,500 J	62,100 J	59,200 J	46,000 J
Chromium	MG/KG	10	1.5-40	8.0	6.1	7.3	8.7	9.3
Cobalt	MG/KG	30	2.5-60	5.2	3.8	5.1	5.2	5.9
Copper	MG/KG	25	1-50	15.0	20.9	22.5	16.2	17.3
Iron	MG/KG	2000	2000- 550000	13,800 J	13,200 J	18,200 J	14,600 J	15,100 J
Lead	MG/KG	SB	500	6.5	749	9.3	5.8	11.4
Magnesium	MG/KG	SB	100-5000	6,110 J	2,780	4,590	9,170	7,610
Manganese	MG/KG	SB	50-5000	523 J	214 J	618 J	423 J	443 J
Mercury	MG/KG	0.1	0.001-0.2	0.019 U	0.065	0.016 U	0.016 U	0.020 U
Nickel	MG/KG	13	0.5-25	13.0	10.0	12.3	14.3	14.9
Potassium	MG/KG	SB	8500-43000	591	348	557	742	675
Sodium	MG/KG	SB	6000-8000	143 U	189 U	157 U	142 U	143 U
Vanadium	MG/KG	150	1-300	8.0	15.2	9.8	9.7	9.6
Zinc	MG/KG	20	9-50	43.8	350	38.6	41.9	47.9

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-07	SB-08	SB-08	SB-09	SB-09
Sam	ple ID			SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
Ma	Matrix				Soil	Soil	Soil	Soil
Depth Interval (ft)				22.0-24.0	10.0-12.0	18.0-20.0	14.0-16.0	18.0-20.0
Date S	ampled			11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	units Criteria Criteria (1) (2)							
Miscellaneous Paramet	ers							
Cyanide	MG/KG	-	-	1.1 U	1.0	0.92 U	1.0 U	1.0 U
Cyanide, Amenable To	MG/KG	-	-	1.1 U	1.1 U	1.0 U	0.95 U	1.0 U
Total Organic Carbon (TOC)	MG/KG	-	-	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

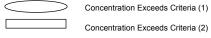
NA - Not Analyzed

Loca	tion ID			SB-10	SB-10	SB-11-1	SB-11-1	SB-12
Sam	ple ID			SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11	DUP-042606
Ma	ıtrix			Soil	Soil	Soil	Soil	Soil
Depth In	terval (fi	t)		14.0-16.0	18.0-20.0 11/14/05	6.0-8.0 11/14/05	9.0-11.0 11/14/05	10.0-12.0 04/26/06
Date S	ampled			11/14/05				
Parameter	Units	Criteria (1)	Criteria (2)					Field Duplicate (1-1)
Volatile Organic Compounds								
Acetone	UG/KG	200	-	26 U	26 U	26 U	88	NA
Benzene	UG/KG	60	-	5 U	5 U	5 U	22	NA
Carbon disulfide	UG/KG	2700	-	5 U	5 U	5 U	7	NA
Ethylbenzene	UG/KG	5500	-	5 U	5 U	5 U	22	NA
Isopropylbenzene (Cumene)	UG/KG	2300	-	5 U	5 U	5 U	3 J	NA
Methyl ethyl ketone (2- Butanone)	UG/KG	300	-	26 U	26 U	26 U	22 J	NA
Styrene	UG/KG	-	-	5 U	5 U	5 U	4 J	NA
Tetrachloroethene	UG/KG	1400	-	5 U	5 U	5 U	6 U	NA
Toluene	UG/KG	1500	-	5 U	5 U	5 U	10	NA
Xylene (total)	UG/KG	1200	-	16 U	16 U	16 U	60	NA
Total BTEX	UG/KG	-	-	ND	ND	ND	114	NA
Total Volatile Organic Compounds	UG/KG	10000	-	ND	ND	ND	238	NA
Semivolatile Organic Comp	ounds							
1,1'-Biphenyl	UG/KG	50000	-	340 U	360 U	350 U	4,000 J	NA
2,4-Dimethylphenol	UG/KG	50000	-	340 U	360 U	350 U	8,100 U	NA
2-Methylnaphthalene	UG/KG	36400	-	340 U	360 U	18 J	19,000	58 J
2-Methylphenol (o-cresol)	UG/KG	100 or MDL	-	340 U	360 U	350 U	8,100 U	NA
4-Methylphenol (p-cresol)	UG/KG	900	-	340 U	360 U	350 U	1,800 J	NA
Acenaphthene	UG/KG	50000	-	340 U	360 U	350 U	6,400 J	38 J
Acenaphthylene	UG/KG	41000	-	340 U	360 U	32 J	14,000	310 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.



U - Not detected above the reported quantitation limit.

NA - Not Analyzed

J - The reported concentration is an estimated value.

Loca	ation ID			SB-10	SB-10	SB-11-1	SB-11-1	SB-12
San	nple ID			SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11	DUP-042606
M	atrix			Soil	Soil	Soil	Soil	Soil
Depth I	nterval (ft	:)		14.0-16.0	18.0-20.0 11/14/05	6.0-8.0	9.0-11.0 11/14/05	10.0-12.0
Date :	Sampled			11/14/05		11/14/05		04/26/06
Parameter	Units	Criteria (1)	Criteria (2)					Field Duplicate (1-1)
Semivolatile Organic Com	pounds							
Anthracene	UG/KG	50000	-	340 U	360 U	37 J	23,000	120 J
Benzo(a)anthracene	UG/KG	224 or MDL	-	340 U	360 U	160 J	35,000	510
Benzo(a)pyrene	UG/KG	61 or MDL	-	340 U	360 U	180 J	22,000	660
Benzo(b)fluoranthene	UG/KG	1100	-	340 U	360 U	220 J	28,000	940
Benzo(g,h,i)perylene	UG/KG	50000	-	340 U	360 U	130 J	7,800 J	920
Benzo(k)fluoranthene	UG/KG	1100	-	340 U	360 U	63 J	8,800	240 J
Carbazole	UG/KG	50000	-	340 U	360 U	36 J	8,800	NA
Chrysene	UG/KG	400	-	340 U	360 U	180 J	31,000	610
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	-	340 U	360 U	28 J	2,500 J	210 J
Dibenzofuran	UG/KG	6200	-	340 U	360 U	19 J	18,000	19 J
Fluoranthene	UG/KG	50000	-	340 U	360 U	370	92,000	1,100
Fluorene	UG/KG	50000	-	340 U	360 U	22 J	27,000	340 U
Indeno(1,2,3-cd)pyrene	UG/KG	3200	-	340 U	360 U	120 J	7,900 J	740
Naphthalene	UG/KG	13000	-	340 U	360 U	350 U	28,000	99 J
Phenanthrene	UG/KG	50000	-	340 U	360 U	240 J	110,000	380
Phenol	UG/KG	30 or MDL	-	340 U	360 U	350 U	8,100 U	NA
Pyrene	UG/KG	50000	-	340 U	360 U	320 J	69,000	810
Total Polycyclic Aromatic Hydrocarbons	UG/KG	-	-	ND	ND	2,102	512,400	7,687
Total Semivolatile Organic Compounds	UG/KG	5.00E+05	-	ND	ND	2,175	564,000	7,764

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Lo	ocation ID			SB-10	SB-10	SB-11-1	SB-11-1	SB-12
S	ample ID			SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11	DUP-042606
	Matrix			Soil	Soil	Soil	Soil	Soil
Dept	h Interval (ft)		14.0-16.0	18.0-20.0	6.0-8.0	9.0-11.0	10.0-12.0
Dat	te Sampled			11/14/05	11/14/05	11/14/05	11/14/05	04/26/06
Parameter	Units	Criteria (1)	Criteria (2)					Field Duplicate (1-1)
Metals								
Aluminum	MG/KG	SB	33000	7,810 J	4,310 J	5,740 J	6,340 J	NA
Arsenic	MG/KG	7.5	3-12	2.9	25.0	8.9	10.9	NA
Barium	MG/KG	300	15-600	32.3 J	23.9 J	328 J	48.2 J	NA
Beryllium	MG/KG	0.16	0-1.75	0.32	0.25	0.44	0.52	NA
Cadmium	MG/KG	1	0.1-1	0.21 U	0.19 U	0.23 U	0.23 U	NA
Calcium	MG/KG	SB	130-35000	59,400 J	120,000 J	18,300 J	75,600 J	NA
Chromium	MG/KG	10	1.5-40	9.7	6.3	10.1	7.5	NA
Cobalt	MG/KG	30	2.5-60	5.6	5.7	9.2	6.0	NA
Copper	MG/KG	25	1-50	18.2	7.4	72.9	26.2	NA
Iron	MG/KG	2000	2000- 550000	15,600 J	12,100 J	16,100 J	17,200 J	NA
Lead	MG/KG	SB	500	7.3	10.6	2,110	168	NA
Magnesium	MG/KG	SB	100-5000	4,180	42,400	2,630	5,490	NA
Manganese	MG/KG	SB	50-5000	808 J	334 J	265 J	484 J	NA
Mercury	MG/KG	0.1	0.001-0.2	0.018 U	0.016 U	0.227	0.058	NA
Nickel	MG/KG	13	0.5-25	15.0	13.9	12.0	14.3	NA
Potassium	MG/KG	SB	8500-43000	771	523	750	589	NA
Sodium	MG/KG	SB	6000-8000	150 U	137	497	257	NA
Vanadium	MG/KG	150	1-300	10.5	6.5	18.6	21.0	NA
Zinc	MG/KG	20	9-50	40.9	22.8	121	64.7	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-10	SB-10	SB-11-1	SB-11-1	SB-12
Sam	ple ID			SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11	DUP-042606
Ma	Matrix				Soil 18.0-20.0 11/14/05	Soil 6.0-8.0 11/14/05	Soil	Soil
Depth Interval (ft) Date Sampled			14.0-16.0	9.0-11.0			10.0-12.0	
			11/14/05	11/14/05			04/26/06	
Parameter	Parameter Units Criteria Criteria (1) (2)							Field Duplicate (1-1)
Miscellaneous Paramet	ers							
Cyanide	MG/KG	-	-	1.0 U	0.94 U	1.0 U	1.2	1.0 UJ
Cyanide, Amenable To Chlorination	MG/KG	-	-	0.92 U	1.0 U	0.99 U	1.1	NA
Total Organic Carbon (TOC)	MG/KG	-	-	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-12	SB-12	SB-13	SB-13	SB-14
Sam	ple ID			SB12 10-12	SB12 14-15	SB13 10-12	13 14-15.7	SB14 11-12
M	atrix			Soil	Soil	Soil	Soil	Soil
Depth II	nterval (ft	:)		10.0-12.0	14.0-15.0	10.0-12.0	14.0-15.7	11.0-12.0
Date S	Sampled			04/26/06	04/26/06	04/26/06	04/26/06	04/26/06
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compo	unds							
Acetone	UG/KG	200	-	NA	NA	NA	NA	NA
Benzene	UG/KG	60	-	5 U	5 U	5 U	5 U	7,500 U
Carbon disulfide	UG/KG	2700	-	NA	NA	NA	NA	NA
Ethylbenzene	UG/KG	5500	-	5 U	1 J	5 U	5 U	53,000
Isopropylbenzene (Cumene)	UG/KG	2300	-	NA	NA	NA	NA	NA
Methyl ethyl ketone (2- Butanone)	UG/KG	300	-	NA	NA	NA	NA	NA
Styrene	UG/KG	-	-	NA	NA	NA	NA	NA
Tetrachloroethene	UG/KG	1400	-	NA	NA	NA	NA	NA
Toluene	UG/KG	1500	-	5 U	3 J	5 U	3 J	14,000
Xylene (total)	UG/KG	1200	-	15 U	3 J	16 U	4 J	640,000
Total BTEX	UG/KG	-	-	ND	7	ND	7	707,000
Total Volatile Organic Compounds	UG/KG	10000	-	ND	7	ND	7	707,000
Semivolatile Organic Com	pounds							
1,1'-Biphenyl	UG/KG	50000	-	NA	NA	NA	NA	NA
2,4-Dimethylphenol	UG/KG	50000	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/KG	36400	-	340 U	22 J	98 J	60 J	19,000
2-Methylphenol (o-cresol)	UG/KG	100 or MDL	-	NA	NA	NA	NA	NA
4-Methylphenol (p-cresol)	UG/KG	900	-	NA	NA	NA	NA	NA
Acenaphthene	UG/KG	50000	-	340 U	350 U	71 J	36 J	4,800 J
Acenaphthylene	UG/KG	41000	-	120 J	350 U	340 U	340 U	18,000

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	ation ID			SB-12	SB-12	SB-13	SB-13	SB-14
San	nple ID			SB12 10-12	SB12 14-15	SB13 10-12	13 14-15.7	SB14 11-12
M	atrix			Soil	Soil	Soil	Soil	Soil
Depth I	nterval (ft	t)		10.0-12.0	14.0-15.0	10.0-12.0	14.0-15.7	11.0-12.0
Date :	Sampled			04/26/06	04/26/06	04/26/06	04/26/06	04/26/06
Parameter	Units	Criteria (1)	Criteria (2)					
Semivolatile Organic Com	pounds							
Anthracene	UG/KG	50000	-	34 J	350 U	340 U	340 U	29,000
Benzo(a)anthracene	UG/KG	224 or MDL	-	180 J	350 U	340 U	340 U	35,000
Benzo(a)pyrene	UG/KG	61 or MDL	-	240 J	350 U	340 U	340 U	28,000
Benzo(b)fluoranthene	UG/KG	1100	-	350	31 J	340 U	340 U	31,000
Benzo(g,h,i)perylene	UG/KG	50000	-	380	42 J	340 U	340 U	13,000
Benzo(k)fluoranthene	UG/KG	1100	-	120 J	350 U	340 U	340 U	10,000
Carbazole	UG/KG	50000	-	NA	NA	NA	NA	NA
Chrysene	UG/KG	400	-	230 J	350 U	340 U	340 U	27,000
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	-	80 J	350 U	340 U	340 U	4,900 J
Dibenzofuran	UG/KG	6200	-	340 U	350 U	340 U	20 J	16,000
Fluoranthene	UG/KG	50000	-	400	21 J	340 U	340 U	66,000
Fluorene	UG/KG	50000	-	340 U	350 U	340 U	340 U	23,000
Indeno(1,2,3-cd)pyrene	UG/KG	3200	-	290 J	32 J	340 U	340 U	14,000
Naphthalene	UG/KG	13000	-	24 J	350 U	180 J	110 J	24,000
Phenanthrene	UG/KG	50000	-	150 J	350 U	72 J	44 J	66,000
Phenol	UG/KG	30 or MDL	-	NA	NA	NA	NA	NA
Pyrene	UG/KG	50000	-	330 J	350 U	340 U	340 U	46,000
Total Polycyclic Aromatic Hydrocarbons	UG/KG	-	-	2,928	126	323	190	439,700
Total Semivolatile Organic Compounds	UG/KG	5.00E+05	-	2,928	148	421	270	474,700

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

	Location ID			SB-12	SB-12	SB-13	SB-13	SB-14
	Sample ID			SB12 10-12	SB12 14-15	SB13 10-12	13 14-15.7	SB14 11-12
	Matrix			Soil	Soil	Soil	Soil	Soil
De	epth Interval (ft	:)		10.0-12.0	14.0-15.0 04/26/06	10.0-12.0	14.0-15.7	11.0-12.0
I	Date Sampled			04/26/06		04/26/06	04/26/06	04/26/06
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Aluminum	MG/KG	SB	33000	NA	NA	NA	NA	NA
Arsenic	MG/KG	7.5	3-12	NA	NA	NA	NA	NA
Barium	MG/KG	300	15-600	NA	NA	NA	NA	NA
Beryllium	MG/KG	0.16	0-1.75	NA	NA	NA	NA	NA
Cadmium	MG/KG	1	0.1-1	NA	NA	NA	NA	NA
Calcium	MG/KG	SB	130-35000	NA	NA	NA	NA	NA
Chromium	MG/KG	10	1.5-40	NA	NA	NA	NA	NA
Cobalt	MG/KG	30	2.5-60	NA	NA	NA	NA	NA
Copper	MG/KG	25	1-50	NA	NA	NA	NA	NA
Iron	MG/KG	2000	2000- 550000	NA	NA	NA	NA	NA
Lead	MG/KG	SB	500	NA	NA	NA	NA	NA
Magnesium	MG/KG	SB	100-5000	NA	NA	NA	NA	NA
Manganese	MG/KG	SB	50-5000	NA	NA	NA	NA	NA
Mercury	MG/KG	0.1	0.001-0.2	NA	NA	NA	NA	NA
Nickel	MG/KG	13	0.5-25	NA	NA	NA	NA	NA
Potassium	MG/KG	SB	8500-43000	NA	NA	NA	NA	NA
Sodium	MG/KG	SB	6000-8000	NA	NA	NA	NA	NA
Vanadium	MG/KG	150	1-300	NA	NA	NA	NA	NA
Zinc	MG/KG	20	9-50	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-12	SB-12	SB-13	SB-13	SB-14
Sam	ple ID			SB12 10-12	SB12 14-15	SB13 10-12	13 14-15.7	SB14 11-12
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			10.0-12.0	14.0-15.0	10.0-12.0	14.0-15.7	11.0-12.0	
Date Sampled			04/26/06	04/26/06	04/26/06	04/26/06	04/26/06	
Parameter	Units	Criteria (1)	Criteria (2)					
Miscellaneous Paramet	ers							
Cyanide	MG/KG	-	-	0.98 UJ	1.0 J	1.0 UJ	0.97 UJ	1.2 UJ
Cyanide, Amenable To Chlorination	MG/KG	-	-	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	MG/KG	-	-	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	ation ID			SB-14	SB-15	SB-16	SB-17	SB-17
San	nple ID			SB14 14-15	SB15 12-14	SB16 10-12	SB17 9-11	SB17 12-14
M	atrix			Soil	Soil	Soil	Soil	Soil
Depth I	nterval (fi	t)		14.0-15.0	12.0-14.0	10.0-12.0	9.0-11.0	12.0-14.0
Date :	Sampled			04/26/06	04/26/06	04/26/06	04/26/06	04/26/06
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compo	unds							
Acetone	UG/KG	200	-	NA	NA	NA	NA	NA
Benzene	UG/KG	60	-	2 J	5 U	34	12	4 J
Carbon disulfide	UG/KG	2700	-	NA	NA	NA	NA	NA
Ethylbenzene	UG/KG	5500	-	2 J	5 U	2 J	7	6 U
Isopropylbenzene (Cumene)	UG/KG	2300	-	NA	NA	NA	NA	NA
Methyl ethyl ketone (2- Butanone)	UG/KG	300	-	NA	NA	NA	NA	NA
Styrene	UG/KG	-	-	NA	NA	NA	NA	NA
Tetrachloroethene	UG/KG	1400	-	NA	NA	NA	NA	NA
Toluene	UG/KG	1500	-	8	3 J	20	11	4 J
Xylene (total)	UG/KG	1200	-	28	16 U	15 J	36	3 J
Total BTEX	UG/KG	-	-	40	3	71	66	11
Total Volatile Organic Compounds	UG/KG	10000	-	40	3	71	66	11
Semivolatile Organic Com	pounds							
1,1'-Biphenyl	UG/KG	50000	-	NA	NA	NA	NA	NA
2,4-Dimethylphenol	UG/KG	50000	-	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/KG	36400	-	980 J	250 J	67 J	460 J	460
2-Methylphenol (o-cresol)	UG/KG	100 or MDL	-	NA	NA	NA	NA	NA
4-Methylphenol (p-cresol)	UG/KG	900	-	NA	NA	NA	NA	NA
Acenaphthene	UG/KG	50000	-	2,000 J	140 J	38 J	210 J	160 J
Acenaphthylene	UG/KG	41000	-	5,800	590	440 U	2,000 U	330 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised). Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	ation ID			SB-14	SB-15	SB-16	SB-17	SB-17
San	nple ID			SB14 14-15	SB15 12-14	SB16 10-12	SB17 9-11	SB17 12-14
M	atrix			Soil	Soil	Soil	Soil	Soil
Depth I	nterval (ft	:)		14.0-15.0	12.0-14.0	10.0-12.0	9.0-11.0	12.0-14.0 04/26/06
Date :	Sampled			04/26/06	04/26/06	04/26/06	04/26/06	
Parameter	Units	Criteria (1)	Criteria (2)					
Semivolatile Organic Com	pounds							
Anthracene	UG/KG	50000	-	8,800	1,000	440 U	150 J	990
Benzo(a)anthracene	UG/KG	224 or MDL	-	31,000	2,300	440 U	200 J	1,000
Benzo(a)pyrene	UG/KG	61 or MDL	-	24,000	1,700	440 U	120 J	730
Benzo(b)fluoranthene	UG/KG	1100	-	27,000	2,700	440 U	160 J	1,100
Benzo(g,h,i)perylene	UG/KG	50000	-	12,000	800	440 U	2,000 U	350
Benzo(k)fluoranthene	UG/KG	1100	-	10,000	2,800	440 U	100 J	1,200
Carbazole	UG/KG	50000	-	NA	NA	NA	NA	NA
Chrysene	UG/KG	400	-	22,000	2,200	440 U	150 J	840
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	-	4,400	310 J	440 U	2,000 U	120 J
Dibenzofuran	UG/KG	6200	-	1,400 J	460	440 U	340 J	560
Fluoranthene	UG/KG	50000	-	54,000	5,400	28 J	400 J	2,400
Fluorene	UG/KG	50000	-	3,500 J	780	440 U	430 J	900
Indeno(1,2,3-cd)pyrene	UG/KG	3200	-	12,000	840	440 U	2,000 U	350
Naphthalene	UG/KG	13000	-	2,500 J	260 J	130 J	370 J	460
Phenanthrene	UG/KG	50000	-	18,000	4,400	45 J	860 J	3,500
Phenol	UG/KG	30 or MDL	-	NA	NA	NA	NA	NA
Pyrene	UG/KG	50000	-	40,000	4,000	440 U	310 J	1,800
Total Polycyclic Aromatic Hydrocarbons	UG/KG	-	-	277,000	30,220	241	3,460	16,230
Total Semivolatile Organic Compounds	UG/KG	5.00E+05	-	279,380	30,930	308	4,260	17,250

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

	Location ID			SB-14	SB-15	SB-16	SB-17	SB-17
	Sample ID			SB14 14-15	SB15 12-14	SB16 10-12	SB17 9-11	SB17 12-14
	Matrix			Soil	Soil	Soil	Soil	Soil
De	pth Interval (ft	:)		14.0-15.0	12.0-14.0 04/26/06	10.0-12.0	9.0-11.0	12.0-14.0
[Date Sampled			04/26/06		04/26/06	04/26/06	04/26/06
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Aluminum	MG/KG	SB	33000	NA	NA	NA	NA	NA
Arsenic	MG/KG	7.5	3-12	NA	NA	NA	NA	NA
Barium	MG/KG	300	15-600	NA	NA	NA	NA	NA
Beryllium	MG/KG	0.16	0-1.75	NA	NA	NA	NA	NA
Cadmium	MG/KG	1	0.1-1	NA	NA	NA	NA	NA
Calcium	MG/KG	SB	130-35000	NA	NA	NA	NA	NA
Chromium	MG/KG	10	1.5-40	NA	NA	NA	NA	NA
Cobalt	MG/KG	30	2.5-60	NA	NA	NA	NA	NA
Copper	MG/KG	25	1-50	NA	NA	NA	NA	NA
Iron	MG/KG	2000	2000- 550000	NA	NA	NA	NA	NA
Lead	MG/KG	SB	500	NA	NA	NA	NA	NA
Magnesium	MG/KG	SB	100-5000	NA	NA	NA	NA	NA
Manganese	MG/KG	SB	50-5000	NA	NA	NA	NA	NA
Mercury	MG/KG	0.1	0.001-0.2	NA	NA	NA	NA	NA
Nickel	MG/KG	13	0.5-25	NA	NA	NA	NA	NA
Potassium	MG/KG	SB	8500-43000	NA	NA	NA	NA	NA
Sodium	MG/KG	SB	6000-8000	NA	NA	NA	NA	NA
Vanadium	MG/KG	150	1-300	NA	NA	NA	NA	NA
Zinc	MG/KG	20	9-50	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

Loca	tion ID			SB-14	SB-15	SB-16	SB-17	SB-17
Sam	ple ID			SB14 14-15	SB15 12-14	SB16 10-12	SB17 9-11	SB17 12-14
Matrix Depth Interval (ft)				Soil	Soil	Soil	Soil	Soil
				14.0-15.0	12.0-14.0	10.0-12.0	9.0-11.0	12.0-14.0
Date Sampled			04/26/06	04/26/06	04/26/06	04/26/06	04/26/06	
Parameter	Units	Criteria (1)	Criteria (2)					
Miscellaneous Paramet	ers							
Cyanide	MG/KG	-	-	0.98 UJ	1.0 UJ	1.2 UJ	4.0 J	0.97 UJ
Cyanide, Amenable To Chlorination	MG/KG	-	-	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	MG/KG	-	-	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

NA - Not Analyzed

TABLE 4 SUMMARY OF DETECTED GROUNDWATER ANALYTICAL RESULTS NYSEG - CORTLAND

Location	ID		PZ-01	PZ-02	PZ-02	PZ-03	PZ-04
Sample II	D		PZ-01	DUP-11-16-05	PZ-02	PZ-03	PZ-04
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interva			-	- 11/16/05	- 11/16/05	-	-
Date Samp	led		11/16/05			11/16/05	11/16/05
Parameter	Units	Criteria*		Field Duplicate (1-1)			
Metals							
Aluminum	UG/L	-	20.9 B	200 U	200 U	1,600	434
Barium	UG/L	1000	49.6	50.0	50.7	61.6	53.0
Calcium	UG/L	-	83,400	86,800	87,500	87,200	87,400
Chromium	UG/L	50	0.92 B	4.0 U	4.0 U	2.8 B	1.1 B
Cobalt	UG/L	-	4.0 U	4.0 U	4.0 U	0.59 B	4.0 U
Copper	UG/L	200	0.78 B	1.7 B	1.6 B	2.7 B	1.7 B
Iron	UG/L	300	30.8 B	50.0 U	50.0 U	1,200	324
Lead	UG/L	25	5.0 U	5.0 U	5.0 U	2.0 B	5.0 U
Magnesium	UG/L	35000	15,700	16,000	16,100	16,700	16,500
Manganese	UG/L	300	2.3 B	0.95 B	1.3 B	22.6	8.0
Nickel	UG/L	100	10.0 U	10.0 U	10.0 U	1.6 B	10.0 U
Potassium	UG/L	-	1,550	1,840	1,880	2,240	1,900
Sodium	UG/L	20000	56,500	67,900	68,500	61,500	64,600
Vanadium	UG/L	-	5.0 U	5.0 U	5.0 U	2.9 B	0.56 B
Zinc	UG/L	2000	1.3 B	1.1 B	1.3 B	6.3 B	2.1 B

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

NA - Not Analyzed

^{*}Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

TABLE 5 SCRAPE SAMPLE ANALYTICAL RESULTS NYSEG - CORTLAND

Location ID		SCRAPE-01	SCRAPE-02	SCRAPE-03
Sample ID		SCRAPE 1	SCRAPE 2	SCRAPE 3
Matrix		Soil	Soil	Soil
Depth Interval (ft)		-	-	-
Date Sampled	-	06/12/06	06/12/06	06/12/06
Parameter	Units			
Volatile Organic Compounds				
Benzene	UG/KG	120	44	1 J
Ethylbenzene	UG/KG	38	22	5 U
Toluene	UG/KG	97	58 U	5 U
Xylene (total)	UG/KG	170	120	15 U
Total BTEX	UG/KG	425	186	1
Semivolatile Organic Compounds				
2-Methylnaphthalene	UG/KG	25,000 J	6,400 J	330 U
Acenaphthene	UG/KG	4,800 J	68,000 U	330 U
Acenaphthylene	UG/KG	150,000	42,000 J	330 U
Anthracene	UG/KG	310,000	130,000	19 J
Benzo(a)anthracene	UG/KG	670,000	240,000	47 J
Benzo(a)pyrene	UG/KG	410,000	140,000	32 J
Benzo(b)fluoranthene	UG/KG	610,000	190,000	47 J
Benzo(g,h,i)perylene	UG/KG	140,000	54,000 J	20 J
Benzo(k)fluoranthene	UG/KG	200,000	65,000 J	330 U
Chrysene	UG/KG	650,000	220,000	44 J
Dibenzo(a,h)anthracene	UG/KG	69,000	22,000 J	330 U
Dibenzofuran	UG/KG	41,000 J	11,000 J	330 U
Fluoranthene	UG/KG	1,600,000 D	490,000	120 J
Fluorene	UG/KG	46,000 J	14,000 J	330 U
Indeno(1,2,3-cd)pyrene	UG/KG	160,000	60,000 J	17 J
Naphthalene	UG/KG	42,000 J	9,700 J	46 J
Phenanthrene	UG/KG	990,000	370,000	110 J

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

 $[\]ensuremath{\mathsf{D}}$ - Result reported from a secondary dilution analysis.

TABLE 5 SCRAPE SAMPLE ANALYTICAL RESULTS NYSEG - CORTLAND

Location ID	SCRAPE-01	SCRAPE-02	SCRAPE-03	
Sample ID	SCRAPE 1	SCRAPE 2	SCRAPE 3 Soil	
Matrix	Soil	Soil		
Depth Interval (ft)	-	-		
Date Sampled	06/12/06	06/12/06	06/12/06	
Parameter	Units			
Semivolatile Organic Compounds				
Pyrene	UG/KG	1,000,000	360,000	70 J
Total Polycyclic Aromatic Hydrocarbons	UG/KG	7,051,800	2,406,700	572
Total Semivolatile Organic Compounds	UG/KG	7,117,800	2,424,100	572

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

TABLE 6 SURFACE SOIL ANALYTICAL RESULTS NYSEG - CORTLAND

Location ID			SS-01	SS-02	SS-02	SS-03	SS-04
Sample ID		SS-01	SS-02	SS-FD-042606	SS-03	SS-04	
Matrix		Soil	Soil	Soil	Soil	Soil	
Depth Interval (ft)		-	-	-	-	-	
Date Sampled		04/26/06	04/26/06	04/26/06	04/26/06	04/26/06	
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/KG	36400	4,300 U	4,500 U	9,000 U	4,600 U	4,200 U
Acenaphthene	UG/KG	50000	900 J	4,500 U	9,000 U	4,600 U	370 J
Acenaphthylene	UG/KG	41000	4,300 U	4,500 U	9,000 U	4,600 U	4,200 U
Anthracene	UG/KG	50000	2,400 J	660 J	1,300 J	290 J	1,200 J
Benzo(a)anthracene	UG/KG	224 or MDL	7,400	3,000 J	5,200 J	1,900 J	3,600 J
Benzo(a)pyrene	UG/KG	61 or MDL	6,600	2,900 J	4,600 J	1,800 J	3,200 J
Benzo(b)fluoranthene	UG/KG	1100	8,800	4,200 J	6,600 J	2,100 J	4,000 J
Benzo(g,h,i)perylene	UG/KG	50000	4,000 J	1,300 J	2,200 J	780 J	1,400 J
Benzo(k)fluoranthene	UG/KG	1100	2,300 J	1,000 J	1,500 J	860 J	1,600 J
Chrysene	UG/KG	400	7,300	3,100 J	5,200 J	1,800 J	3,600 J
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	1,200 J	430 J	740 J	270 J	450 J
Dibenzofuran	UG/KG	6200	4,300 U	4,500 U	9,000 U	4,600 U	4,200 U
Fluoranthene	UG/KG	50000	16,000	6,800	11,000	3,200 J	8,900
Fluorene	UG/KG	50000	4,300 U	4,500 U	9,000 U	4,600 U	4,200 U
Indeno(1,2,3-cd)pyrene	UG/KG	3200	3,700 J	1,300 J	2,100 J	780 J	1,400 J
Naphthalene	UG/KG	13000	4,300 U	4,500 U	9,000 U	4,600 U	4,200 U
Phenanthrene	UG/KG	50000	11,000	2,800 J	5,400 J	4,600 U	5,600
Pyrene	UG/KG	50000	12,000	4,900	7,800 J	2,500 J	6,100
Total Polycyclic Aromatic Hydrocarbons	UG/KG	-	83,600	32,390	53,640	16,280	41,420
Total Semivolatile Organic Compounds	UG/KG	5.00E+05	83,600	32,390	53,640	16,280	41,420
Miscellaneous Parameters							
Cyanide	MG/KG	-	1.1 UJ	0.17 UJ	1.8 J	1.3 UJ	1.2 UJ

^{*}Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

TABLE 6 SURFACE SOIL ANALYTICAL RESULTS NYSEG - CORTLAND

Location ID	SS-05	SS-06		
Sample ID	SS-05	SS-06		
Matrix	Soil	Soil		
Depth Interval (fi	-	-		
Date Sampled	04/26/06	04/26/06		
Parameter	Units	Criteria*		
Semivolatile Organic Compounds				
2-Methylnaphthalene	UG/KG	36400	440 U	4,400 U
Acenaphthene	UG/KG	50000	24 J	290 J
Acenaphthylene	UG/KG	41000	440 U	4,400 U
Anthracene	UG/KG	50000	64 J	880 J
Benzo(a)anthracene	UG/KG	224 or MDL	290 J	3,100 J
Benzo(a)pyrene	UG/KG	61 or MDL	280 J	2,800 J
Benzo(b)fluoranthene	UG/KG	1100	400 J	4,000 J
Benzo(g,h,i)perylene	UG/KG	50000	130 J	1,400 J
Benzo(k)fluoranthene	UG/KG	1100	110 J	1,100 J
Chrysene	UG/KG	400	300 J	3,000 J
Dibenzo(a,h)anthracene	UG/KG	14 or MDL	42 J	420 J
Dibenzofuran	UG/KG	6200	440 U	4,400 U
Fluoranthene	UG/KG	50000	620	6,900
Fluorene	UG/KG	50000	440 U	4,400 U
Indeno(1,2,3-cd)pyrene	UG/KG	3200	130 J	1,300 J
Naphthalene	UG/KG	13000	440 U	4,400 U
Phenanthrene	UG/KG	50000	320 J	4,300 J
Pyrene	UG/KG	50000	490	5,200
Total Polycyclic Aromatic Hydrocarbons	UG/KG	-	3,200	34,690
Total Semivolatile Organic Compounds	UG/KG	5.00E+05	3,200	34,690
Miscellaneous Parameters				
Cyanide	MG/KG	-	1.2 UJ	1.3 UJ

^{*}Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

APPENDIX A SITE PHOTOGRAPHS



Photo #1: Looking southeast, 45 Charles Street on left, 43 Charles Street on right.



Photo #2: Looking east between 43 and 45 Charles Street.

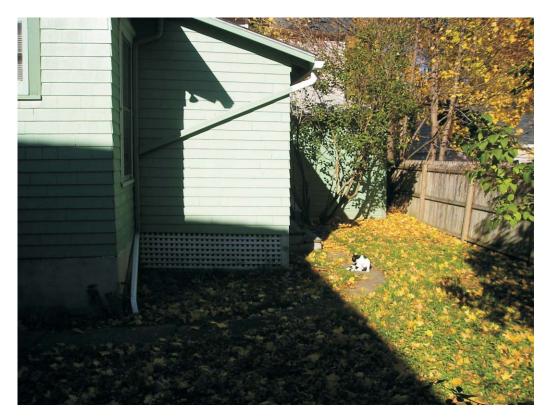


Photo #3: Backyard at 45 Charles Street, looking north.



Photo #4: Backyard at 43 Charles Street, looking south-southeast.



Photo #5: GPR survey in front of 43 Charles Street.



Photo #6: Close-up of GPR apparatus.



Photo #7: Test trench TP-01 excavated to approximately 7.5 feet below ground surface, looking southeast. Thin ash layer visible at approximately 1.5 feet below ground surface.



Photo #8: Test trench TP-02 excavated to approximately 7.0 feet below ground surface, looking north. Soils appear darker at north end of trench due to perched water percolating into trench.



Photo #9: Test trench TP-03 excavated to approximately 10.5 feet below ground surface, looking west. Note ash layer at approximately 6.0 feet below ground surface. Perched water encountered at 10.5 feet below ground surface.



Photo #10: Cobbles encased in glassy looking tar observed in TP-03.



Photo #11: Skid steer mounted geoprobe unit advancing SB-07/PZ-02, looking east-southeast.



Photo #12: Surface completion at PZ-02.



Photo #13: Stone #1 prior to sampling.



Photo #14: Stone #2 prior to sampling. Note crackly appearance.



Photo #15: Stone #3 with mold or mildew appearance.



Photo #16: Stone #4 with black crackly appearance prior to sampling.



Photo #17: Stone #5, located beneath Stone #4.



Photo #18: Background drill holes for collection of Scrape #3 sample, collected from the north wall.



Photo #19: Background (Scrape #3) locations on south basement wall. Note crawl space access in upper right corner of photograph.

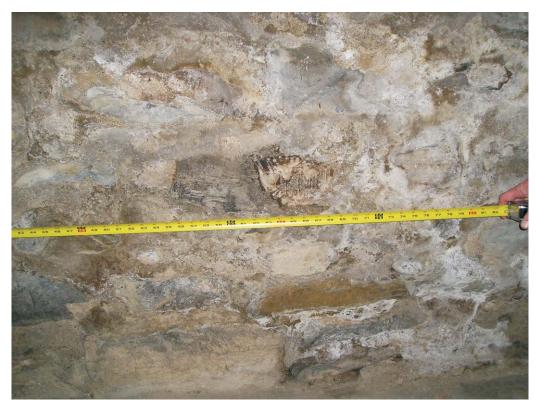


Photo #20: Stone #1 after sampling. Located approximately 5 feet from the wooden partition wall.



Photo #21: Stone #1 after sampling located approximately 2 feet above the basement floor.

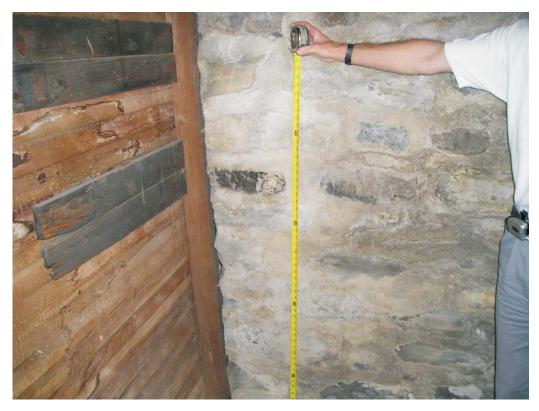


Photo #22: Stone #2 after sampling located approximately 3.5 feet above basement floor. Stone #3 is to the right of the measuring tape.



Photo #23: Stone #2 and #3.



Photo #24: Stone #4 and #5 after sampling.

APPENDIX B GEOPHYSICAL APPLICATIONS REPORT

GEOPHYSICAL APPLICATIONS

INCORPORATED

Geophysical Survey Report 43 and 45 Charles Street Cortland, New York

Prepared for URS CORPORATION November 2005



November 22, 2005

Mr. Michael Gutmann URS CORPORATION 77 Goodell Street Buffalo, NY 14203

Subject:

Geophysical Survey Report 43 and 45 Charles Street Cortland, New York

Dear Mr. Gutmann:

Geophysical Applications, Inc. performed a survey at the above-noted site to help URS identify physical remnants of the former gasholder and associated piping at 43 and 45 Charles Street. The survey area was approximately 80 by 105 feet. Fieldwork was performed November 7 and 8, 2005.

The geophysical survey method included ground penetrating radar (GPR) profiling, as described below.

METHODS OF INVESTIGATION

Survey Control

We established a reference grid throughout the survey area before geophysical data acquisition. The grid was denoted by spray paint and chalk marks, and referenced by taped distance measurements to homes and other semi-permanent features.

Ground Penetrating Radar

GPR profiling is based on the principle that materials with contrasting electrical properties reflect radar signals back to the ground surface. Metal objects such as pipes and steel reinforcement in concrete generally produce high-amplitude GPR reflections. Plotting observed reflections on a base map typically enables an interpreter to identify a large object's lateral extent, or a pipe's trend.

GPR data were recorded using a GSSI model SIR-2000 radar instrument, with a 400 megahertz (MHz) antenna. Radar profiles were recorded continuously along traverses located 2.5 feet apart. These profiles were displayed on a color monitor for immediate inspection and preliminary interpretation. GPR data were also downloaded to a computer and archived to a CD-ROM for backup and storage.

The horizontal scale on each GPR record was determined by the antenna speed, and survey stations were noted by pressing a marker button as the antenna passed each grid node. The vertical scale of radar cross sections recorded during this survey was 60 nanoseconds. This time interval was selected to enhance deeper reflectors (up to ten feet below ground surface) while maintaining resolution of smaller near-surface buried objects.

SURVEY LIMITATIONS

GPR signal penetration is site specific. It is determined by dielectric properties of local soil or fill materials. Maximum GPR signal penetration throughout most of this site was approximately 6 feet below ground surface. Objects deeper than the GPR signal's maximum penetration depth remain undetected.

GPR interpretations are subjective, based on identifying reflection patterns that may not uniquely represent a subsurface object. Profiling along perpendicular traverses helps to determine the size and shape of buried objects. GPR interpretation is more subjective than most geophysical methods, and anomaly confirmation via test pits, borings, or other direct means is strongly recommended.

Varying a GPR antenna's speed along a survey traverse can cause slight errors in horizontal distance interpolations and inferred object positions. Distance interpolation errors were minimized during this survey by using 5-foot distance marks.

GPR is most likely to detect concrete or metallic objects. Plastic or vitreous clay pipes, or fiberglass tanks, are not likely to be detected with GPR.

RESULTS

GPR survey coverage and interpretations are shown on Figure 1. Continuous flat GPR reflectors ranging from one to three feet deep exist between both homes, see Figure 1. The edge on the west side appears to have approximately a one-foot high buried wall and to the east of this buried wall are flat reflectors ranging in depth from one to three feet.

Yellow, green, and blue lines on Figure 1 represent pipes or cables that were marked by others. Where GPR detected these utilities, their depths are shown on Figure 1.

A few GPR point targets (reflections from small buried objects) were detected throughout the survey area. Because these reflections were only visible on one or two traverses, they are inferred to represent small discrete objects rather than laterally-extensive pipes, cables, or concrete pads.

* * * * *

Please call the undersigned at 508/429-2430 if you have questions regarding our report. We appreciate this opportunity to provide geophysical services to URS Corporation, and we welcome inquiries regarding this survey or future projects.

Sincerely.

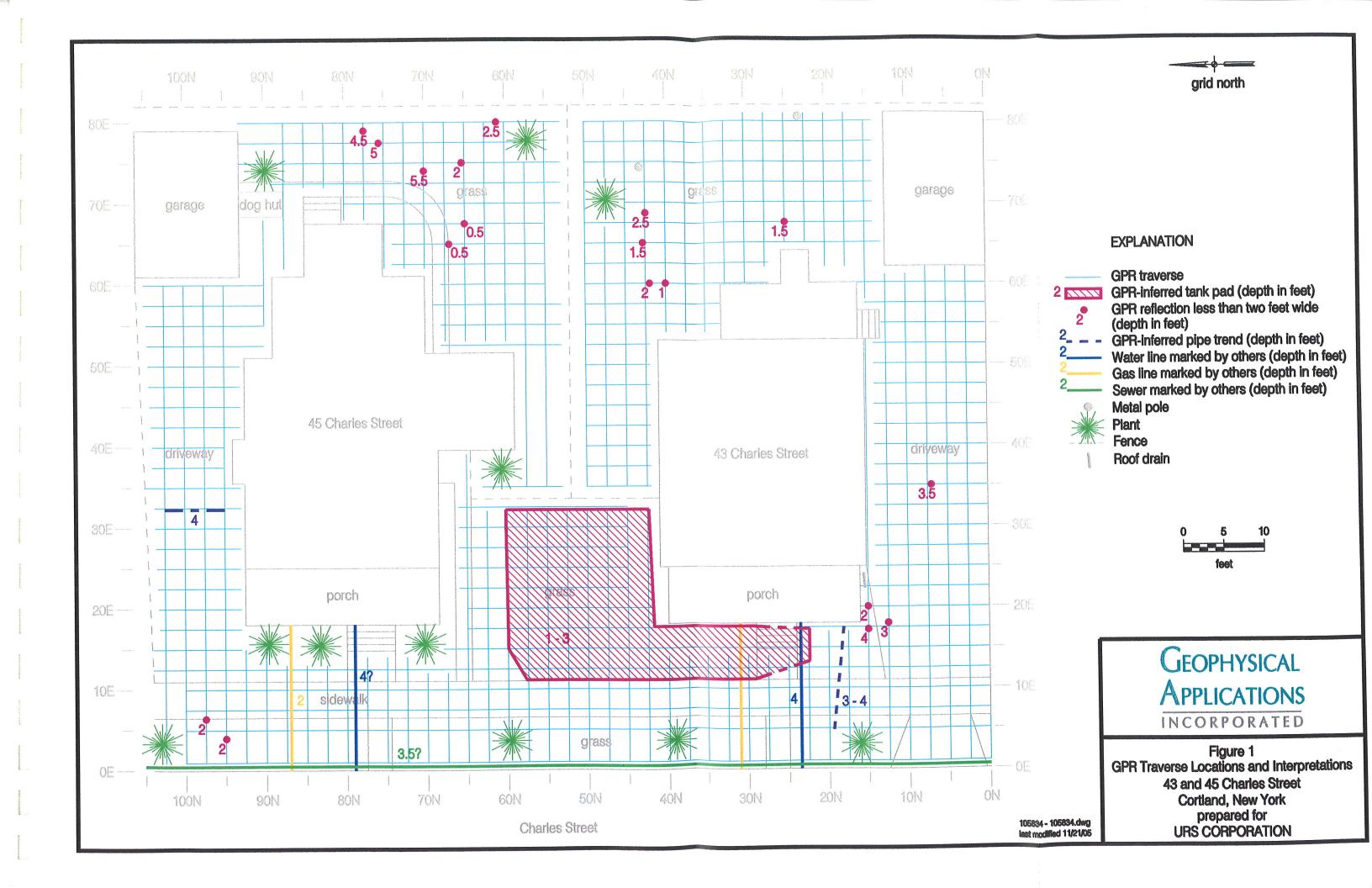
GEOPHYSICAL APPLICATIONS, INC.

Peter Giger

Geophysicist

Principal and Geophysicist

105834



APPENDIX C TEST TRENCH LOGS

URS

77 Goodell Street Buffalo, New York 14203 (716) 856-5636

TEST TRENCH LOG

DDO IECT.			l rikLitori Loo	Obest 4 of 4
PROJECT:		Former Cortland Gasholder		Sheet 1 of 1
CLIENT:		NYSEG	JOB NUMBER:	11174428.00000
CONTRACT		Nature's Way EC & C, Inc.	LOCATION:	Cortland, New York
DATE STAF		11/9/2005	GROUND ELEVATION:	1118.86 feet AMSL
DATE COM		11/9/2005 TP-01	OPERATOR:	Rich Brown
		1F-U1	GEOLOGIST:	Rob Murphy
DEPTH (FT)	SAMPLE		DESCRIPTION	ON
1		Fill: (0.0 to 1.5') Dark Brown to brown Clayey S coal. One piece of fire brick, o		d cobbles. Thin ash layer at 1.5' with trace pipe.
3		Clayey Silt:(1.5 to 7.5) (MH) br	own, moist, with coarse gra	avel and cobbles.
4				
5				
7				
8 9 10 11				
COMMENTS	S:	Collected soil samples TP-01-2 Samples submitted to STL Lab analyses.		-7.5' from north end of pit. , TAL metals, Phenols, and Cyanide

URS

77 Goodell Street Buffalo, New York 14203 (716) 856-5636

TEST TRENCH LOG

PROJECT:			eastion	Shoot 1 of 1
		Former Cortland Gasholder I		Sheet 1 of 1 11174428.00000
CLIENT: CONTRACT	rop.	NYSEG	JOB NUMBER: LOCATION:	Cortland, New York
		Nature's Way EC & C, Inc.	GROUND ELEVATION:	1119.20 feet AMSL
DATE STAF		11/9/2005 11/9/2005	OPERATOR:	
TRENCH N		TP-02	GEOLOGIST:	Rich Brown
		17-02	GEOLOGIST.	Rob Murphy
DEPTH (FT)	SAMPLE		DESCRIPTION	ON
1		Fill: (0.0 to 1.5') Dark Brown to gray Clayey Silt metal and trace red brick near		(rounded) and cobbles. One piece of scrap
2		depth. Cobbles numerous at d	lepth is this pit. Minor amo	avel and cobbles. Increasing clay content with bunts of perched water percolated into pit from but discharge to unseen drain tile system.
3		moral cha during excavation, d	odia de relateu lo dowlispo	out discharge to uniscen drain the system.
4				
5				
6				
7				
8				
9				
10				74
11				
12				
COMMENT	S:	Collected soil samples TP-02-2 south end of pit. Samples sub- Phenols, and Cyanide analyse	mitted to STL Laboratory fo	nd TP-02-5.5' and TP-02-7.0' from or VOCs, SVOCs, TAL metals,

URS

77 Goodell Street Buffalo, New York 14203 (716) 856-5636

TEST TRENCH LOG

		163	I IRENCH LOG	
PROJECT:		Former Cortland Gasholder	Location	Sheet 1 of 1
CLIENT:		NYSEG	JOB NUMBER:	11174428.00000
CONTRACT	ΓOR:	Nature's Way EC & C, Inc.	LOCATION:	Cortland, New York
DATE STAF	RTED:	11/9/2005	GROUND ELEVATION:	1118.66 feet AMSL
DATE COM	PLETED:	11/9/2005	OPERATOR:	Rich Brown
TRENCH N	UMBER:	TP-03	GEOLOGIST:	Rob Murphy
DEPTH	SAMPLE			
(FT)			DESCRIPTION	ON
1		zone at approximately 1.5'. Br bottles, bricks, fire brick, ash, o	own Clayey Silt with Cobblone piece of metal pipe, on	avel and Cobbles. Mortar material and Ash les at 1.5' to 6.0'. Below 6.0', Debris: glass, e piece of ceramic coated metal. Slight odor d in weathered glassy appearing tar, no odor.
3		on two pieces of brick. One pi	ece of 4-5 couples effcased	u in weathered glassy appearing tar, no odor.
4				
5				
6				
7 8				
9				
10			1	
11	<u>, </u>	Perched water encountered at	10.5'. Excavator limit read	ched.
12				
COMMENT	S:	·		3-10.5' from the west end of the pit. , TAL metals, Phenols, and Cyanide

APPENDIX D BORING LOGS

TEST BORING LOG Corporation **BORING NO.: SB-01** PROJECT/PROJECT LOCATION: Former Cortland Gasholder Location OF 1 SHEET: 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas **NORTHING:** 949265.96 **EASTING: 928981.76 BORING CONTRACTOR:** Nature's Way EC & C, Inc. 1119.29 **GROUND ELEVATION: GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 11/10/05 TIME LEVEL TYPE Macrocore DATE **TYPE** DATE FINISHED: 11/10/05 DIA. WT. DRILLER: Mike Saeli R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brucia SOIL SAMPLE REC% MATERIAL CONSISTENCY **DEPTH** COLOR STRATA **BLOW** USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 60 D. Brn OI ND moist Silty organic Topsoil. Brown Clayey Silt, some fine to coarse gravel and cobbles, trace organics (roots). Trace to some coarse sand (4-8'). Occasional Fine to medium sand zones and cobbles (8-12') NΑ 50 ND very moist ND NA 50 -10 very moist to wet ND 60 Gray very moist Silty Fine Sand and Fine to Coarse Brown Gravel (rounded) and cobbles, some clay. -15 GM ND × NA 75 Light wet Silty Gravel with Medium to Coarse Sand Brown × × × and Cobbles × × × × × × SW 6 NΑ 80 ND Medium to Coarse Sand and Gravel. -20 End of Boring at 23' due to gravel collapse into borehole. -25 COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

Collected Sample SB-01-10-12' for analysis of VOCs, SVOCs, phenols, cyanide, and metals.

No odors, staining or sheens observed. Terminated hole due collapse of materials.

ND = Non-detect above background levels

BORING NO.:

TEST BORING LOG Corporation **BORING NO.:** SB-02 PROJECT/PROJECT LOCATION: Former Cortland Gasholder Location SHEET: 1 OF 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas **NORTHING:** 949239.27 **EASTING:** 929012.44 **BORING CONTRACTOR:** Nature's Way EC & C, Inc. **GROUND ELEVATION:** 1118.59 **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 11/10/05 TIME LEVEL TYPE Macrocore DATE **TYPE** DATE FINISHED: 11/10/05 DIA. WT. DRILLER: Mike Saeli R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brucia SOIL SAMPLE REC% MATERIAL **DEPTH** CONSISTENCY COLOR STRATA **BLOW** USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 60 Brown OL ND moist Silty Organic Topsoil, trace coal fragments. МН Clayey Silt, some fine to coarse gravel and cobble. NΑ 50 ND dry Silt, trace clay and fine to coarse gravel and cobble. ND NΑ 50 Silt to Clayey Silt, fine to coarse gravel and cobbles, trace organics. 10-11':Silty Fine Sand Zone, no gravel. -10 ND Significant Fall in from above fills up liner. -15 End of boring due to sampler refusal and cave in. -20 -25 COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler. No samples were collected.

BORING NO.:

SB-02

No odors, staining or sheens observed. Terminated hole due collapse of materials.

ND = Non-detect above background levels

TEST BORING LOG Corporation **BORING NO.: SB-03** PROJECT/PROJECT LOCATION: Former Cortland Gasholder Location OF 1 SHEET: 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas NORTHING: 949240.51 **EASTING: 929000.69 BORING CONTRACTOR:** Nature's Way EC & C, Inc. **GROUND ELEVATION:** 1118.86 **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 11/10/05 TIME LEVEL TYPE Macrocore DATE **TYPE** 11/10/05 **DATE FINISHED:** DIA. WT. DRILLER: Mike Saeli R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Bruci SOIL SAMPLE REC% MATERIAL CONSISTENCY **DEPTH** COLOR STRATA **BLOW** USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 75 D. Brn ΟI ND moist Silty organic topsoil. Brown Clayey Silt with fine to coarse gravel and cobbles. Silty Fine Sand zone at 9.0-9.5'. NΑ 50 ND moist to dry ND NΑ 75 -10 ND × × Gray Silty Medium Sand, Gravel, and Cobbles. Brown Ø Ø × × × × × × × -15 A 5 NΑ 75 ND wet × Silty Gravel and Medium to Coarse Sand. × × × × × × × × Ø Ø × × × × × × -20 End of Boring at 20' due to hole collapse. -25 COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

Collect Sample SR-02-15-17' for analysis of VOCs_SVOCs_Phonels_Cyanide_and Metals

Collect Sample SB-03-15-17' for analysis of VOCs, SVOCs, Phenols, Cyanide, and Metals.

End boring at 20' due to hole collapse.

ND = Non-detect above background levels

BORING NO.:

TEST BORING LOG Corporation **BORING NO.: SB-04** PROJECT/PROJECT LOCATION: Former Cortland Gasholder Location OF 1 SHEET: 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas **NORTHING:** 949262.45 **EASTING: 929011.79 BORING CONTRACTOR:** Nature's Way EC & C, Inc. **GROUND ELEVATION:** 1118.76 **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 11/10/05 TIME LEVEL Macrocore DATE **TYPE TYPE DATE FINISHED:** 11/10/05 DIA. WT. DRILLER: Mike Saeli R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brucia SOIL SAMPLE REC% MATERIAL CONSISTENCY **DEPTH** COLOR STRATA **BLOW** USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 50 Dark OL ND Moist Silty organic topsoil. Brown МН Brown Clayey Silt with fine to coarse gravel and cobbles, some coarse sand. NΑ 50 SW-SM ND Dry Silty medium to coarse sand and gravel, trace fine sand. ND 3 NΑ 75 Light Brown GM Silty Fine to Coarse Gravel, some × × -10 medium to coarse sand. × × × × × × × × ND Gray × × × End of boring due to material cave-in. -15 -20 -25

COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

Collected Sample SB-04-12-13.5' and Field Duplicate (DUP-01) for analysis of VOCs, SVOCs, Phenols, Cyanide, and Metals.

End boring at 13.5' due to hole collapse.

ND = Non-detect above background levels

BORING NO.:

		,	ID	2					TEST	BORIN	IG LO	G		
			UR!	O Co	rpor	ation			BORING NO.: SB-05					
PROJE	CT/PROJEC	T LOCATIO	N: Forr	mer Cortlai	nd Gash	older Location			SHEET: 1 OF 1					
CLIENT	•	N	lew York S	tate Electr	ic & Gas	3			JOB NO.: 11174428.00000					
BORING	CONTRAC	TOR: N	lature's Wa	y EC & C,	NORTHING: 949278.47	EAS	TING: 928	3961.18						
GROUN	IDWATER:			GROUND ELEVATION:	1118.57	7								
DATE	TIME	LEVEL	TYPE	TYPE		Macrocore			DATE STARTED:	11/10/0	5			
				DIA.		2"			DATE FINISHED:	11/10/0	5			
				WT.					DRILLER:	Mike Sa	eli			
				LENGTH		4'			GEOLOGIST:	R. Murp	hy			
				* P	OCKET F	PENETROMETER	READIN	G	REVIEWED BY:	Tim B	mein	į.		
		SAMP	LE	REC%		SOIL			MATERIAL					
DEPTH FEET	STRATA	NO.	BLOW	RQD%	COLOR	CONSISTENCY ROCK HARDNESS			SCRIPTION	USCS	PID	REMARKS		
		<u> </u>	<u> </u>	<u> </u>	J.					<u>_</u>				
0	ZYY	1	NA	50	D. Brn		Silty Or	ganic Top		FILL	ND	moist		
-	$\times \times$				Brown				. – – – – – – – – .					
_							Clayey	Silt, som	e fine to coarse gravel					
_	(\times)													
										_				
_	(X)	2	NA	50	Gray				some cobbles, rock and		ND	dry		
-5 —							mortar.							
1	$\times \times$													
-	$\times \times$													
-	x^{x}	3	NA	75			Δsh an	d Coal fra	agments, perched wet	-	ND			
-								9.5-10.0						
-10 —	$\left(x^{\prime}x^{\prime}\right)$			-	Green				Ash, some fine gravel.			perched wet zone at 9.5'-		
_	(X)				Brown				apthalene odor at 11' a thin band (~1") of dark			10.0', then moist		
_		4	NIA	75	0		staining		,	-	ND			
_	$\times \times$	4	NA	75	Gray Brown		Ash, Ci	nder, and	d Fine Gravel.		ND			
							Clavev	Silt and 0	Gravel (rounded).	MH				
]									(11 11)					
-15 —														
=		5	NA	50			Silty Fi	ne to Coa	arse Gravel, trace coarse	GM	ND	wet		
-							sand.		·					
-														
=														
-20 —														
_							End of	Boring at	20' due to hole collapse.					
1														
-														
-25							<u> </u>					1		

COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

Collected Samples SB-05-11-12' and SB-05-15-16' for analysis of VOCs, SVOCs, Phenols, Cyanide, and Metals.

11-12' Sample was of stained material and material just beneath it. Ended boring at 20' due to hole collapse.

ND = Non-detect above background levels

BORING NO.:

TEST BORING LOG Corporation **BORING NO.:** PROJECT/PROJECT LOCATION: **Former Cortland Gasholder Location** SHEET: 1 OF 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas **NORTHING:** 949239.66 **EASTING: 929013.36 BORING CONTRACTOR:** Nature's Way EC & C, Inc. **GROUND ELEVATION:** 1118.56 **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 11/11/05 TIME LEVEL TYPE Macrocore DATE **TYPE DATE FINISHED:** 11/11/05 DIA. WT. DRILLER: Mike Saeli R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brucia SOIL SAMPLE REC% MATERIAL CONSISTENCY **DEPTH** COLOR STRATA **BLOW** USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 75 Dark OL ND moist Organic Silt, some clay. Brown Brown МН Clayey Silt with gravel and cobbles. NΑ 30 SM ND dry Silty Fine to Coarse Sand and Gravel. ND NΑ 75 Silty Fine Sand. -10 МН Clayey Silt and Coarse Sand to Coarse Gravel. No odor. Brown ND very moist Gray -15 wet at 15' 50 GM ND NA Gray × Gravel and Silty Medium to Coarse Sand. × × Brown Ø × × × × × × × -20 End of Boring at 20' due to hole collapse. -25

COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

Collected Samples SB-06-14-16' and SB-06-16-18' for analysis of VOCs, SVOCs, Phenols, Cyanide, and Metals.

This boring was next to SB-02, in order to collect samples from this area. PZ-01 was installed in the borehole.

ND = Non-detect above background levels

BORING NO.:

TEST BORING LOG Corporation **BORING NO.:** PROJECT/PROJECT LOCATION: Former Cortland Gasholder Location OF 1 SHEET: 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas NORTHING: 949305.17 **EASTING: 929008.71 BORING CONTRACTOR:** Nature's Way EC & C, Inc. **GROUND ELEVATION:** 1119.11 **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 11/11/05 TIME LEVEL TYPE Macrocore DATE **TYPE** DATE FINISHED: 11/11/05 DIA. WT. DRILLER: Mike Saeli R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brucia SOIL SAMPLE REC% MATERIAL CONSISTENCY **DEPTH** COLOR STRATA **BLOW** USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 40 D. Brn ΟI ND moist Silty Organic Topsoil Brown Clayey Silt and Fine to Coarse Angular Gravel, with occasional cobbles. NΑ 40 ND ND dry with occasional NΑ 60 Gray Brown moist zones -10 ND 60 Silty Fine to Coarse Gravel and Coarse -15 GM wet × × Sand. × ND NA 60 × × × Silty Medium to Coarse Sand and Gravel. 0.1' thick fine sand layer at 19.0'. × × × × × × × × × × × -20 ND NΑ 60 6 × × Silty Fine to Coarse Gravel (rounded), some coarse sand. Coarsening × × downward. × × × × × × × × End of Boring at 24'. -25

COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

Collected Samples SB-07-15-16' and SB-07-22-24' for analysis of VOCs, SVOCs, Phenols, Cyanide, and Metals.

Also collect Sample SB-07-13-15' for analysis of NOD and TOC. Installed PZ-02 in borehole.

ND = Non-detect above background levels

BORING NO.:

TEST BORING LOG Corporation **BORING NO.:** SB-08 PROJECT/PROJECT LOCATION: **Former Cortland Gasholder Location** OF 1 SHEET: 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas NORTHING: 949265.49 **EASTING: 928947.38 BORING CONTRACTOR:** Nature's Way EC & C, Inc. **GROUND ELEVATION:** 1118.77 **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 11/14/05 LEVEL TYPE Macrocore DATE TIME **TYPE** DATE FINISHED: 11/14/05 DIA. WT. DRILLER: Eric Laurienzo R. Murphy **GEOLOGIST:** LENGTH * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brucia SOIL SAMPLE REC% MATERIAL CONSISTENCY DEPTH COLOR STRATA **BLOW** USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 60 Brown FILL ND dry to moist Clayey Silt with Fine to Coarse Gravel and Cobbles, trace coal fragments. NΑ 50 ND Gray Ash and Fine Gravel, one piece coarse gravel size, lightweight shiny/ glassylooking cinder, no odor ND NA 50 Ash Brown Clayey Silt, Ash, and Fine Gravel. -10 Gray МН Brown Clayey Silt and Fine to Coarse rounded Gravel, darker stained material with slight musty decay odor from 10-10.2' ND very moist Clayey Silt and Fine Rounded Gravel. GM wet Very Silty Fine to Coarse Gravel Ø × × -15 (rounded), trace coarse sand. × . . M × SW ND 5 NA 50 Fine to Coarse Sand and Gravel. One piece of decayed wood, caved in from above. -20 End of Boring at 20'. -25

COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

Collected Samples SB-08-10-12' and SB-08-18-20' for analysis of VOCs, SVOCs, Phenols, Cyanide, and Metals.

Installed PZ-03 in borehole. Sample from 10-12' contained slightly stained soils.

ND = Non-detect above background levels

BORING NO.:

URS Corporation									TEST BORING LOG				
			UK	BORING NO.: SB-09									
PROJE	CT/PROJEC					older Location			SHEET: 1 OF 1				
CLIENT			New York S	tate Electi	ic & Gas	3			JOB NO.: 11174428.00000				
BORING	CONTRAC	TOR:	Nature's Wa	y EC & C,	Inc.				NORTHING: 949279.89 EASTING: 929004.64				
GROUN	DWATER:				TUBE	GROUND ELEVATION:	1119.10)					
DATE	TIME	LEVEL	TYPE	TYPE		Macrocore			DATE STARTED:	11/14/0	5		
				DIA.		2"			DATE FINISHED:	11/14/05			
				WT.					DRILLER:	Eric Laurienzo			
				LENGTH		4'			GEOLOGIST:	R. Murp	hy		
				* F	OCKET F	PENETROMETER	READIN	G	REVIEWED BY:	Tim B	mein	į.	
		SAMI	PLE	REC%		SOIL			MATERIAL				
DEPTH FEET	STRATA	NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS			SCRIPTION	USCS	PID	REMARKS	
		•	•										
0	XX	1	NA	30	Dark Brown		Silty Or	ganic Top	psoil	FILL	ND	moist	
4	XX				Brown		<u> </u>		/ Fine to Coarse Gravel,			damp	
4	$\times \times$						trace b		-ille to Coarse Graver,				
4	(X)												
4		2	NA	30	Limbs					-	ND		
-5		2	NA	30	Light Brown		Clayey and Co		Fine to Coarse Gravel		ND		
	(\times)						una co	DD100.					
	$\times \times$												
1	$\times \times$												
1	t⁻×⁻¹	3	NA	50			Clayey	Silt and 0	Gravel, trace to some	-	ND		
1	$\times \times$						coarse						
-10 —	$\times \times$												
-	$\langle \chi \rangle$												
4		4	NA	75	Gray		<u> </u>			-	ND	moist to dry	
4	$\times \times$				Brown			Silt and Food food from the same of the sa	Fine to Coarse Gravel, ents.			,	
4	(X)												
-15 —													
	$\times \times$												
		5	NA	50			Silty Co	arse Sar	nd to Coarse Gravel.	GM	ND	wet at 16'.	
1													
1													
4													
-20 —							Food of	Davina at	201				
4							Ena oi	Boring at	20.				
4													
25													
-25 —		· ·	•							Į.			
	II.												

COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

 $Collected \ Samples \ SB-09-14-16' \ and \ SB-09-18-20' \ for \ analysis \ of \ VOCs, \ SVOCs, \ Phenols, \ Cyanide, \ and \ Metals.$

Installed PZ-04 in borehole. No odors or staining noted.

ND = Non-detect above background levels

BORING NO.:

TEST BORING LOG Corporation **BORING NO.:** PROJECT/PROJECT LOCATION: Former Cortland Gasholder Location OF 1 SHEET: 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas **NORTHING: 949275.91 EASTING: 928983.61 BORING CONTRACTOR:** Nature's Way EC & C, Inc. **GROUND ELEVATION:** 1119.51 **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 11/14/05 TIME LEVEL Macrocore DATE **TYPE TYPE** DATE FINISHED: 11/14/05 DIA. WT. DRILLER: Eric Laurienzo R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brucia SOIL SAMPLE REC% MATERIAL CONSISTENCY **DEPTH** COLOR STRATA **BLOW** USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 50 D. Brn ΟI ND moist Silty Organic Topsoil Brown Clayey Silt, some fine to coarse gravel and cobbles. NΑ 25 ND ND 50 NΑ Clayey Silt, some coarse sand and fine to coarse gravel and cobbles. very moist to wet at 9', then -10 moist ND Gray Clayey Silt and Coarse Gravel, some Brown cobbles and medium to coarse sand. -15 GM ND NA 50 wet at 16'. × × × Silty Fine to Coarse Gravel and cobbles, some silty medium to coarse sand zones. × × × Iron staining around one piece of gravel; Ø × Ø no odor. × × × × × -20 End of Boring at 20'. -25 COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

Collected Samples SB-10-14-16' and SB-10-18-20' for analysis of VOCs, SVOCs, Phenols, Cyanide, and Metals.

BORING NO.:

SB-10

No odors or staining noted.

			IID	C					TEST	BORIN	NG LO	G	
			UR	D Co	rpor	ation			BORING NO. : SB-11-1 thru 4				
PROJE	CT/PROJEC	T LOCATI				older Location			SHEET: 1 OF 1				
CLIENT	:		New York	State Elect	ric & Gas	5			JOB NO.: 11174428.00000				
BORING	G CONTRAC	TOR:	Nature's W	ay EC & C,	NORTHING: 949278.57*	EAS	TING: 928	8946.46*					
GROUN	IDWATER:				GROUND ELEVATION:	1118.7	4*						
DATE	TIME	LEVEL	. TYPE	TYPE		Macrocore			DATE STARTED:	11/14/0	5		
				DIA.		2"			DATE FINISHED:	11/14/0	5		
				WT.					DRILLER:	Eric Lau	urienzo		
				LENGTH	1	4'			GEOLOGIST:	R. Murp	hy		
				* F	POCKET F	PENETROMETER	READIN	G	REVIEWED BY:	Time	3min	4	
		SAN	MPLE	REC%		SOIL		_					
DEPTH FEET	STRATA	NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS			MATERIAL SCRIPTION	uscs	PID	REMARKS	
	<u> </u>				L								
0		1	NA	50	Brown		Organio	Clayey	Silt and Gravel	FILL	ND		
	(-X-)				Gray								
1	$\times \times$				Brown		coarse	gravel an	r, and coal, with fine to add ocasional layers of				
	$\times \times$						clayey	silt, trace	glass.				
-		2	NA	25							ND		
-5	\times												
4	XX												
_	\searrow												
	(XX)												
		3	NA	50							ND		
1	$\times \times$								ck stained zone with				
-10	$[X^*X]$						gravel.	oaor, una	erlain by more ash and	' I			
=							End of	Boring at	11'. Refusal. Four				
-							attemp	s four ref	usals at 11'. Four				
-									ed in as SB-11-1 through ir borings had similar				
								y. Possik	ole mortar in shoe from				
-15													
-13							* - Surv 11-1	ey inform	nation shown is for SB-				
1													
1													
=													
-													
-20 —													
7													
7													
1													
-25													

COMMENTS: Boring advanced with a skid steer mounted Geoprobe unit equipped with a macrocore sampler.

 $Collected \ Samples \ SB-11-6-8' \ and \ SB-11-9-11' \ for \ analysis \ of \ VOCs, \ SVOCs, \ Phenols, \ Cyanide, \ and \ Metals.$

Four attempts, four refusals at 11'. Black staining and decay odor in 0.2' zone between 10 and 11'.

TEST BORING LOG Corporation **BORING NO.:** PROJECT/PROJECT LOCATION: Former Cortland Gasholder Location SHEET: 1 OF 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas **NORTHING:** 949289.48* **EASTING: 928931.04* BORING CONTRACTOR:** TREC Environmental Inc. **GROUND ELEVATION:** NA **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 04/26/06 TIME LEVEL TYPE TYPE Macrocore DATE DATE FINISHED: 04/26/06 DIA. WT. DRILLER: Jim Agar R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brucia SOIL SAMPLE REC% MATERIAL CONSISTENCY **DEPTH** COLOR STRATA **BLOW** USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 50 ΟI ND Moist Dark Organic-Rich Silty Topsoil Brown Brown Clayey silt, some fine gravel, organics (roots), trace cobble. NΑ 60 Brown ND Damp Clayey silt, some cobbles and coarse gravel. Coarse sand layer 7.8-8.0'. Gray Brown ND NΑ 75 Gray Clayey silt with coarse gravel and Brown cobbles, no odor. -10 ND -15 GM Wet at 15'. × Silty fine to coarse gravel. End of Boring at 16'. -20 -25

COMMENTS: Boring advanced with a track mounted Geoprobe unit equipped with a macrocore sampler.

Collected Samples SB-12-10-12' (plus DUP-042606) and SB-12-14-15' for analysis of BTEX, PAHs, and total cyanide.

* - Survey information is approximate, boring location was measured offset from building corners.

ND = Non-detect above background levels

BORING NO.:

TEST BORING LOG Corporation **BORING NO.:** PROJECT/PROJECT LOCATION: Former Cortland Gasholder Location SHEET: 1 OF 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas NORTHING: 949296.99* **EASTING: 928942.67* BORING CONTRACTOR:** TREC Environmental Inc. **GROUND ELEVATION:** NA **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 04/26/06 LEVEL TYPE TYPE Macrocore DATE TIME **DATE FINISHED:** 04/26/06 DIA. WT. DRILLER: Jim Agar R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brien SOIL SAMPLE REC% MATERIAL CONSISTENCY **DEPTH** STRATA **BLOW** COLOR USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** NΑ 50 Dark OI ND Moist Silty organic topsoil. Brown Brown Clayey Silt, trace gravel. NΑ 50 Gray ND Dry Silt, some fine to coarse gravel and Brown cobbles, trace clay. ND NΑ 70 -10 ND Silty fine to coarse gravel. Gray GM Wet @ 15.5' End of boring 15.7' (Refusal). -20 -25

COMMENTS: Boring advanced with a track mounted Geoprobe unit equipped with a macrocore sampler.

Collected Samples SB-13-10-12' and SB-13-14-15.7' (plus MS/MSD) for analysis of BTEX, PAHs, and total cyanide.

* - Survey information is approximate, boring location was measured offset from building corners.

ND = Non-detect above background levels

BORING NO.:

			ID	~					TEST	BORIN	NG LO	G		
			UR	O Co	rpor	ation			BORING NO. : SB-14					
PROJE	CT/PROJEC	T LOCATION	ON: For	mer Cortla	nd Gash	older Location			SHEET: 1 OF 1					
CLIENT			New York S	tate Elect	ric & Ga	s			JOB NO.: 11174428.00000					
BORING	CONTRAC	TOR:	TREC Envir	NORTHING: 949244.64* EASTING: 928945.99*										
GROUN	DWATER:				CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION:	NA				
DATE	TIME	LEVEL	TYPE	TYPE		Macrocore			DATE STARTED:	04/26/0	6			
				DIA.		2"			DATE FINISHED:	04/26/0	6			
				WT.					DRILLER:	Jim Aga				
				LENGTH	ı	4'			GEOLOGIST:	R. Murp	hy			
				*	POCKET	PENETROMETER	READIN	G	REVIEWED BY:	Tim	3min	á		
DEDTU		SAM	IPLE	REC%		SOIL		,	MATERIAL					
DEPTH FEET	STRATA	NO.	BLOW	RQD%	COLOR	CONSISTENCY ROCK HARDNESS			SCRIPTION	USCS	PID	REMARKS		
0		1	NA		Dark Brown		Silty or	ganic top	soil.	FILL	ND	Moist		
-	(X)				Brown				coarse gravel.					
4							Olaycy	ont and o	odisc gravei.					
4	$\times \times$													
4		2	NA		Gray		Ash, ci	nder, coa	l, and gravel.		ND	Very Moist		
-5	$\times \times$	-	107								112			
	$\times \times$													
	(X)													
1	$\times \times $	3	NA								ND			
1	$\times \times$						/		. – – – – – – – – ,					
-10					Brown		Silt, wit (roots).		and sand, some organics			Wet at 10'.		
4	K-X-X				Black		Silt tra		and, moderate MGP odor.		17.7			
4		4	NA		Brown		Siit, tia	ce ille se	and, moderate MGF odor.	SM-GM	2.0			
4					Gray		Silty fin	e to coar	se sand and gravel, slight	ı	ND			
4					O.u,		odor.							
-15									se sand and gravel, no					
							odor. (C	Joarser, r	mostly gravel 15.5-16.0')					
							End of	Boring 16	6'.					
1														
1														
-20														
-														
4														
4														
-25														
-25 —														
COM	MENITS: R	oring adva	nced with a t	track mour	nted Geor	probe unit equi	nned with	a macro	core sampler					

 $\label{lem:collected Samples SB-14-11-12'} and SB-14-14-15' for analysis of BTEX, PAHs, and total cyanide.$

 * - Survey information is approximate, boring location was measured offset from building corners.

ND = Non-detect above background levels

BORING NO.:

TEST BORING LOG Corporation **BORING NO.:** PROJECT/PROJECT LOCATION: Former Cortland Gasholder Location SHEET: 1 OF 1 JOB NO.: 11174428.00000 CLIENT: New York State Electric & Gas NORTHING: 949226.66* **EASTING: 928947.48* BORING CONTRACTOR:** TREC Environmental Inc. **GROUND ELEVATION:** NA **GROUNDWATER:** CAS. SAMPLER CORE TUBE DATE STARTED: 04/26/06 LEVEL TYPE TYPE Macrocore DATE TIME **DATE FINISHED:** 04/26/06 DIA. WT. DRILLER: Jim Agar R. Murphy **GEOLOGIST: LENGTH** * POCKET PENETROMETER READING **REVIEWED BY:** Tim Brien SOIL SAMPLE REC% MATERIAL CONSISTENCY DEPTH STRATA **BLOW** COLOR USCS PID REMARKS DESCRIPTION NO. FEET ROCK RQD% COUNT **HARDNESS** Brown NΑ 60 ND Moist Asphalt and Gravel. МН Clayey Silt, some fine to coarse gravel, trace cobbles. NΑ 40 Gray ND Brown ND NΑ 50 -10 ND Clayey Silt, some fine to coarse gravel, some cobbles. -15 GM Wet at 15'. × Silty fine to coarse gravel. End of boring at 16'. -20 -25

COMMENTS: Boring advanced with a track mounted Geoprobe unit equipped with a macrocore sampler.

Collected Samples SB-15-12-14' for analysis of BTEX, PAHs, and total cyanide.

* - Survey information is approximate, boring location was measured offset from building corners.

ND = Non-detect above background levels

BORING NO.:

			TTD	2	TEST BORING LOG									
			UR	D Co	rpor	ation			BORING NO. : SB-16					
PROJEC	CT/PROJEC	T LOCATI	ON: For	mer Cortla	nd Gash	older Location			SHEET: 1 OF 1					
CLIENT:			New York S	State Electr	ic & Gas	3			JOB NO.: 11174428.00000					
BORING	CONTRAC	TOR:	TREC Envi	ronmental I	NORTHING: 949247.10* EASTING: 928935.59*									
GROUN	DWATER:				GROUND ELEVATION:	NA								
DATE	TIME	LEVEL	. TYPE	TYPE		Macrocore			DATE STARTED:	04/26/0	6			
				DIA.		2"			DATE FINISHED:	04/26/0	6			
				WT.					DRILLER:	Jim Aga				
				LENGTH		4'			GEOLOGIST:	R. Murp	-			
				* F	OCKET	PENETROMETER	READIN	G	REVIEWED BY:	Tim B	mein			
DEPTH	_	SAN	/IPLE	REC%		SOIL			//ATERIAL					
FEET	STRATA	NO.	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS			SCRIPTION	USCS	PID	REMARKS		
			•	•						•				
0	<i>K</i> -X-}	1	NA	40	Dark Brown		Silty or	ganic tops	soil.	FILL	ND	Moist		
1	$\times \times$			ŀ	Brown									
-	$\times \times$						Clayey	Siit, Soille	e fille to coarse graver.					
4	$\langle X \rangle$													
4	\longrightarrow	2	NA	30	Gray						ND			
-5	\searrow	-	IVA	30	Olay				I fragments, glass organics (roots).		ND			
	$\langle \times \rangle$						Ü							
	XX													
1	ľXŹ	3	NA	50					I, sand, and wood		ND			
1	\times						fragme	nts, no oc	dor.					
10 —	$\times \times$													
-	\searrow													
-		4	NA	50	D.Gray		Fine to	coarse sa	and, some silt.	SW	ND			
-				-	Brown Gray				·	MH				
4					Brown		Clayey	siit and c	oarse gravel.					
15 —					Gray		_			GM		Wet at 15'.		
4					Olay				se gravel, no odor.	OW		wordt 10.		
							End of	boring at	16'.					
1														
20 —														
1														
-														
-														
-														
.25														

COMMENTS: Boring advanced with a track mounted Geoprobe unit equipped with a macrocore sampler.

Collected Samples SB-16-10-12' for analysis of BTEX, PAHs, and total cyanide.

* - Survey information is approximate, boring location was measured offset from building corners.

ND = Non-detect above background levels

BORING NO.:

		,	TD	2					TEST	BORIN	IG LO	G		
		9	UR	O Co	rpor	ation			BORING NO.: SB-17					
PROJE	CT/PROJEC	T LOCATIO	N: For	mer Cortlaı	nd Gash	older Location			SHEET: 1 OF 1					
CLIENT	:	ı	New York S	tate Electr	ic & Gas	3			JOB NO.: 11174428.00000					
BORING	CONTRAC	TOR:	TREC Envir	NORTHING: 949263.10*	EAS	TING: 92	8934.38*							
GROUN	IDWATER:			GROUND ELEVATION:	NA									
DATE	TIME	LEVEL	TYPE	TYPE		Macrocore			DATE STARTED:	04/26/0	6			
				DIA.		2"			DATE FINISHED:	04/26/0	6			
				WT.					DRILLER:	Jim Aga	ar			
				LENGTH		4'			GEOLOGIST:	R. Murp	hy			
				* P	OCKET P	PENETROMETER	READIN	G	REVIEWED BY:	Time	mein	4		
DEDTU		SAMF	PLE	REC%		SOIL			MATERIAL					
DEPTH FEET	STRATA	NO. I	BLOW COUNT	RQD%	COLOR	CONSISTENCY ROCK HARDNESS			SCRIPTION	USCS	PID	REMARKS		
		<u> </u>	<u> </u>	<u></u>								<u> </u>		
0	ZX3	1	NA	60	Dark		Silty or	ganic top:	soil	FILL	ND	Moist		
-	$\times \times$			}	Brown Gray				· ·					
_					Brown		Clayey	silt.						
_	(\times)													
_		2	NA	60	Gray				vel, coal fragments, some		ND			
-5 —	(X)						coarse	sand.						
-	\times													
1	$\times \times$													
=		3	NA	70							ND			
=							Fine to	coarse g	ravel.					
-10					Black		Stained	Silt, sligi	ht odor.					
				 -	Gray		l — — —	me grave	· 1					
					Gray Brown		<u> </u>		/	GM				
		4	NA	50			Silt and	l gravel.			ND	Wet 12-12.5' Moist		
1														
1														
-15 —							Silty fin	e to coars	se gravel, no odor.			Wet at 15'.		
=				,			End of	boring 16	'					
=								-						
+														
-														
-20 —														
7														
1														
-25							<u> </u>							

COMMENTS: Boring advanced with a track mounted Geoprobe unit equipped with a macrocore sampler.

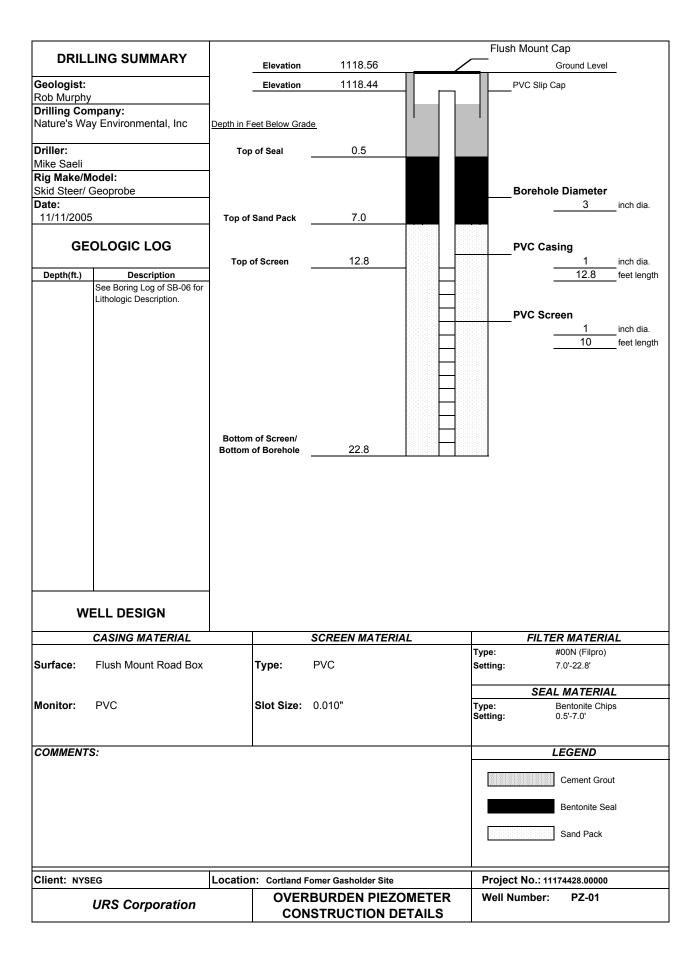
 $\label{lem:collected Samples SB-17-9-11'} \ and \ SB-17-12-14' \ for \ analysis \ of \ BTEX, \ PAHs, \ and \ total \ cyanide.$

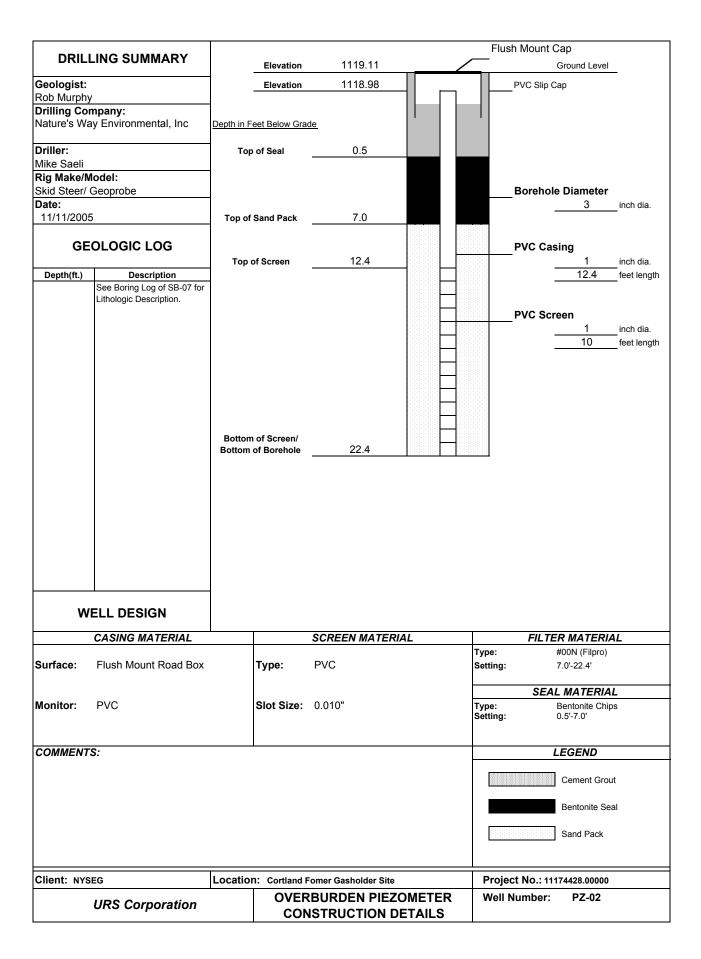
* - Survey information is approximate, boring location was measured offset from building corners.

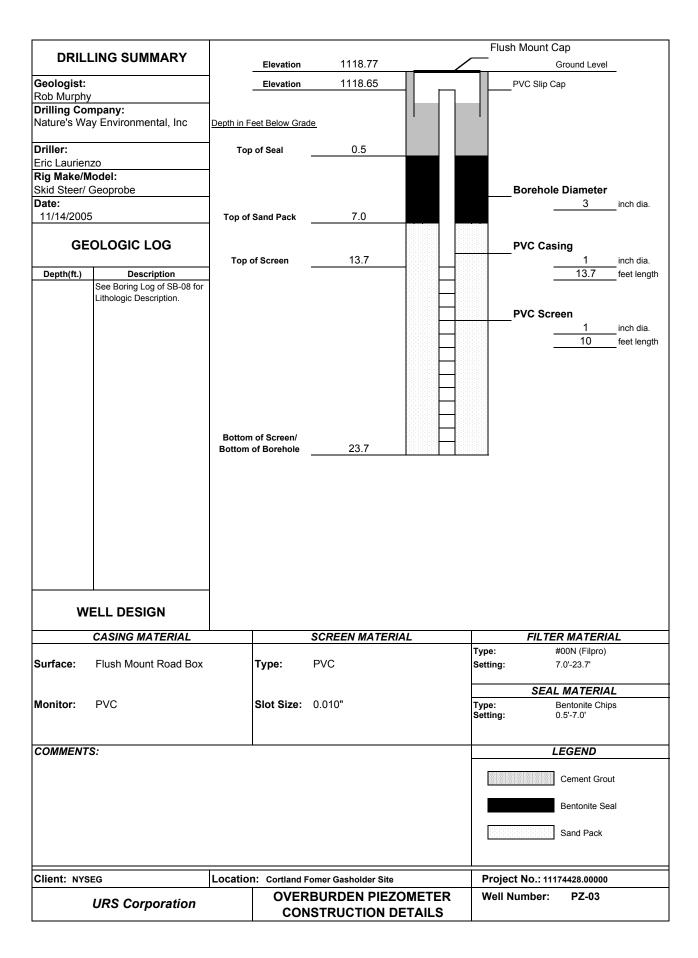
ND = Non-detect above background levels

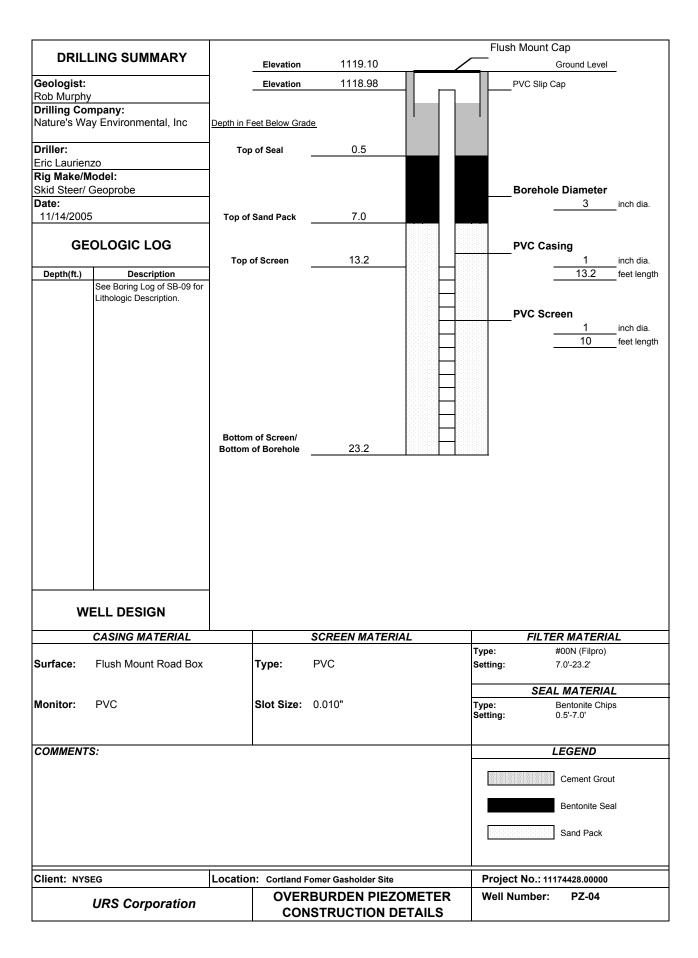
BORING NO.:

APPENDIX E PIEZOMETER CONSTRUCTION DETAILS









APPENDIX F PIEZOMETER DEVELOPMENT LOGS

URS Corporation

PROJECT TITLE: NYSEG Cortland Former Remote Gasholder Site		WELL NO.:	PZ-01	
PROJECT NO.:11174428.00000		Page: 1 of	f 1	
STAFF: R. Murphy				
DATE(S):11/15/05				
			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	22.78	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	13.93	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	8.85	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	0.04	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	0.35	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 5)	=	1.8	6"	1.5
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	10.0	8"	2.6
			V=0.0408 x (CA	OR SING DIAMETER) ²

		ACCUMULATED VOLUME PURGED (GALLONS)									
PARAMETERS	Initial	1	2	4	6	8	10				
pH	7.08	7.34	7.41	7.42	7.46	7.47	7.49				
SPEC. COND. (mS/cm)	1.04	0.903	0.876	0.853	0.865	0.857	0.857				
TEMPERATURE (°C)	11.70	11.80	11.96	12.01	11.95	11.97	11.93				
TURBIDITY (NTU)	>1000	>1000	>1000	832	170	80	30				
ORP (Eh) (millivolts)	101	101	112	113	108	116	124				
			light	light	very light	·					
APPEARANCE	brown	brown	brown	brown	brown	cloudy	clear				

COMMENTS: Developed using a Solinst Peristaltic Pump and dedicated disposable tubing.

1400 Start Development.1425 Stop Development.

URS Corporation

PROJECT TITLE: NYSEG	Cortland F	ormer Rer	note Gasho	older Site		WEL	L NO.: <u>PZ-02</u>			
PROJECT NO.: 111744	28.00000					Page	e: 1 of 1			
STAFF: R. Murphy										
DATE(S): 11/15/05										
							WEI	L ID.	VOL. (GAL/	FT)
1. TOTAL CASING AND S	CREEN LE	NGTH (F	Γ.)		=	22.32	1"		0.04	,
2. WATER LEVEL BELOW	TOP OF (CASING (F	FT.)		=	14.48	2"		0.17	
3. NUMBER OF FEET STA	NDING W	ATER (#1	- #2)		=	7.84	3"		0.38	
4. VOLUME OF WATER/F	OOT OF C	ASING (G	AL.)		=	0.04	4"		0.66	
5. VOLUME OF WATER IN	I CASING	(GAL.)(#3	x #4)		=	0.31			1.04	
6. VOLUME OF WATER TO	O REMOV	E (GAL.)(#	‡5 x 5)		=	1.6	6"		1.5	
7. VOLUME OF WATER A	CTUALLY	REMOVE	D (GAL.)		=	6.0	8"		2.6	
							V=0.0408 >	x (CAS	OR ING DIAME	TER)²
				ACCI IM	III ATED V		GED (GALLONS)			
PARAMETERS	Initial	1	2	4	6	V OLUME FUNC	JED (GALLONS)			

		ACCUMULATED VOLUME PURGED (GALLONS)									
PARAMETERS	Initial	1	2	4	6						
pH	7.46	7.44	7.46	7.45	7.46						
SPEC. COND. (mS/cm)	0.911	0.913	0.914	0.941	0.940						
TEMPERATURE (°C)	12.27	12.71	12.86	12.78	12.82						
TURBIDITY (NTU)	>1000	110	22	6	5						
ORP (Eh) (millivolts)	189	177	178	171	170						
		light									
APPEARANCE	brown	brown	cloudy	clear	clear						

COMMENTS: Developed using a Solinst Peristaltic Pump and dedicated disposable tubing.

1440 Start Development.1500 Stop Development.

1620 Stop Development.

URS Corporation

PROJECT TITLE: NYSEG Cortland Former Remote Gasholder Site WELL NO.: PZ-03										
PROJECT NO.: 111744	28.00000						Page: 1	of 1		
STAFF: R. Murphy										
DATE(S): 11/15/05										
1. TOTAL CASING AND S	CREEN LE	NGTH (FT	- .)		=	23	.63	WELL ID. 1"	VOL. (GAL/I 0.04	FT)
2. WATER LEVEL BELOW	TOP OF (CASING (F	T.)		=	14	.02	2"	0.17	
3. NUMBER OF FEET STA	ANDING W	ATER (#1	- #2)		=	9.	61	3"	0.38	
4. VOLUME OF WATER/F	OOT OF C	ASING (G	AL.)		=	0.	04	4"	0.66	
5. VOLUME OF WATER IN	N CASING	(GAL.)(#3	x #4)		=	0.	38	5"	1.04	
6. VOLUME OF WATER T	O REMOV	E (GAL.)(#	5 x 5)		=	1.9		6"	1.5	
7. VOLUME OF WATER A	CTUALLY	REMOVE	O (GAL.)		=	6	.0	8"	2.6	
								V=0.0408 x (CA	OR SING DIAMET	ΓER)²
				ACCUM	UI ATFD \	/OI UMF F	PURGED ((GALLONS)		
PARAMETERS	Initial	2	4	6			(1025)			
рН	7.56	7.50	7.57	7.58						
SPEC. COND. (mS/cm)	0.91	0.867	0.869	0.870						
TEMPERATURE (°C)	12.01	12.35	12.25	12.30						
TURBIDITY (NTU)	>1000	230	37	22						
ORP (Eh) (millivolts)	175	164	184	178						
APPEARANCE	Brown	Light Brown	Slightly Cloudy	Clear						
-	ed using a art Develop		ristaltic Pur	mp and de	dicated dis	posable tu	ıbing.			

URS Corporation

PROJECT TITLE: NYSEG	Cortland F	ormer Ren	note Gasho	older Site			_WELL NO).: <u>PZ-04</u>			
PROJECT NO.: 111744	128.00000						Page: 1	of 1			
STAFF: R. Murphy											
DATE(S): 11/15/05											
4 TOTAL GASING AND G	ODEENIS	NOTIL (F	- \			0.0	. 40			VOL. (GAL	/FT)
1. TOTAL CASING AND S	CREEN LE	:NGTH (FI	.)		=	23	3.18	_	"	0.04	
2. WATER LEVEL BELOW	/ TOP OF (CASING (F	T.)		=	14	1.42	2	2"	0.17	
3. NUMBER OF FEET STA	ANDING W	ATER (#1	- #2)		=	8	.76	_ 3	3"	0.38	
4. VOLUME OF WATER/FOOT OF CASING (GAL.) = 4" 0.66											
5. VOLUME OF WATER IN	N CASING	(GAL.)(#3	x #4)		=	0	.35	5	5"	1.04	
6. VOLUME OF WATER T	O REMOV	E (GAL.)(#	5 x 5)		=	1	1.8	6	6"	1.5	
7. VOLUME OF WATER A	CTUALLY	REMOVE	O (GAL.)		=	6	3.0	8	3"	2.6	
								V=0.0408	8 x (CAS	OR ING DIAME	TER)²
				ACCUM	ULATED '	VOLUME I	PURGED (GALLONS)		_	
PARAMETERS	Initial	2	4	6							
pH	7.42	7.49	7.50	7.51							
SPEC. COND. (mS/cm)	0.93	0.886	0.905	0.913							
or zer eerre. (merem)	0.00	0.000	0.000	0.010							
TEMPERATURE (°C)	11.96	12.15	12.48	12.42							
TURBIDITY (NTU)	>1000	280	40	20							
, ,											
ORP (Eh) (millivolts)	169	171	175	173							
		Light			Ì		1	1			

COMMENTS: Developed using a Solinst Peristaltic Pump and dedicated disposable tubing.

Brown Cloudy Clear

1515 Start Development.1535 Stop Development.

APPEARANCE

APPENDIX G PIEZOMETER PURGE LOGS

PAGE: 1 of 1 Project: 11174428.00000 Site: NYSEG -Cortland Holder Well I.D.: PZ-01 Sampling Personnel: Date: 11/16/05 R. Murphy Company: URS Corporation Purging/ Sampling High Density Polyethylene Pump/Tubing Midpoint of Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: Screen/Open Hole Device: and Silicone Inlet Location: Measuring Initial Depth Depth to Screen 13.89 22.77 Point: Top of Casing to Water: Well Bottom: Diameter: Length: 10 Estimated Volume in 1 Purge Casing Well Casing Volume Type: PVC (liters): 1.4 (liters): 17.5 Sample PZ-01 10:10 Sample ID: Time: QA/QC: None Sample Parameters: VOCs, SVOCs, Phenols, Metals, Cyanide, Amenable Cyanide, Soluble Iron Other Information:

PURGE PARAMETERS

TIME	рН	TEMP (°C)	COND. (mS/cm)	DISS. O₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
945	7.35	12.04	0.885	8.05	105	165	700	13.89
950	7.22	12.03	0.880	7.18	55	163	700	13.89
955	7.24	12.02	0.879	6.62	110	161	700	13.89
1000	7.25	12.02	0.878	6.15	39	160	700	13.89
1005	7.28	12.03	0.877	6.15	8	159	700	13.89
1010	7.31	12.05	0.877	6.27	4	158	700	13.89
Tolerance:	0.1		3%	10%	10%	+ or - 10		

PAGE: 1 of 1 Project: 11174428.00000 Site: NYSEG -Cortland Holder Well I.D.: PZ-02 Sampling Personnel: Date: 11/16/05 R. Murphy Company: URS Corporation Purging/ Sampling High Density Polyethylene Pump/Tubing Midpoint of Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: Screen/Open Hole Device: and Silicone Inlet Location: Measuring Initial Depth Depth to Screen 14.45 22.32 Point: Top of Casing to Water: Well Bottom: Diameter: Length: 10 Estimated Volume in 1 Purge Casing Well Casing Volume Type: PVC (liters): 1.2 (liters): 20.5 Sample PZ-02 11:20 QA/QC: DUP - 11/16/05 Sample ID: Time: Sample Parameters: VOCs, SVOCs, Phenols, Metals, Cyanide, Amenable Cyanide, Soluble Iron Other Information:

PURGE PARAMETERS

TIME	рН	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1055	7.30	12.98	0.939	7.30	17	143	820	14.42
1100	7.30	12.97	0.938	6.41	8	145	820	14.42
1105	7.30	12.98	0.939	6.14	7	146	820	14.42
1110	7.30	12.99	0.939	5.81	4	148	820	14.42
1115	7.30	13.00	0.938	5.57	2	150	820	14.42
1120	7.30	12.98	0.938	5.46	2	152	820	14.42
Tolerance:	0.1		3%	10%	10%	+ or - 10		

PAGE: 1 of 1 Project: 11174428.00000 Site: NYSEG -Cortland Holder Well I.D.: PZ-03 Sampling Personnel: Date: 11/16/05 R. Murphy Company: URS Corporation Purging/ Sampling High Density Polyethylene Pump/Tubing Midpoint of Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: Screen/Open Hole Device: and Silicone Inlet Location: Measuring Initial Depth Depth to Screen 13.99 23.64 Point: Top of Casing to Water: Well Bottom: Diameter: Length: 10 Estimated Volume in 1 Purge Casing Well Casing Volume Type: PVC (liters): 1.5 (liters): 24 Sample PZ-03 14:40 MS/MSD Sample ID: Time: QA/QC: Sample Parameters: VOCs, SVOCs, Phenols, Metals, Cyanide, Amenable Cyanide, Soluble Iron Other Information:

PURGE PARAMETERS

TIME	рН	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1410	7.40	12.27	0.887	8.57	190	129	800	13.92
1415	7.38	12.29	0.889	6.28	32	134	800	13.92
1420	7.38	12.28	0.889	6.26	18	135	800	13.92
1425	7.38	12.28	0.889	6.18	16	135	800	13.92
1430	7.38	12.90	0.889	6.11	14	136	800	13.92
1435	7.37	12.29	0.888	6.02	10	138	800	13.92
1440	7.37	12.28	0.888	5.95	6	139	800	13.92
Tolerance:	0.1		3%	10%	10%	+ or - 10		

PAGE: 1 of 1 Project: 11174428.00000 Site: NYSEG -Cortland Holder Well I.D.: PZ-04 Sampling Personnel: Date: 11/16/05 R. Murphy Company: URS Corporation Purging/ Sampling High Density Polyethylene Pump/Tubing Midpoint of Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: Device: and Silicone Inlet Location: Screen/Open Hole Measuring Initial Depth Depth to Screen 14.39 Point: Top of Casing to Water: Well Bottom: 23.15 Diameter: Length: 10 Estimated Volume in 1 Purge Casing Well Casing Volume Type: PVC (liters): 1.3 (liters): 24 Sample PZ-04 Sample ID: Time: 12:40 QA/QC: RB-11/16/05 @ 13:50 Sample Parameters: VOCs, SVOCs, Phenols, Metals, Cyanide, Amenable Cyanide, Soluble Iron Other Information: Collected Rinse Blank over clean tubing following sampling of this well.

PURGE PARAMETERS

TIME	рН	TEMP (°C)	COND. (mS/cm)	DISS. O₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1210	7.57	12.50	0.877	7.98	80	115	800	14.37
1215	7.35	12.66	0.903	6.55	40	125	800	14.37
1220	7.35	12.66	0.904	6.11	36	131	800	14.37
1225	7.34	12.65	0.904	5.87	24	136	800	14.37
1230	7.39	12.66	0.903	6.28	18	140	800	14.37
1235	7.35	12.66	0.902	6.43	14	142	800	14.37
1240	7.35	12.64	0.901	6.45	14	144	800	14.37
Tolerance:	0.1		3%	10%	10%	+ or - 10		

APPENDIX H ANALYTICAL DATA ASSESSMENT SUMMARY

DATA ASSESSMENT SUMMARY FORMER OFF-SITE GAS HOLDER - CORTLAND, NY NEW YORK STATE ELECTRIC AND GAS

This data assessment summary addresses quality control deficiencies resulting in qualification of the data for the soil samples, groundwater samples, and field quality control (QC) samples (trip blanks/rinse blanks) collected November 9-16, 2005 at the Former Off-Site Gas Holder located in Cortland, New York. The samples were sent to Severn Trent Laboratories (STL, Amherst, NY) for analysis. A complete list of the samples is presented on Table H-1, which includes sample matrices, collection dates, identification of QC samples, and the laboratory report number in which the results were reported.

All soil and groundwater samples (and associated rinsate blanks) were analyzed for: Target Compound List (TCL) volatile organic compounds (VOCs) by USEPA Method 8260B, TCL semivolatile organic compounds (SVOCs) by USEPA Method SW8270C; Target Analyte List (TAL) metals by USEPA Methods SW6010B/SW7470A/SW7471A; total and amenable cyanide by USEPA Method SW9012A; and total recoverable phenolics by USEPA Method SW9066/420.2. The groundwater samples were also analyzed for dissolved iron by USEPA method 6010B. Select soil samples were analyzed for total organic carbon (TOC) by USEPA Region II Lloyd Kahn Method.

Trip blanks were sent to the laboratory along with each shipment of groundwater samples and analyzed TCL VOCs by USEPA Method 8260B.

Natural oxidant demand (NOD) analyses were performed on some of the soil samples. These analyses are discussed in Section III of this data assessment summary. Information pertaining to these samples is not provided on Table H-1, since the associated laboratory report is provided in full in Attachment A.

Data validation was limited to a review of holding times, surrogate spikes, matrix spike/matrix spike duplicates (MS/MSD), field duplicates (FD), and blanks (method, rinsate, trip, and calibration). Qualification of data was made following the procedures outlined in the following USEPA region II documents:

- Standard Operating Procedure for the Validation of Organic Data Acquired using SW-846 Method 8260B, SOP No. HW-24, Revision 1, June 1999;
- Standard Operating Procedure for the Validation of Organic Data Acquired using SW-846 Method 8270C, SOP No. HW-22, Revision 2, June 2001;
- Data Validation Guidelines for CLP Statement of Work (SOW) OLM04.2, SOP No. HW-6, Revision 12, March 2001;

Evaluation of Metals Data for the CLP based on SOW 3/90, SOP Revision XI, January 1992; and

The validated analytical results are presented on Tables H-2 through H-5. Definitions of data qualifiers are presented at the end of this data assessment summary.

In addition to the General Discussion section below, the specific data qualifiers applied to the sample results are provided for each laboratory report. Chain-of-custody (COC) records, laboratory report case narratives, and documentation supporting the qualification of data (when applicable) is provided in Attachment B, and is sorted by laboratory report number.

I. General Discussion

The analyses were performed in accordance with the required analytical methods, except as noted otherwise in this report. Analyte quantitation limits (QLs) were reported in accordance with the method requirements, and were adjusted for sample size, dilution, and percent moisture. It should be noted that the SVOC fraction of various samples required dilution prior to analysis due to elevated concentrations of target compounds and/or matrix interferences. The QLs reported on Tables H-2 through H-5 are the lowest achievable at the level of dilution performed.

Samples designated for matrix spike/matrix spike duplicate (MS/MSD) analyses are shown on Table H-1. In addition to these, the laboratory performed MS/MSD analyses on other samples collected from this site as needed to fulfill batch quality control requirements. Qualification of data was made based on the MS/MSD results most applicable to the samples in each laboratory batch/report.

Field duplicates (FD) are also shown on Table H-1. USEPA Region II validation guidelines do not provide criteria for qualification of BTEX/VOC, SVOC, or PCB data based on FD results. Any qualification of metals and wet chemistry data based on FD results are discussed in subsequent sections of this report.

II. Severn Trent Laboratories (STL-Buffalo) Reports

STL Job Number A05-C888 (Test Pit Soil Samples Collected November 9, 2005)

The concentrations of methylene chloride in soil samples TP-02-5.5 and TP-02-7.0 were less than or equal to the QL, and less than ten times the amount in the associated rinsate blank. The final results for methylene chloride in these samples were qualified 'U' at the QL.

The metals MS and/or MSD analyses exhibited recoveries below QC limits for antimony (Sb), barium (Ba), and zinc (Zn). The detected results for Ba and Zn were qualified 'J' in all test pit soil samples, and the non-detect results for Sb qualified 'UJ'.

The metals MS analysis also exhibited a recovery above 200% for calcium (Ca). Although USEPA Region II validation guidelines typically require rejection ('R') of detected analyte results when MS/MSD recoveries are above 200%, the MSD recovery for Ca was within QC limits. Using professional judgment, the detected results for Ca were qualified 'J' in all test pit soil samples, and were not rejected.

The metals serial dilution analysis exhibited a percent difference (%D) in concentration of greater than 10% for aluminum (Al), Ba, Ca, iron (Fe), lead (Pb), magnesium (Mg), manganese (Mn), and Zn. The results for these analytes were qualified 'J' in all test pit soil samples.

STL Job Number A05-C903 (Test Pit Soil Samples Collected November 9, 2005, TOC Only)

No data required qualification.

STL Job Number A05-C927 (Soil Boring Samples Collected November 10-11, 2005)

The concentrations of SVOC bis(2-ethylhexyl)phthalate in samples SB-03-15-17, SB-06-16-18, and SB-07-15-16 were less than the QL and less than 10 times the amount in the associated method and rinsate blanks. The final results for bis(2-ethylhexyl)phthalate in these samples were raised to the QL and qualified 'U'. It should be noted that the results for bis(2-ethylhexyl)phthalate in the associated method and rinsate blanks were reported as non-detect by the laboratory because the concentrations were less than the method detection limit (MDL). However, the raw data confirm the presence of this compound in the blanks.

The concentration of SVOC phenol in sample SB-05-11-12 was less than the QL and less than five times the amount in the associated rinsate blank. The final result for phenol in this sample was raised to the QL and qualified 'U'.

The concentrations of SVOC pyrene in samples SB-06-14-16, SB-07-15-16, and SB-07-22-24 were less than the QL and less than five times the amount in the associated rinsate blank. The final results for pyrene in these samples were raised to the QL and qualified 'U'.

The metals MS/MSD analyses exhibited recoveries above QC limits for Al and below QC limits for Sb. The detected results for Al were qualified 'J' and the non-detect results for Sb qualified 'UJ' in all soil boring samples.

The metals serial dilution analysis exhibited a %D in concentration of greater than 10% for Al, Ba, Fe, Mg, and Mn. The results for these analytes were qualified 'J' in all soil boring samples.

The relative percent difference (RPD) between the concentrations of calcium (Ca) in sample SB-04-12-13.5 and the field duplicate of this sample (DUP-01) was greater than 100%. The results for Ca in this sample and field duplicate were qualified 'J'. As per USEPA region II validation guidelines, the results for Ca in the remaining soil boring samples did not require qualification.

STL Job Number A05-C945 (Soil Boring Sample Collected November 11, 2005, TOC Only)

No data required qualification.

STL Job Number A05-D077 (Soil Boring Samples Collected November 14, 2005)

The concentrations of VOC methylene chloride in all soil boring samples were less than 10 times the amount in the associated method blank. The final results for methylene chloride in all soil boring samples were qualified 'U'. It should be noted that the result for methylene chloride in the associated method blank was reported as non-detect by the laboratory because the concentration was less than the MDL. However, the raw data confirm the presence of this compound in the blank.

The concentrations of SVOC bis(2-ethylhexyl)phthalate in soil boring samples SB-08-18-20, SB-09-18-20, and SB-10-14-16 were less than the QL and less than 10 times the amount in the associated rinsate blank (see STL Report A05-C927). The final results for bis(2-

ethylhexyl)phthalate in these samples were raised to the QL and qualified 'U'. It should be noted that the result for bis(2-ethylhexyl)phthalate in the rinsate blank was reported as non-detect by the laboratory because the concentration was less than the MDL. However, the raw data confirm the presence of this compound in the blank.

The concentration of SVOC di-n-butylphthalate in sample SB-08-18-20 was less than the QL and less than 10 times the amount in the associated method blank. The final result for di-n-butylphthalate in this sample was raised to the QL and qualified 'U'.

The concentrations of SVOC naphthalene in samples SB-08-18-20 and SB-11-6-8 were less than the QL and less than five times the amount in the associated method blank. The final results for naphthalene in these samples were raised to the QL and qualified 'U'.

The metals MS/MSD analyses exhibited recoveries above QC limits for Al and below QC limits for Sb. The detected results for Al were qualified 'J' and the non-detect results for Sb qualified 'UJ' in all soil boring samples.

The metals serial dilution analysis exhibited a %D in concentration of greater than 10% for Ba, Ca, Fe, and Mn. The results for these analytes were qualified 'J' in all soil boring samples.

STL Job Number A05-D150 (Groundwater Samples Collected November 16, 2005)

The concentration of SVOC di-n-butylphthalate in sample PZ-02 was less than 10 times the amount in the associated method and rinsate blanks. The final result for di-n-butylphthalate in this sample was qualified 'U'. It should be noted that the results for di-n-butylphthalate in the blanks was reported as non-detect by the laboratory because the concentrations were less than the MDL. However, the raw data confirm the presence of this compound in the blanks.

Total phenolics were not recovered (i.e., 0% recovery) in the MS/MSD analyses. The results for total phenolics were qualified 'R' in all groundwater samples.

III. Additional Analyses

Natural Oxidant Demand (NOD)

Two soil samples and one field duplicate were collected on November 9-11, 2005 and sent to Carus Chemical Company (Peru, IL). The 48-hour NOD of the samples was determined at low, medium, and high doses of potassium permanganate. No quality control problems during sample analyses were noted in the laboratory reports. A summary of the analytical results is provided on Table H-6. A copy of the laboratory report, which describes the analyses in more detail, is provided in Attachment A.

DEFINITIONS OF USEPA REGION II DATA QUALIFIERS

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- NJ The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.
- B The analyte was detected in the sample at a concentration greater than the method detection limit, but less than the quantitation limit (used for metals only).
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- D The concentration reported is from a secondary dilution analysis.

Table H-1
Sample Identification Summary
Former Off-Site Gas Holder - Cortland, New York
New York State Electric & Gas

Sample Type	Matrix	Laboratory Report	Collection Date	Location ID	Sample ID	QC
Test Pit	Soil	STL A05-C888	11/9/05	TP-01	TP-01-2.5	MS/MSD
		STL A05-C903 (TOC Only)		TP-01	TP-01-5.0	
				TP-01	TP-00-1.0	Field Duplicate of TP-01-5.0
				TP-02	TP-02-2.5	·
				TP-02	TP-02-5.5	
				TP-02	TP-02-7.0	
				TP-03	TP-03-2.5	
				TP-03	TP-03-5.5	
				TP-03	TP-03-10.5	
Soil Boring	Soil	STL A05-C927	11/10/05	SB-01	SB-01-10-12	
_		STL A05-C945 (TOC Only)		SB-03	SB-03-15-17	
				SB-04	SB-04-12-13.5	
				SB-04	DUP-01	Field Duplicate of SB-04-12-13.5
				SB-05	SB-05-11-12	·
				SB-05	SB-05-15-16	
			11/11/05	SB-06	SB-06-14-16	
				SB-06	SB-06-16-18	MS/MSD
				SB-07	SB-07-13-15	
				SB-07	SB-07-15-16	
				SB-07	SB-07-22-24	
		STL A05-D077	11/14/05	SB-08	SB-08-10-12	
				SB-08	SB-08-18-20	
				SB-09	SB-09-14-16	
				SB-09	SB-09-18-20	
				SB-10	SB-10-14-16	
				SB-10	SB-10-18-20	
				SB-11	SB-11-6-8	
				SB-11	SB-11-9-11	
Piezometer	Groundwater	STL A05-D150	11/16/05	PZ-01	PZ-01	
				PZ-02	PZ-02	
				PZ-02	DUP-11-16-05	Field Duplicate of PZ-02
				PZ-03	PZ-03	MS/MSD
				PZ-04	PZ-04	
Field QC	Rinsate Blank	STL A05-C888	11/9/05	Field QC	RB-01	Test Pits
		STL A05-C927	11/10/05	1	RB-02	Soil Borings
		STL A05-D150	11/16/05	1	RB-11-16-05	Piezometer Groundwater
	Trip Blank	STL A05-D150	11/16/05	1	TB-11-16-05	Piezometer Groundwater

MS/MSD - Matrix spike/matrix spike duplicate analyses requested on these samples.

Location ID		TP-01	TP-01	TP-01	TP-01	TP-02
Sample ID		TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.5-2.5	5.0-5.0	5.0-5.0	7.5-7.5	2.5-2.5
Date Sampled		11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,1,2,2-Tetrachloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,1,2-Trichloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethene	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2,4-Trichlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dibromo-3-chloropropane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dibromoethane (Ethylene dibromide)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethene (cis)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethene (trans)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichloropropane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,3-Dichlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
1,3-Dichloropropene (cis)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,3-Dichloropropene (trans)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,4-Dichlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
2-Hexanone	UG/KG	28 U	29 U	28 U	29 U	29 U
4-Methyl-2-pentanone	UG/KG	28 U	29 U	28 U	29 U	29 U
Acetone	UG/KG	28 U	29 U	28 U	29 U	29 U
Benzene	UG/KG	6 U	6 U	6 U	6 U	6 U
Bromodichloromethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Bromoform	UG/KG	6 U	6 U	6 U	6 U	6 U

Flags assigned during chemistry validation are shown.

Location ID		TP-01	TP-01	TP-01	TP-01	TP-02
Sample ID		TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.5-2.5	5.0-5.0 11/09/05	5.0-5.0 11/09/05	7.5-7.5 11/09/05	2.5-2.5 11/09/05
Date Sampled		11/09/05				
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Bromomethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Carbon disulfide	UG/KG	6 U	6 U	6 U	6 U	6 U
Carbon tetrachloride	UG/KG	6 U	6 U	6 U	6 U	6 U
Chlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
Chloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Chloroform	UG/KG	6 U	6 U	6 U	6 U	6 U
Chloromethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Cyclohexane	UG/KG	6 U	6 U	6 U	6 U	6 U
Dibromochloromethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Dichlorodifluoromethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Ethylbenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
Isopropylbenzene (Cumene)	UG/KG	6 U	6 U	6 U	6 U	6 U
Methyl acetate	UG/KG	6 U	6 U	6 U	6 U	6 U
Methyl ethyl ketone (2-Butanone)	UG/KG	28 U	29 U	28 U	29 U	29 U
Methyl tert-butyl ether	UG/KG	6 U	6 U	6 U	6 U	6 U
Methylcyclohexane	UG/KG	6 U	6 U	6 U	6 U	6 U
Methylene chloride	UG/KG	6 U	6 U	6 U	6 U	6 U
Styrene	UG/KG	6 U	6 U	6 U	6 U	6 U
Tetrachloroethene	UG/KG	6 U	6 U	6 U	6 U	6 U
Toluene	UG/KG	6 U	2 J	4 J	5 J	6 U
Trichloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Trichloroethene	UG/KG	6 U	6 U	6 U	6 U	6 U
Trichlorofluoromethane	UG/KG	6 U	6 U	6 U	6 U	6 U

Flags assigned during chemistry validation are shown.

Location ID		TP-01	TP-01	TP-01	TP-01	TP-02
Sample ID		TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5
Matrix Depth Interval (ft)		Soil 2.5-2.5	Soil 5.0-5.0	Soil	Soil	Soil 2.5-2.5
				5.0-5.0	7.5-7.5	
Date Sampled		11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Vinyl chloride	UG/KG	11 U	12 U	11 U	11 U	12 U
Xylene (total)	UG/KG	17 U	17 U	16 U	17 U	17 U
Total BTEX	UG/KG	ND	2	4	5	ND
Total Volatile Organic Compounds	UG/KG	ND	2	4	5	ND
Semivolatile Organic Compounds						
1,1'-Biphenyl	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2,2'-oxybis(2-Chloropropane)	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2,4,5-Trichlorophenol	UG/KG	920 U	930 U	4,400 U	920 U	4,700 U
2,4,6-Trichlorophenol	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2,4-Dichlorophenol	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2,4-Dimethylphenol	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2,4-Dinitrophenol	UG/KG	1,800 U	1,900 U	8,700 U	1,800 U	9,300 U
2,4-Dinitrotoluene	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2,6-Dinitrotoluene	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2-Chloronaphthalene	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2-Chlorophenol	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2-Methylnaphthalene	UG/KG	23 J	380 U	1,800 U	380 U	1,900 U
2-Methylphenol (o-cresol)	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
2-Nitroaniline	UG/KG	1,800 U	1,900 U	8,700 U	1,800 U	9,300 U
2-Nitrophenol	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
3,3'-Dichlorobenzidine	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
3-Nitroaniline	UG/KG	1,800 U	1,900 U	8,700 U	1,800 U	9,300 U
4,6-Dinitro-2-methylphenol	UG/KG	1,800 U	1,900 U	8,700 U	1,800 U	9,300 U

Flags assigned during chemistry validation are shown.

Location ID		TP-01	TP-01	TP-01	TP-01	TP-02
Sample ID		TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5
Matrix Depth Interval (ft)		Soil 2.5-2.5	Soil 5.0-5.0	Soil	Soil	Soil 2.5-2.5
				5.0-5.0	7.5-7.5	
Date Sampled	_	11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units		Field Duplicate (1-1)			
Semivolatile Organic Compounds						
4-Bromophenyl-phenylether	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
4-Chloro-3-methylphenol	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
4-Chloroaniline	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
4-Chlorophenyl-phenylether	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
4-Methylphenol (p-cresol)	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
4-Nitroaniline	UG/KG	1,800 U	1,900 U	8,700 U	1,800 U	9,300 U
4-Nitrophenol	UG/KG	1,800 U	1,900 U	8,700 U	1,800 U	9,300 U
Acenaphthene	UG/KG	29 J	380 U	1,800 U	380 U	1,900 U
Acenaphthylene	UG/KG	240 J	170 J	300 J	380 U	580 J
Acetophenone	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Anthracene	UG/KG	320 J	150 J	300 J	380 U	660 J
Atrazine	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Benzaldehyde	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Benzo(a)anthracene	UG/KG	2,000	1,100	2,200	110 J	5,500
Benzo(a)pyrene	UG/KG	1,900	970	1,700 J	88 J	4,800
Benzo(b)fluoranthene	UG/KG	2,400	1,200	2,200	110 J	6,000
Benzo(g,h,i)perylene	UG/KG	1,200	630	1,100 J	52 J	2,600
Benzo(k)fluoranthene	UG/KG	630	360 J	790 J	33 J	1,800 J
bis(2-Chloroethoxy)methane	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
bis(2-Chloroethyl)ether	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
bis(2-Ethylhexyl)phthalate	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Butylbenzylphthalate	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Caprolactam	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U

Flags assigned during chemistry validation are shown.

Location ID		TP-01	TP-01	TP-01	TP-01	TP-02
Sample ID		TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.5-2.5	5.0-5.0 11/09/05	5.0-5.0	7.5-7.5	2.5-2.5 11/09/05
Date Sampled		11/09/05		11/09/05	11/09/05	
Parameter	Units		Field Duplicate (1-1)			
Semivolatile Organic Compounds						
Carbazole	UG/KG	130 J	42 J	1,800 U	380 U	220 J
Chrysene	UG/KG	1,800	990	1,900	94 J	5,200
Dibenzo(a,h)anthracene	UG/KG	350 J	190 J	270 J	380 U	900 J
Dibenzofuran	UG/KG	48 J	380 U	1,800 U	380 U	1,900 U
Diethylphthalate	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Dimethylphthalate	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Di-n-butylphthalate	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Di-n-octylphthalate	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Fluoranthene	UG/KG	3,600	1,600	3,400	160 J	8,400
Fluorene	UG/KG	86 J	31 J	1,800 U	380 U	100 J
Hexachlorobenzene	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Hexachlorobutadiene	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Hexachlorocyclopentadiene	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Hexachloroethane	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Indeno(1,2,3-cd)pyrene	UG/KG	1,100	560	1,000 J	51 J	2,500
Isophorone	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Naphthalene	UG/KG	85 J	50 J	1,800 U	380 U	1,900 U
Nitrobenzene	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
N-Nitroso-di-n-propylamine	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
N-Nitrosodiphenylamine	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U
Pentachlorophenol	UG/KG	1,800 U	1,900 U	8,700 U	1,800 U	9,300 U
Phenanthrene	UG/KG	1,200	410	1,000 J	380 U	2,200
Phenol	UG/KG	380 U	380 U	1,800 U	380 U	1,900 U

Flags assigned during chemistry validation are shown.

Location ID		TP-01	TP-01	TP-01	TP-01	TP-02
Sample ID		TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.5-2.5	5.0-5.0	5.0-5.0	7.5-7.5	2.5-2.5
Date Sampled	_	11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units		Field Duplicate (1-1)			
Semivolatile Organic Compounds						
Pyrene	UG/KG	3,100	1,400	2,900	150 J	7,100
Total Polycyclic Aromatic Hydrocarbons	UG/KG	20,040	9,811	19,060	848	48,340
Total Semivolatile Organic Compounds	UG/KG	20,241	9,853	19,060	848	48,560
Metals						
Aluminum	MG/KG	12,500 J	10,400 J	11,700 J	13,200 J	9,740 J
Antimony	MG/KG	16.0 UJ	17.8 UJ	14.5 UJ	15.9 UJ	15.9 UJ
Arsenic	MG/KG	6.9	4.4	5.2	6.2	5.8
Barium	MG/KG	75.8 J	55.3 J	59.0 J	59.0 J	56.3 J
Beryllium	MG/KG	0.50	0.41	0.46	0.51	0.41
Cadmium	MG/KG	0.42	0.26	0.26	0.53	0.32
Calcium	MG/KG	2,900 J	2,390 J	2,700 J	1,940 J	9,690 J
Chromium	MG/KG	15.3	12.1	13.3	13.8	12.4
Cobalt	MG/KG	9.5	7.5	9.0	9.2	7.4
Copper	MG/KG	24.5	24.0	19.3	20.3	20.4
Iron	MG/KG	23,200 J	21,400 J	22,100 J	24,500 J	18,800 J
Lead	MG/KG	74.6 J	32.1 J	30.2 J	34.3 J	43.0 J
Magnesium	MG/KG	3,640 J	3,310 J	3,710 J	3,440 J	4,260 J
Manganese	MG/KG	961 J	688 J	880 J	1,050 J	697 J
Mercury	MG/KG	0.157	0.048	0.053	0.051	0.125
Nickel	MG/KG	20.8	17.9	20.2	21.6	18.2
Potassium	MG/KG	880	650	771	713	619
Selenium	MG/KG	4.3 U	4.7 U	3.9 U	4.2 U	4.2 U
Silver	MG/KG	0.53 U	0.59 U	0.48 U	0.53 U	0.53 U

Flags assigned during chemistry validation are shown.

Location ID		TP-01	TP-01	TP-01	TP-01	TP-02
Sample ID		TP-01-2.5	TP-00-1.0	TP-01-5.0	TP-01-7.5	TP-02-2.5
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.5-2.5	5.0-5.0	5.0-5.0	7.5-7.5	2.5-2.5
Date Sampled	_	11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units		Field Duplicate (1-1)			
Metals						
Sodium	MG/KG	149 U	166 U	135 U	148 U	149 U
Thallium	MG/KG	6.4 U	7.1 U	5.8 U	6.3 U	6.4 U
Vanadium	MG/KG	19.9	14.0	16.7	19.1	13.7
Zinc	MG/KG	130 J	74.1 J	75.5 J	164 J	101 J
Miscellaneous Parameters						
Cyanide	MG/KG	1.1 U	1.2 U	1.0 U	1.2 U	1.0 U
Cyanide, Amenable To Chlorination	MG/KG	1.1 U	1.1 U	1.1 U	1.0 U	1.0 U
Phenolics, Total Recoverable	MG/KG	5.5 U	6.0 U	5.4 U	5.6 U	5.7 U
Total Organic Carbon (TOC)	MG/KG	NA	12,000	8,700	NA	NA

Flags assigned during chemistry validation are shown.

Location ID		TP-02	TP-02	TP-03	TP-03	TP-03
Sample ID		TP-02-5.5	TP-02-7.0	TP-03-2.5	TP-03-5.5	TP-03-10.5
Matrix Depth Interval (ft)		Soil	Soil 7.0-7.0	Soil	Soil	Soil 10.5-10.5
		5.5-5.5		2.5-2.5	5.5-5.5	
Date Sampled		11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units					
Volatile Organic Compounds						
1,1,2,2-Tetrachloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,1,2-Trichloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethene	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2,4-Trichlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dibromo-3-chloropropane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dibromoethane (Ethylene dibromide)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethene (cis)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethene (trans)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,2-Dichloropropane	UG/KG	6 U	6 U	6 U	6 U	6 U
1,3-Dichlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
1,3-Dichloropropene (cis)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,3-Dichloropropene (trans)	UG/KG	6 U	6 U	6 U	6 U	6 U
1,4-Dichlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
2-Hexanone	UG/KG	28 U	32 U	29 U	28 U	33 U
4-Methyl-2-pentanone	UG/KG	28 U	32 U	29 U	28 U	33 U
Acetone	UG/KG	28 U	32 U	29 U	28 U	33 U
Benzene	UG/KG	6 U	6 U	6 U	6 U	6 U
Bromodichloromethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Bromoform	UG/KG	6 U	6 U	6 U	6 U	6 U

Flags assigned during chemistry validation are shown.

Location ID		TP-02	TP-02	TP-03	TP-03	TP-03
Sample ID		TP-02-5.5	TP-02-7.0	TP-03-2.5	TP-03-5.5	TP-03-10.5
Matrix Depth Interval (ft)		Soil 5.5-5.5	Soil 7.0-7.0	Soil	Soil	Soil 10.5-10.5
				2.5-2.5	5.5-5.5	
Date Sampled		11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units					
Volatile Organic Compounds						
Bromomethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Carbon disulfide	UG/KG	6 U	6 U	6 U	6 U	6 U
Carbon tetrachloride	UG/KG	6 U	6 U	6 U	6 U	6 U
Chlorobenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
Chloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Chloroform	UG/KG	6 U	6 U	6 U	6 U	6 U
Chloromethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Cyclohexane	UG/KG	6 U	6 U	6 U	6 U	6 U
Dibromochloromethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Dichlorodifluoromethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Ethylbenzene	UG/KG	6 U	6 U	6 U	6 U	6 U
Isopropylbenzene (Cumene)	UG/KG	6 U	6 U	6 U	6 U	6 U
Methyl acetate	UG/KG	6 U	6 U	6 U	6 U	6 U
Methyl ethyl ketone (2-Butanone)	UG/KG	28 U	32 U	29 U	28 U	33 U
Methyl tert-butyl ether	UG/KG	6 U	6 U	6 U	6 U	6 U
Methylcyclohexane	UG/KG	6 U	6 U	6 U	6 U	6 U
Methylene chloride	UG/KG	6 U	6 U	6 U	6 U	6 U
Styrene	UG/KG	6 U	6 U	6 U	6 U	6 U
Tetrachloroethene	UG/KG	6 U	6 U	6 U	6 U	6 U
Toluene	UG/KG	2 J	3 J	6 U	6	6 U
Trichloroethane	UG/KG	6 U	6 U	6 U	6 U	6 U
Trichloroethene	UG/KG	6 U	6 U	6 U	6 U	6 U
Trichlorofluoromethane	UG/KG	6 U	6 U	6 U	6 U	6 U

Flags assigned during chemistry validation are shown.

Location ID		TP-02	TP-02	TP-03	TP-03	TP-03
Sample ID		TP-02-5.5	TP-02-7.0	TP-03-2.5	TP-03-5.5	TP-03-10.5
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		5.5-5.5	7.0-7.0	2.5-2.5	5.5-5.5	10.5-10.5
Date Sampled	_	11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units					
Volatile Organic Compounds						
Vinyl chloride	UG/KG	11 U	13 U	12 U	11 U	13 U
Xylene (total)	UG/KG	17 U	20 U	18 U	17 U	20 U
Total BTEX	UG/KG	2	3	ND	6	ND
Total Volatile Organic Compounds	UG/KG	2	3	ND	6	ND
Semivolatile Organic Compounds						
1,1'-Biphenyl	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2,2'-oxybis(2-Chloropropane)	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2,4,5-Trichlorophenol	UG/KG	930 U	1,000 U	960 U	4,600 U	5,400 U
2,4,6-Trichlorophenol	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2,4-Dichlorophenol	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2,4-Dimethylphenol	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2,4-Dinitrophenol	UG/KG	1,900 U	2,100 U	1,900 U	9,100 U	11,000 U
2,4-Dinitrotoluene	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2,6-Dinitrotoluene	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2-Chloronaphthalene	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2-Chlorophenol	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2-Methylnaphthalene	UG/KG	380 U	430 U	33 J	180 J	1,100 J
2-Methylphenol (o-cresol)	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
2-Nitroaniline	UG/KG	1,900 U	2,100 U	1,900 U	9,100 U	11,000 U
2-Nitrophenol	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
3,3'-Dichlorobenzidine	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
3-Nitroaniline	UG/KG	1,900 U	2,100 U	1,900 U	9,100 U	11,000 U
4,6-Dinitro-2-methylphenol	UG/KG	1,900 U	2,100 U	1,900 U	9,100 U	11,000 U

Flags assigned during chemistry validation are shown.

Location ID		TP-02	TP-02	TP-03	TP-03	TP-03
Sample ID		TP-02-5.5	TP-02-7.0	TP-03-2.5	TP-03-5.5	TP-03-10.5
Matrix Depth Interval (ft)		Soil	Soil 7.0-7.0	Soil	Soil	Soil 10.5-10.5
		5.5-5.5		2.5-2.5	5.5-5.5	
Date Sampled	_	11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units					
Semivolatile Organic Compounds						
4-Bromophenyl-phenylether	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
4-Chloro-3-methylphenol	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
4-Chloroaniline	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
4-Chlorophenyl-phenylether	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
4-Methylphenol (p-cresol)	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
4-Nitroaniline	UG/KG	1,900 U	2,100 U	1,900 U	9,100 U	11,000 U
4-Nitrophenol	UG/KG	1,900 U	2,100 U	1,900 U	9,100 U	11,000 U
Acenaphthene	UG/KG	380 U	430 U	46 J	230 J	1,100 J
Acenaphthylene	UG/KG	380 U	430 U	210 J	620 J	3,200
Acetophenone	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Anthracene	UG/KG	380 U	23 J	340 J	750 J	7,400
Atrazine	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Benzaldehyde	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Benzo(a)anthracene	UG/KG	140 J	190 J	1,800	3,900	12,000
Benzo(a)pyrene	UG/KG	120 J	150 J	1,500	3,700	8,900
Benzo(b)fluoranthene	UG/KG	200 J	170 J	1,800	4,400	10,000
Benzo(g,h,i)perylene	UG/KG	73 J	30 J	790	2,400	4,900
Benzo(k)fluoranthene	UG/KG	190 J	65 J	650	1,600 J	3,600
bis(2-Chloroethoxy)methane	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
bis(2-Chloroethyl)ether	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
bis(2-Ethylhexyl)phthalate	UG/KG	380 U	430 U	94 J	1,900 U	2,200 U
Butylbenzylphthalate	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Caprolactam	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U

Flags assigned during chemistry validation are shown.

Location ID		TP-02	TP-02	TP-03	TP-03	TP-03
Sample ID		TP-02-5.5	TP-02-7.0	TP-03-2.5	TP-03-5.5	TP-03-10.5
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		5.5-5.5	7.0-7.0	2.5-2.5	5.5-5.5	10.5-10.5
Date Sampled	_	11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units					
Semivolatile Organic Compounds						
Carbazole	UG/KG	380 U	430 U	160 J	750 J	2,000 J
Chrysene	UG/KG	120 J	140 J	1,600	3,800	10,000
Dibenzo(a,h)anthracene	UG/KG	22 J	29 J	270 J	620 J	1,300 J
Dibenzofuran	UG/KG	380 U	430 U	75 J	320 J	3,000
Diethylphthalate	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Dimethylphthalate	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Di-n-butylphthalate	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Di-n-octylphthalate	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Fluoranthene	UG/KG	190 J	260 J	3,500	8,500	29,000
Fluorene	UG/KG	380 U	430 U	120 J	340 J	4,900
Hexachlorobenzene	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Hexachlorobutadiene	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Hexachlorocyclopentadiene	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Hexachloroethane	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Indeno(1,2,3-cd)pyrene	UG/KG	68 J	78 J	800	2,200	4,500
Isophorone	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Naphthalene	UG/KG	380 U	430 U	72 J	620 J	1,100 J
Nitrobenzene	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
N-Nitroso-di-n-propylamine	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
N-Nitrosodiphenylamine	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U
Pentachlorophenol	UG/KG	1,900 U	2,100 U	1,900 U	9,100 U	11,000 U
Phenanthrene	UG/KG	46 J	51 J	1,500	5,300	27,000
Phenol	UG/KG	380 U	430 U	400 U	1,900 U	2,200 U

Flags assigned during chemistry validation are shown.

Location ID		TP-02	TP-02	TP-03	TP-03	TP-03
Sample ID		TP-02-5.5	TP-02-7.0	TP-03-2.5	TP-03-5.5	TP-03-10.5
Matrix Depth Interval (ft)		Soil	Soil 7.0-7.0	Soil	Soil	Soil 10.5-10.5
		5.5-5.5		2.5-2.5	5.5-5.5	
Date Sampled		11/09/05	11/09/05	11/09/05	11/09/05	11/09/05
Parameter	Units					
Semivolatile Organic Compounds						
Pyrene	UG/KG	180 J	230 J	2,900	7,400	22,000
Total Polycyclic Aromatic Hydrocarbons	UG/KG	1,349	1,416	17,898	46,380	150,900
Total Semivolatile Organic Compounds	UG/KG	1,349	1,416	18,260	47,630	157,000
Metals						
Aluminum	MG/KG	15,200 J	14,200 J	11,100 J	10,900 J	5,990 J
Antimony	MG/KG	15.6 UJ	17.6 UJ	15.0 UJ	15.5 UJ	17.7 UJ
Arsenic	MG/KG	5.2	4.6	5.6	7.2	10.6
Barium	MG/KG	31.5 J	70.7 J	84.4 J	76.1 J	62.6 J
Beryllium	MG/KG	0.54	0.50	0.44	0.48	0.53
Cadmium	MG/KG	0.28	0.23 U	0.30	0.25	1.6
Calcium	MG/KG	1,160 J	3,310 J	2,640 J	4,760 J	3,440 J
Chromium	MG/KG	15.8	14.3	13.2	13.2	8.8
Cobalt	MG/KG	10.6	9.9	7.5	8.1	6.0
Copper	MG/KG	19.0	14.0	19.9	24.6	37.5
Iron	MG/KG	24,400 J	24,700 J	18,900 J	19,500 J	19,700 J
Lead	MG/KG	13.1 J	18.0 J	84.3 J	150 J	598 J
Magnesium	MG/KG	4,180 J	3,960 J	3,040 J	3,330 J	1,250 J
Manganese	MG/KG	549 J	1,040 J	571 J	744 J	470 J
Mercury	MG/KG	0.047	0.022	0.097	0.058	0.363
Nickel	MG/KG	27.7	18.9	18.0	18.0	11.9
Potassium	MG/KG	622	726	696	702	393
Selenium	MG/KG	4.2 U	4.7 U	4.0 U	4.1 U	4.7 U
Silver	MG/KG	0.52 U	0.59 U	0.50 U	0.52 U	0.59 U

Flags assigned during chemistry validation are shown.

Location ID		TP-02	TP-02	TP-03	TP-03	TP-03							
Sample ID		TP-02-5.5	TP-02-7.0	TP-03-2.5	TP-03-5.5	TP-03-10.5							
Matrix Depth Interval (ft) Date Sampled		Soil 5.5-5.5 11/09/05	Soil 7.0-7.0 11/09/05	Soil 2.5-2.5 11/09/05	Soil 5.5-5.5 11/09/05	Soil 10.5-10.5 11/09/05							
							Parameter	Units					
							Metals						
Sodium	MG/KG	146 U	164 U	140 U	145 U	165 U							
Thallium	MG/KG	6.3 U	7.0 U	6.0 U	6.2 U	7.1 U							
Vanadium	MG/KG	16.0	20.3	16.5	21.5	16.0							
Zinc	MG/KG	67.5 J	71.5 J	89.5 J	104 J	407 J							
Miscellaneous Parameters													
Cyanide	MG/KG	1.0 U	1.3 U	1.2 U	0.98 U	1.3 U							
Cyanide, Amenable To Chlorination	MG/KG	1.1 U	1.1 U	1.0 U	1.2 U	1.3 U							
Phenolics, Total Recoverable	MG/KG	5.8 U	7.3 U	5.0 U	5.6 U	6.7 U							
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA							

Flags assigned during chemistry validation are shown.

Location ID		SB-01	SB-03	SB-04	SB-04	SB-05
Sample ID Matrix		SB01-10-12	SB03-15-17	DUP-01	SB04-12-13.5	SB05-11-12
		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		10.0-12.0	15.0-17.0	12.0-13.5	12.0-13.5	11.0-12.0
Date Sampled		11/10/05	11/10/05	11/10/05	11/10/05	11/10/05
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,2,2-Tetrachloroethane	UG/KG	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/KG	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	UG/KG	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	UG/KG	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	UG/KG	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	UG/KG	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	UG/KG	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane (Ethylene dibromide)	UG/KG	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	UG/KG	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	UG/KG	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethene (cis)	UG/KG	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethene (trans)	UG/KG	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	UG/KG	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	UG/KG	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropene (cis)	UG/KG	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropene (trans)	UG/KG	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	UG/KG	5 U	5 U	5 U	5 U	5 U
2-Hexanone	UG/KG	27 U	27 U	26 U	26 U	27 U
4-Methyl-2-pentanone	UG/KG	27 U	27 U	26 U	26 U	27 U
Acetone	UG/KG	27 U	27 U	26 U	26 U	41
Benzene	UG/KG	5 U	5 U	5 U	5 U	8
Bromodichloromethane	UG/KG	5 U	5 U	5 U	5 U	5 U
Bromoform	UG/KG	5 U	5 U	5 U	5 U	5 U

Flags assigned during chemistry validation are shown.

Location ID		SB-01	SB-03	SB-04	SB-04	SB-05							
Sample ID Matrix Depth Interval (ft)		SB01-10-12 Soil 10.0-12.0	SB03-15-17 Soil 15.0-17.0	DUP-01 Soil 12.0-13.5	SB04-12-13.5 Soil 12.0-13.5	SB05-11-12 Soil 11.0-12.0							
							Date Sampled	_	11/10/05	11/10/05	11/10/05	11/10/05	11/10/05
							Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds													
Bromomethane	UG/KG	5 U	5 U	5 U	5 U	5 U							
Carbon disulfide	UG/KG	5 U	5 U	5 U	5 U	2 J							
Carbon tetrachloride	UG/KG	5 U	5 U	5 U	5 U	5 U							
Chlorobenzene	UG/KG	5 U	5 U	5 U	5 U	5 U							
Chloroethane	UG/KG	5 U	5 U	5 U	5 U	5 U							
Chloroform	UG/KG	5 U	5 U	5 U	5 U	5 U							
Chloromethane	UG/KG	5 U	5 U	5 U	5 U	5 U							
Cyclohexane	UG/KG	5 U	5 U	5 U	5 U	5 U							
Dibromochloromethane	UG/KG	5 U	5 U	5 U	5 U	5 U							
Dichlorodifluoromethane	UG/KG	5 U	5 U	5 U	5 U	5 U							
Ethylbenzene	UG/KG	5 U	5 U	5 U	5 U	12							
Isopropylbenzene (Cumene)	UG/KG	5 U	5 U	5 U	5 U	5 U							
Methyl acetate	UG/KG	5 U	5 U	5 U	5 U	5 U							
Methyl ethyl ketone (2-Butanone)	UG/KG	27 U	27 U	26 U	26 U	8 J							
Methyl tert-butyl ether	UG/KG	5 U	5 U	5 U	5 U	5 U							
Methylcyclohexane	UG/KG	5 U	5 U	5 U	5 U	5 U							
Methylene chloride	UG/KG	5 U	5 U	5 U	5 U	5 U							
Styrene	UG/KG	5 U	5 U	5 U	5 U	5 U							
Tetrachloroethene	UG/KG	5 U	5 U	5 U	5 U	5 U							
Toluene	UG/KG	5 U	5 U	5 U	5 U	10							
Trichloroethane	UG/KG	5 U	5 U	5 U	5 U	5 U							
Trichloroethene	UG/KG	5 U	5 U	5 U	5 U	5 U							
Trichlorofluoromethane	UG/KG	5 U	5 U	5 U	5 U	5 U							

Flags assigned during chemistry validation are shown.

Location ID		SB-01	SB-03	SB-04	SB-04	SB-05
Sample ID Matrix Depth Interval (ft)		SB01-10-12	SB03-15-17	DUP-01	SB04-12-13.5	SB05-11-12
		Soil	Soil	Soil	Soil	Soil
		10.0-12.0	15.0-17.0	12.0-13.5	12.0-13.5	11.0-12.0
Date Sampled		11/10/05	11/10/05	11/10/05	11/10/05	11/10/05
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Vinyl chloride	UG/KG	11 U	11 U	10 U	10 U	11 U
Xylene (total)	UG/KG	16 U	16 U	16 U	16 U	62
Total BTEX	UG/KG	ND	ND	ND	ND	92
Total Volatile Organic Compounds	UG/KG	ND	ND	ND	ND	143
Semivolatile Organic Compounds						
1,1'-Biphenyl	UG/KG	360 U	350 U	1,700 U	1,700 U	12,000
2,2'-oxybis(2-Chloropropane)	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
2,4,5-Trichlorophenol	UG/KG	880 U	850 U	4,200 U	4,100 U	28,000 U
2,4,6-Trichlorophenol	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
2,4-Dichlorophenol	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
2,4-Dimethylphenol	UG/KG	360 U	350 U	1,700 U	1,700 U	3,600 J
2,4-Dinitrophenol	UG/KG	1,800 U	1,700 U	8,400 U	8,200 U	55,000 U
2,4-Dinitrotoluene	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
2,6-Dinitrotoluene	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
2-Chloronaphthalene	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
2-Chlorophenol	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
2-Methylnaphthalene	UG/KG	360 U	350 U	1,700 U	1,700 U	52,000
2-Methylphenol (o-cresol)	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
2-Nitroaniline	UG/KG	1,800 U	1,700 U	8,400 U	8,200 U	55,000 U
2-Nitrophenol	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
3,3'-Dichlorobenzidine	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
3-Nitroaniline	UG/KG	1,800 U	1,700 U	8,400 U	8,200 U	55,000 U
4,6-Dinitro-2-methylphenol	UG/KG	1,800 U	1,700 U	8,400 U	8,200 U	55,000 U

Flags assigned during chemistry validation are shown.

Location ID		SB-01	SB-03	SB-04	SB-04	SB-05							
Sample ID Matrix Depth Interval (ft)		SB01-10-12 Soil 10.0-12.0	SB03-15-17 Soil 15.0-17.0	DUP-01 Soil 12.0-13.5	SB04-12-13.5 Soil 12.0-13.5	SB05-11-12 Soil 11.0-12.0							
							Date Sampled		11/10/05	11/10/05	11/10/05	11/10/05	11/10/05
							Parameter	Units			Field Duplicate (1-1)		
Semivolatile Organic Compounds													
4-Bromophenyl-phenylether	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
4-Chloro-3-methylphenol	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
4-Chloroaniline	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
4-Chlorophenyl-phenylether	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
4-Methylphenol (p-cresol)	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
4-Nitroaniline	UG/KG	1,800 U	1,700 U	8,400 U	8,200 U	55,000 U							
4-Nitrophenol	UG/KG	1,800 U	1,700 U	8,400 U	8,200 U	55,000 U							
Acenaphthene	UG/KG	360 U	350 U	1,700 U	1,700 U	60,000							
Acenaphthylene	UG/KG	360 U	350 U	130 J	120 J	28,000							
Acetophenone	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
Anthracene	UG/KG	360 U	350 U	250 J	180 J	110,000							
Atrazine	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
Benzaldehyde	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
Benzo(a)anthracene	UG/KG	360 U	350 U	1,400 J	1,200 J	160,000							
Benzo(a)pyrene	UG/KG	360 U	350 U	1,100 J	1,100 J	120,000							
Benzo(b)fluoranthene	UG/KG	360 U	350 U	1,200 J	1,200 J	130,000							
Benzo(g,h,i)perylene	UG/KG	360 U	350 U	620 J	560 J	72,000							
Benzo(k)fluoranthene	UG/KG	360 U	350 U	650 J	630 J	55,000							
bis(2-Chloroethoxy)methane	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
bis(2-Chloroethyl)ether	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
bis(2-Ethylhexyl)phthalate	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
Butylbenzylphthalate	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							
Caprolactam	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U							

Flags assigned during chemistry validation are shown.

Location ID		SB-01	SB-03	SB-04	SB-04	SB-05
Sample ID		SB01-10-12	SB03-15-17	DUP-01	SB04-12-13.5	SB05-11-12
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		10.0-12.0	15.0-17.0	12.0-13.5	12.0-13.5	11.0-12.0
Date Sampled		11/10/05	11/10/05	11/10/05	11/10/05	11/10/05
Parameter	Units			Field Duplicate (1-1)		
Semivolatile Organic Compounds						
Carbazole	UG/KG	360 U	350 U	1,700 U	1,700 U	73,000
Chrysene	UG/KG	360 U	350 U	1,200 J	1,000 J	150,000
Dibenzo(a,h)anthracene	UG/KG	360 U	350 U	170 J	210 J	22,000
Dibenzofuran	UG/KG	360 U	350 U	1,700 U	1,700 U	74,000
Diethylphthalate	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Dimethylphthalate	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Di-n-butylphthalate	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Di-n-octylphthalate	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Fluoranthene	UG/KG	360 U	350 U	2,100	1,600 J	520,000 D
Fluorene	UG/KG	360 U	350 U	1,700 U	1,700 U	100,000
Hexachlorobenzene	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Hexachlorobutadiene	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Hexachlorocyclopentadiene	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Hexachloroethane	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Indeno(1,2,3-cd)pyrene	UG/KG	360 U	350 U	590 J	530 J	67,000
Isophorone	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Naphthalene	UG/KG	360 U	350 U	1,700 U	1,700 U	160,000
Nitrobenzene	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
N-Nitroso-di-n-propylamine	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
N-Nitrosodiphenylamine	UG/KG	360 U	350 U	1,700 U	1,700 U	11,000 U
Pentachlorophenol	UG/KG	1,800 U	1,700 U	8,400 U	8,200 U	55,000 U
Phenanthrene	UG/KG	360 U	350 U	620 J	360 J	680,000 D
Phenol	UG/KG	360 U	350 U	1,700 U	1,700 U	55,000 U

Flags assigned during chemistry validation are shown.

Location ID		SB-01	SB-03	SB-04	SB-04	SB-05
Sample ID		SB01-10-12	SB03-15-17	DUP-01	SB04-12-13.5	SB05-11-12
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		10.0-12.0	15.0-17.0	12.0-13.5	12.0-13.5	11.0-12.0
Date Sampled		11/10/05	11/10/05	11/10/05	11/10/05	11/10/05
Parameter	Units			Field Duplicate (1-1)		
Semivolatile Organic Compounds						
Pyrene	UG/KG	360 U	350 U	1,900	1,500 J	420,000 D
Total Polycyclic Aromatic Hydrocarbons	UG/KG	ND	ND	11,930	10,190	2,854,000
Total Semivolatile Organic Compounds	UG/KG	ND	ND	11,930	10,190	3,068,600
Metals						
Aluminum	MG/KG	6,230 J	6,070 J	10,300 J	10,100 J	9,790 J
Antimony	MG/KG	17.4 UJ	17.5 UJ	15.3 UJ	17.1 UJ	28.4 UJ
Arsenic	MG/KG	3.7	2.3	5.2	5.3	12.2
Barium	MG/KG	31.3 J	28.6 J	45.6 J	51.3 J	51.5 J
Beryllium	MG/KG	0.31	0.25	0.42	0.42	0.54
Cadmium	MG/KG	0.23 U	0.23 U	0.33	0.29	0.38 U
Calcium	MG/KG	61,400	27,600	2,590 J	23,200 J	72,400
Chromium	MG/KG	8.5	7.9	13.4	12.8	13.5
Cobalt	MG/KG	5.7	4.9	8.9	8.3	7.8
Copper	MG/KG	21.8	7.3	16.8	22.2	29.2
Iron	MG/KG	14,200 J	13,700 J	30,000 J	23,100 J	19,300 J
Lead	MG/KG	8.7	3.6	13.5	12.0	390
Magnesium	MG/KG	15,700 J	5,560 J	3,090 J	8,810 J	22,200 J
Manganese	MG/KG	484 J	290 J	829 J	989 J	403 J
Mercury	MG/KG	0.018 U	0.019 U	0.051	0.041	0.140
Nickel	MG/KG	14.2	11.3	19.4	19.8	20.9
Potassium	MG/KG	786	593	502	791	1,020
Selenium	MG/KG	4.6 U	4.7 U	4.1 U	4.6 U	7.6 U
Silver	MG/KG	0.50 U	0.57 U	0.56 U	0.49 U	0.92 U

Flags assigned during chemistry validation are shown.

Location ID		SB-01	SB-03	SB-04	SB-04	SB-05
Sample ID		SB01-10-12	SB03-15-17	DUP-01	SB04-12-13.5	SB05-11-12
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		10.0-12.0	15.0-17.0	12.0-13.5	12.0-13.5	11.0-12.0
Date Sampled	_	11/10/05	11/10/05	11/10/05	11/10/05	11/10/05
Parameter	Units			Field Duplicate (1-1)		
Metals						
Sodium	MG/KG	163 U	164 U	142 U	160 U	316
Thallium	MG/KG	7.0 U	7.0 U	6.1 U	6.8 U	11.3 U
Vanadium	MG/KG	9.2	8.3	16.4	14.6	23.7
Zinc	MG/KG	67.2	31.1	59.3	58.3	89.8
Miscellaneous Parameters						
Cyanide	MG/KG	1.1 U	0.85 U	1.0 U	0.97 U	1.8 U
Cyanide, Amenable To Chlorination	MG/KG	0.98 U	1.1 U	0.84 U	1.1 U	1.4 U
Phenolics, Total Recoverable	MG/KG	5.4 U	4.7 U	5.5 U	4.7 U	7.7 U
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

Location ID		SB-05	SB-06	SB-06	SB-07	SB-07
Sample ID		SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		15.0-16.0	14.0-16.0	16.0-18.0	13.0-15.0	15.0-16.0
Date Sampled		11/10/05	11/11/05	11/11/05	11/11/05	11/11/05
Parameter	Units					
Volatile Organic Compounds						
1,1,2,2-Tetrachloroethane	UG/KG	5 U	5 U	5 U	NA	5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/KG	5 U	5 U	5 U	NA	5 U
1,1,2-Trichloroethane	UG/KG	5 U	5 U	5 U	NA	5 U
1,1-Dichloroethane	UG/KG	5 U	5 U	5 U	NA	5 U
1,1-Dichloroethene	UG/KG	5 U	5 U	5 U	NA	5 U
1,2,4-Trichlorobenzene	UG/KG	5 U	5 U	5 U	NA	5 U
1,2-Dibromo-3-chloropropane	UG/KG	5 U	5 U	5 U	NA	5 U
1,2-Dibromoethane (Ethylene dibromide)	UG/KG	5 U	5 U	5 U	NA	5 U
1,2-Dichlorobenzene	UG/KG	5 U	5 U	5 U	NA	5 U
1,2-Dichloroethane	UG/KG	5 U	5 U	5 U	NA	5 U
1,2-Dichloroethene (cis)	UG/KG	5 U	5 U	5 U	NA	5 U
1,2-Dichloroethene (trans)	UG/KG	5 U	5 U	5 U	NA	5 U
1,2-Dichloropropane	UG/KG	5 U	5 U	5 U	NA	5 U
1,3-Dichlorobenzene	UG/KG	5 U	5 U	5 U	NA	5 U
1,3-Dichloropropene (cis)	UG/KG	5 U	5 U	5 U	NA	5 U
1,3-Dichloropropene (trans)	UG/KG	5 U	5 U	5 U	NA	5 U
1,4-Dichlorobenzene	UG/KG	5 U	5 U	5 U	NA	5 U
2-Hexanone	UG/KG	26 U	25 U	27 U	NA	27 U
4-Methyl-2-pentanone	UG/KG	26 U	25 U	27 U	NA	27 U
Acetone	UG/KG	26 U	25 U	27 U	NA	27 U
Benzene	UG/KG	5 U	5 U	5 U	NA	5 U
Bromodichloromethane	UG/KG	5 U	5 U	5 U	NA	5 U
Bromoform	UG/KG	5 U	5 U	5 U	NA	5 U

Flags assigned during chemistry validation are shown.

Location ID		SB-05	SB-06	SB-06	SB-07	SB-07
Sample ID		SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		15.0-16.0	14.0-16.0	16.0-18.0	13.0-15.0	15.0-16.0
Date Sampled		11/10/05	11/11/05	11/11/05	11/11/05	11/11/05
Parameter	Units					
Volatile Organic Compounds						
Bromomethane	UG/KG	5 U	5 U	5 U	NA	5 U
Carbon disulfide	UG/KG	5 U	5 U	5 U	NA	5 U
Carbon tetrachloride	UG/KG	5 U	5 U	5 U	NA	5 U
Chlorobenzene	UG/KG	5 U	5 U	5 U	NA	5 U
Chloroethane	UG/KG	5 U	5 U	5 U	NA	5 U
Chloroform	UG/KG	5 U	5 U	5 U	NA	5 U
Chloromethane	UG/KG	5 U	5 U	5 U	NA	5 U
Cyclohexane	UG/KG	5 U	5 U	5 U	NA	5 U
Dibromochloromethane	UG/KG	5 U	5 U	5 U	NA	5 U
Dichlorodifluoromethane	UG/KG	5 U	5 U	5 U	NA	5 U
Ethylbenzene	UG/KG	5 U	5 U	5 U	NA	5 U
Isopropylbenzene (Cumene)	UG/KG	5 U	5 U	5 U	NA	5 U
Methyl acetate	UG/KG	5 U	5 U	5 U	NA	5 U
Methyl ethyl ketone (2-Butanone)	UG/KG	26 U	25 U	27 U	NA	27 U
Methyl tert-butyl ether	UG/KG	5 U	5 U	5 U	NA	5 U
Methylcyclohexane	UG/KG	5 U	5 U	5 U	NA	5 U
Methylene chloride	UG/KG	5 U	5 U	5 U	NA	5 U
Styrene	UG/KG	5 U	5 U	5 U	NA	5 U
Tetrachloroethene	UG/KG	5 U	5 U	2 J	NA	5 U
Toluene	UG/KG	5 U	5 U	5 U	NA	5 U
Trichloroethane	UG/KG	5 U	5 U	5 U	NA	5 U
Trichloroethene	UG/KG	5 U	5 U	5 U	NA	5 U
Trichlorofluoromethane	UG/KG	5 U	5 U	5 U	NA	5 U

Flags assigned during chemistry validation are shown.

Location ID		SB-05	SB-06	SB-06	SB-07	SB-07
Sample ID		SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		15.0-16.0	14.0-16.0	16.0-18.0	13.0-15.0	15.0-16.0
Date Sampled		11/10/05	11/11/05	11/11/05	11/11/05	11/11/05
Parameter	Units					
Volatile Organic Compounds						
Vinyl chloride	UG/KG	10 U	10 U	11 U	NA	11 U
Xylene (total)	UG/KG	16 U	15 U	16 U	NA	16 U
Total BTEX	UG/KG	ND	ND	ND	NA	ND
Total Volatile Organic Compounds	UG/KG	ND	ND	2	NA	ND
Semivolatile Organic Compounds						
1,1'-Biphenyl	UG/KG	1,800 U	340 U	360 U	NA	350 U
2,2'-oxybis(2-Chloropropane)	UG/KG	1,800 U	340 U	360 U	NA	350 U
2,4,5-Trichlorophenol	UG/KG	4,400 U	820 U	870 U	NA	850 U
2,4,6-Trichlorophenol	UG/KG	1,800 U	340 U	360 U	NA	350 U
2,4-Dichlorophenol	UG/KG	1,800 U	340 U	360 U	NA	350 U
2,4-Dimethylphenol	UG/KG	1,800 U	340 U	360 U	NA	350 U
2,4-Dinitrophenol	UG/KG	8,700 U	1,600 U	1,700 U	NA	1,700 U
2,4-Dinitrotoluene	UG/KG	1,800 U	340 U	360 U	NA	350 U
2,6-Dinitrotoluene	UG/KG	1,800 U	340 U	360 U	NA	350 U
2-Chloronaphthalene	UG/KG	1,800 U	340 U	360 U	NA	350 U
2-Chlorophenol	UG/KG	1,800 U	340 U	360 U	NA	350 U
2-Methylnaphthalene	UG/KG	810 J	340 U	360 U	NA	350 U
2-Methylphenol (o-cresol)	UG/KG	1,800 U	340 U	360 U	NA	350 U
2-Nitroaniline	UG/KG	8,700 U	1,600 U	1,700 U	NA	1,700 U
2-Nitrophenol	UG/KG	1,800 U	340 U	360 U	NA	350 U
3,3'-Dichlorobenzidine	UG/KG	1,800 U	340 U	360 U	NA	350 U
3-Nitroaniline	UG/KG	8,700 U	1,600 U	1,700 U	NA	1,700 U
4,6-Dinitro-2-methylphenol	UG/KG	8,700 U	1,600 U	1,700 U	NA	1,700 U

Flags assigned during chemistry validation are shown.

Location ID		SB-05	SB-06	SB-06	SB-07	SB-07
Sample ID		SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
Matrix Depth Interval (ft)		Soil	Soil 14.0-16.0	Soil 16.0-18.0	Soil 13.0-15.0	Soil 15.0-16.0
		15.0-16.0				
Date Sampled		11/10/05	11/11/05	11/11/05	11/11/05	11/11/05
Parameter	Units					
Semivolatile Organic Compounds						
4-Bromophenyl-phenylether	UG/KG	1,800 U	340 U	360 U	NA	350 U
4-Chloro-3-methylphenol	UG/KG	1,800 U	340 U	360 U	NA	350 U
4-Chloroaniline	UG/KG	1,800 U	340 U	360 U	NA	350 U
4-Chlorophenyl-phenylether	UG/KG	1,800 U	340 U	360 U	NA	350 U
4-Methylphenol (p-cresol)	UG/KG	1,800 U	340 U	360 U	NA	350 U
4-Nitroaniline	UG/KG	8,700 U	1,600 U	1,700 U	NA	1,700 U
4-Nitrophenol	UG/KG	8,700 U	1,600 U	1,700 U	NA	1,700 U
Acenaphthene	UG/KG	750 J	340 U	360 U	NA	350 U
Acenaphthylene	UG/KG	780 J	340 U	360 U	NA	350 U
Acetophenone	UG/KG	1,800 U	340 U	360 U	NA	350 U
Anthracene	UG/KG	1,800	340 U	360 U	NA	350 U
Atrazine	UG/KG	1,800 U	340 U	360 U	NA	350 U
Benzaldehyde	UG/KG	1,800 U	340 U	360 U	NA	350 U
Benzo(a)anthracene	UG/KG	3,100	30 J	360 U	NA	52 J
Benzo(a)pyrene	UG/KG	2,500	19 J	360 U	NA	44 J
Benzo(b)fluoranthene	UG/KG	4,100	28 J	360 U	NA	67 J
Benzo(g,h,i)perylene	UG/KG	1,600 J	340 U	360 U	NA	26 J
Benzo(k)fluoranthene	UG/KG	4,300	340 U	360 U	NA	72 J
bis(2-Chloroethoxy)methane	UG/KG	1,800 U	340 U	360 U	NA	350 U
bis(2-Chloroethyl)ether	UG/KG	1,800 U	340 U	360 U	NA	350 U
bis(2-Ethylhexyl)phthalate	UG/KG	1,800 U	340 U	360 U	NA	350 U
Butylbenzylphthalate	UG/KG	1,800 U	340 U	360 U	NA	350 U
Caprolactam	UG/KG	1,800 U	340 U	360 U	NA	350 U

Flags assigned during chemistry validation are shown.

Location ID		SB-05	SB-06	SB-06	SB-07	SB-07
Sample ID		SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		15.0-16.0	14.0-16.0	16.0-18.0	13.0-15.0	15.0-16.0
Date Sampled	1	11/10/05	11/11/05	11/11/05	11/11/05	11/11/05
Parameter	Units					
Semivolatile Organic Compounds						
Carbazole	UG/KG	1,000 J	340 U	360 U	NA	350 U
Chrysene	UG/KG	3,000	26 J	360 U	NA	42 J
Dibenzo(a,h)anthracene	UG/KG	440 J	340 U	360 U	NA	350 U
Dibenzofuran	UG/KG	1,200 J	340 U	360 U	NA	350 U
Diethylphthalate	UG/KG	1,800 U	340 U	360 U	NA	350 U
Dimethylphthalate	UG/KG	1,800 U	340 U	360 U	NA	350 U
Di-n-butylphthalate	UG/KG	1,800 U	340 U	360 U	NA	350 U
Di-n-octylphthalate	UG/KG	1,800 U	340 U	360 U	NA	350 U
Fluoranthene	UG/KG	8,600	45 J	360 U	NA	76 J
Fluorene	UG/KG	1,800	340 U	360 U	NA	350 U
Hexachlorobenzene	UG/KG	1,800 U	340 U	360 U	NA	350 U
Hexachlorobutadiene	UG/KG	1,800 U	340 U	360 U	NA	350 U
Hexachlorocyclopentadiene	UG/KG	1,800 U	340 U	360 U	NA	350 U
Hexachloroethane	UG/KG	1,800 U	340 U	360 U	NA	350 U
Indeno(1,2,3-cd)pyrene	UG/KG	1,400 J	340 U	360 U	NA	22 J
Isophorone	UG/KG	1,800 U	340 U	360 U	NA	350 U
Naphthalene	UG/KG	1,400 J	34 J	360 U	NA	350 U
Nitrobenzene	UG/KG	1,800 U	340 U	360 U	NA	350 U
N-Nitroso-di-n-propylamine	UG/KG	1,800 U	340 U	360 U	NA	350 U
N-Nitrosodiphenylamine	UG/KG	1,800 U	340 U	360 U	NA	350 U
Pentachlorophenol	UG/KG	8,700 U	1,600 U	1,700 U	NA	1,700 U
Phenanthrene	UG/KG	9,800	26 J	360 U	NA	30 J
Phenol	UG/KG	1,800 U	340 U	360 U	NA	350 U

Flags assigned during chemistry validation are shown.

Location ID		SB-05	SB-06	SB-06	SB-07	SB-07
Sample ID		SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
Matrix		Soil 15.0-16.0	Soil	Soil	Soil	Soil
Depth Interval (ft)			14.0-16.0	16.0-18.0	13.0-15.0	15.0-16.0
Date Sampled		11/10/05	11/11/05	11/11/05	11/11/05	11/11/05
Parameter	Units					
Semivolatile Organic Compounds						
Pyrene	UG/KG	6,300	340 U	360 U	NA	350 U
Total Polycyclic Aromatic Hydrocarbons	UG/KG	51,670	208	ND	NA	431
Total Semivolatile Organic Compounds	UG/KG	54,680	208	ND	NA	431
Metals						
Aluminum	MG/KG	6,020 J	4,970 J	4,270 J	NA	8,580 J
Antimony	MG/KG	16.6 UJ	13.4 UJ	14.7 UJ	NA	15.7 UJ
Arsenic	MG/KG	4.8	2.6	2.8	NA	3.6
Barium	MG/KG	34.7 J	25.8 J	24.2 J	NA	38.0 J
Beryllium	MG/KG	0.31	0.24	0.30	NA	0.33
Cadmium	MG/KG	0.24	0.18 U	0.20 U	NA	0.23
Calcium	MG/KG	76,800	33,900	199,000	NA	39,400
Chromium	MG/KG	9.3	6.2	5.8	NA	12.4
Cobalt	MG/KG	5.3	4.0	3.6	NA	7.2
Copper	MG/KG	16.3	8.2	12.1	NA	22.7
Iron	MG/KG	13,400 J	11,500 J	9,090 J	NA	19,500 J
Lead	MG/KG	68.2	5.2	3.9	NA	10.7
Magnesium	MG/KG	15,300 J	4,130 J	11,000 J	NA	9,770 J
Manganese	MG/KG	426 J	639 J	414 J	NA	515 J
Mercury	MG/KG	0.026	0.038	0.017 U	NA	0.016 U
Nickel	MG/KG	12.7	10.8	9.0	NA	17.7
Potassium	MG/KG	756	460	694	NA	813
Selenium	MG/KG	4.4 U	3.6 U	3.9 U	NA	4.2 U
Silver	MG/KG	0.59 U	0.52 U	0.54 U	NA	0.51 U

Flags assigned during chemistry validation are shown.

Location ID		SB-05	SB-06	SB-06	SB-07	SB-07
Sample ID		SB05-15-16	SB06-14-16	SB06-16-18	SB07-13-15	SB07-15-16
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		15.0-16.0	14.0-16.0	16.0-18.0	13.0-15.0	15.0-16.0
Date Sampled		11/10/05	11/11/05	11/11/05	11/11/05	11/11/05
Parameter	Units					
Metals						
Sodium	MG/KG	155 U	125 U	159	NA	147 U
Thallium	MG/KG	6.6 U	5.3 U	5.9 U	NA	6.3 U
Vanadium	MG/KG	10.2	6.8	6.1	NA	12.2
Zinc	MG/KG	53.5	30.5	27.2	NA	65.8
Miscellaneous Parameters						
Cyanide	MG/KG	1.1 U	0.82 U	1.1 U	NA	1.0 U
Cyanide, Amenable To Chlorination	MG/KG	1.0 U	0.93 U	0.81 U	NA	0.82 U
Phenolics, Total Recoverable	MG/KG	4.4 U	4.1 U	5.1 U	NA	4.6 U
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	920	NA

Flags assigned during chemistry validation are shown.

Location ID		SB-07	SB-08	SB-08	SB-09	SB-09
Sample ID		SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		22.0-24.0	10.0-12.0	18.0-20.0	14.0-16.0	18.0-20.0
Date Sampled		11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units					
Volatile Organic Compounds						
1,1,2,2-Tetrachloroethane	UG/KG	6 U	6 U	5 U	5 U	6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/KG	6 U	6 U	5 U	5 U	6 U
1,1,2-Trichloroethane	UG/KG	6 U	6 U	5 U	5 U	6 U
1,1-Dichloroethane	UG/KG	6 U	6 U	5 U	5 U	6 U
1,1-Dichloroethene	UG/KG	6 U	6 U	5 U	5 U	6 U
1,2,4-Trichlorobenzene	UG/KG	6 U	6 U	5 U	5 U	6 U
1,2-Dibromo-3-chloropropane	UG/KG	6 U	6 U	5 U	5 U	6 U
1,2-Dibromoethane (Ethylene dibromide)	UG/KG	6 U	6 U	5 U	5 U	6 U
1,2-Dichlorobenzene	UG/KG	6 U	6 U	5 U	5 U	6 U
1,2-Dichloroethane	UG/KG	6 U	6 U	5 U	5 U	6 U
1,2-Dichloroethene (cis)	UG/KG	6 U	6 U	5 U	5 U	6 U
1,2-Dichloroethene (trans)	UG/KG	6 U	6 U	5 U	5 U	6 U
1,2-Dichloropropane	UG/KG	6 U	6 U	5 U	5 U	6 U
1,3-Dichlorobenzene	UG/KG	6 U	6 U	5 U	5 U	6 U
1,3-Dichloropropene (cis)	UG/KG	6 U	6 U	5 U	5 U	6 U
1,3-Dichloropropene (trans)	UG/KG	6 U	6 U	5 U	5 U	6 U
1,4-Dichlorobenzene	UG/KG	6 U	6 U	5 U	5 U	6 U
2-Hexanone	UG/KG	28 U	30 U	26 U	26 U	28 U
4-Methyl-2-pentanone	UG/KG	28 U	30 U	26 U	26 U	28 U
Acetone	UG/KG	28 U	30	26 U	26 U	28 U
Benzene	UG/KG	6 U	15	5 U	5 U	6 U
Bromodichloromethane	UG/KG	6 U	6 U	5 U	5 U	6 U
Bromoform	UG/KG	6 U	6 U	5 U	5 U	6 U

Flags assigned during chemistry validation are shown.

Location ID		SB-07	SB-08	SB-08	SB-09	SB-09
Sample ID		SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
Matrix		Soil 22.0-24.0	Soil	Soil	Soil	Soil 18.0-20.0
Depth Interval (ft)			10.0-12.0	18.0-20.0	14.0-16.0	
Date Sampled		11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units					
Volatile Organic Compounds						
Bromomethane	UG/KG	6 U	6 U	5 U	5 U	6 U
Carbon disulfide	UG/KG	6 U	3 J	5 U	5 U	6 U
Carbon tetrachloride	UG/KG	6 U	6 U	5 U	5 U	6 U
Chlorobenzene	UG/KG	6 U	6 U	5 U	5 U	6 U
Chloroethane	UG/KG	6 U	6 U	5 U	5 U	6 U
Chloroform	UG/KG	6 U	6 U	5 U	5 U	6 U
Chloromethane	UG/KG	6 U	6 U	5 U	5 U	6 U
Cyclohexane	UG/KG	6 U	6 U	5 U	5 U	6 U
Dibromochloromethane	UG/KG	6 U	6 U	5 U	5 U	6 U
Dichlorodifluoromethane	UG/KG	6 U	6 U	5 U	5 U	6 U
Ethylbenzene	UG/KG	6 U	24	5 U	5 U	6 U
Isopropylbenzene (Cumene)	UG/KG	6 U	6	5 U	5 U	6 U
Methyl acetate	UG/KG	6 U	6 U	5 U	5 U	6 U
Methyl ethyl ketone (2-Butanone)	UG/KG	28 U	30 U	26 U	26 U	28 U
Methyl tert-butyl ether	UG/KG	6 U	6 U	5 U	5 U	6 U
Methylcyclohexane	UG/KG	6 U	6 U	5 U	5 U	6 U
Methylene chloride	UG/KG	6 U	8 U	6 U	7 U	8 U
Styrene	UG/KG	6 U	9	5 U	5 U	6 U
Tetrachloroethene	UG/KG	6 U	6 U	5 U	5 U	6 U
Toluene	UG/KG	6 U	19	5 U	5 U	6 U
Trichloroethane	UG/KG	6 U	6 U	5 U	5 U	6 U
Trichloroethene	UG/KG	6 U	6 U	5 U	5 U	6 U
Trichlorofluoromethane	UG/KG	6 U	6 U	5 U	5 U	6 U

Flags assigned during chemistry validation are shown.

Location ID		SB-07	SB-08	SB-08	SB-09	SB-09
Sample ID		SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		22.0-24.0	10.0-12.0	18.0-20.0	14.0-16.0	18.0-20.0
Date Sampled		11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units					
Volatile Organic Compounds						
Vinyl chloride	UG/KG	11 U	12 U	11 U	10 U	11 U
Xylene (total)	UG/KG	17 U	98	16 U	16 U	16 U
Total BTEX	UG/KG	ND	156	ND	ND	ND
Total Volatile Organic Compounds	UG/KG	ND	204	ND	ND	ND
Semivolatile Organic Compounds						
1,1'-Biphenyl	UG/KG	380 U	13,000	350 U	350 U	370 U
2,2'-oxybis(2-Chloropropane)	UG/KG	380 U	8,000 U	350 U	350 U	370 U
2,4,5-Trichlorophenol	UG/KG	910 U	19,000 U	860 U	840 U	890 U
2,4,6-Trichlorophenol	UG/KG	380 U	8,000 U	350 U	350 U	370 U
2,4-Dichlorophenol	UG/KG	380 U	8,000 U	350 U	350 U	370 U
2,4-Dimethylphenol	UG/KG	380 U	1,100 J	350 U	350 U	370 U
2,4-Dinitrophenol	UG/KG	1,800 U	39,000 U	1,700 U	1,700 U	1,800 U
2,4-Dinitrotoluene	UG/KG	380 U	8,000 U	350 U	350 U	370 U
2,6-Dinitrotoluene	UG/KG	380 U	8,000 U	350 U	350 U	370 U
2-Chloronaphthalene	UG/KG	380 U	8,000 U	350 U	350 U	370 U
2-Chlorophenol	UG/KG	380 U	8,000 U	350 U	350 U	370 U
2-Methylnaphthalene	UG/KG	380 U	53,000	350 U	350 U	370 U
2-Methylphenol (o-cresol)	UG/KG	380 U	920 J	350 U	350 U	370 U
2-Nitroaniline	UG/KG	1,800 U	39,000 U	1,700 U	1,700 U	1,800 U
2-Nitrophenol	UG/KG	380 U	8,000 U	350 U	350 U	370 U
3,3'-Dichlorobenzidine	UG/KG	380 U	8,000 U	350 U	350 U	370 U
3-Nitroaniline	UG/KG	1,800 U	39,000 U	1,700 U	1,700 U	1,800 U
4,6-Dinitro-2-methylphenol	UG/KG	1,800 U	39,000 U	1,700 U	1,700 U	1,800 U

Flags assigned during chemistry validation are shown.

Location ID		SB-07	SB-08	SB-08	SB-09	SB-09
Sample ID		SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		22.0-24.0	10.0-12.0	18.0-20.0	14.0-16.0	18.0-20.0
Date Sampled	_	11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units					
Semivolatile Organic Compounds						
4-Bromophenyl-phenylether	UG/KG	380 U	8,000 U	350 U	350 U	370 U
4-Chloro-3-methylphenol	UG/KG	380 U	8,000 U	350 U	350 U	370 U
4-Chloroaniline	UG/KG	380 U	8,000 U	350 U	350 U	370 U
4-Chlorophenyl-phenylether	UG/KG	380 U	8,000 U	350 U	350 U	370 U
4-Methylphenol (p-cresol)	UG/KG	380 U	2,800 J	350 U	350 U	370 U
4-Nitroaniline	UG/KG	1,800 U	39,000 U	1,700 U	1,700 U	1,800 U
4-Nitrophenol	UG/KG	1,800 U	39,000 U	1,700 U	1,700 U	1,800 U
Acenaphthene	UG/KG	380 U	54,000	350 U	350 U	370 U
Acenaphthylene	UG/KG	380 U	39,000	24 J	350 U	370 U
Acetophenone	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Anthracene	UG/KG	380 U	90,000	31 J	350 U	370 U
Atrazine	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Benzaldehyde	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Benzo(a)anthracene	UG/KG	22 J	230,000 D	59 J	350 U	370 U
Benzo(a)pyrene	UG/KG	380 U	220,000 D	48 J	350 U	370 U
Benzo(b)fluoranthene	UG/KG	19 J	240,000 D	60 J	350 U	370 U
Benzo(g,h,i)perylene	UG/KG	380 U	73,000	24 J	350 U	370 U
Benzo(k)fluoranthene	UG/KG	380 U	72,000	350 U	350 U	370 U
bis(2-Chloroethoxy)methane	UG/KG	380 U	8,000 U	350 U	350 U	370 U
bis(2-Chloroethyl)ether	UG/KG	380 U	8,000 U	350 U	350 U	370 U
bis(2-Ethylhexyl)phthalate	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Butylbenzylphthalate	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Caprolactam	UG/KG	380 U	8,000 U	350 U	350 U	370 U

Flags assigned during chemistry validation are shown.

Sample ID Matrix Depth Interval (ft) Date Sampled Parameter		SB07-22-24 Soil 22.0-24.0	SB08-10-12 Soil	SB08-18-20	SB09-14-16	SB09-18-20
Depth Interval (ft) Date Sampled			Soil			1
Date Sampled		22.0-24 0		Soil	Soil	Soil
			10.0-12.0	18.0-20.0	14.0-16.0	18.0-20.0
Parameter		11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
	Units					
Semivolatile Organic Compounds						
Carbazole	UG/KG	380 U	45,000	350 U	350 U	370 U
Chrysene	UG/KG	380 U	270,000 D	57 J	350 U	370 U
Dibenzo(a,h)anthracene	UG/KG	380 U	20,000	350 U	350 U	370 U
Dibenzofuran	UG/KG	380 U	52,000	350 U	350 U	370 U
Diethylphthalate	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Dimethylphthalate	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Di-n-butylphthalate	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Di-n-octylphthalate	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Fluoranthene	UG/KG	29 J	700,000 D	140 J	350 U	370 U
Fluorene	UG/KG	380 U	90,000	25 J	350 U	370 U
Hexachlorobenzene	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Hexachlorobutadiene	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Hexachlorocyclopentadiene	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Hexachloroethane	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Indeno(1,2,3-cd)pyrene	UG/KG	380 U	66,000	21 J	350 U	370 U
Isophorone	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Naphthalene	UG/KG	380 U	120,000	350 U	350 U	370 U
Nitrobenzene	UG/KG	380 U	8,000 U	350 U	350 U	370 U
N-Nitroso-di-n-propylamine	UG/KG	380 U	8,000 U	350 U	350 U	370 U
N-Nitrosodiphenylamine	UG/KG	380 U	8,000 U	350 U	350 U	370 U
Pentachlorophenol	UG/KG	1,800 U	39,000 U	1,700 U	1,700 U	1,800 U
Phenanthrene	UG/KG	380 U	860,000 D	150 J	350 U	370 U
Phenol	UG/KG	380 U	1,800 J	350 U	350 U	370 U

Flags assigned during chemistry validation are shown.

Location ID		SB-07	SB-08	SB-08	SB-09	SB-09
Sample ID		SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		22.0-24.0	10.0-12.0	18.0-20.0	14.0-16.0	18.0-20.0
Date Sampled	_	11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units					
Semivolatile Organic Compounds						
Pyrene	UG/KG	380 U	670,000 D	130 J	350 U	370 U
Total Polycyclic Aromatic Hydrocarbons	UG/KG	70	3,814,000	769	ND	ND
Total Semivolatile Organic Compounds	UG/KG	70	3,983,620	769	ND	ND
Metals						
Aluminum	MG/KG	6,040 J	4,550 J	6,280 J	7,550 J	7,570 J
Antimony	MG/KG	15.4 UJ	20.2 UJ	16.8 UJ	15.2 UJ	15.3 UJ
Arsenic	MG/KG	2.8	5.2	4.2	3.1	3.1
Barium	MG/KG	27.6 J	40.1 J	44.5 J	39.4 J	28.8 J
Beryllium	MG/KG	0.30	0.33	0.28	0.32	0.29
Cadmium	MG/KG	0.20 U	0.27 U	0.22 U	0.20 U	0.20 U
Calcium	MG/KG	66,400	11,500 J	62,100 J	59,200 J	46,000 J
Chromium	MG/KG	8.0	6.1	7.3	8.7	9.3
Cobalt	MG/KG	5.2	3.8	5.1	5.2	5.9
Copper	MG/KG	15.0	20.9	22.5	16.2	17.3
Iron	MG/KG	13,800 J	13,200 J	18,200 J	14,600 J	15,100 J
Lead	MG/KG	6.5	749	9.3	5.8	11.4
Magnesium	MG/KG	6,110 J	2,780	4,590	9,170	7,610
Manganese	MG/KG	523 J	214 J	618 J	423 J	443 J
Mercury	MG/KG	0.019 U	0.065	0.016 U	0.016 U	0.020 U
Nickel	MG/KG	13.0	10.0	12.3	14.3	14.9
Potassium	MG/KG	591	348	557	742	675
Selenium	MG/KG	4.1 U	5.4 U	4.5 U	4.1 U	4.1 U
Silver	MG/KG	0.53 U	0.67 U	0.56 U	0.51 U	0.51 U

Flags assigned during chemistry validation are shown.

Location ID		SB-07	SB-08	SB-08	SB-09	SB-09
Sample ID		SB07-22-24	SB08-10-12	SB08-18-20	SB09-14-16	SB09-18-20
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		22.0-24.0	10.0-12.0	18.0-20.0	14.0-16.0	18.0-20.0
Date Sampled	_	11/11/05	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units					
Metals						
Sodium	MG/KG	143 U	189 U	157 U	142 U	143 U
Thallium	MG/KG	6.1 U	8.1 U	6.7 U	6.1 U	6.1 U
Vanadium	MG/KG	8.0	15.2	9.8	9.7	9.6
Zinc	MG/KG	43.8	350	38.6	41.9	47.9
Miscellaneous Parameters						
Cyanide	MG/KG	1.1 U	1.0	0.92 U	1.0 U	1.0 U
Cyanide, Amenable To Chlorination	MG/KG	1.1 U	1.1 U	1.0 U	0.95 U	1.0 U
Phenolics, Total Recoverable	MG/KG	5.6 U	5.6 U	4.9 U	4.6 U	5.6 U
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

Location ID		SB-10	SB-10	SB-11-1	SB-11-1
Sample ID		SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11
Matrix		Soil	Soil 18.0-20.0	Soil	Soil 9.0-11.0
Depth Interval (ft)		14.0-16.0		6.0-8.0	
Date Sampled		11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units				
Volatile Organic Compounds					
1,1,2,2-Tetrachloroethane	UG/KG	5 U	5 U	5 U	6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/KG	5 U	5 U	5 U	6 U
1,1,2-Trichloroethane	UG/KG	5 U	5 U	5 U	6 U
1,1-Dichloroethane	UG/KG	5 U	5 U	5 U	6 U
1,1-Dichloroethene	UG/KG	5 U	5 U	5 U	6 U
1,2,4-Trichlorobenzene	UG/KG	5 U	5 U	5 U	6 U
1,2-Dibromo-3-chloropropane	UG/KG	5 U	5 U	5 U	6 U
1,2-Dibromoethane (Ethylene dibromide)	UG/KG	5 U	5 U	5 U	6 U
1,2-Dichlorobenzene	UG/KG	5 U	5 U	5 U	6 U
1,2-Dichloroethane	UG/KG	5 U	5 U	5 U	6 U
1,2-Dichloroethene (cis)	UG/KG	5 U	5 U	5 U	6 U
1,2-Dichloroethene (trans)	UG/KG	5 U	5 U	5 U	6 U
1,2-Dichloropropane	UG/KG	5 U	5 U	5 U	6 U
1,3-Dichlorobenzene	UG/KG	5 U	5 U	5 U	6 U
1,3-Dichloropropene (cis)	UG/KG	5 U	5 U	5 U	6 U
1,3-Dichloropropene (trans)	UG/KG	5 U	5 U	5 U	6 U
1,4-Dichlorobenzene	UG/KG	5 U	5 U	5 U	6 U
2-Hexanone	UG/KG	26 U	26 U	26 U	30 U
4-Methyl-2-pentanone	UG/KG	26 U	26 U	26 U	30 U
Acetone	UG/KG	26 U	26 U	26 U	88
Benzene	UG/KG	5 U	5 U	5 U	22
Bromodichloromethane	UG/KG	5 U	5 U	5 U	6 U
Bromoform	UG/KG	5 U	5 U	5 U	6 U

Flags assigned during chemistry validation are shown.

Location ID		SB-10	SB-10	SB-11-1	SB-11-1	
Sample ID		SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11	
Matrix		Soil	Soil	Soil	Soil	
Depth Interval (ft)		14.0-16.0	18.0-20.0	6.0-8.0	9.0-11.0	
Date Sampled		11/14/05	11/14/05	11/14/05	11/14/05	
Parameter	Units					
Volatile Organic Compounds						
Bromomethane	UG/KG	5 U	5 U	5 U	6 U	
Carbon disulfide	UG/KG	5 U	5 U	5 U	7	
Carbon tetrachloride	UG/KG	5 U	5 U	5 U	6 U	
Chlorobenzene	UG/KG	5 U	5 U	5 U	6 U	
Chloroethane	UG/KG	5 U	5 U	5 U	6 U	
Chloroform	UG/KG	5 U	5 U	5 U	6 U	
Chloromethane	UG/KG	5 U	5 U	5 U	6 U	
Cyclohexane	UG/KG	5 U	5 U	5 U	6 U	
Dibromochloromethane	UG/KG	5 U	5 U	5 U	6 U	
Dichlorodifluoromethane	UG/KG	5 U	5 U	5 U	6 U	
Ethylbenzene	UG/KG	5 U	5 U	5 U	22	
Isopropylbenzene (Cumene)	UG/KG	5 U	5 U	5 U	3 J	
Methyl acetate	UG/KG	5 U	5 U	5 U	6 U	
Methyl ethyl ketone (2-Butanone)	UG/KG	26 U	26 U	26 U	22 J	
Methyl tert-butyl ether	UG/KG	5 U	5 U	5 U	6 U	
Methylcyclohexane	UG/KG	5 U	5 U	5 U	6 U	
Methylene chloride	UG/KG	7 U	8 U	7 U	7 U	
Styrene	UG/KG	5 U	5 U	5 U	4 J	
Tetrachloroethene	UG/KG	5 U	5 U	5 U	6 U	
Toluene	UG/KG	5 U	5 U	5 U	10	
Trichloroethane	UG/KG	5 U	5 U	5 U	6 U	
Trichloroethene	UG/KG	5 U	5 U	5 U	6 U	
Trichlorofluoromethane	UG/KG	5 U	5 U	5 U	6 U	

Flags assigned during chemistry validation are shown.

Location ID		SB-10	SB-10	SB-11-1	SB-11-1
Sample ID		SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11
Matrix		Soil	Soil	Soil	Soil
Depth Interval (ft)		14.0-16.0	18.0-20.0	6.0-8.0	9.0-11.0
Date Sampled	1	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units				
Volatile Organic Compounds					
Vinyl chloride	UG/KG	10 U	10 U	11 U	12 U
Xylene (total)	UG/KG	16 U	16 U	16 U	60
Total BTEX	UG/KG	ND	ND	ND	114
Total Volatile Organic Compounds	UG/KG	ND	ND	ND	238
Semivolatile Organic Compounds					
1,1'-Biphenyl	UG/KG	340 U	360 U	350 U	4,000 J
2,2'-oxybis(2-Chloropropane)	UG/KG	340 U	360 U	350 U	8,100 U
2,4,5-Trichlorophenol	UG/KG	840 U	870 U	860 U	20,000 U
2,4,6-Trichlorophenol	UG/KG	340 U	360 U	350 U	8,100 U
2,4-Dichlorophenol	UG/KG	340 U	360 U	350 U	8,100 U
2,4-Dimethylphenol	UG/KG	340 U	360 U	350 U	8,100 U
2,4-Dinitrophenol	UG/KG	1,700 U	1,700 U	1,700 U	39,000 U
2,4-Dinitrotoluene	UG/KG	340 U	360 U	350 U	8,100 U
2,6-Dinitrotoluene	UG/KG	340 U	360 U	350 U	8,100 U
2-Chloronaphthalene	UG/KG	340 U	360 U	350 U	8,100 U
2-Chlorophenol	UG/KG	340 U	360 U	350 U	8,100 U
2-Methylnaphthalene	UG/KG	340 U	360 U	18 J	19,000
2-Methylphenol (o-cresol)	UG/KG	340 U	360 U	350 U	8,100 U
2-Nitroaniline	UG/KG	1,700 U	1,700 U	1,700 U	39,000 U
2-Nitrophenol	UG/KG	340 U	360 U	350 U	8,100 U
3,3'-Dichlorobenzidine	UG/KG	340 U	360 U	350 U	8,100 U
3-Nitroaniline	UG/KG	1,700 U	1,700 U	1,700 U	39,000 U
4,6-Dinitro-2-methylphenol	UG/KG	1,700 U	1,700 U	1,700 U	39,000 U

Flags assigned during chemistry validation are shown.

Location ID		SB-10	SB-10	SB-11-1	SB-11-1
Sample ID		SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11
Matrix		Soil	Soil	Soil	Soil
Depth Interval (ft)		14.0-16.0	18.0-20.0	6.0-8.0	9.0-11.0
Date Sampled	-	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units				
Semivolatile Organic Compounds					
4-Bromophenyl-phenylether	UG/KG	340 U	360 U	350 U	8,100 U
4-Chloro-3-methylphenol	UG/KG	340 U	360 U	350 U	8,100 U
4-Chloroaniline	UG/KG	340 U	360 U	350 U	8,100 U
4-Chlorophenyl-phenylether	UG/KG	340 U	360 U	350 U	8,100 U
4-Methylphenol (p-cresol)	UG/KG	340 U	360 U	350 U	1,800 J
4-Nitroaniline	UG/KG	1,700 U	1,700 U	1,700 U	39,000 U
4-Nitrophenol	UG/KG	1,700 U	1,700 U	1,700 U	39,000 U
Acenaphthene	UG/KG	340 U	360 U	350 U	6,400 J
Acenaphthylene	UG/KG	340 U	360 U	32 J	14,000
Acetophenone	UG/KG	340 U	360 U	350 U	8,100 U
Anthracene	UG/KG	340 U	360 U	37 J	23,000
Atrazine	UG/KG	340 U	360 U	350 U	8,100 U
Benzaldehyde	UG/KG	340 U	360 U	350 U	8,100 U
Benzo(a)anthracene	UG/KG	340 U	360 U	160 J	35,000
Benzo(a)pyrene	UG/KG	340 U	360 U	180 J	22,000
Benzo(b)fluoranthene	UG/KG	340 U	360 U	220 J	28,000
Benzo(g,h,i)perylene	UG/KG	340 U	360 U	130 J	7,800 J
Benzo(k)fluoranthene	UG/KG	340 U	360 U	63 J	8,800
bis(2-Chloroethoxy)methane	UG/KG	340 U	360 U	350 U	8,100 U
bis(2-Chloroethyl)ether	UG/KG	340 U	360 U	350 U	8,100 U
bis(2-Ethylhexyl)phthalate	UG/KG	340 U	360 U	350 U	8,100 U
Butylbenzylphthalate	UG/KG	340 U	360 U	350 U	8,100 U
Caprolactam	UG/KG	340 U	360 U	350 U	8,100 U

Flags assigned during chemistry validation are shown.

Location ID		SB-10	SB-10	SB-11-1	SB-11-1
Sample ID		SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11
Matrix		Soil	Soil	Soil	Soil
Depth Interval (ft)		14.0-16.0	18.0-20.0	6.0-8.0	9.0-11.0
Date Sampled		11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units				
Semivolatile Organic Compounds					
Carbazole	UG/KG	340 U	360 U	36 J	8,800
Chrysene	UG/KG	340 U	360 U	180 J	31,000
Dibenzo(a,h)anthracene	UG/KG	340 U	360 U	28 J	2,500 J
Dibenzofuran	UG/KG	340 U	360 U	19 J	18,000
Diethylphthalate	UG/KG	340 U	360 U	350 U	8,100 U
Dimethylphthalate	UG/KG	340 U	360 U	350 U	8,100 U
Di-n-butylphthalate	UG/KG	340 U	360 U	350 U	8,100 U
Di-n-octylphthalate	UG/KG	340 U	360 U	350 U	8,100 U
Fluoranthene	UG/KG	340 U	360 U	370	92,000
Fluorene	UG/KG	340 U	360 U	22 J	27,000
Hexachlorobenzene	UG/KG	340 U	360 U	350 U	8,100 U
Hexachlorobutadiene	UG/KG	340 U	360 U	350 U	8,100 U
Hexachlorocyclopentadiene	UG/KG	340 U	360 U	350 U	8,100 U
Hexachloroethane	UG/KG	340 U	360 U	350 U	8,100 U
Indeno(1,2,3-cd)pyrene	UG/KG	340 U	360 U	120 J	7,900 J
Isophorone	UG/KG	340 U	360 U	350 U	8,100 U
Naphthalene	UG/KG	340 U	360 U	350 U	28,000
Nitrobenzene	UG/KG	340 U	360 U	350 U	8,100 U
N-Nitroso-di-n-propylamine	UG/KG	340 U	360 U	350 U	8,100 U
N-Nitrosodiphenylamine	UG/KG	340 U	360 U	350 U	8,100 U
Pentachlorophenol	UG/KG	1,700 U	1,700 U	1,700 U	39,000 U
Phenanthrene	UG/KG	340 U	360 U	240 J	110,000
Phenol	UG/KG	340 U	360 U	350 U	8,100 U

Flags assigned during chemistry validation are shown.

Location ID		SB-10	SB-10	SB-11-1	SB-11-1
Sample ID		SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11
Matrix		Soil	Soil	Soil	Soil
Depth Interval (ft)		14.0-16.0	18.0-20.0	6.0-8.0	9.0-11.0
Date Sampled		11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units				
Semivolatile Organic Compounds					
Pyrene	UG/KG	340 U	360 U	320 J	69,000
Total Polycyclic Aromatic Hydrocarbons	UG/KG	ND	ND	2,102	512,400
Total Semivolatile Organic Compounds	UG/KG	ND	ND	2,175	564,000
Metals					
Aluminum	MG/KG	7,810 J	4,310 J	5,740 J	6,340 J
Antimony	MG/KG	16.1 UJ	14.6 UJ	16.9 UJ	17.6 UJ
Arsenic	MG/KG	2.9	25.0	8.9	10.9
Barium	MG/KG	32.3 J	23.9 J	328 J	48.2 J
Beryllium	MG/KG	0.32	0.25	0.44	0.52
Cadmium	MG/KG	0.21 U	0.19 U	0.23 U	0.23 U
Calcium	MG/KG	59,400 J	120,000 J	18,300 J	75,600 J
Chromium	MG/KG	9.7	6.3	10.1	7.5
Cobalt	MG/KG	5.6	5.7	9.2	6.0
Copper	MG/KG	18.2	7.4	72.9	26.2
Iron	MG/KG	15,600 J	12,100 J	16,100 J	17,200 J
Lead	MG/KG	7.3	10.6	2,110	168
Magnesium	MG/KG	4,180	42,400	2,630	5,490
Manganese	MG/KG	808 J	334 J	265 J	484 J
Mercury	MG/KG	0.018 U	0.016 U	0.227	0.058
Nickel	MG/KG	15.0	13.9	12.0	14.3
Potassium	MG/KG	771	523	750	589
Selenium	MG/KG	4.3 U	3.9 U	4.5 U	4.7 U
Silver	MG/KG	0.54 U	0.49 U	0.56 U	0.59 U

Flags assigned during chemistry validation are shown.

Location ID		SB-10	SB-10	SB-11-1	SB-11-1
Sample ID		SB10-14-16	SB10-18-20	SB11-1-6-8	SB11-1-9-11
Matrix		Soil	Soil	Soil	Soil
Depth Interval (ft)		14.0-16.0	18.0-20.0	6.0-8.0	9.0-11.0
Date Sampled	_	11/14/05	11/14/05	11/14/05	11/14/05
Parameter	Units				
Metals					
Sodium	MG/KG	150 U	137	497	257
Thallium	MG/KG	6.4 U	5.8 U	6.8 U	7.0 U
Vanadium	MG/KG	10.5	6.5	18.6	21.0
Zinc	MG/KG	40.9	22.8	121	64.7
Miscellaneous Parameters					
Cyanide	MG/KG	1.0 U	0.94 U	1.0 U	1.2
Cyanide, Amenable To Chlorination	MG/KG	0.92 U	1.0 U	0.99 U	1.1
Phenolics, Total Recoverable	MG/KG	4.6 U	5.4 U	4.8 U	5.4 U
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

Location ID		PZ-01	PZ-02	PZ-02	PZ-03	PZ-04	
Sample ID		PZ-01	DUP-11-16-05	PZ-02	PZ-03	PZ-04	
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Depth Interval (ft)		-	-	-	-	-	
Date Sampled		11/16/05	11/16/05	11/16/05	11/16/05	11/16/05	
Parameter	Units		Field Duplicate (1-1)				
Volatile Organic Compounds							
1,1,2,2-Tetrachloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1,2-Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2,4-Trichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dibromo-3-chloropropane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloroethene (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloroethene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloropropane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,3-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,3-Dichloropropene (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,3-Dichloropropene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,4-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Acetone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Benzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromodichloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromoform	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	

Flags assigned during chemistry validation are shown.

Location ID		PZ-01	PZ-02	PZ-02	PZ-03	PZ-04
Sample ID		PZ-01	DUP-11-16-05	PZ-02	PZ-03	PZ-04
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/16/05	11/16/05	11/16/05	11/16/05	11/16/05
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Bromomethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Location ID		PZ-01	PZ-02	PZ-02	PZ-03	PZ-04	
Sample ID		PZ-01	DUP-11-16-05	PZ-02	PZ-03	PZ-04 Groundwater -	
Matrix		Groundwater	Groundwater	Groundwater	Groundwater		
Depth Interval (ft)		-	-	-	-		
Date Sampled		11/16/05	11/16/05	11/16/05	11/16/05	11/16/05	
Parameter	Units		Field Duplicate (1-1)				
Volatile Organic Compounds							
Vinyl chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Xylene (total)	UG/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	
Total BTEX	UG/L	ND	ND	ND	ND	ND	
Total Volatile Organic Compounds	UG/L	ND	ND	ND	ND	ND	
Semivolatile Organic Compounds							
1,1'-Biphenyl	UG/L	10 U	9 U	9 U	10 U	10 U	
2,2'-oxybis(2-Chloropropane)	UG/L	10 U	9 U	9 U	10 U	10 U	
2,4,5-Trichlorophenol	UG/L	10 U	9 U	9 U	10 U	10 U	
2,4,6-Trichlorophenol	UG/L	10 U	9 U	9 U	10 U	10 U	
2,4-Dichlorophenol	UG/L	10 U	9 U	9 U	10 U	10 U	
2,4-Dimethylphenol	UG/L	10 U	9 U	9 U	10 U	10 U	
2,4-Dinitrophenol	UG/L	48 U	47 U	47 U	50 U	48 U	
2,4-Dinitrotoluene	UG/L	10 U	9 U	9 U	10 U	10 U	
2,6-Dinitrotoluene	UG/L	10 U	9 U	9 U	10 U	10 U	
2-Chloronaphthalene	UG/L	10 U	9 U	9 U	10 U	10 U	
2-Chlorophenol	UG/L	10 U	9 U	9 U	10 U	10 U	
2-Methylnaphthalene	UG/L	10 U	9 U	9 U	10 U	10 U	
2-Methylphenol (o-cresol)	UG/L	10 U	9 U	9 U	10 U	10 U	
2-Nitroaniline	UG/L	48 U	47 U	47 U	50 U	48 U	
2-Nitrophenol	UG/L	10 U	9 U	9 U	10 U	10 U	
3,3'-Dichlorobenzidine	UG/L	19 U	19 U	19 U	20 U	19 U	
3-Nitroaniline	UG/L	48 U	47 U	47 U	50 U	48 U	
4,6-Dinitro-2-methylphenol	UG/L	48 U	47 U	47 U	50 U	48 U	

Flags assigned during chemistry validation are shown.

Location ID		PZ-01	PZ-02	PZ-02	PZ-03	PZ-04
Sample ID		PZ-01	DUP-11-16-05	PZ-02	PZ-03	PZ-04
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/16/05	11/16/05	11/16/05	11/16/05	11/16/05
Parameter	Units		Field Duplicate (1-1)			
Semivolatile Organic Compounds						
4-Bromophenyl-phenylether	UG/L	10 U	9 U	9 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	9 U	9 U	10 U	10 U
4-Chloroaniline	UG/L	10 U	9 U	9 U	10 U	10 U
4-Chlorophenyl-phenylether	UG/L	10 U	9 U	9 U	10 U	10 U
4-Methylphenol (p-cresol)	UG/L	10 U	9 U	9 U	10 U	10 U
4-Nitroaniline	UG/L	48 U	47 U	47 U	50 U	48 U
4-Nitrophenol	UG/L	48 U	47 U	47 U	50 U	48 U
Acenaphthene	UG/L	10 U	9 U	9 U	10 U	10 U
Acenaphthylene	UG/L	10 U	9 U	9 U	10 U	10 U
Acetophenone	UG/L	10 U	9 U	9 U	10 U	10 U
Anthracene	UG/L	10 U	9 U	9 U	10 U	10 U
Atrazine	UG/L	10 U	9 U	9 U	10 U	10 U
Benzaldehyde	UG/L	48 U	47 U	47 U	50 U	48 U
Benzo(a)anthracene	UG/L	10 U	9 U	9 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	9 U	9 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	9 U	9 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	10 U	9 U	9 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	9 U	9 U	10 U	10 U
bis(2-Chloroethoxy)methane	UG/L	10 U	9 U	9 U	10 U	10 U
bis(2-Chloroethyl)ether	UG/L	10 U	9 U	9 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	UG/L	10 U	9 U	9 U	10 U	10 U
Butylbenzylphthalate	UG/L	10 U	9 U	9 U	10 U	10 U
Caprolactam	UG/L	10 U	9 U	9 U	10 U	10 U

Flags assigned during chemistry validation are shown.

Location ID		PZ-01	PZ-02	PZ-02	PZ-03	PZ-04
Sample ID		PZ-01	DUP-11-16-05	PZ-02	PZ-03	PZ-04
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/16/05	11/16/05	11/16/05	11/16/05	11/16/05
Parameter	Units		Field Duplicate (1-1)			
Semivolatile Organic Compounds						
Carbazole	UG/L	10 U	9 U	9 U	10 U	10 U
Chrysene	UG/L	10 U	9 U	9 U	10 U	10 U
Dibenzo(a,h)anthracene	UG/L	10 U	9 U	9 U	10 U	10 U
Dibenzofuran	UG/L	10 U	9 U	9 U	10 U	10 U
Diethylphthalate	UG/L	10 U	9 U	9 U	10 U	10 U
Dimethylphthalate	UG/L	10 U	9 U	9 U	10 U	10 U
Di-n-butylphthalate	UG/L	10 U	9 U	23 U	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	9 U	9 U	10 U	10 U
Fluoranthene	UG/L	10 U	9 U	9 U	10 U	10 U
Fluorene	UG/L	10 U	9 U	9 U	10 U	10 U
Hexachlorobenzene	UG/L	10 U	9 U	9 U	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	9 U	9 U	10 U	10 U
Hexachlorocyclopentadiene	UG/L	43 U	43 U	42 U	45 U	43 U
Hexachloroethane	UG/L	10 U	9 U	9 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	9 U	9 U	10 U	10 U
Isophorone	UG/L	10 U	9 U	9 U	10 U	10 U
Naphthalene	UG/L	10 U	9 U	9 U	10 U	10 U
Nitrobenzene	UG/L	10 U	9 U	9 U	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	9 U	9 U	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	9 U	9 U	10 U	10 U
Pentachlorophenol	UG/L	48 U	47 U	47 U	50 U	48 U
Phenanthrene	UG/L	10 U	9 U	9 U	10 U	10 U
Phenol	UG/L	10 U	9 U	9 U	10 U	10 U

Flags assigned during chemistry validation are shown.

Location ID		PZ-01	PZ-02	PZ-02	PZ-03	PZ-04
Sample ID		PZ-01	DUP-11-16-05	PZ-02	PZ-03	PZ-04
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/16/05	11/16/05	11/16/05	11/16/05	11/16/05
Parameter	Units		Field Duplicate (1-1)			
Semivolatile Organic Compounds						
Pyrene	UG/L	10 U	9 U	9 U	10 U	10 U
Total Polycyclic Aromatic Hydrocarbons	UG/L	ND	ND	ND	ND	ND
Total Semivolatile Organic Compounds	UG/L	ND	ND	ND	ND	ND
Metals						
Aluminum	UG/L	20.9 B	200 U	200 U	1,600	434
Antimony	UG/L	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Arsenic	UG/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Barium	UG/L	49.6	50.0	50.7	61.6	53.0
Beryllium	UG/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Cadmium	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	UG/L	83,400	86,800	87,500	87,200	87,400
Chromium	UG/L	0.92 B	4.0 U	4.0 U	2.8 B	1.1 B
Cobalt	UG/L	4.0 U	4.0 U	4.0 U	0.59 B	4.0 U
Copper	UG/L	0.78 B	1.7 B	1.6 B	2.7 B	1.7 B
Iron	UG/L	30.8 B	50.0 U	50.0 U	1,200	324
Lead	UG/L	5.0 U	5.0 U	5.0 U	2.0 B	5.0 U
Magnesium	UG/L	15,700	16,000	16,100	16,700	16,500
Manganese	UG/L	2.3 B	0.95 B	1.3 B	22.6	8.0
Mercury	UG/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	UG/L	10.0 U	10.0 U	10.0 U	1.6 B	10.0 U
Potassium	UG/L	1,550	1,840	1,880	2,240	1,900
Selenium	UG/L	15.0 U	15.0 U	15.0 U	15.0 U	15.0 U
Silver	UG/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Flags assigned during chemistry validation are shown.

Location ID		PZ-01	PZ-02	PZ-02	PZ-03	PZ-04	
Sample ID		PZ-01	DUP-11-16-05	PZ-02	PZ-03	PZ-04	
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
Depth Interval (ft)		-	-	-	-	-	
Date Sampled	_	11/16/05	11/16/05	11/16/05	11/16/05	11/16/05	
Parameter	Units		Field Duplicate (1-1)				
Metals							
Sodium	UG/L	56,500	67,900	68,500	61,500	64,600	
Thallium	UG/L	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	
Vanadium	UG/L	5.0 U	5.0 U	5.0 U	2.9 B	0.56 B	
Zinc	UG/L	1.3 B	1.1 B	1.3 B	6.3 B	2.1 B	
Dissolved Metals							
Iron	UG/L	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	
Miscellaneous Parameters							
Cyanide	MG/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
Cyanide, Amenable To Chlorination	MG/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
Phenolics, Total Recoverable	MG/L	R	R	R	R	R	

Flags assigned during chemistry validation are shown.

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		RB-01	RB-02	RB11-16-05	TB11-16-05
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		11/09/05	11/10/05	11/16/05	11/16/05
Parameter	Units	Rinse Blank (1-1)	Rinse Blank (1-1)	Rinse Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds					
1,1,2,2-Tetrachloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropene (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	UG/L	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		RB-01	RB-02	RB11-16-05	TB11-16-05
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		11/09/05	11/10/05	11/16/05	11/16/05
Parameter	Units	Rinse Blank (1-1)	Rinse Blank (1-1)	Rinse Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds					
Bromomethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	UG/L	1.1	1.0 U	1.0 U	1.0 U
Styrene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC	
Sample ID		RB-01	RB-02	RB11-16-05	TB11-16-05	
Matrix		Water Quality	Water Quality	Water Quality	Water Quality	
Depth Interval (ft)		- 11/09/05	-	-	-	
Date Sampled			11/10/05	11/16/05	11/16/05	
Parameter	Units	Rinse Blank (1-1)	Rinse Blank (1-1)	Rinse Blank (1-1)	Trip Blank (1-1)	
Volatile Organic Compounds						
Vinyl chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	
Xylene (total)	UG/L	3.0 U	3.0 U	3.0 U	3.0 U	
Total BTEX	UG/L	ND	ND	ND	ND	
Total Volatile Organic Compounds	UG/L	1.1	ND	ND	ND	
Semivolatile Organic Compounds						
1,1'-Biphenyl	UG/L	10 U	10 U	10 U	NA	
2,2'-oxybis(2-Chloropropane)	UG/L	10 U	10 U	10 U	NA	
2,4,5-Trichlorophenol	UG/L	10 U	10 U	10 U	NA	
2,4,6-Trichlorophenol	UG/L	10 U	10 U	10 U	NA	
2,4-Dichlorophenol	UG/L	10 U	10 U	10 U	NA	
2,4-Dimethylphenol	UG/L	10 U	10 U	10 U	NA	
2,4-Dinitrophenol	UG/L	51 U	50 U	48 U	NA	
2,4-Dinitrotoluene	UG/L	10 U	10 U	10 U	NA	
2,6-Dinitrotoluene	UG/L	10 U	10 U	10 U	NA	
2-Chloronaphthalene	UG/L	10 U	10 U	10 U	NA	
2-Chlorophenol	UG/L	10 U	10 U	10 U	NA	
2-Methylnaphthalene	UG/L	10 U	10 U	10 U	NA	
2-Methylphenol (o-cresol)	UG/L	10 U	10 U	10 U	NA	
2-Nitroaniline	UG/L	51 U	50 U	48 U	NA	
2-Nitrophenol	UG/L	10 U	10 U	10 U	NA	
3,3'-Dichlorobenzidine	UG/L	20 U	20 U	19 U	NA	
3-Nitroaniline	UG/L	51 U	50 U	48 U	NA	
4,6-Dinitro-2-methylphenol	UG/L	51 U	50 U	48 U	NA	

Flags assigned during chemistry validation are shown.

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		RB-01	RB-02	RB11-16-05	TB11-16-05
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		11/09/05	11/10/05	11/16/05	11/16/05
Parameter	Units	Rinse Blank (1-1)	Rinse Blank (1-1)	Rinse Blank (1-1)	Trip Blank (1-1)
Semivolatile Organic Compounds					
4-Bromophenyl-phenylether	UG/L	10 U	10 U	10 U	NA
4-Chloro-3-methylphenol	UG/L	10 U	10 U	10 U	NA
4-Chloroaniline	UG/L	10 U	10 U	10 U	NA
4-Chlorophenyl-phenylether	UG/L	10 U	10 U	10 U	NA
4-Methylphenol (p-cresol)	UG/L	10 U	10 U	10 U	NA
4-Nitroaniline	UG/L	51 U	50 U	48 U	NA
4-Nitrophenol	UG/L	51 U	50 U	48 U	NA
Acenaphthene	UG/L	10 U	0.6 J	10 U	NA
Acenaphthylene	UG/L	10 U	10 U	10 U	NA
Acetophenone	UG/L	10 U	10 U	10 U	NA
Anthracene	UG/L	10 U	10 U	10 U	NA
Atrazine	UG/L	10 U	10 U	10 U	NA
Benzaldehyde	UG/L	51 U	50 U	48 U	NA
Benzo(a)anthracene	UG/L	10 U	10 U	10 U	NA
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	NA
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	NA
Benzo(g,h,i)perylene	UG/L	10 U	10 U	10 U	NA
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	NA
bis(2-Chloroethoxy)methane	UG/L	10 U	10 U	10 U	NA
bis(2-Chloroethyl)ether	UG/L	10 U	10 U	10 U	NA
bis(2-Ethylhexyl)phthalate	UG/L	10 U	10 U	10 U	NA
Butylbenzylphthalate	UG/L	10 U	10 U	10 U	NA
Caprolactam	UG/L	10 U	10 U	10 U	NA

Flags assigned during chemistry validation are shown.

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		RB-01	RB-02	RB11-16-05	TB11-16-05
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		11/09/05	11/10/05	11/16/05	11/16/05
Parameter	Units	Rinse Blank (1-1)	Rinse Blank (1-1)	Rinse Blank (1-1)	Trip Blank (1-1)
Semivolatile Organic Compounds					
Carbazole	UG/L	10 U	10 U	10 U	NA
Chrysene	UG/L	10 U	10 U	10 U	NA
Dibenzo(a,h)anthracene	UG/L	10 U	10 U	10 U	NA
Dibenzofuran	UG/L	10 U	10 U	10 U	NA
Diethylphthalate	UG/L	10 U	10 U	10 U	NA
Dimethylphthalate	UG/L	10 U	10 U	10 U	NA
Di-n-butylphthalate	UG/L	10 U	10 U	2.5 J	NA
Di-n-octylphthalate	UG/L	10 U	10 U	10 U	NA
Fluoranthene	UG/L	10 U	10 U	10 U	NA
Fluorene	UG/L	10 U	10 U	10 U	NA
Hexachlorobenzene	UG/L	10 U	10 U	10 U	NA
Hexachlorobutadiene	UG/L	10 U	10 U	10 U	NA
Hexachlorocyclopentadiene	UG/L	46 U	44 U	43 U	NA
Hexachloroethane	UG/L	10 U	10 U	10 U	NA
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	NA
Isophorone	UG/L	10 U	10 U	10 U	NA
Naphthalene	UG/L	10 U	10 U	10 U	NA
Nitrobenzene	UG/L	10 U	10 U	10 U	NA
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U	10 U	NA
N-Nitrosodiphenylamine	UG/L	10 U	10 U	10 U	NA
Pentachlorophenol	UG/L	51 U	50 U	48 U	NA
Phenanthrene	UG/L	10 U	10 U	10 U	NA
Phenol	UG/L	10 U	1 J	10 U	NA

Flags assigned during chemistry validation are shown.

TABLE H-5 VALIDATED FIELD QC SAMPLE RESULTS FORMER OFF-SITE GAS HOLDER - CORTLAND, NY NEW YORK STATE ELECTRIC AND GAS

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		RB-01	RB-02	RB11-16-05	TB11-16-05
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		11/09/05	11/10/05	11/16/05	11/16/05
Parameter	Units	Rinse Blank (1-1)	Rinse Blank (1-1)	Rinse Blank (1-1)	Trip Blank (1-1)
Semivolatile Organic Compounds					
Pyrene	UG/L	10 U	1 J	10 U	NA
Total Polycyclic Aromatic Hydrocarbons	UG/L	ND	1.6	ND	NA
Total Semivolatile Organic Compounds	UG/L	ND	2.6	2.5	NA
Metals					
Aluminum	UG/L	200 U	200 U	200 U	NA
Antimony	UG/L	20.0 U	20.0 U	20.0 U	NA
Arsenic	UG/L	10.0 U	10.0 U	10.0 U	NA
Barium	UG/L	2.0 U	2.0 U	2.0 U	NA
Beryllium	UG/L	2.0 U	2.0 U	2.0 U	NA
Cadmium	UG/L	1.0 U	1.0 U	1.0 U	NA
Calcium	UG/L	500 U	500 U	12.7 B	NA
Chromium	UG/L	4.0 U	4.0 U	4.0 U	NA
Cobalt	UG/L	10.0 U	4.0 U	4.0 U	NA
Copper	UG/L	10.0 U	10.0 U	1.3 B	NA
Iron	UG/L	50.0 U	50.0 U	50.0 U	NA
Lead	UG/L	5.0 U	5.0 U	5.0 U	NA
Magnesium	UG/L	200 U	200 U	200 U	NA
Manganese	UG/L	3.0 U	3.0 U	0.16 B	NA
Mercury	UG/L	0.20 U	0.20 U	0.20 U	NA
Nickel	UG/L	10.0 U	10.0 U	10.0 U	NA
Potassium	UG/L	500 U	500 U	22.2 B	NA
Selenium	UG/L	15.0 U	15.0 U	15.0 U	NA
Silver	UG/L	3.0 U	3.0 U	3.0 U	NA
			I		

Flags assigned during chemistry validation are shown.

Made By_JJL 12/29/05_ Checked By_AMK 1/3/06_

TABLE H-5 VALIDATED FIELD QC SAMPLE RESULTS FORMER OFF-SITE GAS HOLDER - CORTLAND, NY NEW YORK STATE ELECTRIC AND GAS

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		RB-01	RB-02	RB11-16-05	TB11-16-05
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled	_	11/09/05	11/10/05	11/16/05	11/16/05
Parameter	Units	Rinse Blank (1-1)	Rinse Blank (1-1)	Rinse Blank (1-1)	Trip Blank (1-1)
Metals					
Sodium	UG/L	1,000 U	1,000 U	1,000 U	NA
Thallium	UG/L	20.0 U	20.0 U	20.0 U	NA
Vanadium	UG/L	5.0 U	5.0 U	5.0 U	NA
Zinc	UG/L	20.0 U	20.0 U	20.0 U	NA
Dissolved Metals					
Iron	UG/L	NA	NA	12.0 B	NA
Miscellaneous Parameters					
Cyanide	MG/L	0.010 U	0.010 U	0.010 U	NA
Cyanide, Amenable To Chlorination	MG/L	0.010 U	0.010 U	0.010 U	NA
Phenolics, Total Recoverable	MG/L	0.010 U	0.010 U	0.010 U	NA
Total Organic Carbon (TOC)	MG/L	1.0 U	1.0 U	NA	NA

Flags assigned during chemistry validation are shown.

Made By_JJL 12/29/05_ Checked By_AMK 1/3/06_

Table H-6
Summary of Natural Oxidant Demand Analyses
Former Off-Site Gas Holder - Cortland, New York
New York State Electric and Gas

Location ID	Field Sample ID	Collection Date	Low Dose (g/kg)	Medium Dose (g/kg)	High Dose (g/kg)						
Soil sample 48-Hour natural oxidant demand (NOD) for low, medium, and high KMNQ doses											
TP-01	TP-01-5.0	11/9/2005	>3.4	15.3	25.4						
TP-01	TP-00-1.0 (Field Dup of TP-01-5.0)	11/9/2005	>3.4	15.3	26.1						
GB-42	GB-42 8.5'-10.5'	11/9/2005	1.6	2.7	3.4						

ATTACHMENT A LABORATORY REPORT FOR NOD ANALYSES



CARUS CHEMICAL COMPANY

Technology and Quality Remediation Report 30 November 2005

Customer:

URS

Cc: M. Dingens

K. Frasco B. Veronda

Buffalo, NY 14202

282 Delaware Avenue

P. Vella

Attention:

Jim Lehnen

From:

E. Vlastnik

Keywords: Permanganate

Remediation

TECH#

10031

Soil

Subject:

RemOxTM S ISCO Reagent Soil Oxidant Demand

Summary

The permanganate soil groundwater oxidant demand (PSOD) of the soil sample SB-07-13-15 feet for the low permanganate dose at 48 hours was determined to be 1.6 g/kg. The PSOD for the medium permanganate dose at 48 hours was determined to be 2.7 g/kg. The PSOD for the high permanganate dose at 48 hours was determined to be 3.4 g/kg.

For the soil samples TP 01-5.0 feet and TP 00-1.0 (field duplicate) the average PSOD for the low permanganate dose at 48 hours was determined to be greater than 3.4 g/kg. The average PSOD for the medium permanganate dose at 48 hours was determined to be 15.3 g/kg. The average PSOD for the high permanganate dose at 48 hours was determined to be 25.8 g/kg. These values are calculated on a mass per dry weight of soil. Due to the range of observed soil demands, a pilot study or additional site characterization prior to full-scale in-situ chemical oxidation with permanganate is recommended.

Background

Three soil samples were received from URS from the NYSEG – Cortland Project (Project No: 11174305) on November 16, 2005. The soil samples were identified as TP 01-5.0 feet, TP 00-1.0 (field duplicate), and SB-07-13-15 feet. The samples were analyzed for permanganate soil oxidant demands. The measurement of the permanganate soil/site groundwater oxidant demand is used to estimate the concentration of permanganate that will be consumed by the natural reducing agents as well as the contaminants of concern in the soil during a given time period.

Experimental

To determine the PSOD of the soil samples TP 01-5.0', TP 00-1.0, a reaction vessel for each sample was filled with 50 grams of the soil. Large rocks (>5 grams) were excluded from the analysis. A total volume of 100 mLs of deionized water and concentrated permanganate dosing solution were added for a 1:2 soil to added water ratio. The average initial permanganate concentrations were 3.4 g/kg (low dose), 16.9 g/kg (medium dose), and 33.9 g/kg (high dose) on a dry soil basis.

For the sample labeled SB-07-13-15', the soil volume was decreased from the 50 grams typically used to 10 grams due to the limited soil volume after removal of large rocks. A total volume of 20 mLs of deionized water and concentrated permanganate dosing solution were added for a 1:2 soil to added water ratio. The initial permanganate concentrations were 2.9 g/kg (low dose), 14.4 g/kg (medium dose), and 28.9 g/kg (high dose) on a dry soil basis

The reaction vessels were inverted twice per day during the 48-hour reaction time. Residual permanganate (MnO₄⁻) was determined at 48 hours. The moisture content for each soil sample was determined using ASTM Method D 2216-98 and the demands were calculated on a dry weight basis.

Results

The permanganate demand is the amount of permanganate consumed in a given amount of time. It should be noted that in a soil or groundwater sample, the oxidation of any compound by permanganate is dependent on the initial dose of permanganate and the reaction time available. As the permanganate dose is increased, the reaction rate and oxidant consumption may also increase. Some compounds that are not typically oxidized by permanganate under low doses can become reactive with permanganate at higher concentrations. Therefore, increasing the permanganate dose to extreme excess could be disadvantageous to a remediation project (e.g., inefficient chemical usage, higher costs, etc.).

The 48-hour PSOD results of the soil for the low, medium, and high oxidant doses can be seen in Table 1 (dry soil basis).

Table 1: Soil 48-Hour PSOD* for the Low, Medium, and High Permanganate Doses

Sample ID	Low Dose	Medium Dose	High Dose	Moisture
Soil	(g/kg)	(g/kg)	(g/kg)	(%)
TP 01-5.0'	>3.4	15.3	25.4	21.06
TP 00-1.0 (Field Duplicate)	>3.4	15.3	26.1	20.92
SB-07 – 13-15'	1.6	2.7	3.4	7.46

^{*} All demands were calculated on a dry weight basis. To convert the demand results from a dry basis to an as received basis, multiply the dry value by 1 minus the moisture. For example, for SB-07 13-15 feet demand from the high dose is $3.4 \text{ g/kg (dry)} \times (1-0.0746) = 3.1 \text{ g/kg (as received)}$.

Conclusions

For this application the amount of permanganate needed will be dependent on the reaction time allowed. The soil sample SB-07 – 13-15 feet had a low demand with the 48-hour permanganate demand value of 3.4 g/kg for the high permanganate dose. The soil samples TP 01-5.0 feet and TP 00-1.0 (field duplicate) had a moderate demands with an average demand value of 25.8 g/kg. Generally, remediation sites with a soil demand of less than 35.0 g/kg at 48 hours for the high permanganate dose are favorable for in-situ chemical oxidation with permanganate (see Table 2 for additional information). A pilot study or additional site characterization is recommended to confirm laboratory results and determine the parameters for a full-scale trial.

Table 2: Correlation of Soil Groundwater Oxidant Demand Results*

PSOD (g/kg)	Rank	Comment			
<15	Low	ISCO with MnO ₄ is recommended, PSOD			
		contribution to MnO ₄ demand is low			
15-35	Moderate	ISCO with MnO ₄ is recommended			
35-50	Moderately High	ISCO with MnO ₄ is recommended but PSOD			
		will contribute significantly to MnO ₄ demand.			
		Pilot testing may help define these demands.			
>50	High	Pilot testing is highly recommended to			
		determine effective PSOD at the site.			

^{*}Dry Weight Basis

RemOxTM is a trademark of Carus Corporation

ATTACHMENT B

DOCUMENTATION SUPPORTING QUALIFICATION OF DATA

STL JOB NUMBERS A05-C888/A05-C903

NON-CONFORMANCE SUMMARY

Job#: A05-C888

STL Project#: NY5A9403.3

Site Name: URS NYSEG SITES- Cortland

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A05-C888

Sample Cooler(s) were received at the following temperature(s); 6@2.0 °C All samples were received in good condition.

GC/MS Volatile Data

The Method Blank VBLK39 (A5B1782206) had a hit for Methylene Chloride that was above the reporting limit. The aqueous, field generated, Quality Control samples were associated with soil samples. Therefore, all aqueous samples were analyzed as soils and evaluated using soil Quality Control Limits.

Tentatively Identified Compounds (TIC) were not detected in VBLK39 (A5B1782203) and VBLK40 (A5B1782204). However, a TIC form could not be provided for either VBLK39 or VBLK40.

The sample RB-01 had a pH of less than 2.

Initial calibration standard curve A5I0002286-1 exhibited the %RSD of the compounds 1,1-dichloroethane, Vinyl Acetate, and Methylcyclohexane as greater than 15%. However, the mean RSD of all compounds is 7.31%.

Initial calibration standard curve A5I0002287-1 exhibited the %RSD of the compounds 1,1-Dichloroethane, Vinyl Acetate, and Bromoform as greater than 15%. However, the mean RSD of all compounds is 7.44%.

GC/MS Semivolatile Data

Linear regression was used to calibrate all analytes that were greater than 15% RSD in the initial calibration A5I0002316.

The relative percent difference between the Matrix Spike TP-01-2.5 and the Matrix Spike Duplicate TP-01-2.5 exceed quality control limits for Pyrene, though all individual analyte recoveries are compliant.

Metals Data

The CCB, analyzed at (20:00), exhibited results above the detection limit for Silver. However, the samples were bracketed by compliant CCB's, therefore, no corrective action was necessary.

The recovery of sample TP-01-2.5 Matrix Spike and Matrix Spike Duplicate exhibited results below the quality control limits for Aluminum, Iron, and Manganese. The sample result is more than four times greater than the spike added. The LCS is acceptable.

The recovery of sample TP-01-2.5 Matrix Spike and Matrix Spike Duplicate exhibited results above the quality control limits for Calcium(MS) and below the quality control limits for Antimony, Barium and Zinc(MS). Sample matrix is suspect. The RPD of sample TP-01-2.5 Matrix Spike and Matrix Spike Duplicate exceeded quality control limits for Calcium. However, the LCS was acceptable.

The recovery of sample TP-01-2.5 Post Spike exhibited results below the quality control limits for Aluminum, Barium, Iron, Lead, Magnesium, Manganese, and Zinc. However, the LCS is acceptable.

The Serial Dilution of sample TP-01-2.5 exceeded quality control limits for Aluminum, Barium, Calcium, Iron, Lead, Magnesium, Manganese, and Zinc. However, the LCS is acceptable.

Wet Chemistry Data

The LCS recovery for Total and Amenable Cyanide was above quality control limits. However, since target analytes were non-detect in the samples and the high recoveries would yield a high bias, no further corrective action was necessary.

The LCS, ERA Lot P121-205, recovery for Total Recoverable Phenolics fell outside of the quality control limits, however, the value was within the manufacturer's recommended acceptance limits. No corrective action was taken.

The requested reporting limit for Total Recoverable Phenolics is below STL's standard reporting limit. It must be noted that results reported below STL's standard reporting limit may result in false positive/false negative results, less accurate quantitation and potential misidentification at the lower concentrations. Therefore, no corrective action has been taken for any detections between the requested reporting limit and STLs standard reporting limit.

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

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MATRIX CODES	AA - AMBIE SE - SEDIN SH - HAZA		/ASTE	SL - SLUDGE WP - DRINKING WATER WW - WASTE WATER	WG - GROUNI SO - SOIL DC - DRILL CU		(WL - LEA GS - SOI WC - DR		VATER	,	ws - su	EAN WA	/ATER		ZARDOUS LIQUATING/FREE F			W TABL	.E
SAMPLE TYPE CODES	TB# - TRIP			RB# - RINSE BLANK FR# - FIELD REPLICATE	N# - NORMAL MS# - MATRIX		MENTAL	SAMPLE	(# -	SEQUEN					ACCOMMODA	TE MULTIPLE S	SAMPLES	S IN A S	INGLE	DAY)
RPLINOUISH	ED BY (SIG	SNATURE)	DAT			ATURE)	1 .	1	DATE	1,,	NE 28	SPEC	IAL I	ISTRU D)	ICTIONS					
RELINOUISH	ED BY (SIC	GNATURE)	DAT	1 5500	POR LAB	BY (SIG	GNATUR	RE)	DATE //4/	TIN	NE U	(fry.	•					
Distribution: (Original acc	ompanies s	hipment,	, copy to coordinator field	files															
	The second secon		and other and the second				-	The second second	and the second second	Total Contract	THE PERSON NAMED IN	-							-	

-9-

ICP SERIAL DILUTIONS

SAM	PLE	N	
TP -	01-	2.	5L

Contract:	MYO4 FOO
contract:	NY04-599

NYU4-599

STLBFLO Case No.:

SAS No.:

SDG NO.:

A05-C888

Matrix (soil/water):

Lab Code:

SOIL

Level (low/med):

LOW

Concentration Units:

ug/L

		-					
Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% . Differ- ence	Ω	м
Aluminum	117055.10	i i	132599.20	\forall	(13.3	E	P
Antimony	150.00	ט	750.00	,	The section of the se		P
Arsenic	64.65		100.00	,	100.0		P
Barium	712.13	İ	804.65		13.0	E	P
Beryllium	4.69		10.00	,	100.0	-	P
Cadmium	3.93	İ	10.00		100.0		P
Calcium	27251.39		30560.75		12.1	E	P
Chromium	143.24		163.60	1	14.2	Name and Address of the Owner, where	P
Cobalt	89.21		101.40	\top	13.7		P
Copper	229.71		252.40	\top	9.9		P
Iron	217449.50	İ	244370.80	\top	12.4	E	P
Lead	700.18	İ	793.55	\top	13.3	<u> </u>	P
Magnesium	34187.64		38527.40	T	[12.7	E	P
Manganese	9024.09		10308.90		14.2	E	P
Nickel	195.07		219.30		12.4	TO SHARE WHITE SHARE	P
Potassium	8261.57	Ī	9714.35	\top	17.6		P
Selenium	15.69		200.00	,	100.0		P
Silver	5.00	ט	25.00 0	,			P
Sodium	382.51		7000.00 0	,	100.0		P
Thallium	60.00	ן ט	300.00				P
Vanadium	187.19	İ	211.35	T	12.9		P
Zinc	1220.67	İ	1374.65		12.6	E	P

12/13/05m

Comments:

-10-

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Contract:	NY04-599					
Lab Code:	STLBFLO	Case No.:	SAS No.:	SDG NO.:	A05-C888	
ICP ID Number: SUPERTRA		RACE	Date: 9/8/2005	_		
Flame AA ID	Number:	New year Park & No. Comment of the C				
Furnace AA	ID Number:					

Analyte	Wave- length (nm)	Back- ground	EQL (ug/L)	IDL (ug/L)	М
Aluminum	308.215		100	100	P
Antimony	206.838	Ì	150	150	P
Arsenic	189.042		20	20	P
Barium	493.409		5	5	P
Beryllium	313.042		2	2	P
Cadmium	226.502		2	2	P
Calcium	317.933		500	500	P
Chromium	267.716		5	5	P
Cobalt	228.616		5	5	P
Copper	324.753		10	10	P
Iron	271.441		100	100	P
Lead	220.353		10	10	P
Magnesium	279.078		200	200	P
Manganese	257.610		2	2	P
Nickel	231.604		5	5	P
Potassium	766.491		300	300	P
Selenium	296.026		40	40	P
Silver	328.068		5	5	P
Sodium	330.232		1400	1400	P
Thallium	190.864		60	60	P
Vanadium	292.402		5	5	P
Zinc	206.200		20	20	P

Comments:	

-5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

Contract:	NY04-599				TP-01-2.5\	MS
Lab Code:	STLBFLO	Case No.:	SAS No.:		SDG NO.:	A05-C888
Matrix (soi	l/water):	SOIL		Level	(low/med):	LOW
% Solids fo	r Sample:	84.9				

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	С	Sample Result (SR)	С	Spike Added (SA)	%R	Q	м
Aluminum		13779.5303		12467.4805	1	2169.42	60.5	İ	P
Antimony	75 - 125	16.2706	σ	16.2706	U	43.39	30.7	N	P
Arsenic	75 - 125	43.2062		6.8858		43.39	83.7		P
Barium	75 - 125	104,4099		75.8486	<u> </u>	43.39	65.8	N	P
Beryllium	75 - 125	37.2023		0.4995	1	43.39	100		P
Cadmium	75 - 125	37.4116		0.4186		43.39	85.3		P
Calcium	75 - 125	10900.6396		2902.5320		2169.42	368.7	N	P
Chromium	75 - 125	51.6637		15.2564		43.39	The state of the s		P
Cobalt	75 - 125	45.2161		9.5017		43.39	82.3		P
Copper	75 - 125	61.3100		24.4663		43.39	84.9		P
Iron		24216.6309		23160.4395		2169.42	48.7		P
Lead	75 - 125	113.2839		74.5758		43.39	89.2		P
Magnesium	75 - 125	5768.7290		3641.3091		2169.42	98.1		P
Manganese		871.0243	Ī	961.1514		43.39	-207.7		P
Nickel	75 - 125	57.1924		20.7768		43.39	83.9		P
Potassium	75 - 125	2679.8450		879.9357		2169.42	83.0		P
Selenium.	75 - 125	37,6145		4.3388	ט	43.39	86.7		P
Silver	75 - 125	9.6333		0.5424	ט	10.85	88.8		P
	75 - 125	0.4724		0.1569		0.39	80.9		CV
The state of the s	75 - 125	1922.0699		151.8594	ט	2169.42	88.6		P
Thallium	75 - 125	37.1643		6.5083	ן ט	43.39	85.7		P
Vanadium	75 - 125	55.7302	Ī	19.9375		43.39	82.5		P
Zinc	75 - 125	153.4203		130.0130		43.39	53.9	N	P

Comments:	

URS Corporation -5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

TP-01-2.5\SD	
15-01-2.3/80	

Contract: NY04-599

Lab Code: STLBFLO

Case No.:

SAS No.:

SDG NO.: A05-C888

Matrix (soil/water):

SOIL

Level (low/med):

LOW

% Solids for Sample:

84.9

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Ċ	Sample Result (SR)	С	Spike Added (SA)	%R	Q	М
Aluminum		13851.9805		12467.4805		2189.58	63.2		P
Antimony	75 - 125	16.4219	υ	16.4219	U	43.79	26.4	N	P
Arsenic	75 - 125	44.7321		6.8858		43.79	86.4		P
Barium	75 - 125	108.1588		75.8486		43.79	73.8	N	P
Beryllium	75 - 125	38.8487		0.4995		43.79	87.6		P
Cadmium	75 - 125	39.3829		0.4186		43.79	89.0		₽
Calcium	1	4553.4409		2902.5320		2189.58	75.4		P
Chromium	75 - 125	52.6846		15.2564		43.79	85.5		P
Cobalt	75 - 125	46.5111		9.5017		43.79	84.5		P
Copper	75 - 125	61.9969		24.4663		43.79	85.7		P
Iron		24172.4805		23160.4395		2189.58	46.2		P
Lead	75 - 125	113.1083		74.5758		43.79	88.0		P
Magnesium	75 - 125	5395.2080		3641.3091		2189.58	80.1		P
Manganese		883.3157		961.1514		43.79	-177.7		P
Nickel	75 - 125	58.5921		20.7768		43.79	86.4		P
Potassium	75 - 125	2700.5430		879.9357		2189.58	83.1		P
Selenium	75 - 125	39.2329		4.3792	υ	43.79	89.6		P
Silver	75 - 125	9.9681		0.5474	ש	10.95	91.0		P
Mercury	75 - 125	0.4658		0.1569		0.36	85.8		CV
Sodium	75 - 125	1958.9530		153.2707	Ū	2189.58	89.5		P
Thallium	75 - 125	38.9494		6.5687	U	43.79	88.9		P
Vanadium	75 - 125	57.4076		19.9375	1	43.79	85.6		P
Zinc	75 - 125	163.6899		130.0130		43.79	76.9		P

Comments:	



STL Buffalo 10 Hazelwood Drive, Suite 106 Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7991 www.stl-inc.com

ANALYTICAL REPORT

Job#: A05-C903

STL Project#: NY5A9403.3

Site Name: URS NYSEG SITES- Cortland

Task: NYSEG Cortland Former MGP Site Test Pit Excavation

Mr. Jim Lehnen URS Corporation 77 Goodell Street Buffalo, NY 14203

STL Buffalo

Paul K. Morrow Project Manager

12/20/2005

NON-CONFORMANCE SUMMARY

Job#: A05-C903

STL Project#: NY5A9403.3

Site Name: URS NYSEG SITES- Cortland

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A05-C903

Sample Cooler(s) were received at the following temperature(s); 6@2.0 °C All samples were received in good condition.

Wet Chemistry Data

Total Organic Carbon was subcontracted to STL Chicago. The complete subcontract report is included in this report as Appendix A. Comments pertaining to Total Organic Carbon may be found within the comment summary of the subcontract report.

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

STL Chicago Wet Chemistry Case Narrative

Client:

STL Amherst

Job #:

241988

Date Rec'd:

11/12/05

- 1. This narrative covers the analysis of the soil samples in the above Job # for Total Organic Carbon by the Lloyd Kahn Method. The samples were analyzed by furnace combustion and non-dispersive infrared detection on a Dohrmann Phoenix 8000 TOC analyzer, after acidification to remove inorganic carbon, and low-temperature drying. All analysis was done in duplicate with the average reported. Since the samples were dried prior to analysis, no correction was made for moisture content.
- The method-recommended holding time of 2 weeks from collection was met.
- The standard curve and the initial and continuing calibration verification standards were all
 within acceptance limits. The blanks were less than the reporting limit.
- 4. The LCS recoveries were within the statistical control limits of 53-140% recovery. See the Quality Control Results page and the raw data for details. Please note further that the analyst did four LCSs in the second batch. One 2 of them were averaged for reporting, but all were within the acceptance limits.
- The matrix spikes were done on sample 1 and were within limits.

Diane L. Harper

Wct Chemistry Section Manager

1/-25-05 Date

STL JOB NUMBERS A05-C927/A05-C945

NON-CONFORMANCE SUMMARY

Job#: A05-C927

STL Project#: NY5A9403.3

Site Name: URS NYSEG SITES- Cortland

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A05-C927

Sample Cooler(s) were received at the following temperature(s); 4.0 °C All samples were received in good condition.

GC/MS Volatile Data

The analyte 1,2,4-Trichlorobenzene was detected in Method Blank VBLK85 (A5B1807802) at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

Water sample RB-02 was preserved to a PH less than 2.

Initial calibration standard curve A5I0002286-1 exhibited the %RSD of the compounds 1,1-Dichloroethane, Vinyl Acetate and Methylcyclohexane as greater than 15%. However, the mean RSD of all compounds is 7.31%.

Initial calibration standard curve A5I0002282-1 exhibited the %RSD of the compounds Carbon Disulfide, Bromoform, 1,2-Dibromo-3-chloropropane and Styrene as greater than 15%. However, the mean RSD of all compounds is 8.59%.

GC/MS Semivolatile Data

All surrogate recoveries were diluted out of range in sample SB-05-11-12 DL.

2/5/08

Metals Data

The CCV, analyzed at (18:11), exhibited results below the quality control limits for However, the samples were bracketed by compliant CCV's, therefore, no corrective action was necessary.

The analytes Potassium and Sodium was detected in the Method Blank at a level above the project established reporting limit. All samples were non-detect for this analyte, therefore, no corrective action was necessary. (RB-OQ only)

The recovery of sample SB-06-16-18 Matrix Spike and Matrix Spike Duplicate exhibited results above the quality control limits for Aluminum and below the quality control limits for Antimony. Sample matrix is suspect. The RPD of sample SB-06-16-18 Matrix Spike and Matrix Spike Duplicate exceeded quality control limits for Antimony. However, the LCS was acceptable.

The recovery of sample SB-06-16-18 Matrix Spike and Matrix Spike Duplicate exhibited results above the quality control limits for Iron and below the quality control limits for Calcium, Magnesium, and Manganese. The sample result is more than four times greater than the spike added. The RPD of sample SB-06-16-18 Matrix Spike and Matrix Spike Duplicate exceeded quality control limits for Calcium and Magnesium. The LCS is acceptable.

The recovery of sample SB-06-16-18 Post Spike exhibited results above the quality control limits for Calcium and below the quality control limits for Iron, Magnesium, and Manganese. However, the LCS is acceptable.

The Serial Dilution of sample SB-06-16-18 exceeded quality control limits for Aluminum, Barium, Iron, Magnesium, and Manganese. However, the LCS is acceptable.

Wet Chemistry Data

The recovery of sample SB-06-16-18 Matrix Spike and Matrix Spike Duplicate exhibited results above the quality control limits for Total Cyanide. However, the LCS was acceptable.

The recovery of sample SB-06-16-18 Matrix Spike Duplicate exhibited results below the quality control limits for Amenable Cyanide. However, the LCS was acceptable.

The LCS, ERA Lot D036-541, recovery for Cyanide fell outside of the quality control limits, however, the value was within the manufacturer's recommended acceptance limits. No corrective action was taken.

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

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CH	AIN C	OF C	US.	TOD	Y REC	OR	RD	Ñ	33	2 52						U	R	5		
PROJECT	_			SITE NAM	ΛΕ	15		VOAs	120	3					LAB	51	1 -	PIL	TAL	0
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	LOB MULL		١	L				***************************************	172	4 / <u> </u>	PE AND		SP#9//4	****	COOL	1	of	-	7_	
	0010 4	11/210	wo.	7			T				- AINI	·	SERVA	HVE	PAGE		of	_		_
DELIVERY S	SERVICE:	Drof o	FF	_ AIRBILL I	NO.:		TOTAL NO.# OF CONTAINERS	glass	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	in series					RE	MARKS	TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. #
LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	S	AMPLE ID	MATRIX	TOTAL	202	1600	201							SAMPLE	BEGINNI DEPTH (ENDING DEPTH (I	FIELD L
SB-01	11/10/05	1135	6	58-	01-10-12	50	3	2	1				\top				W.	10	12	T
53-03	11/10/05	1320	G	58-0	13-15-17	50	3	2	1								N,	15	17	
SB-04	11/10/05	1410	6	53-0	54-12-13,5	50	3	2	1				-				10,		13.5	
Dul-01	11/10/05		G	DU	P-01	50	3	2	l					1			FR.	-	_	
53-05	11/10/05	1500	6	5B-0	5-11-12	50	3	2	1							· · · · · · · · · · · · · · · · · · ·	N.	11	12	
5B-05	1/10/05	1505	G		5-15-16	50	3	2	11								W.	15	16	
SB-06	11/11/05	1/20	G	58-0	16-14-16	50	7	Z	I							7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -	W.	14	16	
58-06	11/11/05	1125	G	58.0	6-16-18	So	3	2	1								N.	16	18	
53-06	11/11/05	1125	G	58-06	-16-18Ms/ms	D 50	3	1/	1								MS	2/6	18	
SB-07	While	1345	G	5B-07	-1355	50	3/		1	1			\top				N.	/3	15	
58-07	11/11/05	1350	6	53-07	-15-16	So	3	2	1					-			N.	15	16	
58-07	11/11/05	1355	G	5B-07	-22-24	50	3	2	1								N,	22	24	
																	'		- 1	
MATRIX CODES	AA - AMBIE SE - SEDIM SH - HAZAF		ASTE	SL - SLUDGE WP - DRINKIN WW - WASTE	IG WATER SO	GROUNI SOIL DRILL CL			GS - SO	ACHATE IL GAS RILLING W	/ATER	WS -	- OCEAN 1 - SURFACI - WATER F	E WATER		HAZARDOUS LIG LOATING/FREE			V TABL	Æ
SAMPLE TYPE CODE	000000	RIX SPIKE DUPLI	CATE	RB# - RINSE I		- NORMAL # - MATRIX		MENTAL S	SAMPLE	(# -	SEQUENTI					ATE MULTIPLE				
RELINQUISHED BY (SIGNATURE) DATE TIME RECEIVED BY (SIGNATURE) UNDO 1010						ATURE)	•		DATE	TIME	SP	ECIAL	INSTRU	CTIONS	confuel	JIM	LET	ine	n	
RELINQUISHED BY (SIGNATURE) DATE TIME BECEIVED FOR LAB BY (SIGN						NATUR	110 30 300													
						-				- '				Ч	200					
Distribution:	Original acco	ompanies sh	ipment,	copy to co	ordinator field fil	les											,-			
JRSF-075C/1 OF 1/Co	ofCR/GCM																			
		•																		

URS Corporation -5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

	SB-06-16-18\MS
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Contract: NY04-599

ab Code: STLBFLO Case No.:

SAS No.:

SDG NO.: A05-C927

latrix (soil/water):

SOIL

Level (low/med):

LOW

; Solids for Sample:

91.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	С	Sample Result (SR)	С	Spike Added (SA)	%R	Q	м
Aluminum	75 - 125	9146.4814		4701.0151	I	2248.29	197.7	N	P
Antimony	75 - 125	32.2326		16.8622	υ	44.97		N	P
Arsenic	75 - 125	42.9570		3.1095	l	44.97	88.6		P
Barium	75 - 125	75.2244		26.6058	l	44.97	108.1		P
Beryllium	75 - 125	41.3427		0.3252	l	44.97	91.2		P
Cadmium	75 - 125	41.6192		0.2248	υ	44.97	92.5		P
Calcium		34031.1484		142524.2969		2248.29	-4825.6		P
Chromium	75 - 125	50.3235		6.4299		44.97	97.6		P
Cobalt	75 - 125	46.5036		3.9267		44.97	94.7		P
Copper	75 - 125	56.8458		13.3605		44.97	96.7		P
Iron		17420.1602		10011.4404		2248.29			P
Lead	75 - 125	47.1242		4.3100		44.97	95.2		P
Magnesium		12256.3301		12083.2598		2248.29	7.7		P
Manganese		323.2682		455.9850	-	44.97	-295.1		P
Nickel	75 - 125	54.8583		9.9335		44.97	99.9		P
Potassium	75 - 125	2762.9690		764.0911		2248.29	88.9		P
Selenium	75 - 125	42.7366		4.4966	U	44.97	95.0		P
Silver	75 - 125	9.4199		0.5795	U	11.59	81.3		P
Mercury	75 - 125	0.3564	Ī	0.0176	U	0.35	101.8		CV
Sodium	75 - 125	2237.7520	Ī	174.7302		2248.29	91.8		P
Thallium	75 - 125	39.9667	Ī	6.7449	U	44.97	88.9		P
Vanadium	75 - 125	50.4505	i	6.7659		44.97	97.1		P
Zinc	75 - 125	82.3931	j	29.9296		44.97	116.7		P

omments:	

Solids for Sample:

Analyte

Sodium

Thallium

Vanadium

Zinc

75

75

- 125

125

75 - 125

75 - 125

91.2

Control

Spiked Sample

URS Corporation -5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

Spike

2429.63

48.59

48.59

48.59

89.8

83.4

96.0

112.0

P

P

P

P

!ontract: NY04-599					SB-06-16-1	8\SD
ab Code:	STLBFLO	Case No.:	SAS 1	No.:	SDG NO.:	A05-C927
atrix (soi	.l/water):	SOIL	MINISTER STORY CONTRACT CONTRACTOR CONTRACTO	Level	(low/med):	LOW

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Limit %R	Result (SSR)	C	Result (SR)	C	Added (SA)	%R	Q	м
Aluminum	75 - 125	10003.1904		4701.0151		2429.63	218.2	N	P
Antimony	75 - 125	28.0294		18.2222	ט	48.59	57.7	Ŋ	P
Arsenic	75 - 125	46.8007		3.1095		48.59	89.9		P
Barium	75 - 125	74.7706		26.6058		48.59	99.1		P
Beryllium	75 - 125	42.8963		0.3252		48.59	87.6		P
Cadmium	75 - 125	42.9376		0.2430	ט	48.59	88.4		P
Calcium	1	63580.8203		142524.2969		2429.63	-3249.2		P
Chromium	75 - 125	53.8308		6.4299		48.59	97.6		P
Cobalt	75 - 125	50.5472		3.9267		48.59	95.9		P
Copper	75 - 125	56.5763		13.3605	1	48,59	88.9	Ī	Р

174.7302

7.2889 U

6.7659

29.9296

Sample

Cobalt Copper Iron 19685.5293 10011.4404 2429.63 398.2 Lead 75 - 125 P 50.8752 4.3100 48.59 95.8 Magnesium 9552.9473 12083.2598 2429.63 P -104.1 Manganese 339.7835 455.9850 48.59 -239.1 P Nickel 75 - 125 59.0837 9.9335 48.59 101.2 P Potassium 75 - 125 3051.1780 764.0911 2429.63 94.1 P Selenium 75 - 125 44.1816 4.8593 U 48.59 90.9 P Silver 75 - 125 8.6010 0.5375 U 10.75 80.0 P Mercury 75 - 125 0.3937 0.0199 U 0.40 98.4 CV

2355.5620

40.5250

53.4020

84.3336

comments:	

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

3-06-16-18L

ontract: NY04-599

ab Code:

STLBFLO

Case No.:

SAS No.:

SDG NO.: A05-C927

iatrix (soil/water): SOIL

Level (low/med):

LOW

Concentration Units:

ug/L

Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% Differ- ence	Q	м
Aluminum	43662.11		48820.30	П	11.8	E	P
Antimony	20.00	U	100.00	ט	Andrew Commence of the Commenc	1	P
Arsenic	28.88		50.00	U	100.0		P
Barium	247.11		279.50		[13.1]	E	P
Beryllium	3.02		10.00	ט	100.0		P
Cadmium	1.55		5.00	ט	100.0		P
Calcium	2036349.00		2076665.00		2.0		P
Chromium	59.72		70.65		18.3		P
Cobalt	36.47		44.15	П	21.1	l I	P
Copper	124.09		141.95	П	14.4		P
Iron	92984.27		111219.50	П	19.6	E	P
Lead	40.03		42.95		The second secon		P
Magnesium	112227.00		129104.60		(15.0	E	P
Manganese	4235.10		5032.20		18.8	E	P
Nickel	92.26		110.70		20.0	1	P
Potassium	7096.73		6636.20	П	6.5		P
Selenium	15.00	U	75.00	ט		Ī	P
Silver	3.00	U	15.00	ט		İ	P
Sodium	1622.86		5000.00	U	100.0	Ī	P
Thallium	20.00	U	100.00	ט		İ	P
Vanadium	62.84		73.80		17.4	Ī	P
Zinc	277.98		335.65		20.7		P

Comments:

NON-CONFORMANCE SUMMARY

Job#: A05-C945

STL Project#: NY5A9403.3

Site Name: URS NYSEG SITES- Cortland

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A05-C945

Sample Cooler(s) were received at the following temperature(s); 4.0 °C All samples were received in good condition.

Wet Chemistry Data

Total Organic Carbon was subcontracted to STL Chicago. The complete subcontract report is included in this report as Appendix A. Comments pertaining to Total Organic Carbon may be found within the comment summary of the subcontract report.

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.



STL Chicago 2417 Bond Street University Park, IL 60466

Tel: 708 534 5200 Fax: 708 534 5211 www.stl-inc.com

January 9, 2006

Mr. Paul Morrow Severn Trent Laboratories 10 Hazelwood Drive Suite 106 Amherst, NY 14228

RE: Revised Analytical Report Job# 242166

Dear Mr. Morrow:

The enclosed report is for the project and job number listed above. Per your request, the deliverable has been changed to a Level IV. If you have any questions, please contact me at 708-534-5200.

Sincerely,

Severn Trent Laboratories

Johns Stadelman

Bonnie Stadelmann Project Manager

pmb

Enclosure

The results presented in this report relate only to the analytical testing and conditions of sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

STL Chicago Wet Chemistry Case Narrative

Client:

STL Amberst

Job#:

242166

Date Rec'd:

11/18/05

- 1. This narrative covers the analysis of the soil sample in the above Job # for Total Organic Carbon by the Lloyd Kahn Method. The sample was analyzed by furnace combustion and non-dispersive infrared detection on a Dohrmann Phoenix 8000 TOC analyzer, after acidification to remove inorganic carbon, followed by low-temperature drying. Since the sample was dried prior to analysis, no correction was made for moisture content.
- The holding time was met.
- 3. The standard curve for this test is run monthly or more frequently if necessary. The initial and continuing calibration verification standards were all within acceptance limits. The blanks were less than the reporting limit.
- The LCS recoveries were within the statistical control limits of 53-140% recovery.
- The matrix spikes were done on an alternate sample.

Diane L. Harper

Wet Chemistry Section Manager

<u>1-9-06</u> Date

STL JOB NUMBER A05-D077

NON-CONFORMANCE SUMMARY

Job#: <u>A05-D077</u>

STL Project#: NY5A9403.3

Site Name: URS NYSEG SITES- Cortland

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A05-D077

Sample Cooler(s) were received at the following temperature(s); 3@2.0 °C All samples were received in good condition.

GC/MS Volatile Data

Initial calibration standard curve A5I0002286-1 exhibited the %RSD of the compounds 1,1-Dichloroethane, Vinyl Acetate, and Methylcyclohexane as greater than 15%. However, the mean RSD of all compounds is 7.31%.

GC/MS Semivolatile Data

The analytes Di-n-butyl phthalate and Naphthalene were detected in the Method Blank A5B1792703 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

All surrogate recoveries were diluted out of range in sample SB-08-10-12 DL.

Metals Data

The recovery of sample SB-09-14-16 Matrix Spike and Matrix Spike Duplicate exhibited results above the quality control limits for Aluminum and below the quality control limits for Antimony. Sample matrix is suspect. However, the LCS was acceptable.

The recovery of sample SB-09-14-16 Matrix Spike and Matrix Spike Duplicate exhibited results above the quality control limits for Iron, Magnesium(MS), Manganese and below the quality control limits for Calcium and Magnesium(MSD). The sample result is more than four times greater than the spike added. The RPD of sample SB-09-14-16 Matrix Spike and Matrix Spike Duplicate exceeded quality control limits for Magnesium. The LCS is acceptable.

The recovery of sample SB-09-14-16 Post Spike exhibited results below the quality control limits for Calcium, Iron, Magnesium, and Manganese. However, the LCS is acceptable.

The Serial Dilution of sample SB-09-14-16 exceeded quality control limits for Barium, Calcium, Iron, and Manganese. However, the LCS is acceptable.

Wet Chemistry Data

The LCS, ERA Lot D036-541, recovery for Total and Amenable Cyanide fell outside of the quality control limits, however, the value was within the manufacturer's recommended acceptance limits. No corrective action was taken.

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

METHOD 8260 - TCL VOLATILE ORGANICS METHOD BLANK SUMMARY

140/1438

Client No.

Lab Name: STL Bu	<u>ffalo</u> Co	ontract: <u>97863 US</u>	VBLK44
Lab Code: RECNY	Case No.:	SAS No.:	SDG No.:
Lab File ID:	F7219.RR	Lab Sample ID:	<u>A5B1807502</u>
Date Analyzed:	11/17/2005	Time Analyzed:	13:09

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) \underline{Y}

Instrument ID: <u>HP5973F</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
		*****	=======================================	=========
1	MSB44	A5B1807501	F7217.RR	12:34
2	SB-08-10-12	A5D07701	F7222.RR	14:27
3	SB-08-18-20	A5D07702	F7223.RR	14:56
4	SB-09-14-16	A5D07703	F7224.RR	15:26
5	SB-09-18-20	A5D07704	F7225.RR	15:55
6	SB-10-14-16	A5D07705	F7226.RR	16:25
7	SB-10-18-20	A5D07706	F7227.RR	16:54
8	SB-11-6-8	A5D07707	F7228.RR	17:23
9	SB-11-9-11	A5D07708	F7229.RR	17:53
ł				

Comments:	

METHOD 8260 - TCL VOLATILE ORGANICS ANALYSIS DATA SHEET

								The state of the s
Lab Name	: STL Buffalo	? Cont	ract: 97863 I	IS		VBLK44		
Lab Code	RECIVI Ca	se No.: S	AS No.:	SDG No.:				
Matrix:	(soil/water)	SOIL		Lab Sample	e ID:	A5B180750	02	
Sample w	t/vol:	<u>5.00</u> (g/mL) <u>G</u>		Lab File	D:	F7219.RR		
Level:	(low/med)	LOW		Date Samp,	'Recv:			
% Moistu	re: not dec.	Heated Pur	ge: <u>Y</u>	Date Analy	zed:	11/17/200	<u>05</u>	
GC Colum	n: <u>DB-624</u>	ID: <u>0.53</u> (mm)		Dilution I	actor:	1.00		
Soil Ext	ract Volume:	(uL)		Soil Aliqu	ot Volu	me:	(ı	ıL)
				CONCENTRATION	INTTS.			
	CAS NO.	COMPOUND		(ug/L or ug/I		G/KG	Q	
	67-64-1	'A materials						1
	71-43-2	Acetone					U	,
	75-27-4	Bromodichloromet	2732				U	
	75-25-2					5	U	
	74-83-9	Promomothane					U	
	78-93-3	Bromomethane					U	
	75-15-0	Carbon Disulfide					U	
	56-23-5	- Carbon Tatanah	-1 -1 -				U	
	108-90-7	Carbon Tetrachlo Chlorobenzene					U	
	75-00-3	Chlorobenzene					U	
	67-66-3	Chloroethane					U	
	74-87-3	-Chlorotoliii					U	
	110-82-7	Chloromethane Cyclohexane					U	
	106-93-4	1,2-Dibromoethane				1	U	
	124-48-1	Dibromochlorometh	3				U	
	96-12-8	-1 2-Dibrom 3 ch	rarie				U	
	95-50-1	1,2-Dibromo-3-ch 1,2-Dichlorobenze	coropropane_		,		U	
	541-72-1	1,3-Dichlorobenze	ene				ប	
	106-46-7	1,4-Dichlorobenze	ene				U	
1	75-71-8	1,4-bichlorodifluoror	ene			5	U	
	75-34-3	1,1-Dichloroethar	echane				U	
1	107-06-2	1,2-Dichloroethar	<u> </u>				U	
Ī	75-35-4	1,1-Dichloroether	ie				U	
1	156-59-2-	cis-1,2-Dichloroe	le				U	
1	156-60-5	trans-1,2-Dichlor	echene	·			U	
l	78-87-5	1,2-Dichloropropa	:oetnene				U	-
1	10061-01-5	Gig 1 2 Disloy	ine				U	
	10061-01-5	cis-1,3-Dichloron	probene				υ	
	100-41-4-	trans-1,3-Dichlor Ethylbenzene	.opropene				U	
	591-78-6	Ediyiberizene					U	
							U	
	70-04-0	Isopropylbenzene					U	
İ	100 07 0	-Methyl acetate					U	
	75 00 0	-Methylcyclohexane					U	
1	15-09-2	Methylene chloric	ie			53	U	

321/1438

METHOD 8260 - TCL VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL Buffalo Contract: 97863 U	ra .	VBLK44		
Tab Name: 511 Buttato Contract: 97803 G				
Lab Code: RECNY Case No.: SAS No.:	_ SDG No.:	-		
Matrix: (soil/water) SOIL	Lab Sample ID:	A5B1807	502	
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{G}	Lab File ID:	F7219.R	R	
Level: (low/med) <u>LOW</u>	Date Samp/Recv	7:		
% Moisture: not dec Heated Purge: Y	Date Analyzed:	11/17/2	005	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Facto	or:1.0	<u>0</u>	
Soil Extract Volume: (uL)	Soil Aliquot V	Volume:	(u	L)
	CONCENTRATION UNIT (ug/L or ug/Kg)		Q	
108-10-14-Methyl-2-pentanone 1634-04-4Methyl-t-Butyl Ether (MTBE) 100-42-5Styrene 79-34-51,1,2,2-Tetrachloroethane 127-18-4Tetrachloroethene 108-88-3Toluene 120-82-11,2,4-Trichlorobenzene 71-55-61,1,1-Trichloroethane 79-00-51,1,2-Trichloroethane 76-13-11,1,2-Trichloro-1,2,2-trifluc 75-69-4Trichlorofluoromethane 79-01-6Trichloroethene 108-05-4Vinyl acetate 75-01-4Vinyl chloride 1330-20-7Total Xylenes	proethane	25 5 5 5 5 5 5 5 5 5 5 5 5 10 15	ם ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט	

Vial: 8

Data File : C:\MSDCHEM\1\DATA\111705\F7219.D

: 17 Nov 2005 13:09 Acq On

Operator: JLG Sample : VBLK44 E1 Inst : HP5973 F Misc Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 17 13:28 2005 Quant Results File: A5I02286 E1.RE

Quant Method : C:\MSDCHEM\1...\A5102286_E1.M (RTE Integrator)

: 8260 SOILS ENCON

Last Update : Thu Nov 17 12:01:18 2005

Response via : Initial Calibration 34 11/17/05

DataAcq Meth : VOA

IS QA File : C:\MSDCHEM\1\DATA\111705\F7215.D (17 Nov 2005 11:43)

1) CI10 1,4-Difluorobenzene 4.22 114 870997 250.00 ng 0.00 102.35% 3 CI20 Chlorobenzene-D5 6.80 82 403236 250.00 ng 0.00 101.92% 63) CI30 1,4-Dichlorobenzene- 9.25 152 387338 250.00 ng 0.00 93.49% System Monitoring Compounds 27) CS87 Dibromofluoromethane 3.65 111 272777 254.93 ng 0.00 Spiked Amount 250.000 Range 70 - 130 Recovery = 101.97% 32) CS15 1,2-Dichloroethane-D 3.90 65 293975 219.91 ng 0.00 Spiked Amount 250.000 Range 61 - 136 Recovery = 87.96% 44) CS05 Toluene-D8 5.45 98 966555 275.28 ng 0.00 Spiked Amount 250.000 Range 71 - 125 Recovery = 110.11% 62) CS10 p-Bromofluorobenzene 8.01 174 294666 255.48 ng 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 110.11% 7 Recovery = 102.19	Internal Standards	R.T.	QIon	Response	Conc Units Dev(Min) Rcv(Ar)
43) CI20 Chlorobenzene-D5 6.80 82 403236 250.00 ng 0.00 101.92% 63) CI30 1,4-Dichlorobenzene- 9.25 152 387338 250.00 ng 0.00 93.49% System Monitoring Compounds 27) CS87 Dibromofluoromethane 3.65 111 272777 254.93 ng 0.00 Spiked Amount 250.000 Range 70 - 130 Recovery = 101.97% 32) CS15 1,2-Dichloroethane-D 3.90 65 293375 219.91 ng 0.00 Spiked Amount 250.000 Range 61 - 136 Recovery = 87.96% 944) CS05 Toluene-D8 5.45 98 966555 275.28 ng 0.00 Spiked Amount 250.000 Range 71 - 125 Recovery = 110.11% 62) CS10 p-Bromofluorobenzene 8.01 174 294666 255.48 ng 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 102.19% Target Compounds 20 Qvalue 2) C290 Dichlorodifluorometh 0.00 85 0 N.D. 3) C010 Chloromethane 1.36 50 129 N.D. 4) C020 Vinyl chloride 0.00 62 0 N.D. 5) C015 Bromomethane 1.66 94 128 N.D. 6) C025 Chloroethane 0.00 64 0 N.D. 7) C275 Trichlorofluorometha 0.00 101 0 N.D. 8) C291 1,1,2-Trichloro-1,2, 0.00 101 0 N.D. 8) C291 1,1,2-Trichloro-1,2, 0.00 101 0 N.D. 100 0.00 0.00 0.00 0.00 0.00 0.00 0.	1) CI10 1,4-Difluorobenzene	4.22	114	870997	
System Monitoring Compounds 270 CS87 Dibromofluoromethane 3.65 111 272777 254.93 ng 0.00 Spiked Amount 250.000 Range 70 - 130 Recovery = 101.97% 320 CS15 1,2-Dichloroethane-D 3.90 65 293975 219.91 ng 0.00 Spiked Amount 250.000 Range 61 - 136 Recovery = 87.96% 440 CS05 Toluene-D8 5.45 98 966555 275.28 ng 0.00 Spiked Amount 250.000 Range 71 - 125 Recovery = 110.11% 620 CS10 p-Bromofluorobenzene 8.01 174 294666 255.48 ng 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 110.11% 10.11%	43) CI20 Chlorobenzene-D5	6.80	82	403236	250.00 ng 0.00
System Monitoring Compounds 27) CS87	63) CI30 1,4-Dichlorobenzene-	9.25	152	387338	250.00 ng 0.00
27) CS87 Dibromofluoromethane 3.65 111 272777 254.93 ng 0.00 Spiked Amount 250.000 Range 70 - 130 Recovery = 101.97% 32) CS15 1,2-Dichloroethane-D 3.90 65 293975 219.91 ng 0.00 Spiked Amount 250.000 Range 61 - 136 Recovery = 87.96% 44) CS05 Toluene-D8 5.45 98 966555 275.28 ng 0.00 Spiked Amount 250.000 Range 71 - 125 Recovery = 110.11% 62) CS10 p-Bromofluorobenzene 8.01 174 294666 255.48 ng 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 110.11% 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 102.19% 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 102.19% 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 102.19% 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 102.19% 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 102.19% 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 102.19% 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 100.11% 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 100.11% 0.00 Spiked Amount 250.000 Range 68 - 124 Recovery = 100.11% 0.00 Spiked Amount 250.000 0.00 Spiked Amount 250.000 Spiked A					93.49%
2) C290 Dichlorodifluorometh 0.00 85 0 N.D. 3) C010 Chloromethane 1.36 50 129 N.D. 4) C020 Vinyl chloride 0.00 62 0 N.D. 5) C015 Bromomethane 1.66 94 128 N.D. 6) C025 Chloroethane 0.00 64 0 N.D. 7) C275 Trichlorofluorometha 0.00 101 0 N.D. 8) C291 1,1,2-Trichloro-1,2, 0.00 101 0 N.D. 9) C045 1,1-Dichloroethene 0.00 96 0 N.D. 10) C030 Methylene chloride 2.48 84 10893 14.62 ng 76 11) C040 Carbon disulfide 2.34 76 608 N.D. 12) C036 Acrolein 0.00 56 0 N.D. 13) C038 Acrylonitrile 2.62 53 988 N.D. 14) C035 Acetone 2.22 43 5531 N.D. 15) C300 Acetonitrile 2.38 41 3034 N.D. 16) C276 Iodomethane 0.00 142 0 N.D. 17) C255 Methyl Acetate 2.42 43 1032 N.D.	27) CS87 Dibromofluoromethane Spiked Amount 250.000 Range 32) CS15 1,2-Dichloroethane-D Spiked Amount 250.000 Range 44) CS05 Toluene-D8 Spiked Amount 250.000 Range 62) CS10 p-Bromofluorobenzene	70 3.90 61 5.45 71 8.01	- 130 65 - 136 98 - 125 174	Recove: 293975 Recove: 966555 Recove: 294666	ry = 101.97% 219.91 ng 0.00 ry = 87.96% 275.28 ng 0.00 ry = 110.11% 255.48 ng 0.00
20) C050 1,1-Dichloroethane 0.00 63 0 N.D. 21) C125 Vinyl Acetate 2.94 43 1206 N.D.	2) C290 Dichlorodifluorometh 3) C010 Chloromethane 4) C020 Vinyl chloride 5) C015 Bromomethane 6) C025 Chloroethane 7) C275 Trichlorofluorometha 8) C291 1,1,2-Trichloro-1,2, 9) C045 1,1-Dichloroethene 10) C030 Methylene chloride 11) C040 Carbon disulfide 12) C036 Acrolein 13) C038 Acrylonitrile 14) C035 Acetone 15) C300 Acetonitrile 16) C276 Iodomethane 17) C255 Methyl Acetate 18) C962 T-butyl Methyl Ether 19) C057 trans-1,2-Dichloroet 20) C050 1,1-Dichloroethane	1.36 0.00 1.66 0.00 0.00 0.00 2.48 2.34 0.00 2.62 2.22 2.38 0.00 2.42 0.00 0.00	50 62 94 64 101 96 84 76 53 41 142 43 73 96 63	129 0 128 0 0 0 10893 608 0 988 5531 3034 0 1032 0 0	N.D. N.D. N.D. N.D. N.D. N.D. N.D. 14.62 ng 76 N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D

^{(#) =} qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\111705\F7219.D

Vial: 8 : 17 Nov 2005 13:09 Acq On Operator: JLG

Sample : VBLK44 E1 Inst : HP5973 F Misc Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 17 13:28 2005 Quant Results File: A5I02286 E1.RE

Quant Method : C:\MSDCHEM\1...\A5I02286_E1.M (RTE Integrator)

: 8260 SOILS ENCON

Last Update : Thu Nov 17 12:01:18 2005 Response via : Initial Calibration

DataAcq Meth : VOA

		Compo	ound	R.T.	QIon	Response Conc	Unit Qvalue
2	3)	C056	cis-1,2-Dichloroethe	0.00	96	0 N	.D.
. 2	4)	C272	Tetrahydrofuran	0.00	42	0 N	.D.
2	5)	C222	Bromochloromethane	0.00	128	0 N	.D.
2	6)	C060	Chloroform	0.00	83	0 N	.D.
2	8)	C256	Cyclohexane	3.72	56	342 N	.D.
2	9)	C115	1,1,1-Trichloroethan	0.00	97	0 N	.D.
	0)	C120	Carbon tetrachloride	0.00	117	0 N	.D.
3	1)	C116	1,1-Dichloropropene	0.00	75	0 N	.D.
3	3)	C165	Benzene	3.96	78	1042 N	.D.
3	4)	C065	1,2-Dichloroethane	0.00	62	0 N	.D.
3	5)	C110	2-Butanone	3.32	43	2488 N	.D.
3	6)	C150	Trichloroethene	0.00	95	0 N	.D.
3	7)	C161	2-Chloroethylvinyl Et	0.00	63		.D.
	8)	C012	Methylcyclohexane	0.00	83	0 N	.D.
3	9)	C140	1,2-Dichloropropane	0.00	63	0 N	.D.
4	0)	C278	Dibromomethane	0.00	93		.D.
4	1)	C130	Bromodichloromethane	0.00	83		.D.
4	2)	C145	cis-1,3-Dichloroprop	0.00	75		.D.
4	5)	C230	Toluene	5.51	92		.D.
4	6)	C170	trans-1,3-Dichloropr	0.00	75		.D.
4	7)	C284	Ethyl Methacrylate	0.00	69		.D.
4	8)	C160	1,1,2-Trichloroethan	0.00	83		.D.
4	9)	C210	4-Methyl-2-pentanone	5.35			.D.
5	0)		Tetrachloroethene	6.02			.D.
5	1)	C221	1,3-Dichloropropane	0.00			.D.
5	2)	C155	Dibromochloromethane	0.00			.D.
5	3)		1,2-Dibromoethane	0.00			.D.
	4)		2-Hexanone	6.10	43		.D.
		C235	Chlorobenzene	6.83			.D.
	6)	C281	1,1,1,2-Tetrachloroe	0.00			.D.
	7)	C240	Ethylbenzene	6.95	91		.D.
	8)	C246	m,p-Xylene	7.05			.D.
	9)	C247	o-Xylene	7.46			.D.
	0)	C245	Styrene	0.00	104		.D.
	1)	C180	Bromoform	0.00	173		.D.
	4)	C966	Isopropylbenzene	8.01			.D.
	5)	C301	Bromobenzene	0.00			[.D. "\\
	6)	C225	1,1,2,2-Tetrachloroe	0.00			.D. NO 16
	7)	C282	1,2,3-Trichloropropa	0.00			.D. 14. 1/05
	8)	C283	t-1,4-Dichloro-2-But	0.00			.D. \\gamma\'\'\
6	9)	C302	n-Propylbenzene	8.28	91	1247 N	i.D. (* `

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METHOD 8270 - TCL SEMI-VOLATILE ORGANICS METHOD BLANK SUMMARY

Client No.

S Blank Lab Name: STL Buffalo Contract: <u>97863 US</u> Lab Code: RECNY Case No.: ____ SAS No.: ___ SDG No.: ____ Lab File ID: W06611.RR Lab Sample ID: A5B1792703 Instrument ID: <u>HP5973W</u> Date Extracted: <u>11/17/2005</u> Matrix: (soil/water) SOIL Date Analyzed: <u>11/21/2005</u> Level: (low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

Time Analyzed: 17:38

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
		==========		========
1	Matrix Spike Blank	A5B1792701	W06609.RR	11/21/2005
2	Matrix Spike Blk Dup	A5B1792702	W06610.RR	11/21/2005
3	SB-08-10-12	A5D07701	W06614.RR	11/21/2005
4	SB-08-10-12 DL	A5D07701DL	W06676.RR	11/23/2005
5	SB-08-18-20	A5D07702	W06615.RR	11/21/2005
6	SB-09-14-16	A5D07703	W06616.RR	11/21/2005
7	SB-09-18-20	A5D07704	W06617.RR	11/21/2005
8	SB-10-14-16	A5D07705	W06618.RR	11/21/2005
9	SB-10-18-20	A5D07706	W06619.RR	11/21/2005
10	SB-11-6-8	A5D07707	W06677.RR	11/23/2005
11	SB-11-9-11	A5D07708	W06621.RR	11/21/2005

Comments:	

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>STL Buffalo</u>	Contract: 97863 US		S Blank
Lab Code: RECNY Case No.:	SAS No.:	SDG No.:	
Matrix: (soil/water) SOIL		Lab Sample ID:	A5B1792703
Sample wt/vol: 30.38 (g/mL)	<u>G</u>	Lab File ID:	W06611.RR
Level: (low/med) <u>LOW</u>		Date Samp/Recv:	
% Moisture: decanted: (Y/	N) <u>N</u>	Date Extracted:	11/17/2005
Concentrated Extract Volume: 1000 (u	L)	Date Analyzed:	11/21/2005
Injection Volume: 1.00 (uL)		Dilution Factor:	1.00
GPC Cleanup: (Y/N) N pH:		,	

CAS NO. COMPOUND	CONCENTRATION U		0
CAS NO. COMPOUND	(ug/L or ug/Kg) <u>UG/KG</u>	Q
83-32-9Acenaphthene	17	320	U
208-96-8Acenaphthylene		320	U
98-86-2Acetophenone		320	U
120-12-7Anthracene		320	ט
1912-24-9Atrazine		320	U
100-52-7Benzaldehyde		320	ט
56-55-3Benzo (a) anthracene		320	U
205-99-2Benzo (b) fluoranthene		320	U
207-08-9Benzo(k) fluoranthene		320	U .
191-24-2Benzo (ghi) perylene		320	U
50-32-8Benzo (a) pyrene		320	U
92-52-4Biphenyl		320	U
111-91-1Bis(2-chloroethoxy) metha	ne	320	U
111-44-4Bis(2-chloroethyl) ether		320	U
108-60-12,2'-Oxybis(1-Chloropropa	ne)	320	ט
117-81-7Bis(2-ethylhexyl) phthala	te	320	U
101-55-34-Bromophenyl phenyl ethe	r	320	U
85-68-7Butyl benzyl phthalate		320	U
105-60-2Caprolactam		320	U
106-47-84-Chloroaniline		320	ט
59-50-74-Chloro-3-methylphenol		320	U
91-58-72-Chloronaphthalene		320	lυ
95-57-82-Chlorophenol		320	U
7005-72-34-Chlorophenyl phenyl eth	er	320	U
86-74-8Carbazole		320	U
218-01-9Chrysene		320	lυ
53-70-3Dibenzo(a,h)anthracene		320	lυ
132-64-9Dibenzofuran		320	U
84-74-2Di-n-butyl phthalate		38	J
91-94-13,3'-Dichlorobenzidine		320	U
120-83-22,4-Dichlorophenol		320	Ū
84-66-2Diethyl phthalate		320	Ū

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: SIL Buffalo	Contract: 97863 US		S Blank
Lab Code: RECNY Case No.:			
case No.:	SAS NO.:	SDG No.:	
Matrix: (soil/water) SOIL		Lab Sample ID:	A5B1792703
Sample wt/vol: 30.38 (g/mL)	G	Lab File ID:	W06611.RR
Level: (low/med) <u>LOW</u>		Date Samp/Recv:	
% Moisture: decanted: (Y/	/N) <u>N</u>	Date Extracted:	11/17/2005
Concentrated Extract Volume: 1000 (ıL)	Date Analyzed:	11/21/2005
Injection Volume: 1.00 (uL)		Dilution Factor:	1.00
GPC Cleanup: (Y/N) N pH:			

		CONCENTRATION I		
CAS NO.	COMPOUND	(ug/L or ug/K	g) <u>UG/KG</u>	Q
105-67-9	2,4-Dimethylphenol		320	U
131-11-3	Dimethyl phthalate		320	U
534-52-1	4,6-Dinitro-2-methylphenol		1600	ט
51-28-5	2,4-Dinitrophenol		1600	U
121-14-2	2,4-Dinitrotoluene	Million Color of the Anti-Color Color Color of the State Color of the	320	U
606-20-2	2,6-Dinitrotoluene		320	U
117-84-0	Di-n-octyl phthalate		320	U
206-44-0	Fluoranthene		320	U
86-73-7			320	U
118-74-1	Hexachlorobenzene		320	U
	Hexachlorobutadiene		320	U
77-47-4	Hexachlorocyclopentadiene		320	U
67-72-1	Hexachloroethane		320	U
193-39-5	Indeno (1,2,3-cd) pyrene		320	U
78-59-1	Isophorone		320	U
91-57-6	2-Methylnaphthalene		320	U
95-48-7	2-Methylphenol	Military property and the Control of	320	U
106-44-5	4-Methylphenol		320	U
91-20-3	Naphthalene		18	J
88-74-4	2-Nitroaniline		1600	U
	3-Nitroaniline		1600	U
	4-Nitroaniline		1600	U
98-95-3	Nitrobenzene		320	U
88-75-5	2-Nitrophenol	and the second s	320	Ū
	4-Nitrophenol		1600	U
	N-nitrosodiphenylamine		320	U
621-64-7	N-Nitroso-Di-n-propylamine	***************************************	320	Ū
87-86-5	Pentachlorophenol		1600	Ū
85-01-8	Phenanthrene		320	Ū
108-95-2			320	lΰ
129-00-0	Pyrene		320	U
	2,4,5-Trichlorophenol		790	Ū
				1

673/1438

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Tab Name CTT	Diffolo	Contract: 07963 III	!	S BLank					
Lad Name: STL	Buffalo	COLLEGE: 97863 US	2						
Lab Code: <u>REC</u>	NY Case No.:	_ SAS No.:	SDG No.:						
Matrix: (soil	/water) <u>SOIL</u>		Lab Sample ID:	A5B17927	03				
Sample wt/vol	: <u>30.38</u> (g/mL) <u>G</u>	Lab File ID:	W06611.R	R				
Level: (low	/med) <u>LOW</u>		Date Samp/Recv		water Committee or the				
% Moisture: _	decanted: (Y/N) <u>N</u>	Date Extracted	: 11/17/20	05				
Concentrated :	Extract Volume: 1000	(uL)	Date Analyzed:	11/21/20	05				
Injection Vol	ume: 1.00 (uL)		Dilution Factor: 1.00						
GPC Cleanup:	(Y/N) <u>N</u> pH:								
		•	CONCENTRATION UNIT						
CAS	NO. COMPOUND		(ug/L or ug/Kg)	UG/KG	Q				
88-0	6-22,4,6-Tric	hlorophenol		320	บ				

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METHOD 8270 - TCL SEMI-VOLATILE ORGANICS TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: STL Buffalo Contract: 97863 US	S Blank
Lab Code: RECNY Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID: <u>A5B1792703</u>
Sample wt/vol: 30.38 (g/mL) G	Lab File ID: W06611.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv:
% Moisture: decanted: (Y/N) N	Date Extracted: <u>11/17/2005</u>
Concentrated Extract Volume: 1000 (uL)	Date Analyzed: <u>11/21/2005</u>
Injection Volume:1.00 (uL)	Dilution Factor: 1.00
GPC Cleanup: (Y/N) N pH:	
Number TICs found:2	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 79-34-5	1,1,2,2-TETRACHLOROETHANE	5.50		NC
2. 84-64-0	1,2-BENZENEDICARBOXYLIC ACID	13.44		NC

URS Corporation -5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

Contract:	NY04-599
	14104-23:

SB-09-14-16\MS

Lab Code:

STLBFLO

Case No.:

SAS No.:

SDG NO.: A05-D077

Matrix (soil/water):

SOIL

Level (low/med):

LOW

% Solids for Sample:

92.7

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

1	7	-								
Analyte	Contr		Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	м
Aluminum	75 -	125	9977.8174		7545.1240		1923.17	(126.5	N	P
Antimony	75 -	125	19.5875		14.4238	σ	38.46			P
Arsenic	75 -	125	37.4317		3.0622	İ	38.46	The second secon		P
Barium	75 -	125	77.4568		39.3507	Ī	38.46	99.1		P
Beryllium	75 -	125	32.0805		0.3217	Ī	38.46	82.6		P
Cadmium	75 -	125	29.5496		0.1923	U	38.46	76.8		P
Calcium		·	46206.0195		59211.2305		1923.17			P
Chromium	75 -	125	40.5136		8.6578		38.46	82.8		P
Cobalt	75 -	125	36.7346		5.2403	1	38.46	81.9		P
Copper	75 -	125	53.1710		16.1787	1	38.46	96.2		P
Iron		7-2	17359.5703		14596.4404		1923.17	143.7		P
Lead	75 -	125	41.1280		5.7833		38.46	91.9		P
Magnesium			14994.7197		9168.3340		1923.17	303.0		P
Manganese			518.9983		423.1069		38.46	249.3		P
Nickel	75 -	125	47.7351		14.2635		38.46	87.0		P
Potassium	75 -	125	2498.4121		742.1004		1923.17	91.3		P
Selenium	75 -	125	32.3257		3.8463	ט	38.46	84.1		P
Silver	75 ~	125	8.8908		0.4808	ש	9.62	92.4		P
Mercury	75 -	125	0.3295		0.0163	ט	0.33	99.8		CV
Sodium	75 -	125	1820.5081		134.6222	ט	1923.17	94.7		P
	75 -	125	30.9092		5.7695	U	38.46	80.4		P
Vanadium	75 -	125	43.9051		9.6930		38.46	89.0		P
Zinc	75 -	125	81.4993		41.9480		38.46	102.8		P

Comments:

URS Corporation

-5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

Contract:	NY04-599				SB-09-14-1	.6\SD
Lab Code:	STLBFLO	Case No.:	SAS N	No.:	SDG NO.:	A05-D077
Matrix (soi	L/water):	SOIL	THE CONTRACT OF THE CONTRACT O	Level	(low/med):	TOM
% Solids for	Sample:	92.7				

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	Contr	-7	Spiked Sample	-	Garra I -					·
Analyte	Limit		Result (SSR)	Ç	Sample Result (SR)	C	Spike Added (SA)	%R	Q	м
Aluminum			10163.8203	Γ	7545.1240	-	2012.91	130.1		P
Antimony	75 -	125		-	15.0968	<u> </u>	40.26	57.8	-	P
Arsenic	75 -	125	40.4846		3.0622	İ	40.26	93.0	-	P
Barium	75 -	125	78.8617		39.3507	İ	40.26	98.1		P
Beryllium	75 -	125	35.6063		0.3217	İ	40.26	87.6		P
Cadmium	75 -	125	33.0459		0.2013	U	40.26	82.1		P
Calcium			52083.3008		59211.2305	İ	2012.91	-354.1		P
Chromium	75 -	125	43.8894		8.6578	İ	40.26	87.5		P
Cobalt	75 -	125	40.1082		5.2403		40.26	86.6		P
Copper	75 -	125	55.8954		16.1787	1	40.26	98.7		P
Iron			18045.4805		14596.4404	Ī	2012.91	171.3		P
Lead	75 -	125	42.9887		5.7833		40.26	92.4		P
Magnesium			10237.4805		9168.3340		2012.91	53.1		P
Manganese			457.6155		423.1069		40.26	85.7		P
Nickel	75 -	125	51.1309		14.2635		40.26	91.6		P
Potassium	75 -	125	2579.9609		742.1004		2012.91	91.3		P
Selenium	75 -	125	35.9596		4.0258	υ	40.26	89.3		P
The second secon	75 -	125	9.6046		0.5032	υ	10.06	95.5		P
Mercury	75 -	125	0.3053		0.0153	σ	0.31	98.5		CV
Sodium	75 -	125	1969.9139		140.9035	U	2012.91	97.9		P
Thallium	75 -	125	34.6039		6.0387	σ	40.26	86.0		P
	75 -	125	46.9410		9.6930		40.26	92.5		P
Zinc	75 -	125	77.9458		41.9480		40.26	89.4		P

Comments:	

URS Corporation

-9-ICP SERIAL DILUTIONS

SAMPLE NO.

-16L	-	14	-	09	B-	S
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Contract: NY04-599

STLBFLO

Case No.:

SAS No.:

SDG NO.:

A05-D077

Matrix (soil/water):

Lab Code:

SOIL

Level (low/med):

LOW

Concentration Units:

ug/L

Analyte	Initial Sample Result (I)	c	Serial Dilution Result (S)	С	% Differ- ence	Q	м
Aluminum	74337.78		81449.10		9.6		P
Antimony	150.00	ס	750.00	U			P
Arsenic	30.17		100.00	U	100.0		P
Barium	387.70		431.95		11.4	(E)	P
Beryllium	3.17		10.00	U	100.0		P
Cadmium	2.00	σ	10.00	U			P
Calcium	583374.38		671399.81		15.1	E	P
Chromium	85.30		96.75		13.4		P
Cobalt	51.63		56.45		9.3		P
Copper	159.40		158.55		0.5		P
Iron	143810.41		159416.50		10.9	E	P
Lead	56.98		65.85		15.6		P
Magnesium	90330.35		96582.55		6.9		P
Manganese	4168.63		4609.70		10.6	E	P
Nickel	140.53		153.70		9.4	1	P
Potassium	7311.49		8391.30		14.8	İ	P
Selenium	40.00	ט	200.00	Ū			P
Silver	5.00	[ט	25.00	ט			P
Sodium	550.88		7000.00	ט	100.0	İ	P
Thallium	60.00	ט	300.00	ט		İ	P
Vanadium	95.50		109.10		14.2		P
Zinc	413.29		467.20		13.0	Ī	P

12/10/05/

Comments:

STL JOB NUMBER A05-D150

NON-CONFORMANCE SUMMARY

Job#: A05-D150

STL Project#: NY5A9403.3

Site Name: URS NYSEG SITES- Cortland

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A05-D150

Sample Cooler(s) were received at the following temperature(s); 4@2.0 °C All samples were received in good condition.

GC/MS Volatile Data

The Matrix Spike Blank MSB78 (A5B1821201) was above control limits for the analyte Trichloroethene. However, since all target analytes were non-detect in the samples and the high recovery would yield a high bias, no corrective action was done.

The spike recovery of the analytes Trichloroethene, Benzene, Toluene and Chlorobenzene in the Matrix Spike and the Matrix Spike Duplicate of sample PZ-03 exceeded quality control limits.

All samples were preserved to a pH less than 2.

Initial calibration standard curve A5I0002301-1 exhibited the %RSD of several compounds as greater than 15%. However, the mean RSD of all compounds is 11.72%.

GC/MS Semivolatile Data

Linear regression was used to calibrate analytes Hexachlorocyclopentadiene and 2,4-Dinitrophenol that were greater than 15% RSD in the initial calibration A5I0002340.

Metals Data

The recovery of sample PZ-03 Post Spike exhibited results below the quality control limits for Calcium. However, the LFB is acceptable.

Wet Chemistry Data

The recoveries of sample PZ-03 Matrix Spike and Matrix Spike Duplicate exhibited results below the quality control limits for Total Recoverable Phenolics. However, the LCS was acceptable.

The recovery of sample PZ-03 Matrix Spike exhibited results above the quality control limits for Amenable Cyanide. However, the LCS was acceptable.

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

CHA	AIN C)F CI	US1	TODY REC	OR	D			। इ	TE	STS	r	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		TT	R	S		
PROJECT N				SITE NAME NYSEG - CORTA			TCL VORS	L SVOA	META	Sept 1	otol Colum	Amen CN	tal Phends		LAB_STZ_	BUFF	FAL	>	
SAMPLERS		TURE)	21	hole	MAD			OTTL 721		PE AN	D PF	************	10tal	rE .	COOLER	of		4_	_
DELIVERY SERVICE: DROP - OFF AIRBILL NO.: SHEWEND OF SH						L NO.# OF AINERS	40mlvial HCL	Amber	2 Plastiz	1602 Plastic	Plastic		gessans		REMARKS	Е түре	BEGINNING DEPTH (IN FEET)	G (IN FEET)	FIELD LOT NO. # (ERPIMS)
LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL	400	17	1602 H	1602	802	208	Soc			SAMPLE	BEGIN	ENDING DEPTH (IN F	FIELD (ERPIN
PZ-01	11/16/05	1010	6	PZ-01	WG	10	3	2)	1	1	1	1			N			_
PZ-02	17/16/05	1120	G	PZ-02	WG	10	3	2	1	1	1	1	/			10,			_
	11/16/05	1440	6	DUP-11-16-05	WG	to	3	2	1		-!	/	/			N,	\vdash	_	-
P2-03	11/16/05	1440	6	PZ-03	WG	10	3	2	,	}	1	- !	1			N,	\vdash	_	
PZ-03	11/16/05	1440	6	PZ-03 MS	WG	10	3	2	1	1	- (1	(
PZ-03	11/16/05	1440	6	PZ -03 MSD	WG	10	3	2	/	(1		1		***************************************	5D,	\vdash		
PZ-04	11/16/05	1240	6	PZ-04	WG	(0	3	2	_/_	1		/_	(N ¹			
RINGE BLANK	11/16/07	1350	6	RB-11-16-05	WQ	10	2	2	((/	/	/			RB ₁	\vdash		
TRIP BLANK	11/16/05		G	TB-11-16-05	Ma	1	-						-			TB,	\vdash		
	·															+	-	-	
							_					-				+	\vdash	-	
																+-		\dashv	
MATRIX CODES	AA - AMBIE SE - SEDIM SH - HAZAI		ASTE	WP - DRINKING WATER SO	- GROUNE - SOIL - DRILL CL		(WL - LEA GS - SOI WC - DR		VATER	1	ws - su	EAN WAT RFACE W	/ATER	LH - HAZARDOUS L LF - FLOATING/FRE			N TABL	.E
SAMPLE TYPE CODE:	TB# - TRIP SD# - MAT		CATE		- NORMAL # - MATRIX		MENTAL	SAMPLE	(# -	SEQUEN	NTIAL NO	JMBER (FROM 1	TO 9) TO	ACCOMMODATE MULTIPL	E SAMPLE!	S IN A S	INGLE (DAY)
TYPE CODES SD# - MATRIX SPIKE DUPLICATE FR# - FIELD REPLICATE MS# - MATRIX SPIKE (# - SEQUENTIAL NUMBER (FROM 1 TO 8) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY) RELINQUISHED BY (SIGNATURE) DATE TIME RECEIVED FOR LAB BY (SIGNATURE) DATE TIME SPECIAL INSTRUCTIONS WHAT DISTRIBUTIONS DATE TIME SPECIAL INSTRUCTIONS DATE TIME DATE TIME DATE TIME DISTRIBUTIONS DISTRIBUTIONS DISTRIBUTIONS DISTRIBUTIONS DISTRIBUTIONS DISTRIBUTIONS DATE TIME DATE TIME DISTRIBUTIONS DISTRIBUTIONS DISTRIBUTIONS DISTRIBUTIONS DATE TIME DISTRIBUTIONS DATE TIME DISTRIBUTIONS DISTRIBUTIONS DATE TIME DATE TIME																			
Distribution:	Original acc	ompanies si	iipment,	copy to coordinator field fi	es														

Data File : C:\MSDCHEM\1\DATA\112805\W06742.D Vial: 20 Acq On : 29 Nov 2005 2:00
Sample : A5D15006 AW50028432
Misc :
MS Integration Params: rteint.p Operator: MRF Inst : HP5973W Multiplr: 1.00

Quant Time: Nov 29 12:01:07 2005

Results File: 8270EQ.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270EQ.M (RTE Integrator)

Title : 8270 BNA Calibration with EPC

Last Update : Mon Nov 28 17:47:48 2005

Response via : Initial Calibration

Dat Acq Meth : 8270

IS OA File : C:\MSDChem\1\DATA\112805\W06723.D (28 Nov 2005 17:21)

-	1		e . C. (Habchelli / I / DA	114/1150	OD (WUO	23.D (26 N	OV 2005 17	:41)	
	Int	ernal		R.T			Conc Units	Rcv(Ar)	
	27	C435	bis(2-Chloroethoxy)		93	0	N.D.		
	28	C440	2,4-Dichlorophenol	0.00	162	0.	N.D.		
	29)		1,2,4-Trichlorobenz	0.00	180	0	N.D.		
	30		Naphthalene	8.51	128	165	N.D.		
	31)		4-Chloroaniline	0.00	127	0	N.D.		
	32)		Hexachlorobutadiene	0.00	225	0	N.D.		
	33)	C465	4-Chloro-3-methylph	0.00	107	0	N.D.	Ringe	
	34	C470	2-Methylnaphthalene	0.00	142	. 0	N.D.	1.	1
	36	C510	Hexachlorocyclopent	0.00	237	Ö	N.D.	200	(118)
	37)	C515	2,4,6-Trichlorophen	0.00	196	Ö	N.D.	50	Ma
	38)		2,4,5-Trichlorophen	0.00	196	Ö	N.D.	, ρ	·
			2-Chloronaphthalene	0.00	162	Ö	N.D.	0.07	
	41	C530	2-Nitroaniline	0.00	65	ő	N.D.	1	
	42)		Acenaphthylene	0.00	152	Ö	N.D.	\	
	43)		Dimethylphthalate	0.00	163	0	N.D.		
	44)	C542	2,6-Dinitrotoluene	0.00	165	0	N.D.		
	45		Acenaphthene	0.00	153	0	N.D.		
	46)		3-Nitroaniline	0.00	138	Ö	N.D.		
:	47		2,4-Dinitrophenol	0.00	184	Ö	N.D.		
	48		Dibenzofuran	11.32	168	172	N.D.		
	49		2,4-Dinitrotoluene	0.00	165	0	N.D.		
	50	C560	4-Nitrophenol	0.00	109	Ö	N.D.		
	51	C590	Fluorene	0.00	166	ő	N.D.		
	52		4-Chlorophenyl-phen	0.00	204	0	N.D.		
	53)	C580	Diethylphthalate	0.00	149	Ö	N.D.		whiloso
	54	C620	1,2-diphenylhydrazi	0.00	77	ő	N.D.		Ma
	55	C595	4-Nitroaniline	0.00	138	Ö	N.D.		1
	57		4,6-Dinitro-2-methy	0.00	198	ő	N.D.		
	58		n-Nitrosodiphenylam	0.00	169	Ö	N.D.		
	60	C625	4-Bromophenyl-pheny	0.00	248	Ö	N.D.		
	61)	C630	Hexachlorobenzene	0.00	284	Ö	N.D.		· contraction of
	62	C635	Pentachlorophenol	0.00	266	Ö	N.D.		16
	63	C640	Phenanthrene	0.00	178	0	N.D.		1 de
	64		Anthracene	0.00	178	0	N.D.		1 5 M
	65		carbazole	0.00	167	0	N.D.		1,200
(66	C650	Di-n-butylphthalate	13.8	3 149	36970	2.65 ng	99	= 25 Mg/L
	67	C655	Fluoranthene	0.00	202	0	N.D.		
	69		Pyrene	14.65	202	391	N.D.		Andrew Control of the
	70		benzidine	0.00	184	0	N.D.		
	72	·C720	Butylbenzylphthalat	15.28	149	229	N.D.		
	73	C725	3,3'-Dichlorobenzid	0.00	252	0	N.D.		
	74	C730	Benzo[a]anthracene	15.78	228	597	N.D.		
	75	C735	Chrysene	15.78	228	597	N.D.		
V	76)	C740	bis(2-Ethylhexyl)pht	h 15.8		9335	1.09 ng	90	
	77	C760	Di-n-octylphthalate	16.41	149	1163	N.D.		
	79	C765	Benzo[b]fluoranthen	17.08	252	1343	N.D.		
	80		Benzo[k]fluoranthen	0.00	252	0	N.D.		
	81		Benzo[a]pyrene	17.08	252	1343	N.D.		
	82	C780	Indeno[1,2,3-cd]pyr	0.00	276	0	N.D.		
	83	C785	Dibenz[a,h]anthrace	0.00	278	0	N.D.		
	84	C790	Benzo[g,h,i]perylen	0.00	276	0	N.D.		
	12								

Date : 12/06/2005 15:58:14

SAMPLE DATE 11/16/2005

Rept: AN0364

Client Sample ID: PZ-03 Lab Sample ID: A5D15004

PZ-03 A5D15004MS PZ-03 A5D15004SD

	Unite of		Conce	ntration			% F	Recover	у			
	Units of Measure	Sample	Matrix Spike	Spike Duplicate	Spike MS	Amount MSD	MS	MSD	Avg	% RPD	QC L: RPD	IMITS REC.
METHOD 420.1 - TOTAL RECOVERABLE PHENO	MG/L MG/L UG/L	0 0 0	0.117 0 85.30	0.113 0 91.60	0.100 0.100 100.0	0.100 0.100 100.0	117 *) 0 * 85	113 0 *> 92	115 0 89	3 0 8	20.0	85 - 115 60 - 143 85 - 115

12/11/05/

DATA ASSESSMENT SUMMARY SOIL SAMPLING AT THE FORMER OFFSITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE – CORTLAND, NY NEW YORK STATE ELECTRIC AND GAS

This data assessment summary addresses quality control deficiencies resulting in qualification of the data for the 10 subsurface soil samples, six surface soil samples, two field duplicate (FD) samples (one subsurface soil and one surface soil), two matrix spike/matrix spike duplicate (MS/MSD) pairs (one subsurface soil and one surface soil), and one equipment rinsate blank collected on April 26, 2006 at the Former Offsite Gas Holder associated with the Homer Former MGP Site, Cortland, New York. The samples were sent to Severn Trent Laboratories (STL, Amherst, NY) for analysis. The analytical results were reported in STL report number A06-4536.

All of the samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by USEPA Method 8260B, polynuclear aromatic hydrocarbons (PAHs) by USEPA Method SW8270C, and total cyanide by USEPA Method SW9012A.

Data validation was limited to a review of holding times, surrogate spike recoveries, MS/MSD recoveries, internal standard (IS) recoveries, FD results, and blanks (method and rinsate). Qualification of data was made following the procedures outlined in the following USEPA region II documents:

- Standard Operating Procedure for the Validation of Organic Data Acquired using SW-846 Method 8260B, SOP No. HW-24, Revision 1, June 1999; and
- Standard Operating Procedure for the Validation of Organic Data Acquired using SW-846 Method 8270C, SOP No. HW-22, Revision 2, June 2001.

The validated analytical results are presented on Tables 1 and 2. Definitions of data qualifiers are presented at the end of this data assessment summary. Chain-of-custody (COC) records, laboratory report case narratives, and documentation supporting the qualification of data (when applicable) is provided in Attachment A. Copies of the validated laboratory data (Form 1s) are presented in Attachment B.

BTEX (USEPA Method 8260B)

No data qualifications were made, and all data are usable as reported. It should be noted that the BTEX results reported by STL for sample SB12 10-12 were inconsistent with the FD results for this sample, and with the field observations made at this location during sample collection (including visual observations and screening with photoionization detector). The laboratory reported elevated BTEX concentrations in sample SB12 10-12, but BTEX was not detected in the FD collected at this location (DUP-042606). Observations recorded during field activities also indicate that there was no contamination present. URS believes that the results reported by the laboratory for SB12 10-12 do not accurately represent the current conditions at this location, and may have resulted from the wrong sample being analyzed. Using professional judgment and the observations made during sample collection, the results reported by the laboratory for DUP-042606 are presented on Table 2 as the results for parent sample SB12 10-12. Therefore, there are no BTEX results reported on Table 2 for DUP-042606.

It is not believed that the concentrations reported by the laboratory for sample SB12 10-12 are the result of this sample mistakenly being switched with another site sample during collection or laboratory analysis. Sample identifications (IDs) were recorded on the lids of the sample collection containers, as well as on the labels affixed to the containers. No discrepancies were noted upon receipt at the laboratory, and the laboratory has confirmed that the IDs on the container lids match those on the labels. As previously indicated, it is possible that the laboratory used the wrong sample when performing the analysis of SB12 10-12. However, all other site samples were analyzed on a different day and different instrument than SB12 10-12. Therefore, it is unlikely that this sample was switched with another site sample during analysis, and it is believed that the results reported by the laboratory for the remaining site samples are representative of the current conditions at those sampling locations.

PAHs (USEPA Method 8270C)

The concentration of fluorene in samples SS-01, SS-04, SS-05, SS-06, and SS-FD-042606 was less than five times the concentration detected in the associated method blank. The results for fluorene in these samples were raised to the quantitation limit and qualified 'U'.

The concentration of dibenzofuran in sample SS-01 was less than five times the concentration detected in the associated method blank. The result for dibenzofuran in this sample was raised to the quantitation limit and qualified 'U'.

The concentration of phenanthrene in samples SS-03 was less than five times the concentration detected in the associated method blank. The result for phenanthrene in this sample was raised to the quantitation limit and qualified 'U'.

The concentration of acenaphthylene in samples SS-05 and SS-06 was less than five times the concentration detected in the associated method blank. The results for acenaphthylene in these samples were raised to the quantitation limit and qualified 'U'.

The concentration of 2-methylnaphthalene in sample SS-05 was less than five times the concentration detected in the associated method blank. The result for 2-methylnaphthalene in this sample was raised to the quantitation limit and qualified 'U'.

Total Cyanide (USEPA Method 9012A)

The recoveries of total cyanide in both the surface and subsurface soil MS/MSD analyses were below quality control limits. The results for total cyanide were qualified 'J' or 'UJ' in all surface and subsurface soil samples.

DEFINITIONS OF USEPA REGION II DATA QUALIFIERS

- The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- NJ The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.
- B The analyte was detected in the sample at a concentration greater than the method detection limit, but less than the quantitation limit (used for metals only).
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- D The concentration reported is from a secondary dilution analysis.

TABLE 1 VALIDATED SOIL SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		SB-12	SB-12	\$B-12	\$B-13	SB-13
Sample ID		DUP-042608	SB12 10-12	SB12 14-15	SB13 10-12	13 14-15.7
Matrix		Soil	Soll	Soil	Sofl	Soil
Depth Interval (ft)		10.0-12.0	10.0-12.0	14.0-15.0	10.0-12.0	14.0-15.7
Date Sampled		04/26/06	04/26/06	04/26/06	04/26/08	04/26/06
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
Benzene	UG/KG	NA	5 U	5 U	5 U	5 U
Ethylbenzene	UG/KG	NA	5 U	1 J	5 U	5 ป
Toluene	UG/KG	NA	5 U	3 J	5 U	3 J
Xylene (total)	UG/KG	NA	15 U	3 J	16 Ü	4 J
Total BTEX	UG/KG	NA	ND	7	ND	7
Semivolatile Organic Compounds						
2-Methylnaphthalene	UG/KG	58 J	340 U	22 J	98 J	60 J
Acenaphthene	UG/KG	38 J	340 U	350 U	71 J	36 J
Acenaphthylene	UG/KG	310 J	120 J	350 U	340 U	340 U
Anthracene	UG/KG	120 J	34 J	350 U	340 U	340 ∪
Benzo(a)anthracene	UG/KG	510	180 J	350 U	340 U	340 U
Benzo(a)pyrene	UG/KG	660	240 J	350 U	340 U	340 U
Benzo(b)fluoranthene	UG/KG	940	350	31 J	340 U	340 U
Benzo(g,h,i)perylene	UG/KG	920	380	42 J	340 U	340 U
Benzo(k)fluoranthene	UG/KG	240 J	120 J	350 U	340 U	340 U
Chrysene	UG/KG	610	230 J	350 U	340 U	340 U
Dibenzo(a,h)anthracene	UG/KG	210 J	80 J	350 U	340 U	340 U
Dibenzofuran	UG/KG	19 J	340 U	350 U	340 U	20 J
Fluoranthene	UG/KG	1,100	400	21 J	340 U	340 U
Fluorene	UG/KG	340 U	340 U	350 U	340 U	340 U
Indeno(1,2,3-cd)pyrene	UG/KG	740	290 J	32 J	340 U	340 U
Naphthalene	UG/KG	99 J	24 J	350 U	180 J	110 J
Phenanthrene	UG/KG	380	150 J	350 U	72 J	44 J

Flags assigned during chemistry validation are shown.

VALIDATED SOIL SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		SB-12	SB-12	SB-12	SB-13	SB-13
Sample ID Matrix		DUP-042606 Soll	\$812 10-12 Soil	SB12 14-15 Soll	SB13 10-12 Soll	13 14-15.7
						Soil
Depth Interval (ft)		10.0-12.0	10.0-12.0	14.0-15.0	10.0-12.0	14.0-15.7
Date Sampled		04/26/06	04/26/06	04/26/06	04/26/06	04/28/06
Parameter	Units	Fleid Duplicate (1-1)				
Semivolatile Organic Compounds						
yrene	UG/KG	810	330 J	350 U	340 U	340 U
otal Polycyclic Aromatic Hydrocarbons	UG/KG	7,687	2,928	126	323	190
Miscellaneous Parameters						- 171
Cyanide	MG/KG	1.0 UJ	0.98 UJ	1.0 J	1.0 UJ	0.97 UJ

Flags assigned during chemistry validation are shown.

VALIDATED SOIL SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		SB-14	SB-14	\$B-15	SB-16	SB-17
Sample ID		SB14 11-12	SB14 14-15	SB15 12-14	SB16 10-12	SB17 9-11
Matrix		Soil	Soll	Soil 12.0-14.0	Soil	Soil
Depth Interval (ft)		11.0-12.0	14.0-15.0		10.0-12,0	9.0-11.0
Date Sampled	•		04/26/06	04/26/06	04/28/06	04/26/06
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/KG	7,500 U	2 J	5 U	34	12
Ethylbenzens	UG/KG	53,000	2 J	5 U	2 J	7
Toluene	UG/KG	14,000	8	3 J	20	11
Kylene (total)	UG/KG	640,000	28	16 U	15 J	36
Total BTEX	UG/KG	707,000	40	3	71	66
Semivolatile Organic Compounds				<u> </u>		<u> </u>
?-Methylnaphthalene	UG/KG	19,000	980 J	250 J	67 J	460 J
cenaphthene	UG/KG	4,800 J	2,000 J	140 J	38 J	210 J
scenaphthylene	UG/KG	18,000	5,800	590	440 U	2,000 U
nthracene	UG/KG	29,000	8,800	1,000	440 U	150 J
enzo(a)anthracene	UG/KG	35,000	31,000	2,300	440 U	200 J
enzo(a)pyrene	UG/KG	28,000	24,000	1,700	440 U	120 J
enzo(b)fluoranthene	UG/KG	31,000	27,000	2,700	440 U	160 J
enzo(g,h,i)perylene	UG/KG	13,000	12,000	800	440 U	2,000 U
enzo(k)fluoranthene	UG/KG	10,000	10,000	2,800	440 U	100 J
hrysene	UG/KG	27,000	22,000	2,200	440 U	150 J
ibenzo(a,h)anthracene	UG/KG	4,900 J	4,400	310 J	440 U	2,000 U
ibenzofuran	UG/KG	16,000	1,400 J	460	440 U	340 J
uoranthene	UG/KG	66,000	54,000	5,400	28 J	400 J
uorene	UG/KG	23,000	3,500 J	780	440 U	430 J
deno(1,2,3-cd)pyrene	UG/KG	14,000	12,000	840	440 U	2,000 U
aphthalene	UG/KG	24,000	2,500 J	260 J	130 J	370 J
henanthrene	UG/KG	66,000	18,000	4,400	45 J	860 J

Flags assigned during chemistry validation are shown.

VALIDATED SOIL SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		SB-14	SB-14	SB-15	SB-16	SB-17
Sample ID		SB14 11-12	SB14 14-15	SB15 12-14	SB16 10-12	SB17 9-11
Matrix		Soil	Sall	Soil	Soil	Soli
Depth Interval (ft) Date Sampled		11.0-12.0 04/26/0 6	14.0-15.0 04/26/06	12.0-14.0 04/26/06	10.0-12.0	9.0-11.0
					04/26/06	04/26/06
Parameter	Units					
Semivolatile Organic Compounds						
Pyrene	UG/KG	46,000	40,000	4,000	440 U	310 J
Total Polycyclic Aromatic Hydrocarbons	UG/KG	439,700	277,000	30,220	241	3,460
Miscellaneous Parameters						
Cyanide	MG/KG	1.2 UJ	0.98 UJ	1.0 UJ	1.2 UJ	4.0 J

Flags assigned during chemistry validation are shown.

TABLE 1 VALIDATED SOIL SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		SB-17	SS-01	SS-02	SS-02	88-03
Sample ID		SB17 12-14	SS-01	SS-02	SS-FD-042606	\$S-03
Matrix		Soil	Soil	Soll	Soll	Soil
Depth Interval (ft)		12.0-14.0	•	•	•	-
Date Sampled		04/26/06	04/26/06	04/26/06	04/26/06 Fleid Duplicate (1-1)	04/26/06
Parameter	Units				Freed Doblicate (1-1)	
Volatile Organic Compounds						
Benzene	UG/KG	4 J	NA	NA	NA NA	NA
Ethylbenzene	UG/KG	6 U	NA	NA	NA	NA
Toluene	UG/KG	4 J	NA	NA	NA	NA
Xylene (total)	UG/KG	3 J	NA	NA	NA	NA
Total BTEX	UG/KG	11	NA	NA	NA	NA
Semivolatile Organic Compounds						•
2-Methylnaphthalene	UG/KG	460	4,300 U	4,500 U	9,000 ∪	4,600 U
Acenaphthene	UG/KG	160 J	900 J	4,500 U	U 000,8	4,600 U
Acenaphthylene	UG/KG	330 J	4,300 U	4,500 U	9,000 U	4,600 U
Anthracene	UG/KG	990	2,400 J	660 J	1,300 J	290 J
Benzo(a)anthracene	UG/KG	1,000	7,400	3,000 J	5,200 J	1,900 J
Benzo(a)pyrene	UG/KG	730	6,600	2,900 J	4,600 J	1,800 J
Benzo(b)fluoranthene	UG/KG	1,100	8,800	4,200 J	6,600 J	2,100 J
Benzo(g,h,i)perylene	UG/KG	350	4,000 J	1,300 J	2,200 J	780 J
Benzo(k)fluoranthene	ŲG/KG	1,200	2,300 J	1,000 J	1,500 J	L 098
Chrysene	UG/KG	840	7,300	3,100 J	5,200 J	1,800 J
Dibenzo(a,h)anthracene	UG/KG	120 J	1,200 J	430 J	740 J	270 J
Dibenzofuran	UG/KG	560	4,300 U	4,500 U	9,000 U	4,600 U
Fluoranthene	UG/KG	2,400	16,000	6,800	11,000	3,200 J
Fluorene	UG/KG	900	4,300 U	4,500 U	9,000 U	4,600 U
Indeno(1,2,3-cd)pyrene	UG/KG	350	3,700 J	1,300 J	2,100 J	780 J
Naphthalene	UG/KG	460	4,300 U	4,500 U	U 000,e	4,600 U
Phenanthrene	UG/KG	3,500	11,000	2,800 J	5,400 J	4,600 U

Flags assigned during chemistry validation are shown.

VALIDATED SOIL SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		SB-17	SS-01	SS-02	SS-02	SS-03
Sample ID Matrix		\$817 12-14	SS-01 Soil	SS-02	SS-FD-042606	SS-03 Soil
		Soil		Soli	Soll	
Depth Interval (ft)		12.0-14.0	•	-	•	
Date Sampled		04/26/06	04/26/06	04/26/06	04/26/06	04/26/06
Parameter	Units	-			Field Duplicate (1-1)	
Semivolatile Organic Compounds					 	· · · · · · · · · · · · · · · · · · ·
yrene	UG/KG	1,800	12,000	4,900	7,800 J	2,500 J
otal Polycyclic Aromatic Hydrocarbons	UG/KG	16,230	83,600	32,390	53,640	16,280
Miscellaneous Parameters						
Cyanide	MG/KG	0.97 UJ	1.1 UJ	0.17 UJ	1.8 J	1.3 UJ

Flags assigned during chemistry validation are shown.

VALIDATED SOIL SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		SS-04	\$8-05	SS-06
Sample ID		SS-04	SS-05	SS-06
Matrix		Soll	Soll	Soil
Depth Interval (ft)		•	•	•
Date Sampled		04/26/06	04/26/06	04/26/06
Parameter	Units			
Volatile Organic Compounds				
Benzene	UG/KG	NA	NA	NA
Ethylbenzene	UG/KG	NA	NA	NA
Toluene	UG/KG	NA	NA	NA
Xylene (total)	UG/KG	NA	NA	NA
Total BTEX	UG/KG	NA	NA .	NA
Semivolatile Organic Compounds		:		
2-Methylnaphthalene	UG/KG	4,200 U	440 U	4,400 U
Acenaphthene	UG/KG	370 J	24 J	290 J
Acenaphthylene	UG/KG	4,200 U	440 U	4,400 U
Anthracene	UG/KG	1,200 J	64 J	880 J
Benzo(a)anthracene	UG/KG	3,600 J	290 J	3,100 J
Benzo(a)pyrene	UG/KG	3,200 J	280 J	2,800 J
Benzo(b)fluoranthene	UG/KG	4,000 J	400 J	4,000 J
Benzo(g,h,i)perylene	UG/KG	1,400 J	130 J	1,400 J
Benzo(k)fluoranthene	UG/KG	1,600 J	110 J	1,100 J
Chrysene	UG/KG	3,600 J	300 J	3,000 J
Dibenzo(a,h)anthracene	UG/KG	450 J	42 J	420 J
Dibenzofuran	UG/KG	4,200 U	440 U	4,400 U
Fluoranthene	UG/KG	8,900	620	6,900
Fluorene	UG/KG	4,200 U	440 U	4,400 U
Indeno(1,2,3-cd)pyrene	UG/KG	1,400 J	130 J	1,300 J
Naphthalene	ŲG/KG	4,200 U	440 U	4,400 U
Phenanthrene	UG/KG	5,600	320 J	4,300 J

Flags assigned during chemistry validation are shown.

VALIDATED SOIL SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		SS-04	SS-05	SS-06	
Sample ID		SS-04	88-05	59-06	
Matrix		Soll	Soil	Soil	
Depth Interval (ft)		•		04/26/06	
Date Sampled		04/26/06	04/26/06		
Parameter	Units				
Semivolatile Organic Compounds					
Pyrene	UG/KG	6,100	490	5,200	
Total Polycyclic Aromatic Hydrocarbons	UG/KG	41,420	3,200	34,690	
Miscellaneous Parameters		· · · · · · · · · · · · · · · · · · ·			
Cyanide	MG/KG	1.2 UJ	1.2 UJ	1.3 UJ	

Flags assigned during chemistry validation are shown.

VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		FIELDQC
Sample ID		RB-042606
Matrix		Water Quality
Depth Interval (ft)		•
Date Sampled		04/26/06
Parameter	Units	Rinse Blank (1-1)
Volatile Organic Compounds		
Benzene	UG/L	5,0 U
Ethylbenzene	UG/L	5.0 U
Toluene	UG/L	5.0 U
Xylene (total)	UG/L	15 U
Total BTEX	UG/L	ND
Semivolatile Organic Compounds		
2-Methylnaphthalene	UG/L	10 U
Acenaphthene	UG/L	10 U
Acenaphthylene	UG/L	10 U
Anthracene	UG/L	10 U
Benzo(a)anthracene	UG/L	10 U
Benzo(a)pyrena	UG/L	10 U
Benzo(b)fluoranthene	UG/L	10 U
Benzo(g,h,i)perylene	UG/L	10 U
Benzo(k)fluoranthene	UG/L	10 U
Chrysene	UG/L	10 U
Dibenzo(a,h)anthracene	UG/L	10 U
Dibenzofuran	UG/L	10 U
Fluoranthene	UG/L	10 U
Fluorene	UG/L	10 U
Indeno(1,2,3-cd)pyrene	ŲG/L	10 U
Naphthalene	UG/L	10 U
Phenanthrene	UG/L	10 U

Flags assigned during chemistry validation are shown.

VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		FIELDQC
Sample ID		RB-042606
Matrix	Water Quality	
Depth Interval (ft)	•	
Date Sampled	04/26/06	
Parameter	Units	Rinse Blank (1-1)
Semivolatile Organic Compounds		
Pyrene	UG/L	10 U
Total Polycyclic Aromatic Hydrocarbons	UG/L	NĐ
Miscellaneous Parameters		
Cyanide	MG/L	0.01 U

Flags assigned during chemistry validation are shown.

ATTACHMENT A

CHAIN-OF-CUSTODY RECORDS, LABORATORY REPORT CASE NARRATIVES, AND DOCUMENTATION SUPPORTING QUALIFICATION OF DATA

100	LAB_STAL	COOLER of 2	HEET)	E SEGINALE SERVICE SER	2 2	2 3		A. 10.12	72	_	2	77	-	7	5	0	1 6 10	LH - HAZARDOUS LIQUID WASTE LF - FLOATING/FHEE PRODUCT ON GW TABLE	(# - SEQUENTIAL NUMBER (FROM 1 TO 8) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)	OTIONS,	Janlehnen Mer & Jak 2016	nedans (7,0°C)
- -		AND PRESERVATIVE					-											WO - OCEAN WATER WS - SURFACE WATER WO - WATER RIP O OC	NUMBER (FROM 1 TO 9) TO A	SPECIAL INSTRUCTIONS	Coled 5	g (24/2)
ESTS	X키운 자카	J J E	Stall Stall	202	7	2	2	7	2 1			1	2	2	2 1	1 2	2 1	WL - LEACHATE GS - BOIL GAS WC - DPALLING WATER		SATE TIME	(SIGNATURE) DATE : E	
ORD	CAN.		INEHS NO:# OE	MATRIX TOTAL COUTA	8	50 3	50 3	So 3	50 3	1 05	1 05	1 03	3	8	50 3			WG - GROUND WATER SO - SOIL DC - DRILL CUTTINGS	N# - NOFMAL ENVIRONMENTAL SAMPLE MB# - MATRIX SPIKE	(BIGNATURE)	MAB BY (SIGN	
TODY RECORD	SITE NAME N''SEG -COGTCAMD		FD & AIRBILL NO	SAMPLE ID	58-12-10-12		5B-DUP-042606	52-13-10-12	58-13-14-157"	157' MS	518-13-14-157 MSD	05 2M/2MC31-14-67-80	5B-H- 11-12	58-14-14-15	- 12-14	28-16-10-12	53-17-9-1	SI SLUDGE WP - DRINKONG WATER SO - S WW - WASTE WATER DC - D		K 1840 NEGRAPE AN	K 1855 CHIME RECENEDARY	Distribution: Original accompanies shipment, copy to coordinator field files
CHAIN OF CUSTODY		ded III	Sh-Fere	TIME GRAB	1805 G	1015 G	<u>ی</u> ا	04/2	5 050	000	S 0501	1050 C	1135 6	1140 G	n.30 G	300 6	1330 G	AA - AMBIENT AR SE - SEDIMENT SH - HAZARDOUS SOLID WASTE	TB# . TRIP BLANK SD# - MATRIX SPIKE DUPLICATE	A STATE BAT	SIGNATURE) DATE	panies shipment,
NIN O	1305	SAMPLERS (PRINT/SIGNATURE) ROB MURPHY / DA	<u> </u>	DATE	4/26/06	20/20/2	4/2/100	190/7/2	4/24/06	4/26/06	4/24/06	4/14/06	"Hashe	4/26/06	4/2/106	4/24/06	30h7/h,	AA - AMBIENT SE - SEDIMEN SH - HAZARDC	1		SHED BY WIGHA	Original accom
E C	PROJECT NO.	SAMPLERS ROB M	DELLVERY SERVICE:	LOCATION	58-12	587	S8-FD-1	58-13	58-13	58-13	58-13	88-13	SB-14	513-14	. — Т	58-16	58-17	MATRIX	SAMPLE TYPE COURS	HELINGUISH CALL	RELINGUISH	Distribution: (

URSF-075C/1 OF 1/CorCR/GCM

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1174305		SITE NAME	, T	7+3 X2		LAB_STL			
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The same of the sa	?	hornal			TWE AND PRESERVATIVE	PAGE 2	ď	7	
DELIVERY SERVICE: 572	r-ferra	AIRBILL NO ::	NEUR NO'# OL	9 lass			JdA	(T334	
A DATE	TIME GRAB		MATRIX TOTAL 1	SoS		REMARKS	T 3J4MA	EPTH (IN	NOING EPTH (IN TO.I U.OT
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90/57/4	148 6	75/21					2	0	ದ
55-01 476/06 I	207 6	25-01-MS/MS/2	105 92	-			100		0,
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55-0-1 4/2dp6 12	232 6	58-04	80				z.	0	0.72
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55-06 426/06 1	22 6	52-06	50 1				2	O O	0.5
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The second of the second secon								_	
								-	
MATRIX SE SEGMENT AIR CODES SE SEGMENT	3	SL - SLUDGE WP - DRINKING WATER	WG - GROUND WATER SO - SOIL	W LEACHATE GS - SOIL GAS	MO - OCEAN WATER WS - SURFACE WATER	LH - HAZARDOUS LIQUID WASTE LF - FLOATING/FREE PRODUCT ON GW TABLE	D WAST	- 8	
S	A SOLID MASTE	RB# - RINSE BLANK FR# - FIELD REPLICATE	N# · NORMAL ENVIRONMENTAL SAMPLE MS# · MATRIX SPIKE	WENTAL SAMPLE	MAY WATER WO - WATER FIELD OC (# - SEQUENTIAL MAKER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)	CCOMMODATE MULTIPLE SA	WPLES	SNIS 4	P P
REMORIEH BY ISIGNATORE		200	ED BY (SIGNATURE)		SPECIAL INSTRUCTIONS	SNOIT			
RELINGUISHED BY LAGNATURE)		DATE TIME REGENT	FORLER BY (SIG	BY (SIGNATURE) DATE TIME	aft timbe	ž 7	100- 76-80-	7825	~0
Distribution: Original accompanies shipment, copy to coordinator field files	nies shipment	, copy to coordinator fie	3	C)LORDIANA	4	To a	16	150	15
URSF-075C/1 OF 1/CorCR/GCM					,		J	7)

URSF-075C/1 OF 1/CorCR/GCM

CHAIN OF CUSTOD	USTODY	r RECORD	ORD	(TESTS - S		URS		M	·	
PROJECT NO.	SITE NAME	SITE NAME (BETLAN)	AUP.	X214	SHY!	774U		178 STL	7	2		1
SAMPLERS (PRINT/SIGNATURE) 1	1 the of	7		1		TYPE AND	BOTTLE TYPE AND PRESERVATIVE	COOLER	, j	1-1		, ,
= 50c-	CEPS AIRBILL N	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	FNO:# OE	Pein E	Les Hills	H(Zipalo		REMARKS	LE TYPE	I (IN SEET) INING	(IN FEET)	lsM
LOCATION DATE TIME	COMP/ GRAB SAN	MPLE 10	MATRIX	₩0 ₩ соит	7-1	1.518 0.414			Idwys	BEGIN		3,1317 11983)
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g	1		N# - NORMAL ENVIRONMENTAL SAMPLE MS# - MATRIX SPIKE	RONMENTA	L SAMPLE		L NUMBER (FROM 1 TO 8) TO	(# - SEQUENTIAL NUMBER (FROM 1 TO 8) TO ACCOMINODATE MULTIPLE SAMPLES IN A SINGLE DAY)	SAMPLE	SAS	INGLE D	(VAC
M	CATE TIME	RECEIVED B	BY (SIGNATURE)	(E)	_160	DATE TIME	SPECIAL INSTRUCTIONS	UCTIONS Shipped on Ice	શુ			
RELINOUNCHED BY ((FRANTURE)	DATE TIME	RECEIVED FOR LAB BY (SIGNATURE)	OR LAB BY	(SIGNATI		DÁTE TIME	•	•				
Distribution: Original accompanies shipment, copy to coordinator field flies	thipment, copy to co	ordinator field fi	lea									
												l

NON-CONFORMANCE SUMMARY

Job#: A06-4536

STL Project#: NY5A9403.3

Site Name: URS NYSEG SITES- Cortland

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A06-4536

Sample Cooler(s) were received at the following temperature(s); 2.0 $^{\circ}\text{C}$ All samples were received in good condition.

GC/MS Volatile Data

Initial calibration standard curve A610001440 exhibited a %RSD of compound Tollume as greater than 15%. However, the mean RSD of all compounds is 9.04%.

Samples SB-12 10-12 and SB-14 11-12 were analyzed using medium level techniques due to high concentrations of target analytes.

GC/MS Semivolatile Data

The analytes Acenaphthylene, Dibenzofuran, Fluorene, and Phenanthrene were detected in the Method Blank SBLK32 (A6B1817502) at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analytes Naphthalene and 2-Methylnaphthalene were detected in the Nethod Rlank SBLK32 (A6B1817502) at a level above the project established reporting Nimit. All samples with the exception of sample SS-05 were non-detect for these analytes. The concentration of 2-Methylnaphthalene in sample SS-05 has been flagged accordingly. Since the concentration of 2-Methylnaphthalene was below the Estimated Quantitation Limit (EQL), no further corrective action was necessary.

All surrogate recoveries were below laboratory quality control limits in sampleSB-17 due to the presence of a precipitate in the extract.

1/7/Chra

The surrogate recovery for 2,4,6-Tribromophenol was below the laboratory quality control limits for samples SB-14 11-12 and SS-06. As per the laboratory SOP, one surrogate from each fraction may be outside of control limits with no corrective action necessary.

The surrogate recoveries for 2,4,6-Tribromophenol and p-Terphenyl were below the laboratory quality control limits for samples SS-02 and SS-04. As per the laboratory SOP, one surrogate from each fraction may be outside of control limits with no corrective action necessary.

The spike recoveries for Pyrene were below the laboratory quality control limits in the Matrix Spike SS-01 and Matrix Spike Duplicate SS-01 due to elevated detections for this analyte in the parent sample SS-01. Since the Matrix Spike Blank SMSB32 (A6B1817501) recoveries were compliant, no corrective action was required.

The relative percent difference between the Matrix Spike SS-01 and the Matrix Spike Duplicate SS-01 exceeded quality control criteria for Pyrene.

Wet Chemistry Data

The recovery of sample SS-01 Matrix Spike and Matrix Spike Duplicate exhibited results below the quality control limits for Total Cyanide. However, the LCS was acceptable.

The recovery of sample SB-13 14-15.7 Matrix Spike and Matrix Spike Duplicate exhibited results below the quality control limits for Total Cyanide. However, the LCS was acceptable.

The relative percent difference between the Matrix Spike and Matrix Spike Duplicate exceed quality control limits for Total Cyanide on sample SB-13 14-15.7. This is due to sample matrix.

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

SAMPLE SUMMARY

TAD CAMENTER TO			SAMP	LED	RECEIV	ED
LAB SAMPLE II		MATRIX		TIME	DATE	TIME
A6453619	RB-042606	WATER	04/26/2006	13:50	04/27/2006	09:15
A6453601	SB-12 10-12	SOIL	04/26/2006	10:05	04/27/2006	09:15
A6453602	SB-12 14-15	SOIL	04/26/2006	10:15	04/27/2006	09:15
A6453604	SB-13 10-12	SOIL	04/26/2006	10:45	04/27/2006	09:15
A6453605	SB-13 14-15.7	SOIL	04/26/2006	10:50	04/27/2006	09:15
A6453605MS	SB-13 14-15.7	SOIL	04/26/2006	10:50	04/27/2006	09.15
A6453605SD	SB-13 14-15.7	SOIL	04/26/2006	10:50	04/27/2006	09.15
A6453606	SB-14 11-12	SOIL	04/26/2006	11:35	04/27/2006	09:15
A6453607	SB-14 14-15	SOIL	04/26/2006	11:40	04/27/2006	09.15
	SB-15 12-14	SOIL	04/26/2006	12:30	04/27/2006	09:15
A6453609	SB-16 10-12	SOIL	04/26/2006	13:00	04/27/2006	09.15
A6453611	SB-17 12-14	SOIL	04/26/2006	13:35	04/27/2006	09.15
A6453610	SB-17 9-11	SOIL	04/26/2006	13:30	04/27/2006	09.15
A6453603	SB-DUP-042606	SOIL	04/26/2006		04/27/2006	09:15
A6453612	SS-01	SOIL		12-07	04/27/2006	09:15
A6453612MS	SS-01	SOIL	04/26/2006	12.07	04/27/2006	00-16
A6453612SD	SS-01	SOIL	04/26/2006	12.07	04/27/2006	00-1E
A6453614	SS-02	SOIL	04/26/2006	11.49	04/27/2006	00-16
A6453615	SS-03	SOIL	04/26/2006	11.50	04/27/2006	00.12
A6453616	SS-04		04/26/2006	12.22		
A6453617	SS-05	SOIL	04/26/2006	12.12	04/27/2006	09:15
A6453618	SS-06	SOIL	04/26/2006	12.21	04/27/2006	03:72
A6453613	SS-FD-042606	SOIL	04/26/2006	12:21	04/21/2006	09:15
		فنديجب	0-12012000	14:0/	04/27/2006	09:15

METHOD 8270 - HSL PAH SEMI-VOLATILE ORGANICS METHOD BLANK SUMMARY

466/1063

Client No.

Lab Name: STL Buffal	<u>○</u> Co	ntract: <u>97863 US</u>	SBLK32
Lab Code: RECNY C	ase No.:	SAS No.:	SDG No.:
Lab File ID: W	09041.RR	Lab Sample ID:	A6B1817502
Instrument ID:	HP5973W	Date Extracted:	05/03/2006
Matrix: (soil/water)	SOIL	Date Analyzed:	05/05/2006
Level: (low/med)	LOW	Time Analyzed:	00:04

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT	LAB	LAB	DATE
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
1 2 3 4 5 6 7 8 9	SMSB32 SS-01 SS-01 SS-02 SS-03 SS-04 SS-05 SS-06 SS-FD-042606	A6B1817501 A6453612 A6453612MS A6453612SD A6453614 A6453615 A6453616 A6453617 A6453618 A6453613	W09089.RR W09042.RR W09043.RR W09044.RR W09046.RR W09047.RR W09047.RR W09048.RR W09090.RR W09091.RR	05/08/2006 05/05/2006 05/05/2006 05/05/2006 05/05/2006 05/05/2006 05/05/2006 05/08/2006 05/08/2006

. .	•
Comments:	

Lab Name: <u>STL Buffalo</u> Contract: <u>97863 US</u>	SBLK32
Lab Code: RECNY Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID: <u>A6B1817502</u>
Sample wt/vol: <u>30.14</u> (g/mL) <u>G</u>	Lab File ID: W09041.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv:
% Moisture: decanted: (Y/N) N	Date Extracted: <u>05/03/2006</u>
Concentrated Extract Volume: 1000 (uL)	Date Analyzed: 05/05/2006
Injection Volume: 1.00 (uL)	Dilution Factor: 1.00
GPC Cleanup: (Y/N) N pH:	1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度,1000年度
	CNCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> Q
83-32-9	330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 48 J 330 U

Date : 05/12/2006 14:24:56			SAMPLE	SAMPLE DATE 04/26/2006							Rept: AN0364	N0364
lient Sample ID: SB-13 14-15.7 Lab Sample ID: A6453605	SB-13 14-15.7 A6453605MS		SB-13 14-15.7 A6453605sp									
-	100		Conce	Concentration			*	% Recovery	-			
Analyte	Measure	Sample	Matrix Spike	Matrix Spike Spike Duplicate	Spike MS	Spike Amount	¥.	S S S S S S S S S S S S S S S S S S S		* 5	OC LIMITS	STI
UET CHEMISTRY ANALYSIS									;	_	ארט	YEL.
METHOD 9012 - TOTAL CYANIDE	0/9n	0.00070	2.72	1.80	10.10	00.6	27	27 20 .	2	(SE	15.0	24 (30 *) 15.0 85-115

290/1/3

Date : 05/12/2006 14:24:56			SAMPLE	SAMPLE DATE 04/26/2006							Rept: AN0364	AN0364
lient Sample 10: SS-01 Lab Sample 1D: A6453612	SS-01 A6453612MS	SS-01 A6453612SD	12SD									
			Conce	Concentration			*	% Recovery				
40a vte	Units of	alomes	Matrix Spike	Matrix Spike Spike Ouplicate	Spike	Spike Amount MSD		<u>8</u>	Avg	× &	RPD REC.	MITS REC.
			<u> </u>					—	1			
WET CHEMISTRY ANALYSIS METHOD 9012 - TOTAL CYANIDE	9/9N	0.00880	87.8	9.82	11.60	12.20	88	8	1	, o	15.0	15.0 85-115
)	_			

11/08

ATTACHMENT B VALIDATED LABORATORY DATA (FORM 1s)

Lab Name: STL Buffalo Contract: 9786	RB-042606
Lab Code: RECNY Case No.: SAS No.: _	SDG No.:
Matrix: (soil/water) WATER	Lab Sample ID: <u>A6453619</u>
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Iab File ID: <u>O1832.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 04/26/2006 04/27/2006
% Moisture: not dec. Heated Purge: N	Date Analyzed: <u>05/03/2006</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:1.00
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u> Q
71-43-2Benzene 108-88-3Toluene 100-41-4Ethylbenzene 1330-20-7Total Xylenes	5.0 U 5.0 U 5.0 U 15 U

Lab Name: SIL Buffalo Contract: 97863	USSB-12 10-12
Lab Code: RECNY Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID: A6453601
Sample wt/vol: 4.09 (g/mL) G	Lab File ID: R8956.RR
Level: (low/med) MFD	Date Samp/Recv: 04/26/2006 04/27/2006
% Moisture: not dec5, Heated Purge: N	Date Analyzed: <u>04/29/2006</u>
GC Column: DB-624 ID: \(\frac{0.25}{mm}\)	Dilution Factor: 4.00
Soil Extract Volume: 10000 (vil.)	Soil Aliquot Volume:100.00 (uL)
CAS NO. COMPOUND	CONCEVERATION UNITS: (ug/L or ug/Kg) <u>ug/Kg</u> Q
71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes	350 J 10000 7200 100000
	Not used-data is suspect. 6/23/06m

Lab Name	e: STL Buffalo	Contract: 978	863 US	SB-12 14-	15
Lab Code	: <u>RECNY</u> Ca	se No.: SAS No.: _	SDG No.:		
Matrix:	(soil/water)	SOIL.	Lab Sample ID:	A6453602	
Sample w	rt/vol:	4.93 (g/mL) <u>G</u>	Lab File ID:	01815.RR	
Level:	(low/med) <u>I</u>	<u>MO</u>	Date Samp/Recv:	04/26/2006	04/27/2006
% Moistu	re: not dec	5 Heated Purge: N	Date Analyzed:	05/02/2006	
GC Colum	n: <u>DB-624</u>	ID: <u>0.25</u> (mm)	Dilution Factor:	1.00	
Soil Ext	ract Volume: _	(uL)	Soil Aliquot Volu	me:	(uL)
	CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>U</u>	G/KG	Q
	71-43-2	-Benzene -Ethylbenzene		5 U	
	108-88-3	-Eulymenzene -Toluene		1 J	
·	1330-20-7	-Total Xylenes		3 J	
	<u></u>	-		- 10	l l

Lab Name	: STL Buffal	<u>O</u> Contract: <u>97863</u>	<u>US</u>	SB-13 1	l0-12
		ase No.: SAS No.:		:	
Matrix:	(soil/water)	SOIL	Lab Sample: ID:	<u>A6453604</u>	
Sample w	t/vol:	5.05 (g/mL) <u>G</u>	Lab File ID:	Q1817.RR	<u> </u>
Level:	(low/med)	LOW	Date Samp/Recv:	04/26/20	06 04/27/2006
% Moistu	re: not dec.	5 Heated Purge: Y	Date Analyzed:	05/02/20	006
GC Colum	n: <u>DB-624</u>	ID: <u>0.25</u> (mm)	Dilution Factor:	1.00	· [
Soil Ext	ract Volume:	(uL)	Soil Aliquot Volu	me:	(uL)
i	CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) L	G/KG	Q
	108-88-3	Benzene Ethylbenzene Toluene Total Xylenes		5 5 5	n n n

Lab Name: S	TL Buffalo	C	Contract: 97863	US	.*	SB-13	14-15.7	·
Lab Code: R	ECNY Case	∍ No.:	SAS No.:	SDG N	ю.:	-		
Matrix: (so	il/water) <u>sc</u>	OIL.		Lab Sa	mple ID:	<u>A645360</u>	5	
Sample wt/vo	ol:	<u>5.10</u> (g/m L) <u>G</u>	}	Lab Fi	le ID:	<u>01818.R</u>	R	
Level: (lo	ow/med) <u>IC</u>	<u>w</u>		Date S	amp/Recv:	04/26/2	006 04/	27/2006
% Moisture:	not dec	6 Heated	Purge: Y	Date A	nalyzed:	05/02/2	006	
GC Column: <u>I</u>	DB-624	ID: <u>0.25</u> (mm)	Diluti	on Factor	:1.0	<u>o</u>	
Soil Extract	: Volume:	(uL)		Soil A	liquot Vo	olume:	(1	n <u>r</u>)
CAS	S NO.	COMPOUND		CONCENTRAT			Q	
100 108	1 - 88-3	Ethylbenzene				5 5 3 4	U U J	

Lab Name	e: STL Buffalo Contract: 97863 U	<u>JS</u>	SB-14 11-12
Lab Code	e: RECNY Case No.: SAS No.:	SDG No.:	
Matrix:	(soil/water) SOIL	Lab Sample ID:	A6453606
Sample w	t/vol: <u>4.00</u> (g/mL) <u>G</u>	Lab File ID:	N6430.RR
Level:	(low/med) MED	Date Samp/Recv:	04/26/2006 04/27/2006
% Moistu	re: not dec. <u>17</u> Heated Purge: N	Date Analyzed:	<u>05/02/2006</u>
GC Colum	n: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	50.00
Soil Ext	ract Volume: 10000 (uL)	Soil Aliquot Volu	me: <u>100.00</u> (uL)
	CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>U</u>	<u>G/KG</u> Q
	71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes	75 530 140	00

Lab Name: STL Buffalo Contract: 97863 US	}	SB-14 14-15	
Lab Code: RECNY Case No.: SAS No.:	SDG No.:	_	
Matrix: (soil/water) SOIL	Lab Sample ID:	A6453607	
Sample wt/vol: 5.13 (g/mL) G	Lab File ID:		
Level: (low/med) <u>Low</u>	Date Samp/Recv:	<u>04/26/2006</u> <u>0</u> 4	1/27/2006
% Moisture: not dec9 Heated Purge: Y	Date Analyzed:		
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:		
Soil Extract Volume: (uL)	Soil Aliquot Volu		(uL)
CAS NO. COMPOUND	NKENTRATION UNITS: (ug/L or ug/Kg) <u>u</u>	S/KG Q	
71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes		2 2 3 8 8	

Lab Name: STL Buffalo Contract: 97863	US SB-15 12-14
Lab Code: RECNY Case No.: SAS No.:	• *
Matrix: (soil/water) SOIL	Lab Sample ID: <u>A6453608</u>
Sample wt/vol: 5.12 (g/mL) G	Lab File ID: 01820.RR
Level: (low/med) <u>Low</u>	Date Samp/Recv: 04/26/2006 04/27/2006
% Moisture: not dec7 Heated Purge: Y	Date Analyzed: 05/02/2006
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:1.00
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
CAS NO. COMPOUND	CONCENTRATION UNITS: (Ug/L or Ug/Kg) UG/KG Q
71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes	5 U 5 U 3 J 16 U

Lab Name: STL Buffalo	2 Contract: <u>97863 U</u>	<u>s</u>	SB-16 10	-12
Lab Code: <u>RECNY</u> Ca	ase No.: SAS No.:	_ SDG No.:		
Matrix: (soil/water)	SOIL	Lab Sample ID:	<u>A6453609</u>	<u>.</u> _
Sample wt/vol:	<u>4.98</u> (g/mL) <u>G</u>	Lab File ID:	01821.RR	
Level: (low/med)	LOW	Date Samp/Recv:	04/26/200	<u>6 04/27/2006</u>
% Moisture: not dec.	<u>15</u> Heated Purge: Y	Date Analyzed:	05/02/200	<u>6</u>
GC Column: <u>DB-624</u>	ID: <u>0.25</u> (mm)	Dilution Factor:	1.00	
Soil Extract Volume:	(uL)	Soil Aliquot Volu	me:	(uL)
CAS NO.		CONCENTRATION UNITS: (ug/L or ug/Kg) <u>L</u>	G/KG	Q
108-88-3	Ethylbenzene		34 2 20 15	

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Lab Name: SIL Buffalo Contract: 97863	US SB-17 12-14
Lab Code: RECNY Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID: <u>A6453611</u>
Sample wt/vol: 5.04 (g/mL) G	Lab File ID: <u>Q1823.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 04/26/2006 04/27/2006
% Moisture: not dec. <u>12</u> Heated Purge: <u>Y</u>	Date Analyzed: 05/02/2006
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:1.00
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/KG</u> Q
71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes	4 J 6 U 4 J 3 J

Lab Name: STL Buffalo Contract: 9786	3 US SB-17 9-11
Lab Code: RECNY Case No.: SAS No.:	·
Matrix: (soil/water) SOIL	Lab Sample ID: A6453610
Sample wt/vol: $\underline{5.07}$ (g/mL) \underline{G}	Lab File ID: <u>Q1822.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 04/26/2006 04/27/2006
% Moisture: not dec. 19 Heated Purge: Y	Date Analyzed: <u>05/02/2006</u>
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.00
Soil Extract Volume: (uL)	Soil Aliquot Volume:(uL)
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>UG/kg</u> Q
71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes	12 7 11 36

6/23/06

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Lab Name: STL Buff	falo (Contract: <u>97863</u>	US	- SB-DU	P-042606	5
Lab Code: RECNY	Case No.:	SAS No.:	SDG No.: _	5	B12	10-12
Matrix: (soil/wate				ID: <u>A64536</u>		•
Sample wt/vol:	<u>5.03</u> (g/mL) <u>(</u>	3	Lab File ID	: <u>01816.</u>	RR	
Level: (low/med)	LOW		Date Samp/R	ecv: <u>04/26/</u>	2006 <u>04</u> /	27/2006
% Moisture: not de	c. 4 Heated	Purge: <u>Y</u>	Date Analyz	ed: <u>05/02/</u> ;	2006	
GC Column: <u>DB-624</u>	ID: <u>0.25</u> (mm	v ·	Dilution Fac	ctor:1.0	<u> 20</u>	. : .
Soil Extract Volum	e: (uL)		Soil Aliquot	: Volume:	(
CAS NO.	COMPOUND		CONCENTRATION UN (ug/L or ug/Kg)	NITS: UG/KG	Q	
100-41-4 108-88-3	Benzene Ethylbenzene Toluene Total Xylenes			5 5 5 15	n n	

METHOD 8270-HSL POLYNUCLEAR AROMATIC HYDROCARBONS ANALYSIS DATA SHEET

Lab Name: STL Buffalo	Contract: 97863 US	· .	RB-042606
Lab Code: RECNY Case No.: _	SAS No.:	SDG No.:	
Matrix: (soil/water) WATER		Lab Sample ID:	<u>A6453619</u>
Sample wt/vol: <u>1030.0</u> (g/	/mL) ML	Lab File ID:	<u>V14448.RR</u>
Level: (low/med) <u>LOW</u>		Date Samp/Recv:	04/26/2006 04/27/2006
% Moisture: decanted:	(Y/N) <u>N</u>	Date Extracted:	 -
Concentrated Extract Volume: 10	<u>000</u> (uL)	Date Analyzed:	05/03/2006
Injection Volume: 1.00(uL)		Dilution Factor:	1.00
GPC Cleamin: (V/M) M with F	•		

CAS NO.	COMPOUND	CONCENTRATION UNIT	UNITS:	
	COMPOUND	(ug/L or ug/Kg)	<u>UG/L</u>	Q
83-32-9			10	1
208-96-8	Acenaphthylene		-	ប
120-12-7	Anthracene		10	ប
56-55-3	Benzo (a) anthracene		10	ט
205-99-2	Benzo (b) fluoranthene		10	U
207-08-9	Benzo (k) fluoranthene		10	U
191-24-2	Benzo (ghi) perylene		10	U
50-32-0	Benzo (a) pyrene		10	U
210-22-0	Benzo (a) pyrene		10	ט
210-01-3	Chrysene		10	U
227/0-3	Dibenzo (a, h) anthracene		10	lu
200-44-U	Fluoranthene		10	Ū
86-73-7	Fluorene		10	Ιΰ
L93-39-5	Indeno (1,2,3-cd) pyrene		10	Ü
91-57-6	2-Methylnaphthalene		10	1 -
91-20-3	Naphthalene		10	ր
35-01-8	Phenanthrene			ប្រ
L29-00-0	Pyrrene		10	U
132-64-9	Dibenzofuran		10	U
			10	U

Lab Name: STL Buffalo	Contract: 97863 US		SB-12 10-12
Lab Code: RECNY Case No.: _	SAS No.:	SDG No.:	
Matrix: (soil/water) SOIL	•	Lab Sample ID:	A6453601
Sample wt/vol:30.12 (g,	/mL) <u>G</u>		W08958,RR
Level: (low/med) <u>LOW</u>		Date Samp/Recv:	04/26/2006 04/27/2006
% Moisture:5 decanted:	(Y/N) <u>N</u>	Date Extracted:	
Concentrated Extract Volume: 10	<u>)00</u> (uL)	Date Analyzed:	05/01/2006
Injection Volume: 1.00(uL)		Dilution Factor:	1.00
GPC Cleanup: (Y/N) N pH:			

CAS NO.	COMPOUND	CONCENTRATION UNIT	is: <u>UG/KG</u>	ı. Q
83-32-9	Acenaphthene		340	1
208-96-8	Acenaphthylene			ភ
120-12-7	Anthracene		120	J
56-55-3	Benzo (a) anthracene		34	J
205-99-2	Benzo(b) fluoranthene		180	J
207-08-9	Benzo (k) fluoranthene		350	-
191-24-2	Benzo(ghi) perylene		120	J
50-32-8	Benzo (a) pyrene	- <u>-</u>	380	
218-01-0	Chrysene		240	J
53-70-2	Dibenzo (a, h) anthracene		230	J
206-44.0	Fluoranthene		80	J
26_72 7	Fluorene		400	
102 20 5	Fluorene		340	ט
L93-39-5	Indeno (1,2,3-cd) pyrene		290	lπ
71-57-6	2-Methylnaphthalene		340	U
11-20-3	Naphthalene		24	T
35-01-8	Phenanthrene		150	, T
L29-00-0-~-	Pyrene	·	330	l ⁺
132-64-9	Dibenzofuran			Ų,
			340	U

Client No.

Lab Name: STL Buffalo	Contract: 97863 US		SB-12 14-	15
Lab Code: RECNY Case No.:	SAS No.:	SDG No.:		
Matrix: (soil/water) SOIL		Lab Sample ID:	A6453602	
Sample wt/vol:30,27 (c	g/mL) <u>G</u>	Lab File ID:	W08959.RR	<u> </u>
Level: (low/med) LOW		Date Samp/Recv:	04/26/2006	04/27/2006
% Moisture:7 decanted:	(Y/N) <u>N</u>	Date Extracted:	04/28/2006	
Concentrated Extract Volume: 1	000 (uL)	Date Analyzed:	05/01/2006	
Injection Volume: 1.00 (uL)		Dilution Factor:	1.00	
GPC Cleanup: (Y/N) N pH:				

CAS NO.	COMPOUND	CONCENTRATION UNIT (ug/L or ug/kg)	rs: <u>UG/KG</u>	Q	
83-32-9			350	U	1 *** ** * *
208-96-8	Acenaphthylene		350	1 -	
120-12-7	Anthracene			ប	en fig.
56-55-3	Benzo (a) anthracene		350	U	
205-99-2	Benzo (b) fluoranthene		350	U	100
207-08-9	Benzo (k) fluoranthene		31	J	
191-24-2	Benzo (ghi) perylene		350	U	
50-32-8	Benzo (a) pyrene		42	J	1.00
218-01-0	Chrysene		350	U	1.5
53-70-3	Dibana (1)		350 '	U	
35-70-3 20 <i>-</i> 44 0	Dibenzo (a, h) anthracene		350	U	
200 -44-0	Fluoranthene		21	J	
102 20 6	Fluorene		350	Ū	
193-39-5	Indeno (1,2,3-cd) pyrene		32	.7	
91-57-6	2-Methylnaphthalene		22	1.7	
91-20-3			350	177	A-2
85-01-8	Phenanthrene	·	350	10	991
L29-00-0	Pyrene		350 350	10	
132-64-9	Dibenzofuran			U	
			350	U	

Lab Name: SIL Buffalo Contract: 97863	US SB-13 10-12
Lab Code: RECNY Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) SOIL	Lab Sample ID: A6453604
Sample wt/vol: 30.33 (g/mL) G	Lab File ID: W08968.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 04/26/2006 04/27/2006
% Moisture:5 decanted: (Y/N) N	Date Extracted: 04/28/2006
Concentrated Extract Volume: 1000 (uL)	Date Analyzed: <u>05/02/2006</u>
Injection Volume: 1.00 (uL)	Dilution Factor: 1.00
GPC Cleanup: (Y/N) N pH:	•
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/kg	Q
83-32-9	Acenaphthene		71	J
208-96-8	Acenaphthylene		340	Ū
	Anthracene		340	Ū
56 - 55 - 3	Benzo (a) anthracene		340	Ū
205-99-2	Benzo (b) fluoranthene		340	Ū
207-08-9	Benzo(k) fluoranthene		340	Ū
191-24-2	Benzo(ghi)perylene		340	U
50 - 32-8	Benzo (a) pyrene		340	Ü
218-01-9	Chrysene		340	Ü
53-70-3	Dibenzo (a, h) anthracene		340	U
206-44-0	Fluoranthene		340	TT.
36-73-7	Fluorene		340	lΰ
L93-39-5	Indeno (1,2,3-cd) pyrene		340	Ū
9 1-57-6	2-Methylnaphthalene		98	lσ
91-20-3	Naphthalene		180	l,T
35-01-8- -	Phenanthrene		72	J
L29-00-0	Pyrene		340	li i
	Dibenzofuran_		340	ŭ

Lab Name: STL Buffal	lo Contract: 97863 US		SB-13 14-	15.7
Lab Code: RECNY	Case No.: SAS No.:	SDG No.:		*
Matrix: (soil/water)	SOIL	Lab Sample ID:	<u>A6453605</u>	<u>.</u>
Sample wt/vol:	- -	Lab File ID:		•
Level: (low/med)		Date Samp/Recv:		-
	decanted: (Y/N) N	Date Extracted:		
Concentrated Extract		Date Analyzed:	05/02/2006	e e e e e e e e e e e e e e e e e e e
Injection Volume:		Dilution Factor:	1.00	e tau
GPC Cleanup: (Y/N) I	<u>v</u> ph:			***

120-12-7	CAS NO.	COMPOUND	CONCENTRATION UNIT (ug/L or ug/kg)	is: <u>UG/KG</u>	· Q
20 ј	208-96-8 120-12-7 56-55-3 205-99-2 207-08-9 191-24-2 50-32-8 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 91-57-6 91-20-3 85-01-8 129-00-0	AcenaphthyleneAnthraceneBenzo (a) anthraceneBenzo (b) fluorantheneBenzo (k) fluorantheneBenzo (ghi) peryleneBenzo (a) pyreneChryseneDibenzo (a, h) anthraceneFluorantheneFluoreneIndeno (1,2,3-cd) pyrene2-MethylnaphthaleneNaphthalene		340 340 340 340 340 340 340 340 340 340	מנענים

Lab Name: STL Buffalo Contract: 97863 US	SB-14 11-12
Lab Code: REKONY Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) SOIL	Lab Sample ID: <u>A6453606</u>
Sample wt/vol: 30.36 (g/mL) G	Lab File ID: W08972.RR
Level: (low/med) LOW	Date Samp/Recv: 04/26/2006 04/27/2006
% Moisture: <u>19</u> decanted: (Y/N) N	Date Extracted: 04/28/2006
Concentrated Extract Volume: 1000 (uL)	Date Analyzed: 05/02/2006
Injection Volume: 1.00 (uL)	Dilution Factor: 20.00
GPC Clearup: (Y/N) N pH:	

CAS NO.	COMPOUND	CONCEMIRATION UNI (ug/L or ug/Kg)	TS: <u>UG/KG</u>	Q
83-32 - 9	Acenaphthene Acenaphthylene		4800 18000	J
120-12-7	Anthracene		29000	
205-99-2	Benzo (a) anthracene Benzo (b) fluoranthene		35000 31000	
207-08-9	Benzo(k) fluoranthene		10000	
50-32-8	Benzo (ghi) perylene Benzo (a) pyrene		13000 28000	
218-01-9	Chrysene		27000	
206-44-0	Dibenzo (a, h) anthracene Fluoranthene		4900 66000	J
86-73-7	Fluorene		23000	
91-57-6	Indeno (1,2,3-cd) pyrene 2-Methylnaphthalene		14000 19000	
91-20-3	Naphthalene Phenanthrene		24000	
129-00-0	Pyrene		66000 46000	
132-64-9	Dibenzofuran		16000	

Lab Name: STL Buffa	lo Contract: 97863 US		SB-14 14-15
Lab Code: <u>RECNY</u>	Case No.: SAS No.:	SDG No.:	
Matrix: (soil/water	SOIL	Lab Sample ID:	<u>A64536</u> 07
Sample wt/vol:	30.13 (g/mL) <u>G</u>	Lab File ID:	
Level: (low/med)	TOM		04/26/2006 04/27/2006
% Moisture:10	-	Date Extracted:	_
Concentrated Extract		Date Analyzed:	05/02/2006
Injection Volume:		Dilution Factor:	10.00
GPC Cleanup: (Y/N)	<u>N</u> ph:		
:			

83-32-9	CAS NO.	COMPOUND	CONCENTRATION UN (ug/L or ug/kg)	ITS: <u>UG/KG</u>	0
	208-96-8 120-12-7 56-55-3 205-99-2 207-08-9 191-24-2 50-32-8 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 91-20-3 85-01-8	AcenaphthyleneAnthraceneBenzo (a) anthraceneBenzo (b) fluoranthene		5800 8800 31000 27000 10000 12000 24000 22000 4400 54000 3500 12000 980 2500 18000	J

Lab Name: <u>STL Buffalo</u>	Contract: 97863 US		SB-15 12-14
Lab Code: RECNY Case No.:	SAS No.:	SDG No.:	
Matrix: (soil/water) <u>SOIL</u>		Lab Sample ID:	A6453608
Sample wt/vol: 30.12 (g/mL) (g/mL)	<u>G</u>	Lab File ID:	W08974.RR
Level: (low/med) <u>LOW</u>	•	Date Samp/Recv:	04/26/2006 04/27/2006
% Moisture: 8 decanted: (Y/r	и) й	Date Extracted:	04/28/2006
Concentrated Extract Volume: 1000 (ul	L)	Date Analyzed:	05/02/2006
Injection Volume: 1.00 (uL)		Dilution Factor:	1,00
GPC Cleanup: (Y/N) N pH:		5 ,	

CAS NO.	CONTRACTOR TO	CONCENTRATION UNI	rs:	
CAS IVO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
83-32-9	Acenaphthene		140	J
208-96-8	Acenaphthylene		590	١
120-12-7	Anthracene		1000	1
56-55-3	Benzo (a) anthracene	· · · · · · · · · · · · · · · · · · ·	2300	
205-99-2 -	Benzo (b) fluoranthene		2700	
207-08-9	Benzo (k) fluoranthene		2800	ŀ
191-24-2	Benzo(ghi)perylene			1
50-32-8	Benzo (a) pyrene		800	1
218-01-9	Chrysene		1700	
53-70-3	Dibenzo (a, h) anthracene		2200	_
206-44-0	Fluoranthene		310	J
86-73-7	Fluorene		5400	1
193-39-5	Indeno (1,2,3-cd) pyrene		780	ł
91-57-6	2-Methylnaphthalene		840	1
91-20-3	Naphthalene		250	J
95_01_0	Phenanthrene		260	J
129-00-0	Drawn a control of the control of th		4400	
122-64 O	Pyrene		4000	1
132-04-3	Dibenzofuran		460	1

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METHOD 8270 ~ HSL PAH SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>STL Buffalo</u>	Contract: 97863 US	SB-16 10-12
Lab Code: <u>RECNY</u> Case No	.: SAS No.:	SDG No.:
Matrix: (soil/water) SOIL		Lab Sample ID: A6453609
Sample wt/vol: 30.1	7 (g/mL) <u>G</u>	Lab File ID: W08975.RR
Level: (low/med) <u>LOW</u>		Date Samp/Recv: 04/26/2006 04/27/2006
% Moisture: <u>25</u> decant	ted: (Y/N) <u>N</u>	Date Extracted: 04/28/2006
Concentrated Extract Volume	: <u> 1000</u> (uL)	Date Analyzed: 05/02/2006
Injection Volume: 1.00 (u	正)	Dilution Factor: 1.00
CDC Cleaning (V/AT) AT		

CAS NO.	COMPOUND	CONCENTRATION UNIT (ug/L or ug/Kg)	S: <u>UG/KG</u>	Q
83-32-9	Acenaphthene	•	38	J
208-96-8	Acenaphthylene		440	Ü
120-12-7	Anthracene		440	Ü
56 - 55 - 3	Benzo (a) anthracene		440	U
205-99-2	Benzo(b) fluoranthene			10
207-08-9	Benzo(k) fluoranthene		440	U
191-24-2	Benzo (ghi) perylene		440	ש
50-32-8	Benzo (a) pyrene		440	ַד
218-01-9	Chrysene		44 0	U
33-70-3	Dibenzo (a, h) anthracene		440	U
05-70-5 06-44-0	Fluoranthene	· · ·	440	ַט
100-44-0	Fluoranthene		28	J
02 20 5	Fluorene		440	U
93-39 - 5	Indeno (1,2,3-cd) pyrene		440	Ū
T-5/-6	2-Methylnaphthalene		67	1,7
1-20-3	Naphthalene		130	1.7
5-01-8	Phenanthrene		45	14
29-00-0 -	Pyrene		440	1,7
32-64-9	Dibenzofuran			lu.
			440	ĮŪ

Lab Name: <u>STL Buffalo</u>	Contract: 97863 US		SB-17 12-14
Lab Code: RECNY Case No.:	SAS No.:	SDG No.:	
Matrix: (soil/water) SOIL		Lab Sample ID:	A6453611
Sample wt/vol: 30.85 (g/mL)	<u>G</u>	Lab File ID:	W08977.RR
Level: (low/med) <u>LOW</u>	•	Date Samp/Recv:	04/26/2006 04/27/2006
% Moisture: 7 decanted: (Y/	N) <u>N</u>	Date Extracted:	04/28/2006
Concentrated Extract Volume: 1000 (u	L)	Date Analyzed:	05/02/2006
Injection Volume: 1.00(uL)		Dilution Factor:	1.00
GPC Cleanup: (Y/N) N pH:			

CAS NO.	COMPOUND	CONCENTRATION UNIT (ug/L or ug/Kg)	rs: <u>UG/KG</u>	Q
208-96-8 120-12-7	Acenaphthene Acenaphthylene Anthracene		160 330 990	J
205-99-2 207-08-9	Benzo (a) anthracene Benzo (b) fluoranthene Benzo (k) fluoranthene		1000 1100 1200	
191 <i>-</i> 24-2 50-32-8	Benzo (ghi) perylene Benzo (a) pyrene Chrysene		350 730	
53-70-3 206-44-0	Dibenzo (a,h) anthracene Fluoranthene Fluorene		840 120 2400	J
193-39-5 91-57-6	Indeno (1,2,3-cd) pyrene 2-Methylnaphthalene		900 350 460	
91-20-3 35-01-8 L29-00-0	Naphthalene Phenanthrene		460 3500	
L32-64-9	Dibenzofuran		1800 560	

Client No.

Lab Name: STL Buffalo	Contract: 97863 US		SB-17 9-11
Lab Code: RECNY C	ase No.: SAS No.:	SDG No.:	
Matrix: (soil/water)	SOIL	Lab Sample ID:	<u>A6453610</u>
Sample wt/vol:	30.39 (g/mL) <u>G</u>	Lab File ID:	W09143.RR
Level: (low/med)	LOW	Date Samp/Recv:	04/26/2006 04/27/2006
% Moisture: 19	decanted: (Y/N) N	Date Extracted:	04/28/2006
Concentrated Extract		Date Analyzed:	05/10/2006
Injection Volume:		Dilution Factor:	5.00
GPC Cleanup: (Y/N) N	pH:		

CAS NO.	COMPOUND	CONCENTRATION UNI (ug/L or ug/Kg)	TS: <u>UG/KG</u>	Q	
208-96-8 120-12-7 56-55-3 205-99-2 207-08-9 191-24-2 50-32-8 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 91-20-3 85-01-8	AcenaphtheneAcenaphthylene		210 2000 150 200 160 100 2000 120 150 2000 400 430 2000 460 370 860 310 340	מהמהמהמהמההמת	17617-57-57-57-57-5

1/106/

Client No.

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Lab Name: SIL Buffalo Contract: 97863 US		SB-DUP-042606
Lab Code: RECONY Case No.: SAS No.:	SDG No.:	· .
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A6453603
Sample wt/vol: 30.73 (g/mL) G	Lab File ID:	W08960.RR
Level: (low/med) LOW	Date Samp/Recv:	04/26/2006 04/27/2006
% Moisture: 6 decanted: (Y/N) N	Date Extracted:	04/28/2006
Concentrated Extract Volume: 1000 (uL)	Date Analyzed:	05/01/2006
Injection Volume: 1.00 (uL)	Dilution Factor:	1.00
GPC Clearup: (Y/N) N pH:		×. ·

CRC NO.		CONCENTRATION UNITS:		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
83-32-9	Acenaphthene		38	J
208-96-8	Acenaphthylene		310	J
	Anthracene		120	l.T
56-55-3	Benzo (a) anthracene		510	١
205-99-2	Benzo(b) fluoranthene		940	
207 - 08-9	Benzo(k) fluoranthene		240	JJ
191-24-2	Benzo(ghi)perylene		920	١
50-32-8	Benzo (a) pyrene		660	- {
218-01-9	Chrysene		610	Į.
53 - 70-3	Dibenzo(a,h)anthracene		210	1.7
206-44-0	Fluoranthene		1100	١٥
	Fluorene		340	U
L93-39-5	Indeno (1,2,3-cd) pyrene		740	١
91 - 57 - 6	2-Methylnaphthalene		58	J
91-20-3	Naphthalene		99	1.7
35-01-8	Phenanthrene		380	ا
29-00-0	Pyrene		810	
L32-64-9	Dibenzofuran		19	J
 _				

Client No.

Lab Name: STL Buffalo Contract: 97863 US		SS-01
Lab Code: RECNY Case No.: SAS No.:	SDG No.:	·
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A6453612
Sample wt/vol: 30.13 (g/mL) G	Lab File ID:	W09042.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	04/26/2006 04/27/2006
% Moisture: 23 decanted: (Y/N) N	Date Extracted:	05/03/2006
Concentrated Extract Volume: 1000 (uL)	Date Analyzed:	05/05/2006
Injection Volume: 1.00 (uL)	Dilution Factor:	10.00
GPC Cleanup: (Y/N) N pH:		

CAS NO.	COMPOUND	CONCENTRATION UN (ug/L or ug/Kg)	ITS: <u>UG/KG</u> _	Q	
83-32-9	Acenaphthene		900	J	7
208-96-8	Acenaphthylene		4300	ū	1
120-12 - 7	Anthracene		2400	l ₃	ı
56-55-3	Benzo(a) anthracene	····	7400	٦	ſ
205-99-2	Benzo(b) fluoranthene				ı
207-08-9	Benzo(k) fluoranthene		8800	1_	1
191-24-2	Benzo (ghi) nervlene		2300	1	
50-32-8	Benzo(a) pyrene		4000	J	1
218-01-9	Chrysene		6600		1
53-70-3	Dibenzo (a,h) anthracene		7300		1
206-44-0	Fluoranthene		1200	J	ı
36-73-7	Fluorene		16000		1
93-39-5	Indeno (1,2,3-cd) pyrene		1100 4300		1
21-57-6	2-Methylnaphthalene		3700	J	
91-20-3	Naphthalene		4300	U	1
25-01-9	Naprichatene Phenanthrene		4300	ע,	
130-00-0 13-01-0	Prienanchrene		11000	B	
L29-00-0	ryrene		12000	ſ	
132-04-7	Dibenzofuran		4 30 4300	BJ	1

6/7/060

Client No.

Lab Name: STL Buffalo Contract: 97863 US	SS-02
Lab Code: RECNY Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) SOIL	Lab Sample ID: <u>A6453614</u>
Sample wt/vol: 30.36 (g/mL) G	Lab File ID: W09046.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 04/26/2006 04/27/200
% Moisture:28 decanted: (Y/N) N	Date Extracted: 05/03/2006
Concentrated Extract Volume: 1000 (uL)	Date Analyzed: <u>05/05/2006</u>
Injection Volume: 1.00(uL)	Dilution Factor:10.00
GPC Cleanup: (Y/N) N pH:	the transfer of the second
	NCENTRATION UNITS: (ug/L or ug/kg) <u>UG/kg</u> Q
83-32-9Acenaphthene	4500 U
208-96-8Acenaphthylene	4500 W D
1 1 / U = 1 / = = = = = ADEDEDEDE	1 <i>66</i> 0 17 1
205-99-2Penzo(h) fluoranthene	4200
1207-08-9Benzo(k) fluoranthene	1000
1131-24-2Benzo (dn1) berviene	1300 /1.7 1
50-32-8Benzo (a) pyrene	2900 J
1218-01-9	1 2100 : 17 1
53-70-3Dibenzo (a.h) anthracene	430 7
206-44-0Fluoranthene	6800
185=/5=/=====#INOTPDA	i AEAA Itt I
193-39-5Indeno (1,2,3-od) pyrene	1300
191-5/-62-Metrivinaphthalene	1 4500 lit l
191-20-3Naphthallene	1 4500 III I
85-01-8Phenanthrene	2800
129-00-0Pyrene	4900
132-64-9Dibenzofuran	4500

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Client No.

Lab Name: STL Buffalo	Contract: <u>97863 US</u>	3	SS-03	· <u> </u>	
Lab Code: RECNY Case No.:	SAS No.:	SDG No.:		4 .D	
Matrix: (soil/water) SOIL		Lab Sample ID:			
Sample wt/vol: 30.42 (g/mL) G	<u> </u>	Lab File ID:			
Level: (low/med) <u>LOW</u>		Date Samp/Recv			_
% Moisture: <u>29</u> decanted: (Y/N)) <u>N</u>	Date Extracted			
Concentrated Extract Volume: 1000 (uL))	Date Analyzed:	05/05/2	006	1300 1300
Injection Volume: 1.00 (uL)		Dilution Factor			
GPC Cleanup: (Y/N) N pH:		* 4		1 - V - V - V - V - V - V - V - V - V -	De la companya di santa di santa di santa di santa di santa di santa di santa di santa di santa di santa di sa Della companya di santa di santa di santa di santa di santa di santa di santa di santa di santa di santa di sa
CAS NO. COMPOUND		ONCENTRATION UNITS (ug/L or ug/Kg)	: UG/KG	Q	. •
83-32-9Acenaphthene 208-96-8Acenaphthylene 120-12-7	cene nthene		4600 4600 290 1900 2100	ប ប ប ប ប ប	
207-08-9Benzo(k) fluora	ntnene		860	1.7	1

191-24-2----Benzo(ghi)perylene

53-70-3-----Dibenzo (a,h) anthracene

193-39-5----Indeno(1,2,3-cd)pyrene

91-57-6----2-Methylnaphthalene

50-32-8-----Benzo (a) pyrene_

206-44-0----Fluoranthene

91-20-3----Naphthalene

85-01-8-----Phenanthrene

132-64-9-----Dibenzofuran

218-01-9-----Chrysene

86-73-7----Fluorene

129-00-0----Pyrene

1/106m

860

780

1800

1800

270

3200

4600

780

4600

4600

2500

4600

-870-4600

J

J

J

J

J

J

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Client No.

Tab Name CON DUESA	*	SS-04	
Lab Name: STL Buffalo Contract: 97863 US			
Lab Code: RECNY Case No.: SAS No.:	SDG No.:		
Matrix: (soil/water) SOIL	Lab Sample ID:	A6453616	×
Sample wt/vol: 30.95 (g/mL) G	Lab File ID:	W09048.RR	
Level: (low/med) LOW	Date Samp/Recv:	04/26/2006 04/	<u>27/2006</u>
% Moisture: <u>25</u> decanted: (Y/N) N	Date Extracted:	05/03/2006	*
Concentrated Extract Volume: 1000 (uL)	Date Analyzed:	05/05/2006	en en en en en en en en en en en en en e
Injection Volume: 1.00(uL)	Dilution Factor:	10.00	
GPC Cleanup: (Y/N) N pH:	19.7		
	NCENIRATION UNITS: ug/L or ug/Kg)		
83-32-9Acenaphthene		370 J]
208-96-8Acenaphthylene		200 ປັ	
120-12-7Anthracene		200 J	
56-55-3Benzo (a) anthracene			
205-99-2Benzo (b) fluoranthene	1 3	600 J	İ
	Δ.		· .
207-08-9Benzo(k)fluoranthene	4	600 J	N .
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (chi) pervlene	4	600 Л 000 Л	N .
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene	1 1 2 3	600 J 000 J 600 J 400 J 200 J	
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene 218-01-9Chrysene	1 1 3	600 J 000 J 600 J 400 J 200 J	
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene 218-01-9Chrysene 53-70-3Dibenzo (a, h) anthracene	1 1 3	600 J 000 J 600 J 400 J 200 J	
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene 218-01-9Chrysene 53-70-3Dibenzo (a, h) anthracene 206-44-0Fluoranthene	1 1 3 3	600 J 000 J 600 J 400 J 200 J 600 J 450 J	
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene 218-01-9Chrysene 53-70-3Dibenzo (a, h) anthracene 206-44-0Fluoranthene 86-73-7Fluorene	1 1 3 3 8	600 J 000 J 600 J 400 J 200 J 600 J 450 J 900 J	
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene 218-01-9Chrysene 53-70-3Dibenzo (a, h) anthracene 206-44-0Fluoranthene 86-73-7Fluorene 193-39-5Indeno (1, 2, 3-cd) pyrene	4 1 3 3	600 J 000 J 400 J 200 J 600 J 450 J 900 J 500 4200 D J	U
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene 218-01-9Chrysene 53-70-3Dibenzo (a, h) anthracene 206-44-0Fluoranthene 86-73-7Fluorene 193-39-5Indeno (1,2,3-cd) pyrene 91-57-62-Methylnaphthal ene	4 1 1 3 3 3	600 J 000 J 400 J 200 J 600 J 450 J 900 J 500 4200 BJ J U	U
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene 218-01-9Chrysene 53-70-3Dibenzo (a, h) anthracene 206-44-0Fluoranthene 86-73-7Fluorene 193-39-5Indeno (1, 2, 3-cd) pyrene 91-57-62-Methylnaphthalene	4 1 1 3 3 3 8 1 4 4	600 J 000 J 400 J 200 J 450 J 900 J 500 /200 J J 200 U	U
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene 218-01-9Chrysene 53-70-3Dibenzo (a, h) anthracene 206-44-0Fluoranthene 86-73-7Fluorene 193-39-5Indeno (1,2,3-cd) pyrene 91-57-62-Methylnaphthalene 91-20-3Naphthalene 85-01-8Phenanthrene	4 1 1 3 3 3 8 1 4 4 4 5	600 J 000 J 400 J 200 J 450 J 900 J 500 4200 B U 200 U	U
207-08-9Benzo (k) fluoranthene 191-24-2Benzo (ghi) perylene 50-32-8Benzo (a) pyrene 218-01-9Chrysene 53-70-3Dibenzo (a, h) anthracene 206-44-0Fluoranthene 86-73-7Fluorene 193-39-5Indeno (1, 2, 3-cd) pyrene 91-57-62-Methylnaphthalene	4 1 1 3 3 3 8 1 4 4 4 5 6	600 J 000 J 400 J 200 J 450 J 900 J 500 /200 J J 200 U	U

6/7/Chm

METHOD 8270 - HSL PAH SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Client No.

Lab Name: STL Buffalo Contract: 97863 US		SS-05
Lab Code: RECNY Case No.: SAS No.:	-	•, •
Matrix: (soil/water) SOIL		A6453617
Sample wt/vol: 30.63 (g/mL) G	Lab File ID:	W09090.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	04/26/2006 04/27/2006
% Moisture: <u>26</u> decanted: (Y/N) N	Date Extracted:	05/03/2006
Concentrated Extract Volume: 1000 (uL)	Date Analyzed:	05/08/2006
Injection Volume: 1.00 (uL)	Dilution Factor:	1.00
GPC Clearup: (Y/N) N pH:	With a	
CON	CENTRATION UNITS:	

CAS NO.	COMPOUND	CONCENTRATION UNIT (ug/L or ug/Kg)	UG/KG	Q	
83-32-9	Acenaphthene		24	J	1
208-96-8	Acenaphthylene		-34-440	Bar	1,,
120-12-7	Anthracene		64	J	١٧
56-55-3	Benzo (a) anthracene		290		
205-99-2	Benzo (b) fluoranthene		400	Ţ	1
207-08-9	Benzo(k) fluoranthene			J	
191-24-2	Benzo (ghi) perylene		110	J	İ
50-32-8	Benzo (a) pyrene		130	J	
218-01-9	Chrysene		280	J	
53-70-3	Dibenzo (a, h) anthrace		300	Ţ	
206-44-0	Fluoranthene	1E	42	J	
86-73-7	Fluorene		620	I	1
193-39-5	Indeno (1,2,3-cd) pyre		-25-440	· DJ -	ان ا
91-57-6	2-Methylnaphthalene	ne	130	J	1
01_20.2	2-Weutymaphthatene		-38 440	BJ	IU.
91-20-3	Naphthalene		440	U]
85-01-8	Phenanthrene		320	78 T	
129-00-0	Pyrene		490		
132-64-9	Dibenzofuran_		440	U	

6/10/gr

METHOD 8270 - HSL PAH SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Client No.

Lab Name: STL Buffalo Contract: 97863 US		SS-06	A A S	
Lab Code: RECNY Case No.: SAS No.:	SDG No.:	<u> </u>		
Matrix: (soil/water) SOIL	Lab Sample ID:	<u>A6453618</u>	<u>} </u>	
Sample wt/vol: 30.57 (g/mL) G	Lab File ID:	W09091.R	R	• • •
Level: (low/med) <u>LOW</u>	Date Samp/Recv	04/26/20	06: 04/	27/2006
% Moisture: <u>27</u> decanted: (Y/N) N	Date Extracted:	05/03/20	06	•
Concentrated Extract Volume: 1000 (uL)	Date Analyzed:	05/08/20	<u>06</u>	•
Injection Volume: 1.00 (uL)	Dilution Factor	10,00	.	
GPC Cleanup: (Y/N) N pH:	$\tau_{r_{i}}$		i. ;	٠.
	ONCENIRATION UNITS (ug/L or ug/Kg)		Q	
83-32-9Acenaphthene		UG/KG]
83-32-9Acenaphthene 208-96-8Acenaphthylene		<u>UG/KG</u> 290	J],,
83-32-9Acenaphthene 208-96-8Acenaphthylene 120-12-7Anthracene		290 240 4/400	J BJ	Jυ
83-32-9Acenaphthene 208-96-8Acenaphthylene 120-12-7Anthracene 56-55-3Benzo(a) anthracene	(ug/L or ug/Kg)	290 240 4/400 880	J BJ J	U
83-32-9Acenaphthene 208-96-8Acenaphthylene 120-12-7Anthracene 56-55-3Benzo (a) anthracene 205-99-2Benzo (b) fluoranthene	(ug/L or ug/Kg)	290 240 4/400	J BJ J J	U
83-32-9Acenaphthene 208-96-8Acenaphthylene 120-12-7Anthracene 56-55-3Benzo (a) anthracene 205-99-2Benzo (b) fluoranthene 207-08-9Benzo (k) fluoranthene	(ug/L or ug/Kg)	290 249 4400 880 3100	J J J J	U
83-32-9Acenaphthene 208-96-8Acenaphthylene 120-12-7	(ug/L or ug/Kg)	290 240-4/400 880 3100 4000	J BJ J J	U
83-32-9Acenaphthene 208-96-8Acenaphthylene 120-12-7Anthracene 56-55-3	(ug/L or ug/Kg)	290 240 4/400 880 3100 4000 1100	J J J J J	U
83-32-9	(ug/L or ug/Kg)	290 240 4/400 880 3100 4000 1100 1400	J J J J J J	U
83-32-9	(ug/L or ug/Kg)	290 249 4/400 880 3100 4000 1100 1400 2800 3000 420	J J J J J J J	U
83-32-9	(ug/L or ug/Kg)	290 -240 4/400 880 3100 4000 1100 1400 2800 3000 420 6900	J J J J J J J J J J J J J J J J J J J	
83-32-9	(ug/L or ug/Kg)	290 240 4/400 880 3100 4000 1100 1400 2800 3000 420 6900 410 4/00	J J J J J J J J J	U
83-32-9	(ug/L or ug/Kg)	290 -249 4/400 880 3100 4000 1100 1400 2800 3000 420 6900 -410 4/400 1300	J J J J J J J J J J J J J J J J J J J	
83-32-9	(ug/L or ug/Kg)	290 249 4/400 880 3100 4000 1100 1400 2800 3000 420 6900 410 4/100 1300 4400	J J J J J J J J J	

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4400

4300 5200 4400

85-01-8-----Phenanthrene 129-00-0-----Pyrene 132-64-9-----Dibenzofuran

METHOD 8270 - HSL PAH SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Client No.

Lab Name: STL Buffalo Contract: 97863 US	SS-FD-042606
Lab Code: RECNY Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) SOIL	Lab Sample ID: A6453613
Sample wt/vol: 30.30 (g/mL) G	Lab File ID: W09045.RR
Level: (low/med) <u>Low</u>	Date Samp/Recv: 04/26/2006 04/27/2006
% Moisture:28 decanted: (Y/N) N	Date Extracted: <u>05/03/2006</u>
Concentrated Extract Volume: 1000 (uL)	Date Analyzed: <u>05/05/2006</u>
Injection Volume: 1.00 (uL)	Dilution Factor:20.00
GPC Cleanup: (Y/N) N pH:	$\mathbf{A}_{i,j}$

CAS NO.	COMPOUND	CONCENTRATION UNI (ug/L or ug/Kg)	TS: <u>UG/KG</u>	0	
208-96-8 120-12-7 56-55-3 205-99-2 207-08-9 191-24-2 50-32-8 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 91-57-6	Dibenzo(a,h)anthraceneFluorantheneFluoreneIndeno(1,2,3-cd)pyrene2-MethylnaphthaleneNaphthalenePhenanthrene		9000 9000 1300 5200 6600 1500 2200 4600 5200 740 11000 470 400 2100 9000 9000 5400 7800 9000	מראשממל איני מנינים מ	U

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41/1063

Client Sample No.

Lab Name: <u>STL Buffalo</u>	Contract: 97863 US					RB-042606	
Lab Code: RECNY Case No.:	SAS No.	:		SDG No.:			
Matrix (soil/water): WATER	Lab Sample ID: A6453619						•
% Solids: 0.0	Date Samp/Recv: 04/26/2006 04/27/2006						1/27/2006
Parameter Name	Units of Measure	Result	C	Q	М	Method Number	Analyzed Date
Cyanide - Total	UG/L	10	ט			9012A	05/03/2006
Comments:							

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Client Sample No.

Lab Name:	STL Buffalo		Contract: <u>97863 US</u>	SB-12 10-12
Lab Code:	RECNY	Case No.:	SAS No.:	SDG No.:

Matrix (soil/water): SOIL

Lab Sample ID: A6453601

% Solids: <u>95.4</u>

Date Samp/Recv: <u>04/26/2006</u> <u>04/27/2006</u>

99	Units of Measure	Result	С	Q	м	Method Number	Analyzed Date
Cyanide - Total	UG/G	0.98	ט	54		9012A	05/04/2006

Comments:		

6/1/0hr

43/1063

Client Sample No.

SB-12 14-15

Lab Name: STL Buffalo

Contract: 97863 US

SDG No.: ____

Lab Code: RECNY Case No.: ____ SAS No.: ____

Matrix (soil/water): SOIL

Lab Sample ID: <u>A6453602</u>

% Solids:

Comments:

92.7

Date Samp/Recv: 04/26/2006 04/27/2006

Parameter Name	Units of Measure	Result	С	Q	м	Method Number	Analyzed Date
Cyanide - Total	UG/G	1.0		4		9012A	05/04/2006

		•		
			ľ	

Client Sample No.

Lab Name: <u>STL Buffalo</u>		Contract: 97863 US					SB-13 10-12			
Lab Code: <u>RECNY</u>	Case No.:	SAS No.:				i	SDG No.:			
Matrix (soil/water): §	OIL		Lab Samp	ρle	D:	<u>A6</u>	<u>453604</u>			
% Solids:	<u>94.7</u>		Date Sar	np/	'Recv:	04	/26/2006 04	/27/2006		
Parame	ter Name	Units of Measure	Result	С	Q	М	Method Number	Analyzed Date		
Cyanide - Total		UG/G	1.0	U	いゴ		9012A	05/04/2006		
Comments:										

617/06m

45/1063

Wet Chemistry Analysis

Client Sample No.

SB-13 14-15.7

Lab Name: STL Buffalo

Contract: 97863 US

Lab Code: <u>RECNY</u>

Case No.:

SAS No.: ____

SDG No.: ____

Matrix (soil/water): SOIL

Lab Sample ID: <u>A6453605</u>

% Solids:

Comments:

95.1

Date Samp/Recv: <u>04/26/2006</u> <u>04/27/2006</u>

Parameter Name	Units of Measure	Result	С	Q	М	Method Number	Analyzed Date
Cyanide - Total	UG/G	0.97	ט	ي كن		9012A	05/04/2006

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[1]

46/1063

Client Sample No.

SB-14	11-12	•

Lab Name: STL Buffalo

Contract: 97863 US

Lab Code: RECNY Case No.:

SAS No.: ____

SDG No.: ____

Matrix (soil/water): SOIL

Lab Sample ID: A6453606

% Solids:

80.9

Date Samp/Recv: <u>04/26/2006</u> <u>04/27/2006</u>

	Units of Measure	Result	С	Q	М	Method Number	Analyzed Date
Cyanide - Total	UG/G	1.2	Ū	υŹ		9012A	05/04/2006

Comments:	•	
		
		
		

1/2/06/20

Client Sample No.

	SB-14	14_15	· · · · · · · · · · · · · · · · · · ·
4	20-14	T4-T3	

Lab Name: STL Buffalo

Contract: 97863 US

Lab Code: RECONY Case No.: ____ SAS No.: ____ SDG No.: ____

Matrix (soil/water): SOIL

Lab Sample ID: A6453607

% Solids: 90.5

Date Samp/Recv: 04/26/2006 04/27/2006

Parameter Name	Units of Measure	Result	С	Q	м	Method Number	Analyzed Date
Cyanide - Total	UG/G	0.98	U	N		9012A	05/03/2006

Comments:					•	•
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	····	 	···		 ·	

Client Sample No.

Lab Name: STL Buffalo		Contract	: <u>97863 US</u>		_		SB-15 12-14	
Lab Code: RECNY	Case No.:	SAS No.	:			:	SDG No.: _	
Matrix (soil/water): S	<u>on</u>		Lab Sam	ole	e ID:	<u>A6</u>	453608	•
% Solids:	<u>92.1</u>		Date Sar	πp/	'Recv:	<u>04</u>	/26/2006 <u>04</u>	/27/2006
Paramet	cer Name	Units of Measure	Result	C	Q	м	Method Number	Analyzed Date
Cyanide - Total		UG/G	1.0	Ū	V		9012A	05/03/2006
Comments:								
		· · · · · · · · · · · · · · · · · · ·						

(H1062

Wet Chemistry Analysis

Client Sample No.

	Contract: 97863 US	SB-16 10-12	
	Williams. <u>97003 W</u>		
ase No.:	SAS No.:	SDG No.:	

Matrix (soil/water): SOIL

Lab Name: STL Buffalo

Lab Code: RECNY

Lab Sample ID: A6453609

% Solids:

<u>75.3</u>

Date Samp/Recv: 04/26/2006 04/27/2006

Parameter Name	Units of Measure	Result	С	Q	М	Method Number	Analyzed Date
Cyanide - Total	UG/G	1.2	U	び		9012A	05/03/2006
Comments:							

50/1063

Client Sample No.

Lab Name: STL Buffalo	Contract	: <u>97863 US</u>			Į	SB-17 12-14	4
Lab Code: RECNY Case No.:	SAS No.	:				SDG No.:	·
Matrix (soil/water): SOIL		Lab Sam	ple	e ID:	<u>A6</u>	453611	
% Solids: 92.7		Date Sar	np)	/Recv:	<u>04</u>	/26/2006 <u>0</u> 4	1/27/2006
Parameter Name	Units of Measure	Result	C	Q	м	Method Number	Analyzed Date
Cyanide - Total	UG/G	0.97	Ū	34		9012A	05/03/2006
Comments:					<u> </u>		

6/1/06gr

Client Sample No.

SB-17	9-11	
Ļ		

Lab Name: SIL Buffalo

Contract: 97863 US

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: ____

Matrix (soil/water): SOIL

Lab Sample ID: A6453610

% Solids:

80.9

Date Samp/Recv: 04/26/2006 04/27/2006

Parameter Name	Units of Measure	Result	С	Q	М	Method Number	Analyzed Date
Cyanide - Total	UG/G	4.0		4		9012A	05/03/2006

Comments:					
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52/1063

Client Sample No.

Lab Name: STL Buffalo	Contract	: <u>97863 US</u>		SB-DUP-042606				
Lab Code: RECNY Case No.:	SAS No.:							
Matrix (soil/water): SOIL	Lab Sample ID: <u>A6453603</u>							
% Solids: 94.3	Date Samp/Recv: 04/26/2006 04/27/2006							
Parameter Name	Units of Measure	Result	С	Q	м	Method Number	Analyzed Date	
Cyanide - Total	UG/G	1.0	ט	54		9012A	05/04/2006	
Comments:							· · · · · · · · · · · · · · · · · · ·	

9-10-m

Client Sample No.

Lab Name: <u>SIL Buffalo</u>	Contract	: <u>97863 US</u>				SS-01		
Lab Code: RECNY Case No.:	SAS No.:							
Matrix (soil/water): SOIL Iab Sample ID: A					<u>A6</u> 4	453612		
% Solids: <u>76.9</u>	Date Samp/Recv: 04/26/2006 04/27/2006							
Parameter Name	Units of Measure	Result	С	Q	м	Method Number	Analyzed Date	
Cyanide - Total	UG/G	1.1	υ	S		9012A	05/03/2006	
Comments:								

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1			

Lab Name: STL B	uffalo	Contract	: <u>97863 US</u>		SS-02				
Lab Code: <u>RECNY</u>	Case No.:	SAS No.	·:				SDG No.:		
Matrix (soil/wat	cer): <u>SOIL</u>	Lab Sample ID: A6453614							
% Solids:	71.7	Date Samp/Recv: 04/26/2006 04/27/2006							
	Parameter Name	Units of Measure	Result	C	Q	м	Method Number	Analyzed Date	
Cyanide - Total		UG/G	1.2	U	70	-	9012A	05/03/2006	
Comments:									
							<u>. </u>		

6/1/06/22

Client Sample No.

Lab Name: STL Buffalo	Contract	: <u>97863 US</u>				SS-03	
Lab Code: RECNY Case No.:	SAS No.		•	_	;	EDG No.:	
Matrix (soil/water): SOIL	Lab Sample ID: A6453615						
% Solids: <u>70.7</u>	Date Samp/Recv: <u>04/26/2006</u> <u>04/27/2006</u>						<u>/27/2006</u>
Parameter Name	Units of Measure	Result	C	Q	м	Method Number	Analyzed Date
Cyanide - Total	UG/G	1.3	Ū	W		9012A	05/03/2006
Comments:							<u> </u>

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Client Sample No.

Iab Name: STL Buffalo Contract: 97863 U					ļ	SS-04		
TAD TWINE. DIN BUILDIO	Contract	9/863 US		_	L			
Lab Code: RECNY Case No.:	SAS No.:	·			i	SDG No.: _		
Matrix (soil/water): SOIL	rix (soil/water): SOIL Lab Sample ID: A6453616							
% Solids: <u>75.4</u>	·	Date Sar	np/	Recv:	04	/26/2006 <u>04</u>	1/27/2006	
Parameter Name	Units of Measure	Result	c	Q	М	Method Number	Analyzed Date	
Cyanide - Total	UG/G	1.2	U	W		9012A	05/03/2006	
Comments:					-		· · · · · · · · · · · · · · · · · · ·	

6/2/0pm

Client Sample No.

Lab Name: <u>SIL Buffalo</u>

Contract: 97863 US

Lab Code: RECNY

Case No.: ____ SAS No.: ____ SDG No.: ____

Matrix (soil/water): SOIL

Lab Sample ID: <u>A6453617</u>

% Solids:

Comments:

<u>73.6</u>

Date Samp/Recv: <u>04/26/2006</u> <u>04/27/2006</u>

Parameter Name	Units of Measure	Result	С	Q	M	Method Number	Analyzed Date
Cyanide - Total	UG/G	1.2	U	05		9012A	05/03/2006

Client Sample No.

Lab Name: SIL Buffalo	Contract	: <u>97863 US</u>			ŀ	SS-06	
Lab Code: RECNY Case No.:	SAS No.	:	ł	SDG No.:			
Matrix (soil/water): SOIL		Lab Samp	ρle	e ID:	<u>A6</u>	453618	
% Solids: <u>72.7</u>		Date San	np/	'Recv:	<u>04</u>	/26/2006 <u>04</u>	<u>/27/2006</u>
Parameter Name	Units of Measure	Result	С	Q	М	Method Number	Analyzed Date
Cyanide - Total	UG/G	1.3	U	VI		9012A	05/03/2006
Comments:							

6/7/06m

59/1063

Wet Chemistry Analysis

Client Sample No.

SS-FD-042606	
<u> </u>	

Lab Name: STL Buffalo

Contract: 97863 US

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: ____

Matrix (soil/water): SOIL

Lab Sample ID: A6453613

% Solids: <u>72.4</u>

Comments:

Date Samp/Recv: <u>04/26/2006</u> <u>04/27/2006</u>

!	Units of Measure	Result	С	Q	M	Method Number	Analyzed Date
Cyanide - Total	UG/G	1.8		13		9012A	05/03/2006

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DATA ASSESSMENT SUMMARY RESIDENTIAL BASEMENT SAMPLING AT THE FORMER OFFSITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE – CORTLAND, NY NEW YORK STATE ELECTRIC AND GAS

This data assessment summary addresses quality control deficiencies resulting in qualification of the data for the three scrape samples and one equipment rinsate blank collected on June 12, 2006 from the basement walls of a residence located in the vicinity of the Former Offsite Gas Holder associated with the Homer Former MGP Site, Cortland, New York. The samples were sent to Severn Trent Laboratories (STL, Amherst, NY) and analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by USEPA Method 8260B and polynuclear aromatic hydrocarbons (PAHs) by USEPA Method SW8270C.

Data validation was limited to a review of holding times, laboratory control sample recoveries, surrogate spike recoveries, internal standard recoveries, and blanks (method and rinsate). Qualification of data was made following the procedures outlined in the following USEPA Region II documents:

- Standard Operating Procedure for the Validation of Organic Data Acquired using SW-846 Method 8260B, SOP No. HW-24, Revision 1, June 1999; and
- Standard Operating Procedure for the Validation of Organic Data Acquired using SW-846 Method 8270C, SOP No. HW-22, Revision 2, June 2001.

The validated analytical results are presented on Tables 1 and 2. Definitions of data qualifiers are presented at the end of this data assessment summary. The chain-of-custody (COC) record, laboratory report case narrative, and documentation supporting the qualification of data (when applicable) is provided in Attachment A. Copies of the validated laboratory data (Form 1s) are presented in Attachment B.

BTEX (USEPA Method 8260B)

The concentrations of toluene in samples SCRAPE 2 and SCRAPE 3 were less than ten times the concentration in the method and rinsate blanks. The laboratory has indicated that the low concentrations of toluene detected in the blanks are likely residual contamination from within the laboratory resulting from maintenance activities in the days preceding sample analysis. Following USEPA validation guidelines, the result for toluene in sample SCRAPE 2 was qualified 'U' at the reported concentration. Based on EPA validation guidelines, the result for toluene in sample SCRAPE 3 was raised to the quantitation limit (QL) and qualified 'U'.

No other data qualifications were made, and all other data are usable as reported.

PAHs (USEPA Method 8270C)

No data qualifications were made, and all data are usable as reported.

DEFINITIONS OF USEPA REGION II DATA QUALIFIERS

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- NJ The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.
- B The analyte was detected in the sample at a concentration greater than the method detection limit, but less than the quantitation limit (used for metals only).
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- D The concentration reported is from a secondary dilution analysis.

TABLE 1 VALIDATED SCRAPE SAMPLE ANALYTICAL RESULTS FORMER OFFSITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		SCRAPE-01	SCRAPE-02	SCRAPE-03
Sample ID		SCRAPE 1	8CRAPE 2	8CRAPE 3
Matrix		•	•	•
Depth Interval (ft)		•	•	•
Date Sampled		06/12/06	06/12/06	06/12/06
Parameter	Units			
Volatile Organic Compounds				
Benzene	UG/KG	120	44	1 J
Ethylbenzene	UG/KG	38	22	5 U
Toluene	UG/KG	97	58 U	5 U
Xylene (total)	UG/KG	170	120	16 U
Total BTEX	UG/KG	425	186	1
Semivolatile Organic Compounds				
2-Methylnaphthalene	UG/KG	25,000 J	6,400 J	330 U
Acenaphthene	UG/KG	4,800 J	68,000 U	330 U
Acenaphthylene	UG/KG	150,000	42,000 J	330 U
Anthracene	UG/KG	310,000	130,000	19 J
Benzo(a)anthracene	UG/KG	670,000	240,000	47 J
Benzo(a)pyrene	UG/KG	410,000	140,000	32 J
Benzo(b)fluoranthene	UG/KG	610,000	190,000	47 J
Benzo(g,h,l)perylene	UG/KG	140,000	54,000 J	20 J
Benzo(k)fluoranthene	UG/KG	200,000	65,000 J	330 U
Chrysene	UG/KG	650,000	220,000	44 J
Dibenzo(a,h)anthracene	UG/KG	69,000	22,000 J	330 U
Dibenzofuran	UG/KG	41,000 J	11,000 J	330 U
Fluoranthene	ug/kg	1,600,000 D	490,000	120 J
Fluorene	UG/KG	46,000 J	14,000 J	330 U
Indeno(1,2,3-cd)pyrene	UG/KG	160,000	60,000 J	17 J
Naphthalene	UG/KG	42,000 J	9,700 J	46 J
Phenanthrene	UG/KG	990,000	370,000	110 J

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Mede By_JJL 7/18/06_ Checked By_AMK 7/18/06_

TABLE 1

VALIDATED SCRAPE SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID		8CRAPE-01	SCRAPE-02	SCRAPE-03
Sample ID		SCRAPE 1	SCRAPE 2	SCRAPE 3
Matrix		Soil	Soll	Soil
Depth Interval (ft)		•	•	•
Date Sampled		06/12/06	06/12/06	06/12/06
Parameter	Units			
Semivolatile Organic Compounds		 		
Ругепе	UG/KG	1,000,000	360,000	70 J
Total Polycyclic Aromatic Hydrocarbons	UG/KG	7,051,800	2,406,700	572

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Made By_JJL 7/18/06_ Checked By_AMK 7/18/06_

TABLE 2

VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS

FORMER OFFSITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE

NEW YORK STATE ELECTRIC AND GAS

Location ID		FIELDQC
Sample ID	RB-001206	
Matrix	Water Quality	
Depth Interval (ft)	•	
Date Sampled	06/12/06	
Parameter	Units	Rinse Stank (1-1)
Volatile Organic Compounds		
Benzene	UGAL	5.0 U
Ethylbenzene	UGAL	5.0 U
Toluene	UGAL	5.7
Xylene (total)	UG/L	15 U
Total BTEX	UGAL	5.7
Semivolatile Organic Compounds		
2-Methylnaphthalene	UG/L	9 U
Acenaphthene	UG/L	9 U
Acenaphthylene	UG/L	9 U
Anthracene	UG/L	9 U
Benzo(a)anthracene	UGA.	9 U
Benzo(a)pyrene	UGAL	9 U
Benzo(b)fluoranthene	UG/L	9 U
Benzo(g,h,i)perylene	UG/L	8 U
Benzo(k)fluoranthene	UG/L	9 U
Chrysene	UGAL	9 U
Dibenzo(a,h)enthracene	UG/L	9 U
Dibenzofuran	UGAL	9 U
Fluoranthene	UGAL	9 U
Fluorene	UGA.	9 U
Indeno(1,2,3-cd)pyrene	UG/L	9 U
Naphthalene	UGAL	9 U
Phenanthrene	UG/L	9 U

Flags assigned during chemiatry validation are shown.

U - Not detected above the reported quantitation limit.

Made By_JJL 7/18/06_ Checked By_AMK 7/18/06_

Detection Limits shown are PQL

N:11174305.0000/DBIProgram1EDMS.mai Printel: 7/19/2005 11:07:28 AV [LOCIDATE] = 86/12/29086 AND (LOCID) = FIELDQC

TABLE 2 VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS FORMER OFF-SITE GAS HOLDER ASSOCIATED WITH THE HOMER FORMER MGP SITE NEW YORK STATE ELECTRIC AND GAS

Location ID	FIELDQC	
Sample ID	RB-051206	
Matrix	Water Quality	
Depth Interval (ft)	•	
Date Sampled	06/12/06	
Parameter	Units	Rinse Blank (1-1)
Semivolatile Organic Compounds		
Pyrene	UGAL	9 U
Total Polycyclic Aromatic Hydrocarbons	UG/L	ND

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

Detection Limits shown are PQL

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ATTACHMENT A

CHAIN-OF-CUSTODY RECORD, LABORATORY REPORT CASE NARRATIVE, AND DOCUMENTATION SUPPORTING QUALIFICATION OF DATA

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0	્ટ્રી		9	TIME	1340	350	1530	1630	•						SOLIC	KE DL	Û.	Œ.	nies	
<u> </u>	\vee	THE STATE	(')	F	3	7	2	3							A POC	ZANK K SPI		ATURE)	ad l	
0	2	TANKS TO THE)		مر	9		<u></u>	-		7	 		+	MBREN EDIME AZARI	INATE B	BY (SIGNATURE)	133	22	
2	2	A STAN	Ä	DATE	92/11/9	12/06	15	200	.						¥	0	<u>}</u> <	<u>k</u>	nal s	Æ
CHAIN OF CUSTODY	11174465	SAMPLERS (PRINT/SIGNATURE)	DELIVERY SERVICE:		9	19	6/12	Ę.	.						7,44	NEGOVI POR COLO	鬥	RELINQUISHED BY	Distribution: Original accompanies shipment, copy to coordinator field files	URSF-075C/1 OF 1/ColCRyGCM
7	PROJECT NO	88 8	ly Sį	z s	7.	৸	3			\prod		1			20	wä	IS	Sp.	oi.	F1/50
六	띩	型で 1	IVER	LOCATION	SCEAPET	SE SE	₹	B 3							SALATER CORES	3	Acquist Les	ğ	ibuti	0 1,5 2,5
	8	* N	DEL	걸합	Sa	SCANE-2	SCRNE-3	7							80	SAMPLE TOPE CODES	N.	₹	Dist	SF-07.
	j			لــــــــــــــــــــــــــــــــــــــ		7.1	7			1, 1				أسلك				<u> </u>		5

NON-CONFORMANCE SUMMARY

Job#: A06-6725

STL Project#: NY5A9403.3

Site Name: URS NYSEG SITES- Cortland

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A06-6725

Sample Cooler(s) were received at the following temperature(s); $2.0~^{\circ}$ C Volatiles to get samples first.

GC/MS Volatile Data

The analyte Toluene was detected in the Method Blank VBLK18 (A6B2146502) at a concentration above the project established reporting limit. The sample associated with this Method Blank, SCRAPE 2, had Toluene detected at a concentration above that detected in the Method Blank and is flagged accordingly. No further corrective action was required.

Initial calibration standard curve A6I0001615 exhibited a percent Relative Standard Deviation (%RSD) greater than 15% for the compound Toluene. However, the mean RSD of all compounds is 7.05%.

GC/MS Semivolatile Data

All surrogate concentrations were diluted below the linear range of the calibration curve in sample SCRAPE 1 DL.

The surrogate concentrations for 2,4,6-Tribromophenol, p-Terphenyl-dl4 and 2-Fluorobiphenyl were diluted below the linear range of the calibration curve in sample SCRAPE 1.

The surrogate concentrations for 2,4,6-Tribromophenol and p-Terphenyl-d14 were diluted below the linear range of the calibration curve in sample SCRAPE 2.

Samples SCRAPE 1 and SCRAPE 2, 8270 soils, had adjusted final volumes during extraction due to extract matrix and viscosity.

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

SAMPLE SUMMARY

			SAMP	LED	RECEIVE	3 D
LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE	TIME	DATE	TIME
A6672504	RB-061206	WATER	06/12/2006	16:30	06/13/2006	
A6672501	SCRAPE 1	SOIL	06/12/2006	13:40	06/13/2006	09:00
A6672502	SCRAPE 2	SOIL	06/12/2006	13:50	06/13/2006	09:00
A6672503	SCRAPE 3	SOIL	06/12/2006	15:30	06/13/2006	09:00

METHOD 8260 - BTEX METHOD BLANK SUMMARY

Client No.

Lab Code: RECNY Case No.: SAS No.: SDG No.: Lab File ID: Q3226.RR Lab Sample ID: A6B2146502 Date Analyzed: 06/21/2006 Time Analyzed: 00:05 GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y Instrument ID: HP59730 THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD: CLIENT LAB LAB TIME	
Date Analyzed: 06/21/2006 Time Analyzed: 00:05 GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y Instrument ID: HP59730 THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:	·
Date Analyzed: 06/21/2006 GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y Instrument ID: HP59730 THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:	
Instrument ID: HP59730 THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:	
Instrument ID: HP59730 THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:	
CT TENM	
CT TENM	
SAMPLE NO. SAMPLE ID FILE ID ANALYZED	
1 MSB18 A6B2146501 Q3221.RR 21:47 Q3230.RR 01:54	
Comments:	
	·

FORM IV - GC/MS VOA

METHOD 8260 - BTEX ANALYSIS DATA SHEET

Client No.

Lab Name: STL Buffalo Contract: 97863 U	· 3	VBLK18		
Lab Code: RECNY Case No.: SAS No.:		•		
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A6B21465	02	
Sample wt/vol: $\underline{5.00}$ (g/mL) G	Lab File ID:	03226.RR		
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	• • • • • • • • • • • • • • • • • • • •		
% Moisture: not dec Heated Purge: Y	Date Analyzed:	06/21/20	<u>06</u>	
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1,00	,	
Soil Extract Volume: (uL)	Soil Aliquot Vol	ume:	(1	رـلد)
ATT A 100	ONCENIRATION UNITS: (ug/L or ug/Kg)		Q	·
71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes		5 5 5 15	ប ប	······································

FORM I - GC/MS VOA

ATTACHMENT B VALIDATED LABORATORY DATA (FORM 1s)

10/483

METHOD 8260 -BTEX ONLY ANALYSIS DATA SHEET

Client No.

					· · · · · · · · · · · · · · · · · · ·
T.ah Nam	e: SIL Buffalo	Contract: 97867	TIC	RB-061206	<u> </u>
TOD IVER	C. BIH BULLANO	CONTICIACE: 27003	0.00		
Lab Code	e: <u>RECNY</u> Case No.:	_ sas no.:	SDG No.:	- ,	
Matrix:	(soil/water) <u>WATER</u>		Lab Sample ID:	A6672504	
Sample v	wt/vol:	,) <u>ML</u>	Lab File ID:	P1682.RR	·
Level:	(low/med) <u>IOW</u>		Date Samp/Recv:	06/12/2006	06/13/2006
% Moist	ure: not dec Heat	ed Purge: N	Date Analyzed:	06/19/2006	
GC Colum	m: <u>DB-624</u> ID: <u>0.25</u>	(mm)	Dilution Factor	:1.00	
Soil Ext	tract Volume: (uL)		Soil Aliquot Vo	lume:	(uL)
·.	CAS NO. COMPOUND		CONCENTRATION UNITS (ug/L or ug/Kg)		Q
	71-43-2Benzene			5.0 U	
	108-88-3Toluene			5.7	
	100-41-4Ethylbenze	ne		5.0 U	
to the second	1330-20-7Total Xvle	nes		15 · U	.

FORM I - GC/MS VOA

METHOD 8260 - BTEX ANALYSIS DATA SHEET

Client No.

7.2	SCRAPE 1
Lab Name: SIL Buffalo Contract: 97863	<u>US</u>
Lab Code: RECNY Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) SOIL	Lab Sample ID: <u>A6672501</u>
Sample wt/vol: $5.01 (g/mL) G$	Lab File ID: P1691.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 06/12/2006 06/13/2006
% Moisture: not dec4 Heated Purge: Y	Date Analyzed: 06/19/2006
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:1.00
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> Q
71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes	120 38 97 170

2/3/06 Vr

FORM I — GC/MS VOA

METHOD 8260 - BIEX ANALYSIS DATA SHEET

Client No.

Lob Name . SIT Diffelo	, <u>~</u>	SCRAPE 2
Lab Name: STL Buffalo Contract: 97863 US	,	
Lab Code: RECNY Case No.: SAS No.:	SDG No.:	
Matrix: (soil/water) SOIL	Lab Sample ID:	A6672502
Sample wt/vol: 5.03 (g/mL) G	Lab File ID:	Q3230.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	06/12/2006 06/13/2006
% Moisture: not dec. 21 Heated Purge: Y	Date Analyzed:	06/21/2006
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume: (uL)	Soil Aliquot Vol	ume: (uL)
_ 	NCENIRATION UNITS: ug/L or ug/Kg)	
71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes		44 22 58 120

1/3/06gn

FORM I - GC/MS VOA

METHOD 8260 - BTEX ANALYSIS DATA SHEET

Client No.

Lab Name: SIL Buffalo Contract: 97863 U	S	SCRAPE 3
Lab Code: RECNY Case No.: SAS No.:	_ SDG No.:	
Matrix: (soil/water) SOIL	Lab Sample ID:	A6672503
Sample wt/vol: $5.00 (g/mL) G$	Lab File ID:	Q3205.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	06/12/2006 06/13/2006
% Moisture: not dec. <u>1</u> Heated Purge: Y	Date Analyzed:	06/20/2006
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume: (uL)	Soil Aliquot Volu	ume:(uL)
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	
71-43-2Benzene 100-41-4Ethylbenzene 108-88-3Toluene 1330-20-7Total Xylenes		1 U U U U U U U U U U U U U U U U U U U

7/3/06p

METHOD 8270-HSL POLYNUCLEAR ARCMATIC HYDROCARBONS ANALYSIS DATA SHEET

Client No.

Lab Name: <u>STL Buffalo</u>	Contract: <u>97863 US</u>	-	RB-061206
Lab Code: RECNY Case No.:	SAS No.:	SDG No.:	
Matrix: (soil/water) WATER	4.1 41.1	Lab Sample ID:	A6672504
Sample wt/vol: <u>1060.0</u> (g/mL) M	<u>L</u>	Lab File ID:	V15429.RR
Level: (low/med) <u>LOW</u>		Date Samp/Recv:	06/12/2006 06/13/2006
% Moisture: decanted: (Y/N	ı) N	Date Extracted:	06/14/2006
Concentrated Extract Volume: 1000 (uL	۱)	Date Analyzed:	06/20/2006
Injection Volume: 1.00(uL)		Dilution Factor:	1.00
GPC Cleamin: (Y/N) N pH 5.0		•	

CAS NO.	COMPOUND	CONCENTRATION UNIT (ug/L or ug/Kg)	NS: UG/L	Q	
83-32-9			9	U]
208-96-8	Acenaphthylene		9	ប	
	Anthracene		9	ט	1
56-55-3	Benzo (a) anthracene		9	ប	
205-99-2	Benzo (b) fluoranthene		9	ט	1
207-08-9	Benzo(k) fluoranthene		, 9	ี บ	
191-24-2	Benzo(ghi)perylene		9	U	
50-32-8	Benzo(a) pyrene		9	ΙŪ	
218-01-9	Chrysene		9	lπ	
53-70-3	Dibenzo (a, h) anthracene		. 9	Ü	1
	Fluoranthene		9	lii	1
	Fluorene		9	111	
193-39-5	Indeno (1,2,3-cd) pyrene		9	111	
91-57-6	2-Methylnaphthalene		9	II	1
91-20-3	Naphthalene		9	lit	
85-01-8	Phenanthrene		9	III	
129-00-0			· 9	III	
	Dibenzofuran		9	Ü	

METHOD 8270 - HSL PAH SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Client No.

Lab Name: <u>STL Buffalo</u>	Contract: 97863 US	<u> </u>	SCRAPE 1
Lab Code: RECNY Case No.:	SAS No.:	SDG No.:	
Matrix: (soil/water) SOIL		Lab Sample ID:	A6672501
Sample wt/vol:30.57 (g/mL)	<u>G</u>	Lab File ID:	<u>U13641.RR</u>
Level: (low/med) <u>LOW</u>		Date Samp/Recv:	06/12/2006 06/13/2006
% Moisture: 4 decanted: (Y	√N) <u>Й</u>	Date Extracted:	06/17/2006
Concentrated Extract Volume: 10000 (uL)	Date Analyzed:	06/19/2006
Injection Volume: 1.00(uL)		Dilution Factor:	20.00
GPC Cleanup: (Y/N) N pH:	·		
	CON.	<u> </u>	

CAS NO.	COMPOUND	(ug/L or ug/Kg)		Q
83-32-9 208-96-8 120-12-7 56-55-3 205-99-2 207-08-9 191-24-2 50-32-8 218-01-9	AcenaphtheneAcenaphthyleneAcenaphthyleneBenzo (a) anthraceneBenzo (b) fluorantheneBenzo (k) fluorantheneBenzo (ghi) peryleneBenzo (a) pyrene	(ug/L or ug/Kg)	4800 150000 310000 670000 610000 200000 140000 410000 650000	J
53-70-3 206-44-0 86-73-7 193-39-5 91-57-6	Dibenzo (a, h) anthraceneFluorantheneFluoreneIndeno (1, 2, 3-cd) pyrene2-Methylnaphthalene	1,600,000	69000 1500000 46000 160000	J J
85-01-8 129-00-0	Naphthalene Phenanthrene Pyrene Dibenzofuran		42000 990000 1000000 41000	J

7/3/06

METHOD 8270 - HSL PAH SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Client No.

Lab Name	: STL Buffa	alo c	ontract: <u>97863</u>	US	SCRAP	E 1 DL	
Lab Code	: RECNY	Case No.:	SAS No.:	SDG No.:	·	-	
Matrix:	(soil/water	r) <u>SOIL</u>		Lab Sample	ID: <u>A66725</u>	01DL	
Sample w	t/vol:	<u>30.57</u> (g/mL) <u>G</u>		Lab File I	D: <u>U13725</u>	.RR	
Level:	(low/med)	LOW		Date Samp/	Recv: <u>06/12/</u>	<u> 2006 06/:</u>	13/2006
% Moistu	re: <u>4</u>	decanted: (Y/N	й	Date Extra	acted: <u>06/17/</u>	2006	
Concentr	ated Extra	ct Volume: <u>10000</u> (uL	angle	Date Analy	/zed: <u>06/21/</u>	2006	
Injectio	n Volume:_	1.00 (uL)		Dilution F	actor: <u>80.</u>	<u>00</u>	
GPC Clea	nup: (Y/N)	<u>И</u> рн:		. ,			
	CAS NO.	COMPOUND		CONCENTRATION (ug/L or/ug/k		Q	
	208-96-8 120-12-7 56-55-3 205-99-2 207-08-9 191-24-2 50-32-8 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 91-57-6 91-20-3 85-01-8 129-00-0	AcenaphtheneAcenaphthylenAcenaphthylen	acene anthene anthene ylene e nthracene cd) pyrene halene		270000 140000 330000 750000 850000 840000 240000 440000 700000 73000 1600000 43000 220000 26000 43000 1000000		
• .	132-64-9	Dibenzofurayi			44000	p <u>r</u>	

11000

J

METHOD 8270 - HSL PAH SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

	•			CTIGHT MO
Lab Name: STL Buffalo	Contract: 97863	<u>US</u>	SCRAPE 2	
Lab Code: RECNY Case No.:				
Matrix: (soil/water) SOIL	·	Lab Sample ID:	A6672502	
Sample wt/vol: 30.30 (g/ml	a) <u>G</u>	Lab File ID:	<u>U13642.RR</u>	
Level: (low/med) <u>LOW</u>		Date Samp/Recv:		06/13/2006
% Moisture: 4 decanted: (Date Extracted:		
Concentrated Extract Volume: 10000	(uL)	Date Analyzed:	06/19/2006	**
Injection Volume: 1.00(uL)		Dilution Factor:	20.00	
GPC Cleanup: (Y/N) N pH:				
CAS NO. COMPOUND		CONCENTRATION UNITS: (ug/L or ug/kg)	JG/KG (2
83-32-9Acenaphthe	ne	69	000 U	
208-96-8Acenaphthy	lene	42	I -	
120-12-7Anthracene				
56-55-3Benzo (a) an	hracene	130		1
		240		ľ
207-08-9Benzo (k) fli	Ioranthene		•	
207-08-9Benzo (k) flu 191-24-2Benzo (chi)	DOMESTICAL DESIGNATION OF THE PROPERTY OF THE	650	DO J	
191-24-2Benzo (ghi)	erAtere	540)00 J	ł
218-01-9Chramone		1400	000	
53-70-3Dibenzo (a, 1 206-44-0Fluoranther		2200	000	
206-14-0	ı) anthracene		000 J	
206-44-0Fluoranther 86-73-7Fluorene	ne	4900		
102 20 5		140		
193-39-5Indeno (1, 2, 91-57-62	3-cd) pyrene	600	17	
91-57-6Naphthalene	hthalene	64	00 J	1
91-20-3Naphthalene		9	00 J	1
TOD OF COLUMN TO THE PROPERTY OF THE	ie	3700	, 	
		3600		•
1132-64-9Dibon-of		3000	100	1

132-64-9-----Dibenzofuran

METHOD 8270 - HSL PAH SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Client No.

Lab Name: STL Buffalo Contract: 97863 US		SCRAPE 3
Lab Code: RECNY Case No.: SAS No.:	SDG No.:	
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A6672503
Sample wt/vol:30.02 (g/mL) G	Lab File ID:	<u>U13643.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	<u>06/12/2006</u> <u>06/13/2006</u>
% Moisture: 0 decanted: (Y/N) N	Date Extracted:	06/17/2006
Concentrated Extract Volume: 1000 (uL)	Date Analyzed:	06/19/2006
Injection Volume: 1.00 (uL)	Dilution Factor:	1.00
GPC Cleanup: (Y/N) N pH:	·	

CAS NO.	COMPOUND	CONCENTRATION UNIT (ug/L or ug/Kg)	NS: <u>UG/KG</u>	Q
83-32-9	Acenaphthene		330	U
208-96-8	Acenaphthylene		330	Ü
120-12-7	Anthracene		. 19	Įů,
56-55-3	Benzo (a) anthracene			lu_
205-99-2	Benzo(b) fluoranthene		47	Ŋ
207-08-9	Benzo (k) fluoranthene		47	J
191-24-2	Benzo (ghi) perylene	···	330	U
50-32-8	Benzo (a) pyrene		20	J
218-01-9	Chrysene		32	J
53-70-3	Dibenzo (a, h) anthracene		44	J
206-44-0	Fluoranthene		330	U
200-44-0 26 72 7			120	J
100 30 6	Fluorene		330	II.
193-39-5	Indeno (1,2,3-cd) pyrene		17	l. T
11-57-6	2-Methylnaphthalene		330	U
91-20-3	Naphthalene		46	J
35-01-8	Phenanthrene		110	1-
L29 - 00-0	Pyrene			J
132-64-9	Dibenzofuran		70	J
			330	Ü

APPENDIX I NEWFIELDS FORENSIC REPORT



July 24, 2006

Tracy L. Blazicek, CHMM
Environmental Compliance, Team NY
Site Investigation & Remediation
NYSEG
18 Link Drive
Binghamton, NY 13904

Phone: (607)762-8839

Subject: Letter Report for Forensic Cortland Scrape Samples

Dear Mr. Blazicek:

This letter report summarizes our review of selected data provided to NewFields on July 21, 2006. These data included one (1) soil boring sample collected on April 26, 2006 (SB-14 11-12) and three (3) scrape samples collected on June 12, 2006 (Scrape 1, Scrape 2, and Scrape 3) as part of the NYSEG Cortland, NY investigation.

Objective

This review compared the source signature of MGP residuals in the soil sample with three scrape samples of unknown origin collected on rock surfaces in a residential property built in close proximity to a former gas holder. The objective of this review was to determine if tar residues in the samples could have originated from the same source.

Laboratory Data

The sample analyses were performed by STL Buffalo, Amherst, NY. EPA Method 8260B was used for BTEX analysis and EPA Method 8270C was used for PAH analysis. While these standard EPA methods are useful for measuring a wide variety of chemicals, they were not specifically developed for the detailed forensic measurement and analysis. Therefore, this review was intended to identify gross differences among the tar signatures, if present.

Results

The site investigation results yielded the following conclusions:

- Soil Boring, Scrape 1, and Scrape 2 samples contain coal tar.
- Scrape 3 contained concentrations of PAHs that were too low to generate a meaningful source signature.
- Some compositional differences exist, but it was not possible to determine if the tar residues in the soil boring and scrape samples were derived from the MGP gas holder or various other tar sources commonly encountered in residential

properties (e.g., waterproofing sealer, insecticides, tar paper, and others) using the data provided.

Don't hesitate to contact me should you have any questions regarding this report.

Sincerely,

Gina M. Plantz Senior Scientist

Cc: Stephen Emsbo-Mattingly