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Pilot-Scale Treatability Testing Summary Report

North Albany Service Center

Albany, New York

February 2007

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National Grid
North Albany Service Center
Albany, New York

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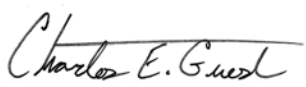

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Our Ref.:
B0036648.0000 #10

Date:
February 2007

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Pilot-Scale Treatability Testing Summary Report

National Grid
North Albany Service Center
Albany, New York

Executive Summary

In accordance with an Administrative Order on Consent between National Grid and the New York State Department of Environmental Conservation (NYSDEC) (National Grid, 2003), National Grid implemented pilot-scale treatability testing activities at the North Albany Service Center former manufactured gas pant (MGP) site (the site) in Albany, New York. A site location map is shown on Figure 1 and a site layout plan is shown on Figure 2. The objectives of the treatability testing activities are summarized below, followed by an overview of the pilot-scale testing activities and results.

I. Pilot-Scale Testing Objectives

The pilot-scale test was conducted to achieve the following objectives:

- Assess the potential effectiveness of in-situ chemical oxidation using ozone in reducing the levels of MGP-related constituents in onsite environmental media (including polynuclear aromatic hydrocarbons [PAHs] and benzene, toluene, ethylbenzene, and xylenes [BTEX] in soil and groundwater and non-aqueous phase liquids [NAPL] in subsurface material).

- Evaluate the potential of using in-situ chemical oxidation to treat site-related impacts under actual site conditions.

- Implement testing activities in a manner that protects the safety of personnel operating and monitoring the testing application and National Grid personnel at the site.

- Obtain information to support design and implementation of a subsequent larger scale implementation, if appropriate.

Pilot-scale testing was performed at two areas of the site (identified as Test Area #1 and Test Area #2 – see Figure 2). Specific objectives for pilot-scale testing at each of these areas are presented below.

- **Test Area #1 – Pilot-Scale Treatability Testing:** Pilot-scale testing at Test Area #1 involved the injection of ozone into the subsurface through a network of injection points, operation of a soil-vapor extraction (SVE) system, in-situ monitoring of subsurface conditions, and periodic sampling of soil and groundwater.

- **Test Area #2 – Pneumatic Testing:** Pilot-scale pneumatic testing at Test Area #2 involved pneumatic testing to evaluate potential subsurface delivery, radius of influence, and the feasibility of potential future treatment in the area (if appropriate) in the vicinity of the former relief gas holder in the northwestern portion of the site. Pneumatic testing was performed in this area prior to in-situ oxidant testing due to its proximity to significant and sensitive utilities (i.e., underground natural gas mains, a natural gas regulator station, and an electrical substation).

II. Pilot-Scale Testing Activities

Pilot-scale testing activities conducted for Test Area #1 and Test Area #2 are summarized below.

Test Area #1

Activities implemented as part of the pilot-scale treatability testing at Test Area #1 include:

- **Pre-Test Planning:** Pre-test planning included preparation of an Operations Plan, a Contingency Plan, and a project-specific Health and Safety Plan. In addition, regulatory notifications related to underground injection control and air discharge were made to the United States Environmental Protection Agency (USEPA) and NYSDEC. Pre-test planning also included distribution of a fact sheet to onsite National Grid personnel.

- **Baseline Sampling:** Sampling was conducted to establish baseline concentrations in soil and groundwater and confirm that subsurface soil conditions were representative of the site and appropriate for treatability testing.

- **Field Installations:** Field installation activities included the installation/construction of 14 ozone injection/sparge points, three SVE wells, and six vapor monitoring cluster points.

- **Performance and Startup Testing:** In-situ performance testing and radius of influence testing were conducted to evaluate the pneumatics of gaseous injection/extraction based on physical effects and geochemical effects observed at the injection/extraction points and nearby monitoring points.

- **Pilot-Scale Testing:** Pilot-scale testing for Test Area #1 involved the subsurface injection of gaseous ozone and oxygen, off-gas extraction, and in-situ monitoring. Ozone was generated onsite through a two-step process to produce a gaseous oxidant feed containing an average of approximately 4.4% ozone and 93.6% oxygen. Ozone was delivered to the testing area at an average rate of approximately 27.7 pounds per day. The treatability testing system operated for approximately 90 days (not including shutdown for inspection, maintenance, and mid-test sampling).

- **Testing System and Work Area Monitoring:** Monitoring was performed to confirm that the system was functioning appropriately, determine necessary maintenance/adjustments, and confirm that ozone and other parameters in the work area were less than established action levels.

- **In-Situ Monitoring:** In-situ vapor and groundwater monitoring were performed prior to, during, and following the testing applications to evaluate subsurface conditions, the effectiveness of testing, and the effect on groundwater quality.

- **Soil and Groundwater Sampling:** Two rounds of mid-test and post-test sampling were conducted to evaluate the effectiveness of the testing operations. Mid-test sampling events were conducted following approximately 4 weeks and 8 weeks of testing and post-test sampling events were conducted immediately following shutdown of the testing system (after approximately 12 weeks of testing) and approximately 4 weeks after testing was shutdown. During each sampling event, subsurface soil and groundwater samples were collected and submitted for laboratory analyses for constituents of interest and treatment indicator parameters.

Test Area #2

Activities implemented as part of the pilot-scale treatability testing at Test Area #2 include:

- **Pre-Test Planning:** Pre-test planning for Test Area #2 was performed in conjunction with pre-test planning for Test Area #1 (summarized above).

- **Field Installations:** Field installations included the installation/construction of six injection/sparge points, two SVE wells, five vapor monitoring clusters, and one individual vapor monitoring point.

- **Pneumatic Testing and Radius of Influence Testing:** In-situ pneumatic testing and radius of influence testing were conducted to evaluate the pneumatics of gaseous injection/extraction based on physical effects and geochemical effects observed at the injection/extraction points and at nearby monitoring points.

- **In-Situ Monitoring:** In-situ vapor and groundwater monitoring were performed to evaluate subsurface conditions and the effectiveness of pneumatic testing.

III. Pilot Testing Results

Results obtained for the pilot-scale testing activities implemented for Test Area #1 and Test Area #2 are summarized below.

Test Area #1 – In-Situ Treatability Testing

The results for the pilot-scale testing activities at Test Area #1 indicate:

- **Performance Testing Results:** Performance testing indicated that the oxidant could be adequately applied and distributed to the subsurface. In-situ monitoring indicated that induced pressures and induced flow were observed at nearby monitoring points. However, oxidant distribution may not be uniform and there is some evidence of preferential subsurface migration pathways from the test area toward MW-102 (located approximately 45 feet north of the center of the test area).

- **Safety:** The in-situ pilot test was performed in a safe and controlled manner and potential health and safety risks were minimized through control measures, system design, and monitoring.

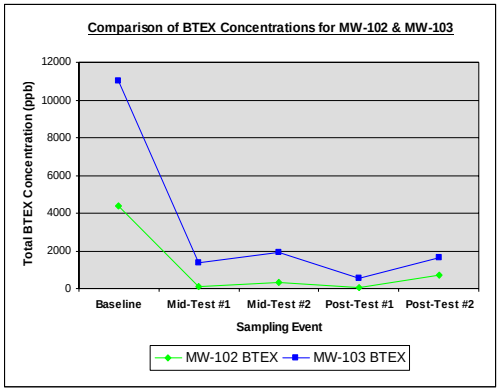
- **Groundwater Field Monitoring Data:** The groundwater field monitoring results suggest evidence of oxidation and stimulation of aerobic biodegradation. Dissolved oxygen and ORP increased significantly, indicating that the injected oxidant feed was effectively distributed. Limited detections of dissolved ozone indicate that the injected ozone (approximately 27 pounds per day) was readily consumed. Slight reductions in pH and alkalinity are an indication that oxidative conditions were promoted. Increased NAPL accumulations at nearby groundwater monitoring wells were not observed. Although indicator parameters were favorable to oxidation/biodegradation, it is not clear how much effect ozone in the oxidant feed (i.e., approximately 93% oxygen and 4.4% ozone and 27 pounds per day

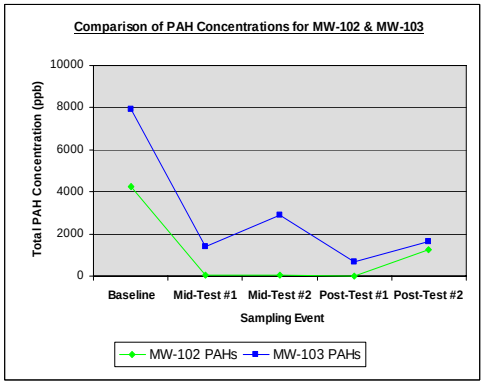
ozone) had in changes to the oxidative conditions or whether the observed conditions would result from the injection of oxygen alone.

- **In-Situ Vapor Monitoring:** In-situ vapor monitoring results suggest evidence of oxidant distribution, oxidation, and stimulation of aerobic biodegradation. Oxygen concentrations increased significantly and decreased after the system was shutdown. Limited detections of ozone indicate that injected ozone reacted rapidly within the saturated zone. Increased volatile organic vapor concentrations during initial pilot testing indicate volatilization of organic compounds, followed by a reduction in volatile organic vapors associated with continued operation of the SVE system. Carbon dioxide and carbon monoxide monitoring data suggests that breakdown of organic compounds occurred. Lower explosive limit (LEL) values and methane concentrations generally increased during initial testing, followed by a decreasing trend. Methane monitoring results indicate that subsurface conditions were anaerobic (methanogenic) at select areas prior to in-situ testing and that pilot testing stimulated an aerobic environment.

- **Groundwater Sampling Results:** The groundwater analytical results indicate that oxidation of dissolved-phase VOCs and SVOCs occurred and that aerobic biodegradation was stimulated, as indicated by the following:

  - As shown on the charts below, BTEX concentrations for post-test sampling event #1 were reduced for MW-102 and MW-103 by 99% and 95%, respectively, compared with baseline concentrations. Similarly, PAH concentrations for post-test sampling event #1 were reduced at MW-102 and MW-103 by 99.7% and 92%, respectively.





- BTEX and PAH concentrations for MW-104 and MW-105 (located farther outside and hydraulically downgradient of the test area) were also reduced.

- A slight rebound was observed in BTEX and PAH concentrations at MW-102, MW-103, and MW-105 during post-test sampling event #2. The rebound of BTEX and PAH concentrations is not unexpected since absorbed source materials remain within the test area and both absorbed-phase source materials and dissolved constituents remain hydraulically upgradient of the test area.

- Similar to trends for the BTEX and PAH results, total petroleum hydrocarbon (TPH) concentrations were reduced compared with baseline results at MW-102 through MW-105.

- Microbial plate counts increased in groundwater samples collected while the pilot-test system operated and decreased during post-test sampling event #2, consistent with the trends observed for dissolved oxygen and ORP.

The data suggests that, if the oxidant feed can be effectively distributed to an area stimulating oxidative/aerobic conditions (as evidenced by increased dissolved oxygen and ORP at MW-102), dissolved-phase BTEX, PAHs, and TPH can be effectively oxidized in groundwater.

- **Soil Sampling Results:** The subsurface soil analytical results indicate the following:

  - The analytical results for soil samples collected during the pilot-test indicate that BTEX and PAH concentrations were highly variable from sampling event to sampling event. BTEX and PAH concentrations were significantly reduced during some sampling events, yet considerable increases were detected for BTEX and PAHs for samples collected from the same (or immediately adjacent) location during other sampling events. The variability of analytical results was inconsistent and not restricted to certain sampling locations and/or sampling events. Overall, for the post-test sampling event #2, the arithmetic means of BTEX and PAH concentrations indicated a reduction of 16% and 53%, respectively, compared with baseline concentrations. However, based on the significant variability observed between sampling events, these results do not appear to be a reliable indicator of the effectiveness of the testing operations.

- Similar to the BTEX and PAH results, the TPH analytical results show a high degree of a variability for the different sampling events. The greatest variability was detected for analytical results from mid-test sampling event #1. Overall, the TPH arithmetic and geometric means for mid-test sampling event #2, post-test sampling event #1, and post-test sampling event #2 indicated relatively consistent reductions in TPH concentrations compared with the baseline.

- Increases in bacteria were measured while the pilot-test system operated and microbial plate counts generally decreased in soil samples collected during post-test sampling event #2 consistent with trends observed for dissolved oxygen and ORP.

Test Area #2 – Pneumatic Testing

Performance testing implemented as part of the pneumatic testing for Test Area #2 indicate that the oxidant could be generally applied and distributed to the subsurface in the area. In-situ monitoring indicated that induced pressures and induced flow were observed at nearby monitoring points during the pneumatic testing. In addition, injected helium was detected at nearby monitoring points during the radius of influence testing. Based on the monitoring data, the injection radius of influence for Test Area #2 was between approximately 7 feet and 17.5 feet. The shallow depth to groundwater at Test Area #2 during the testing activities (approximately 1.5 to 6 feet bgs) limited the effectiveness of the SVE system and extraction wells.

IV. Summary and Conclusions

The analytical results for in-situ groundwater monitoring, in-situ vapor monitoring, and groundwater sampling show evidence that oxidation and stimulation of aerobic biodegradation occurred as part of the pilot test to reduce the concentrations of MGP-related constituent concentrations within the aqueous matrix. However, the analytical results for soil sampling indicate that MGP-related constituents remain within the test area following the pilot test and that if in-situ chemical oxidation is a feasible alternative, additional oxidant application would be necessary in the test area to achieve potential cleanup goals.

During the planning of the pilot test, it was not anticipated that complete oxidation or reduction of constituents of concern would occur. The primary goal of the pilot test was to evaluate the effectiveness of in-situ chemical oxidation using ozone to reduce the concentrations of MGP-related constituents at the site. The data generated during the

pilot test would then be used to determine estimated rates of reduction using the technology to remediate MGP-related constituents at the site. However, while there is some soil analytical data that indicates favorable results for the in-situ chemical oxidation testing, the variability of the soil sampling data does not provide a reliable indicator for calculating mass loading rates, rates of oxidation, and what anticipated extent of full-scale remediation would be required. It may be possible to overcome the variability of soil sampling results associated with the heterogeneity in subsurface conditions through additional application of oxidant within the area.

The results of the pilot-scale treatability test suggest the in-situ chemical oxidation may not be a completely feasible technology for source removal/reduction. However, as demonstrated by the reduction in dissolved-phase concentrations of MGP-related constituents, the technology may have some application (possibly in conjunction with other remedial technologies) to target certain areas of the site or to address specific objectives. Further evaluation of the feasibility, potential application, and estimated costs associated with in-situ chemical oxidation as part of the overall remedial strategy for addressing MGP-related impacts at the National Grid North Albany Service Center will be performed in connection with the completion of a feasibility study for the site.

1. Introduction

1.1 General

This Pilot-Scale Treatability Testing Summary Report (summary report) has been prepared by ARCADIS BBL [formally known as Blasland, Bouck, and Lee, Inc. (BBL)] to summarize pilot-scale testing activities that were conducted to evaluate the potential effectiveness of in-situ chemical oxidation for addressing historical manufactured gas plant- (MGP-) related residual impacts in subsurface materials at the National Grid North Albany Service Center (the site) located at 1125 Broadway in Albany, New York. Specifically, the pilot-scale treatability test was implemented to assess the feasibility of using in-situ chemical oxidation (via ozone injection) to:

- Reduce the concentrations of polynuclear aromatic hydrocarbons (PAHs) and benzene, toluene, ethylbenzene, and xylenes (BTEX) in subsurface soil and groundwater at the site.

- Evaluate the potential feasibility of using in-situ chemical oxidation to address the presence of non-aqueous phase liquids (NAPL) in subsurface materials at the site.

A site location map is shown on Figure 1. A site layout plan is shown on Figure 2 and an aerial photograph showing the site is included on Figure 3.

The pilot-scale treatability testing activities were implemented under an existing Administrative Order on Consent (Consent Order Index No. A4-0473-0000) between National Grid and the New York State Department of Environmental Conservation (NYSDEC) (National Grid, 2003). The pilot-scale treatability testing activities were also performed in accordance with the following documents:

- The NYSDEC-approved *Pilot-Scale Treatability Testing Work Plan* (work plan) (ARCADIS BBL, 2005b). The draft work plan was initially submitted to the NYSDEC for review during January 2004 and revised during February 2005 to address NYSDEC comments.

- An October 14, 2004 letter from the NYSDEC to National Grid providing comments on the work plan (NYSDEC, 2004).

- A January 13, 2005 letter from National Grid to the NYSDEC that provided responses to NYSDEC comments on the work plan (National Grid, 2005a).

- A January 26, 2005 letter from the NYSDEC to National Grid that provided approval of the work plan (NYSDEC, 2005).

- An Operations Plan prepared by Resource Control Corporation (RCC) (RCC, 2005c). The Operations Plan was submitted to the NYSDEC in a September 14, 2005 letter from National Grid to the NYSDEC (National Grid, 2005e).

The design, operation, monitoring, and maintenance of the pilot test were conducted by RCC of Moorestown, New Jersey, while ARCADIS BBL provided general project oversight and coordination for the implementation of the pilot-scale testing. RCC and ARCADIS BBL performed periodic monitoring of in-situ subsurface conditions during the testing program. Drilling services were performed by ARCADIS BBL and ARCADIS BBL's subcontractor, Parratt Wolff, Inc. (Parratt Wolff) of East Syracuse, New York. RCC observed the drilling and well point installation activities to confirm that installations were conducted appropriately. Soil and groundwater sampling was performed by ARCADIS BBL with input and oversight by RCC. Laboratory analysis of samples collected to evaluate the effectiveness of the pilot-scale testing program was performed by Severn Trent Laboratories, Inc. located in Shelton, Connecticut (STL-CT) using NYSDEC Analytical Services Protocol (ASP) methods, where applicable.

The organization of this summary report is outlined below, followed by a discussion of relevant background information related to the pilot-scale treatability testing program.

1.2 Summary Report Organization

This summary report is organized into the following sections:

Section	Purpose
Section 1: Introduction	Presents a brief overview and site background information associated with the pilot-scale testing activities.
Section 2: Pilot-Scale Testing Objectives	Presents the objectives for the pilot-scale treatability testing program.
Section 3: Pre-Test Planning Activities	Summarizes regulatory notification/permitting activities and documentation prepared prior to implementing the pilot test.
Section 4: Pilot-Scale Testing – Test Area #1	Describes the activities performed as part of pilot-scale testing for Test Area #1.
Section 5: Pilot-Scale Testing – Test Area #2	Describes the activities performed as part of pilot-scale testing for Test Area #2.
Section 6: Results and Conclusions	Presents a summary of the results for the pilot-scale test and conclusions based on the findings.

Section	Purpose
Section 7: References	Provides references used to prepare this summary report.

Additional details associated with the pilot-scale treatability testing program and a summary of the results for the testing activities are included in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) and *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b), which are included as Appendices A and B to this summary report, respectively.

1.3 Background Information

In accordance with the Administrative Order on Consent (Consent Order Index No. A4-0473-0000) between National Grid and the NYSDEC (National Grid, 2003), National Grid submitted a draft *Feasibility Study* (FS) (ARCADIS BBL, 2001) to the NYSDEC for preliminary review. The draft FS presented a detailed evaluation of potential remedial alternatives for addressing MGP-related impacts at the site. Several in-situ remedial technologies were reviewed as part of the draft FS to evaluate the potential feasibility of addressing former MGP-related impacts. Based on the findings of the draft FS, in-situ chemical oxidation was identified as potentially applicable for treating site impacts. In-situ chemical oxidation involves the delivery and distribution of oxidizing agents (e.g., ozone, hydrogen peroxide, sodium persulfate, potassium permanganate) into the subsurface to reduce the mass and toxicity of organic constituents. Ultimate breakdown products of the chemical oxidation process are carbon dioxide and water. Intermediate breakdown products may include aldehydes and phenols. However, intermediate products are typically short lived, subject to subsequent oxidation and/or biodegradation, and do not typically accumulate. In-situ chemical oxidation is an emerging technology, and there is limited full-scale data regarding the effectiveness and implementability of this treatment technology for addressing the MGP-related impacts identified at the site.

To evaluate the feasibility of using chemical oxidation for treating site-related historical MGP impacts, National Grid implemented a bench-scale chemical oxidation treatability testing study during late 2002 and early 2003. The bench-scale treatability testing study was a preliminary effort to evaluate the feasibility of using chemical oxidation as a larger-scale treatment option for addressing site-related historical MGP impacts. The bench-scale study was conducted by RCC at RCC's subcontracted treatability laboratory operated by Environmental Resource Management (ERM) in Lawrenceville,

New Jersey. The bench-scale study involved multiple methods of applications (e.g., pulsed injection versus continuous injection) and multiple oxidizing agents (e.g., using ozone injection versus hydrogen peroxide using Fenton's Reagent). The findings of the bench-scale treatability study activities indicated that in-situ treatment using ozone may have the potential to treat MGP-related chemical constituents in saturated soil. The bench-scale findings are summarized in the *Chemical Oxidation Bench-Scale Treatability Study Summary Report* (ARCADIS BBL, 2003). The bench-scale treatability study was conducted within treatment containers with limited sample volumes (compared with actual subsurface conditions) that may not be representative of in-place subsurface characteristics. As such, the bench-scale treatability study results were not expected to directly mirror the results obtained for a pilot-scale field study. Based on the findings of the bench-scale treatability study and available information regarding in-situ chemical oxidation at other sites, the pilot-scale field test was implemented to evaluate the potential feasibility of using in-situ chemical oxidation (via ozone injection) to address former MGP-related impacts in subsurface materials at the site.

2. Pilot-Scale Testing Objectives

2.1 General

This section presents the objectives of the pilot-scale treatability testing activities at the North Albany Service Center.

2.2 Pilot-Scale Testing Objectives

The pilot-scale test was implemented to evaluate the potential feasibility of using in-situ chemical oxidation (via ozone injection) to reduce the concentrations of absorbed-phase and aqueous-phase MGP-related chemical constituents (i.e., PAHs and BTEX) in subsurface soil and groundwater at the site. The pilot-scale test also evaluated the potential feasibility of addressing the presence of NAPL in subsurface materials at the site. As presented in the *Pilot-Scale Treatability Testing Work Plan* (ARCADIS BBL, 2005b), the pilot-scale test was conducted to achieve the following objectives:

- Assess the potential effectiveness of in-situ chemical oxidation using ozone in reducing the levels of MGP-related constituents in onsite environmental media.
- Evaluate the potential of using in-situ chemical oxidation to treat site-related impacts under actual site conditions.
- Implement testing activities in a manner that protects the safety of personnel operating and monitoring the testing application and National Grid personnel at the site.
- Obtain information to support design and implementation of a subsequent larger scale implementation, if appropriate.

As detailed in Sections 4 and 5 of this summary report, pilot-scale testing was performed at two areas of the site (identified as Test Area #1 and Test Area #2 – see Figure 2). Specific objectives for pilot-scale testing at each of these areas are presented below.

2.2.1 Test Area #1 – Pilot-Scale Treatability Testing

Pilot-scale testing was conducted at Test Area #1 to evaluate whether chemical oxidation (via ozone injection) was effective in reducing the concentrations of PAHs

and BTEX in subsurface soil and groundwater within the test area and addressing NAPL in subsurface materials within the area. Testing in this area involved the injection of ozone into the subsurface through a network of injection points, extraction of unreacted ozone and volatilized organic vapors via a vapor extraction system, periodic monitoring of ambient conditions in the work area, in-situ monitoring of subsurface conditions, and periodic sampling of soil and groundwater. The location of Test Area #1 is shown on Figures 2 and 3 and detailed on Figure 4. A summary of the pilot-scale testing activities completed in Test Area #1 is presented in Section 4 of this report.

2.2.2 Test Area #2 – Pneumatic Testing

Pilot-scale pneumatic testing was conducted in Test Area #2 to evaluate the effectiveness for subsurface delivery of gaseous oxidants in the vicinity of the former relief gas holder in the northwestern portion of the site. This testing was performed to evaluate potential subsurface delivery, radius of influence, and the feasibility of potential future treatment in the area (if appropriate). Pneumatic testing was performed in this area prior to in-situ oxidant testing due to its proximity to significant and sensitive utilities (i.e., underground natural gas mains, a natural gas regulator station, and an electrical substation). The location of Test Area #2 is shown on Figure 2 and detailed on Figure 5. A summary of the pilot-scale testing activities completed in Test Area #2 is presented in Section 5 of this report.

3. Pre-Test Planning Activities

3.1 General

This section presents a summary of regulatory notification/permitting and planning activities completed prior to implementing the pilot-scale treatability testing activities.

3.2 Plan Preparation

Prior to commencing the pilot-scale testing activities, the following plans were prepared to provide details and procedures for implementing the testing activities:

- *Pilot-Scale Treatability Testing Work Plan* (ARCADIS BBL, 2005b) detailing the pilot-scale testing activities to be completed. The work plan was approved by the NYSDEC in a January 26, 2005 letter from the NYSDEC to National Grid (NYSDEC, 2005).

- Site-specific *Health and Safety Plan* (HASP) (ARCADIS BBL, 2005a) and HASP Addendum No. 1 (ARCADIS BBL, 2005d) were prepared to describe procedures and control measures to protect the health and safety of ARCADIS BBL employees and subcontractors performing work at the site. A project-specific HASP (RCC, 2005a) was also prepared by RCC to describe potential hazards and control measures associated with the pilot-scale testing project.

- *Community Air Monitoring Plan* (CAMP) (ARCADIS BBL, 2005c) identifying potential air emissions and describing the air monitoring procedures, monitoring schedule, and data collection and supporting requirements for activities at the site.

- Project-specific *Contingency Plan* (RCC, 2005b) outlining measures to be implemented in the event of a planned or unplanned sudden release of ozone or hazardous constituents during the pilot test.

- *Operations Plan* (RCC, 2005c) detailing the methods, materials, procedures, and equipment used to complete the pilot-scale testing program. As described above, the Operations Plan was submitted to the NYSDEC in a September 14, 2005 letter from National Grid to the NYSDEC (National Grid, 2005e).

3.3 Regulatory Notifications

Applicable regulatory notifications and permitting items that were completed prior to implementing the pilot-scale testing activities are discussed below.

3.3.1 RI/FS Program

The pilot-scale test was conducted as part of the FS process pursuant to an existing Consent Order between National Grid and the NYSDEC. As described above, the *Pilot-Scale Treatability Testing Work Plan* (ARCADIS BBL, 2005b) was submitted to the NYSDEC for review and approval prior implementing the pilot-scale testing activities. The NYSDEC provided approval of the pilot-scale treatability testing program in a January 26, 2005 letter to National Grid (NYSDEC, 2005).

3.3.2 Underground Injection Control

Based on discussions with the United States Environmental Protection Agency (USEPA) Region 2 Groundwater Compliance Branch, the underground injection of ozone as part of the pilot-scale treatability testing program required notification and authorization by rule under the USEPA Underground Injection Control (UIC) program. The ozone injection wells used during the pilot-scale treatability testing program were classified as Class V injection wells. Under the federal UIC program, Class V wells are authorized by general rule and do not require a separate UIC permit. However, as required by the USEPA, National Grid submitted an August 24, 2005 letter to the USEPA Region 2 Groundwater Water Compliance Branch Chief that provided a description of the pilot-scale testing activities and a completed USEPA Inventory of Injection Wells form for review and authorization by rule prior to implementation of the underground injection activities (National Grid, 2005c).

3.3.3 Air Discharge Notification

The pilot-scale testing process included a soil vapor extraction (SVE) system to capture and treat volatilized organic vapors and unreacted ozone (if any) generated during the testing process. The SVE activities were considered a trivial activity in accordance New York State air regulations under 6 NYCRR Part 201-3.3. Prior to implementing the pilot-scale testing activities, National Grid submitted an August 26, 2005 notification letter to the NYSDEC Regional Air Pollution Control Engineer (NYSDEC Region 4) describing the pilot-scale testing activities and detailing the SVE extraction and treatment system (National Grid 2005d).

3.4 Site Notification

Prior to implementing the pilot-scale testing, a project-specific fact sheet was distributed to onsite National Grid employees at the North Albany Service Center. The fact sheet presented background information, a description of the pilot-scale testing activities, and internal National Grid contacts available to address any questions or concerns related to the testing activities.

4. Pilot-Scale Testing – Test Area #1

4.1 General

This section presents a summary of the pilot-scale testing activities conducted for Test Area #1 (shown on Figure 2 and detailed on Figure 4). A detailed description of the pilot-test activities for Test Area #1 is presented below. Additional details associated with the pilot-scale treatability testing activities for Test Area #1 are included in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A).

4.2 Site Selection

The in-situ testing activities at Test Area #1 were conducted within an approximately 50-foot by 50-foot area in the vicinity of previous soil borings SB-16 and EPRI-3, and test pit TP-5, located west of the Vehicle Maintenance Building. The location of Test Area #1 is shown on Figure 2 and detailed on Figure 4. Based on available data, this area is representative of the general site lithology and MGP-related impacts encountered as part of previous site investigations in the area were also fairly consistent with conditions encountered throughout a large portion of the property north of Building 2. The portion of the site selected for Test Area #1 also offered the following advantages for testing purposes:

- Clearance from critical, ongoing National Grid operations and access.

- Clearance from major underground and/or overhead utilities (i.e., underground natural gas mains, the onsite natural gas regulator station, and the Genesee Street Electrical Substation) that may interfere with testing operations and/or serve as a potential subsurface pathway of migration.

- Clearance from the site property boundary to provide for sufficient area surrounding the testing area for upgradient and downgradient monitoring of the testing applications.

- The presence of existing upgradient and downgradient groundwater monitoring wells to monitor the testing activities.

4.3 Health and Safety

Potential health and safety risks associated with operation of the ozone generation and injection system were minimized through control measures and monitoring completed during the pilot-scale testing. Prior to implementation, potential health and safety issues were reviewed, and appropriate control/monitoring measures were used to minimize potential risks. The pilot-scale testing activities were conducted in accordance with site-specific HASPs prepared by ARCADIS BBL and RCC. A temporary chain-link fence and signage were installed around the perimeter of the testing area to restrict unauthorized access. To reduce the potential risk of ozone exposure, ozone detection/monitoring systems were operated inside the treatment trailer and at the perimeter of the fenced testing area to monitor for the presence of fugitive ozone. The detection/monitoring systems were equipped with automated controls that would shut down the treatment system if the levels of fugitive ozone exceeded established action levels. In addition, periodic monitoring was performed using hand-held monitoring instruments within the work area, at the testing area perimeter, and at the location of injection/extraction points to confirm that ozone, oxygen, volatile organic vapors, carbon dioxide, methane, and explosive vapors in ambient air were less than established action levels. Monitoring activities for the pilot-scale testing program are further detailed in Section 4.9.

4.4 Baseline Sampling

Prior to implementing the pilot-scale testing activities, baseline sampling was conducted to establish baseline concentrations and confirm that subsurface soil conditions in Test Area #1 were representative of the site and appropriate for treatability testing. The baseline sampling activities included the completion of soil borings, installation of groundwater monitoring wells, and collection of soil and groundwater samples for laboratory analysis. A summary of the baseline sampling activities is presented in Section 4.10.1.

4.5 Field Installations

Field installation of sparge points, extraction points, and monitoring points was conducted following review of the results for the baseline sampling event. Field installation activities included the installation/construction of the following components of the pilot-scale testing system:

- 14 ozone injection/sparge points (SP-101S through SP-107S and SP-101D through SP-107D) arranged in a hexagonal layout in Test Area #1.

- Three soil-vapor extraction (SVE) wells (SVE-101 through SVE-103).

- Six vapor monitoring cluster points (VP-101 through VP-106).

The layout of the injection, extraction, and monitoring points for Test Area #1 is shown on Figure 4. The field installation activities were performed between August 24, 2005 and September 2, 2005. During the field installations, drilling services and sparge/well point construction activities were performed by ARCADIS BBL's subcontractor, Parratt Wolff. RCC observed the drilling and well point installation activities to confirm that installations were conducted appropriately. Details associated with the installation/construction of the sparge/well points are presented below.

4.5.1 Ozone Injection/Sparge Points

The pilot-scale testing project included the installation of seven ozone injection/sparge cluster points (SP-101 through SP-107) in a hexagonal layout within Test Area #1. Each ozone injection/sparge cluster included the installation of one shallow injection/sparge point (screened approximately 10.5 to 11.5 feet below ground surface [bgs]) and one deep injection/sparge point (screened approximately 14.5 to 15.5 feet bgs). The shallow injection/sparge points were designated with an "S" identifier, and the deep injection/sparge points were designated with a "D" identifier. The layout of the ozone injection/sparge points is shown on Figure 4.

Prior to installation, one soil boring was completed at each ozone injection/sparge point location using 3.25-inch inside diameter (ID) hollow-stem augers. Soil borings at the shallow injection/sparge points were completed in overburden to depth up to approximately 12 feet bgs, and soil borings at the deep injection/sparge points were completed in overburden to depths up to approximately 16 feet bgs. Soil samples were recovered continuously from each boring location using a 2-inch outside diameter, 2-foot-long standard split-barrel sampling device. Select baseline soil sampling was conducted during the field installation activities as described in Section 4.10.1.1.

Upon completing the borehole, a 1-foot long, sintered stainless steel screen with a 100-micron slot size was connected to 3/8-inch outer diameter stainless steel tubing and lowered into the borehole. A Morie #00 sand pack was placed to within 0.5 feet above the screen, a hydrated bentonite seal was placed to within approximately 1 foot above

the Morie #00 sand pack, grout was placed above the bentonite seal to a depth approximately 2 feet bgs, and a Morie #2 sand was placed in the borehole to ground surface. Details regarding the construction of the ozone injection/sparge points are included in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A to this summary report). Details for the construction of the sparge points are summarized in Table 1 of this summary report.

4.5.2 Soil Vapor Extraction Wells

The pilot-scale testing included the construction of three SVE wells (SVE-101 through SVE-103) within Test Area #1 to facilitate collection of volatilized organic vapors and unreacted ozone (if any) resulting from the testing operations. The layout of the SVE wells is shown on Figure 4. Prior to installation, one soil boring was completed in overburden to a depth of approximately 5 feet bgs at each SVE well location using 6.25-inch ID hollow-stem augers. Upon completing the borehole, a 3-foot long, 4-inch diameter, 0.020-inch slotted schedule 40 PVC screen was connected to a 4-inch diameter, schedule 40 PVC riser and lowered into the borehole. The SVE wells were screened within the vadose zone soil at a depth of approximately 2 to 5 feet bgs. A Morie #2 sand pack was placed in the borehole to within approximately 1 foot bgs, a hydrated bentonite seal was placed to within 0.5 feet bgs, and grout was placed above the bentonite seal to ground surface. Details regarding the construction of the SVE wells are included in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a). A summary of construction details for the SVE wells is presented in Table 1.

4.5.3 Vapor Monitoring Points

Six in-situ vapor monitoring clusters (VP-101 through VP-106) were installed to facilitate subsurface monitoring for the presence of unreacted ozone, volatile organic vapors, and other indicator parameters. Each vapor monitoring cluster included the installation of one shallow vapor monitoring point (screened above the groundwater table at approximately 3 to 6 feet bgs) and one deep vapor monitoring point (screened below the groundwater table at approximately 7.5 to 17.5 feet bgs) installed within a single borehole. Shallow vapor monitoring points were designated with an “S” identifier, and the deep vapor monitoring points were designated with a “D” identifier. The layout of the vapor monitoring points is shown on Figure 4.

Prior to installation, one soil boring was completed in overburden to a depth of approximately 18 feet bgs at each vapor monitoring point cluster location using 4.25-inch ID hollow-stem augers. Soil samples were recovered continuously from each

boring location using a 2-inch outside diameter, 2-foot-long standard split-barrel sampling device. Select baseline soil sampling was conducted during the field installation activities as described in Section 4.10.1.1.

Upon completing the borehole, a 10-foot-long, 1-inch diameter, 0.020-inch slotted schedule 40 PVC screen was connected to a 1-inch diameter, schedule 40 PVC riser and lowered into the bottom of the borehole (to construct the deep vapor monitoring point). A Morie #2 sand pack was placed to within 0.5 feet above the slotted screen and a hydrated bentonite seal was placed to within 1 foot above the sand pack. After installing the deep vapor monitoring point, the shallow vapor monitoring point was constructed in the same borehole using a 3-foot-long, 1-inch diameter, 0.020-inch slotted schedule 40 PVC screen connected to a 1-inch diameter, schedule 40 PVC riser. A Morie #2 sand pack was placed to within approximately 2 feet bgs, a hydrated bentonite seal was placed above the sand pack to within 1 foot bgs, and grout was placed above the bentonite. A flush-mount steel curb box was placed over the risers. Details regarding the construction of the vapor monitoring point clusters are included in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A). A summary of construction details for the vapor monitoring points is presented in Table 1.

4.5.4 Equipment Decontamination and Waste Material Handling

Drilling and sampling equipment were decontaminated prior to initiating drilling activities, between each boring, and at the completion of the drilling activities. Excess soil cuttings, disposable sampling materials, purge water, decontamination fluids, and personal protective equipment (PPE) generated during the field activities were containerized in 55-gallon drums and staged within the fenced testing area prior to subsequent offsite disposal in accordance with applicable regulations.

4.6 System Mobilization and Startup

Following field installations, the treatability testing system components were mobilized to the site and set up. As part of testing system mobilization, a project kick-off meeting was held at the site on September 27, 2005 to introduce various project team members (including personnel from National Grid, RCC, and ARCADIS BBL) and review the testing activities and project schedule.

The pilot-scale treatability testing system included a trailer-type unit (i.e., a sea box) containing equipment, instrumentation, controls, and associated piping/hosing to generate and deliver the oxidizing agent to the subsurface. The treatment testing

trailer unit was staged approximately 15 feet north of the testing area shown on Figure 4 and connected to temporary electrical service installed by National Grid. A temporary chain-link fence and signage were installed surrounding the test area to restrict access to the area. The temporary electrical service provided by National Grid included 208-volt, 3-phase, 5-wire, 200-amp power supplied by utility poles and power lines installed prior to the testing activities. The temporary electrical service was connected to a meter box located immediately north of the pilot-scale treatment testing trailer. The testing system included an oxygen generator, ozone generator, ozone delivery system, vapor extraction and treatment system, monitoring equipment, instrumentation, and controls. The ozone production and delivery system was connected to the in-situ ozone injection/sparge points through a manifold and ozone-compatible inner tubing (e.g., polyvinylidene fluoride [PVDF]), and competent, protective outer tubing (e.g., high-density polyethylene [HDPE]). The SVE system was staged in the trailer and included a vacuum blower, catalytic ozone destruction cells, a moisture knock-out tank, and vapor-phase activated carbon. The vapor extraction and treatment system components were connected to the in-situ SVE well points through plastic piping/hosing. During winter months, the SVE piping was supported above the ground, sloped away from the trailer to prevent accumulation of water in the vapor extraction system, and insulated with foam insulation and heat tracer to prevent the freezing of accumulated water in the piping. The system was also equipped with ozone detection/monitoring equipment and automated controls to monitor the presence of fugitive ozone inside the treatment trailer. The automated controls shut down the system when the levels of fugitive ozone exceeded established action levels and/or when operating conditions were not appropriate. In addition, the ozone generator/delivery system was equipped with a telemetry connection to allow for system alarm notification and remote monitoring of system operations. Additional details associated with the pilot-scale treatability testing system are included in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A).

4.7 Performance Testing

Prior to full-scale operation of the treatability testing system, in-situ performance testing was conducted by RCC to evaluate the pneumatics of gaseous injection/extraction based on physical effects and geochemical effects observed at the injection/extraction points and at nearby monitoring points. Performance testing for the injection/sparge points consisted of applying air at variable flowrates and measuring corresponding pressures. SVE performance testing was conducted at variable operating rates to measure the applied vacuum pressures and flowrates for the SVE points. In conjunction with the performance testing, radius of influence testing was conducted to

evaluate the effective range of the injection/sparge system, evaluate the sparge delivery/distribution through the target zone, and monitor geochemical effects resulting from the sparging. Radius of influence testing for the injection/sparge points was conducted using air as the sparge gas by applying pressure/flowrate at the sparge point(s) and monitoring nearby vapor monitoring points and groundwater monitoring wells for: induced vacuum/pressures; induced flowrates; groundwater table elevations; groundwater indicator parameters; and soil-gas indicator parameters. Radius of influence testing for the SVE points was conducted to establish the effective range of the SVE system to capture soil gas generated during sparging operations and prevent fugitive volatile organic vapor and/or ozone emissions during sparge operation. The performance testing and radius of influence testing performed by RCC and the findings for the testing activities are presented in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A).

4.8 In-Situ Treatability Testing Operations

Following completion of performance testing, the in-situ treatability testing program was conducted. The pilot-scale testing for Test Area #1 involved the subsurface injection of gaseous ozone, off-gas extraction, and in-situ monitoring through the network of ozone injection/sparge points, SVE wells, groundwater monitoring wells, and in-situ vapor monitoring points installed as described above. Ozone was generated onsite through a two-step process. Initially, an oxygen generator produced nearly pure gaseous oxygen from air. The oxygen was then processed through an ozone generator that resulted in a gaseous oxidant feed with an average of approximately 4.4% ozone and approximately 93.6% oxygen. Ozone was delivered to the testing area at an average rate of approximately 27.7 pounds per day (lb/day). In conjunction with ozone injection, an SVE system was operated to recover unreacted ozone and volatile organic vapors and to treat these constituents prior to venting to the atmosphere. Operation and maintenance of the system was performed by RCC personnel experienced and trained with the generation and handling of ozone. System operating parameters were monitored during testing operations to determine appropriate system adjustments and maintenance necessary to maintain desired system performance. The treatability testing activities commenced on October 19, 2005. During the testing activities, the system was periodically shut down to accommodate system maintenance/upgrades and to facilitate safe implementation of the mid-test sampling events. The treatability testing system operated for approximately 90 days and in-situ testing applications were completed on February 1, 2006. A detailed summary of the operating conditions for the pilot-scale testing system is presented in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A).

4.9 Monitoring

Prior to, during, and following testing applications, monitoring activities were performed to confirm that the testing system was functioning appropriately, confirm that vapor-phase concentrations of ozone and volatile organic compounds were less than established action levels, and evaluate subsurface conditions and the effectiveness of the testing operations. Monitoring activities conducted in connection with the testing applications are described below.

4.9.1 System Monitoring

Testing operations were monitored to confirm that the system was functioning appropriately and to determine necessary maintenance/adjustments. Routine monitoring and O&M activities included reviewing treatment system operation and performance, performing system adjustments (as needed) to maintain continuous operations, and monitoring process conditions (i.e., injection pressure, vacuum pressure, flow rates, ozone concentrations, oxygen concentrations, volatile organic vapor concentrations, and carbon dioxide concentrations). The testing system was also equipped with an ozone/oxygen detection/monitoring system with automated controls to monitor atmospheric conditions inside the treatment testing trailer and shutdown the treatment system if the levels of fugitive ozone and/or oxygen exceeded established action levels.

4.9.2 Work Area Monitoring

Air monitoring was conducted in the work area during testing operations to confirm that ozone concentrations and concentrations of other parameters were less than established action levels. The work area monitoring included an automated ozone detection/monitoring system installed at the perimeter of the fenced testing area that would shutdown the treatment system if levels of fugitive ozone in the work area exceeded established action levels. In addition, routine monitoring using hand-held monitoring instruments was performed within the work area and at the location of injection/extraction points to evaluate whether ozone, oxygen, volatile organic vapors, explosive vapors, carbon dioxide, and/or methane were present in ambient air at concentrations exceeding established action levels.

4.9.3 In-Situ Monitoring

In-situ monitoring was performed to evaluate subsurface conditions, the effectiveness of testing operations, and the effect of testing activities on groundwater quality. In-situ monitoring was conducted prior to, during, and following the testing applications. Results for in-situ monitoring conducted prior to the testing activities served as a baseline for evaluating the effectiveness and impact of the oxidant applications. The in-situ monitoring activities included groundwater monitoring and in-situ vapor monitoring as discussed below.

4.9.3.1 Groundwater Monitoring

Routine groundwater monitoring was performed to document groundwater quality during the testing operations. Groundwater monitoring activities were conducted prior to, during, and following the testing applications. Groundwater monitoring consisted of the following activities:

- Probing existing groundwater monitoring wells in the vicinity of the testing area for the presence of light non-aqueous phase liquid (LNAPL) and/or dense non-aqueous phase liquid (DNAPL).

- Obtaining fluid-level measurements from groundwater monitoring wells in the vicinity of the testing area to determine the depth to groundwater and the presence/thickness of NAPL (if encountered). Where encountered, measurable quantities of NAPL were recovered from the monitoring wells (to the extent practical) and containerized in 55-gallon drums for offsite disposal in accordance with applicable regulations.

- Measuring in-situ groundwater parameters (including temperature, pH, conductivity, dissolved oxygen, dissolved ozone, and oxidation-reduction potential) using direct-reading field instruments and a field test kit.

Prior to, during, and following the in-situ testing activities, baseline groundwater monitoring activities were performed at monitoring wells MW-4, MW-5R, MW-7, MW-14, MW-26S, MW-26D, MW-27S, MW-27D, MW-28S, MW-28D, and MW-101 through MW-105. Periodic groundwater monitoring was also conducted at vapor monitoring points VP-102D and VP-103D. Groundwater monitoring results are included in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A).

4.9.3.2 In-Situ Vapor Monitoring

Routine in-situ vapor monitoring was performed to evaluate subsurface gas distribution, the effectiveness of the SVE system, and the effectiveness of testing operations. Vapor monitoring was conducted at each vapor monitoring cluster (VP-101 through VP-106); prior to, in-between, and after the vapor phase granulated activated carbon unit (located at the end of the SVE train); and occasionally at nearby groundwater monitoring wells. The relative concentrations of gaseous ozone, gaseous oxygen, volatile organic vapors, explosive vapors, carbon dioxide, and gaseous methane were measured and recorded on field logs. Vapor monitoring results are included in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A).

4.10 Soil and Groundwater Sampling

Soil and groundwater sampling was conducted prior to, at periodic intervals during, and following the in-situ testing activities to provide data to evaluate the concentrations of MGP-related constituents in subsurface soil and groundwater. Soil and groundwater samples collected as part of each phase of the treatability testing activities (including the parameters and methods analyzed as part of each sampling event) are listed in Tables 2 and 3 of this summary report. The soil and groundwater sampling activities are described in the following subsections.

4.10.1 Baseline Sampling

Prior to installation of the injection, extraction, and vapor monitoring points and in conjunction with the installation of groundwater monitoring wells (described in Section 4.10.1.2), soil and groundwater samples were collected and submitted for laboratory analysis to establish baseline concentrations for the constituents of interest. Prior to proceeding with the treatability testing activities, the analytical results for the baseline sampling activities were reviewed to confirm that subsurface soil conditions at Test Area #1 (including the target depth) were representative of the site and appropriate for treatability testing. The baseline soil and groundwater sampling activities are described below.

4.10.1.1 Baseline Soil Sampling

Baseline subsurface soil sampling was conducted prior to installation/construction of injection, extraction, and vapor monitoring points to evaluate baseline concentrations of

constituents of interest in the test area. Baseline soil sampling included completing six soil borings (SB-201 through SB-206) at the locations shown on Figure 4 and collecting soil samples for laboratory analysis. Baseline subsurface soil samples were also collected for laboratory analysis during installation of oxidant injection sparge points SP-101D, SP-102D, SP-103D, SP-104D, and SP-107D and vapor monitoring point VP-103. The baseline soil borings were completed by ARCADIS BBL's subcontractor, Parratt Wolff, using 4.25-inch inside diameter hollow-stem augers. Each soil boring was completed in overburden to a depth of approximately 20 feet bgs. Soil samples were recovered continuously from each boring using a 2-inch outside diameter, 2-foot-long standard split-barrel sampling device. Each soil sample was visually characterized and a portion of the sample was placed in a container for PID headspace screening. Subsurface conditions encountered at each soil boring location (including PID headspace screening results) are summarized in Table 4 of this summary report and on the soil boring logs included in Appendix C attached to this summary report.

Baseline soil sampling included collecting composite subsurface soil samples for laboratory analysis from a depth of 10 to 15 feet bgs (the target treatment testing zone). In addition, soil samples collected from select 2-foot depth intervals that exhibited the highest PID screening levels were selected for laboratory analysis for volatile organic compounds (VOCs). Quality assurance/quality control (QA/QC) samples (including field duplicate, matrix spike, matrix spike duplicate, and trip blank samples) were also collected for laboratory analysis. A summary of soil samples submitted for laboratory analysis is included in Table 2 of this summary report. The preliminary results for the baseline subsurface soil sampling activities were provided to the NYSDEC in an August 2, 2005 letter from National Grid (National Grid, 2005b).

Following completion, each boring was backfilled with bentonite to the ground surface and the asphalt pavement was restored with cold patch. Soil borings completed as vapor monitoring points or sparge points were constructed as described in Section 4.5. Drilling and sampling equipment was decontaminated prior to initiating drilling activities, between each boring, and at the completion of the drilling activities. Excess soil cuttings, decontamination fluids, and PPE generated during the field activities were containerized in 55-gallon drums for subsequent transport and offsite disposal in accordance with applicable regulations.

4.10.1.2 Installation of Groundwater Monitoring Wells

As part of the baseline sampling event, six additional groundwater monitoring wells (MW-101 through MW-105 and MW-5R) were installed in the vicinity of the testing area to facilitate groundwater monitoring and collection of groundwater samples during the pilot-scale test program. The locations of these groundwater monitoring wells are shown on Figure 4.

Prior to installation, soil borings were completed by Parratt Wolff at the monitoring well locations using 4.25-inch inside diameter hollow-stem augers. Soil samples were recovered continuously from each boring using a 2-inch outside diameter, 2-foot-long standard split-barrel sampling device. Each soil sample was visually characterized and a portion of the sample was placed in a container for PID headspace screening. Subsurface conditions encountered at each monitoring well location are summarized on the monitoring well construction logs included in Appendix D. Following completion of each boring, a groundwater monitoring well was installed using a 2-inch-diameter PVC riser with a length of 0.02-inch slotted PVC well screen and a 2-foot sump installed at the base. The length of the slotted PVC well screen was determined in the field based on subsurface conditions encountered and the water elevation table. To the extent possible, the screened section of each well was installed to straddle the water table to evaluate the potential presence of LNAPL or sheens on the water-table surface. Following installation of the wells, the location and top of casing elevation for each new well was surveyed by National Grid. Construction details for the monitoring wells are summarized in Table 1 and included on the monitoring well construction logs presented in Appendix D.

A minimum of 24 hours after installation, each monitoring well was developed to enhance the hydraulic connection between the well screen and the surrounding geologic formation and to remove fine sediment from the well screen and sand pack. Development was conducted using a watera pump and 1-inch polyethylene tubing equipped with a foot valve and surge block to alternately surge and purge the wells. Development activities continued until groundwater parameters stabilized (including pH, temperature, and conductivity) and the turbidity of groundwater withdrawn from the wells was reduced to less than 50 nephelometric turbidity units (NTUs), if possible.

4.10.1.3 Baseline Groundwater Sampling

Baseline groundwater sampling was performed from June 28, 2005 to June 30, 2005 following installation and development of groundwater monitoring wells MW-101

through MW-105 and MW-5R. The baseline groundwater sampling activities included collecting groundwater samples from each newly installed monitoring well (MW-101 through MW-105 and MW-5R) and from existing monitoring wells MW-14, MW-26S, MW-26D, MW-27S, MW-27D, MW-28S, and MW-28D in the vicinity of the testing area. The baseline groundwater sampling activities were conducted in conjunction with the 2005 site-wide groundwater monitoring program completed during June 2005. The preliminary results for the baseline groundwater sampling activities were provided to the NYSDEC in a September 16, 2005 letter from National Grid (National Grid, 2005f).

Prior to the groundwater sampling event, the monitoring wells were probed for the presence of LNAPL and/or DNAPL. In addition, fluid-level measurements within the monitoring wells were recorded to determine the depth to groundwater and presence/thickness of NAPL (if encountered). The groundwater-level measurements were made to the nearest 0.01-foot from a reference point at the top of the inner well casing.

Prior to collecting groundwater samples, the monitoring wells were purged using low-flow pumping techniques until field parameters stabilized (e.g., turbidity, temperature, specific conductance, and pH). Following purging, groundwater quality field measurements were obtained at each well, including pH, temperature, conductivity, turbidity, dissolved oxygen, and oxidation-reduction potential. Groundwater samples were then collected using low-flow sampling methods (with the exception of samples collected for VOC analysis). Groundwater samples for VOC analysis were collected using a dedicated bailer (i.e., to minimize potential loss of VOCs through peristaltic pumping agitation). QA/QC samples were also collected for laboratory analysis. The groundwater samples were containerized in laboratory-supplied sample containers and submitted for laboratory analysis as summarized in Table 3. Monitoring well purge water was transferred to 55-gallon drums and an onsite polyethylene storage tank for subsequent transport and offsite disposal in accordance with applicable regulations.

4.11 Mid-Test Sampling

Mid-test soil and groundwater sampling was conducted as part of two sampling events. Mid-test sampling event #1 was conducted from November 14, 2005 to November 17, 2005 (following approximately 4 weeks of testing) and mid-test sampling event #2 was conducted from December 19, 2005 to December 22, 2005 (following approximately 8 weeks of testing). Prior to and during implementation of the mid-test sampling events, the pilot-scale testing system was shut down as a precautionary health and safety control measure. Following completion of the sampling activities, the pilot-scale testing

system was re-started. Sampling efforts associated with the mid-test sampling events are described below.

4.11.1 Mid-Test Soil Sampling

Each mid-test sampling event included collecting subsurface soil samples from six soil borings completed at a distance as close as practical (within approximately 3 to 5 feet) to the baseline soil sampling locations SB-201 through SB-206 (shown on Figure 4). The soil borings were completed by ARCADIS BBL using a truck-mounted, direct-push AMS® 9600 PowerProbe sampling rig. Each soil boring was completed in the overburden to a depth of approximately 20 feet bgs. Soil samples were recovered continuously from each boring using 2-inch diameter macro-core sampling sleeves. Each soil sample was visually characterized and a portion of the sample was placed in a container for PID headspace screening. Subsurface conditions encountered at each soil boring location are summarized in Table 4. One composite soil sample collected from a depth of 10 to 15 feet bgs from each soil boring was submitted for laboratory analysis as summarized in Table 2. In addition, during mid-test sampling event #2, one soil grab sample from each boring was collected from the 2-foot interval that exhibited the highest PID screening result for laboratory analysis for VOCs. QA/QC samples were also collected for laboratory analysis during the mid-test sampling events.

Following completion, each boring was backfilled with bentonite to the ground surface and the asphalt pavement was restored with cold patch. Drilling and sampling equipment was decontaminated prior to initiating sampling activities, between each boring, and at the completion of the sampling activities. Excess soil cuttings, decontamination fluids, and PPE generated during the field activities were containerized in 55-gallon drums for subsequent transport and offsite disposal in accordance with applicable regulations.

4.11.2 Mid-Test Groundwater Sampling

Each mid-test sampling event included the collection of groundwater samples from monitoring wells MW-101 through MW-105 and monitoring well MW-14. In addition, groundwater samples were collected from monitoring well MW-5R during mid-test sampling event #2. The mid-test groundwater sampling activities were conducted in general accordance with the procedures described in Section 4.10.1.3. The groundwater samples were collected, placed in laboratory-supplied sample containers, and submitted for laboratory analysis for the chemical and biological constituents summarized in Table 3 of this summary report.

4.12 Post-Test Sampling

Following completion of test activities, post-test soil and groundwater sampling was conducted as part of two sampling events. Post-test sampling event #1 was conducted immediately following completion of the test activities (from January 31, 2006 to February 2, 2006). Post-test sampling event #2 was conducted approximately 4 weeks following completion of the testing activities from February 27, 2006 to March 2, 2006. Sampling efforts associated with the post-test sampling events are described below.

4.12.1 Post-Test Soil Sampling

Post-test soil sampling activities were similar to the mid-test sampling described in subsection Section 4.11.1. Subsurface soil samples were collected from six soil borings completed at a distance as close as practical (within approximately 3 to 5 feet) to the baseline soil sampling locations SB-201 through SB-206. In addition, subsurface soil samples were collected from two soil borings completed at a distance as close as practical (within approximately 3 to 5 feet) to sparge point locations SP-107S and SP-107D. The soil borings were completed by ARCADIS BBL using a truck-mounted, direct-push AMS® 9600 PowerProbe sampling rig. Each soil boring was completed in overburden to a depth approximately 20 feet bgs. Soil samples were recovered continuously from each boring using 2-inch diameter macro-core sampling sleeves. Each soil sample was visually characterized and a portion of the sample was placed in a container for PID headspace screening. Subsurface conditions encountered at each soil boring location are summarized in Table 4. One composite soil sample was collected from the depth interval 10 to 15 feet bgs for each soil boring. In addition, one grab sample was collected from the 2-foot interval that exhibited the highest PID screening result from each soil boring (with the exception of soil borings SP-107S and SP-107D during the post-test sampling event #2). The soil samples were containerized in laboratory-supplied sample containers and submitted for laboratory analysis as summarized in Table 2.

4.12.1.1 Post-Test Groundwater Sampling

Each post-test sampling event included the collection of groundwater samples from monitoring wells MW-101 through MW-105, MW-5R, MW-14, MW-26S, MW-26D, MW-27S, MW-27D, MW-28S, and MW-28D. The post-test groundwater sampling activities were conducted in general accordance with the procedures described in Section 4.10.1.3. The groundwater samples were collected, placed in laboratory-supplied

sample containers, and submitted for laboratory analysis for the chemical constituents as summarized in Table 3.

4.13 Laboratory Analysis of Soil and Groundwater Samples

Soil and groundwater samples collected during each sampling event were submitted to Severn Trent Laboratories located in Shelton, Connecticut (a NYSDOH-certified analytical laboratory) for laboratory analysis to evaluate the concentrations of MGP-related chemical constituents and key indicator parameters in soil and groundwater (including chemical and biological constituents and other indicator parameters). Soil and groundwater samples that were submitted for laboratory analysis as part of the pilot-scale testing activities are summarized in Tables 2 and 3.

The analytical results for laboratory analysis of the soil and groundwater samples were reported using NYSDEC ASP Category B data deliverables. Soil and groundwater samples submitted for laboratory analysis for the primary chemical constituents [target compound list (TCL) VOCs, TCL semi-volatile organic compounds (SVOCs), and total petroleum hydrocarbons (TPH)] were analyzed on an expedited 1-week turnaround basis for each sampling event. Samples submitted for laboratory analysis for the remaining parameters were analyzed on a standard turnaround basis. Analytical data packages for the analysis of samples collected for the baseline sampling activities and the post-test sampling activities were reviewed by ARCADIS BBL's data validation staff for QA purposes. Copies of the validated analytical data are included in Appendix E. Data validation was not performed for the analytical data packages generated for the mid-test sampling activities. Copies of the analytical data sheets for soil and groundwater samples collected during the mid-test sampling events are also included in Appendix E.

5. Pilot-Scale Testing – Test Area #2

5.1 General

This section presents a summary of the pilot-scale testing activities conducted for Test Area #2 (shown on Figure 2 and detailed on Figure 5). In-situ pilot-scale testing for Test Area #2 involved pneumatic testing that included air injection/sparging into saturated overburden (below the groundwater table) and vapor extraction to evaluate potential subsurface delivery, radius of influence, in-situ vapor distribution, and the feasibility of future treatment in the area (if appropriate). The in-situ pneumatic testing activities were implemented using an air sparge system consisting of equipment, instrumentation, piping/hosing, and controls; air injection/sparge points; SVE wells and a vapor treatment system; and vapor monitoring points. A detailed description of the pilot-test activities for Test Area #2 is presented below. Additional details associated with the pilot-scale treatability testing activities for Test Area #2 are included in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b) (Appendix B).

5.2 Site Selection

The in-situ testing activities for Test Area #2 were conducted in the northwestern portion of the North Albany Service Center in close proximity to the Genesee Street Substation, subsurface natural gas mains, and a natural gas regulator station. Test Area #2 was situated near the location of a former relief gas holder and previous investigation activities identified MGP-related impacts (including the presence of NAPL) in the area. The location of Test Area #2 is shown on Figure 2 and detailed on Figure 5. Pneumatic testing was conducted in this area as part of the pilot-scale testing program in lieu of in-situ treatability testing due to its proximity to significant and sensitive utilities (i.e., subsurface natural gas mains, a natural gas regulator station, and an electrical substation).

5.3 Health and Safety

Prior to implementation, potential health and safety issues were reviewed, and appropriate control/monitoring measures were used to minimize potential risks. As described in Section 4.4, the pilot-scale testing activities were conducted in accordance with site-specific HASPs by field personnel with adequate experience and training. As shown on Figure 5, Test Area #2 was located in the vicinity of the energized Genesee Street Substation and subsurface natural gas mains. Prior to implementation, ARCADIS BBL coordinated with National Grid's Gas Department to confirm that the

proposed testing activities would not interfere with the ongoing operation of the onsite natural gas distribution system and to review the locations of the proposed injection, extraction, and monitoring points to confirm clearance from underground natural gas and electric lines. In addition, Digsafely New York (formerly the Underground Facility Protection Organization [UFPO]) was contacted to identify and mark the locations of underground utilities in the work area. For injection, extraction, and monitoring locations in close proximity to the potential underground utilities, hand digging was performed prior to implementing drilling activities to confirm that the locations were clear of underground utilities.

Because Test Area #2 was located at the main traffic exit for the site, ARCADIS BBL coordinated with National Grid's Facilities and Security Departments to shutdown the exit, establish alternate traffic patterns, and implement control measures to maintain site traffic control (i.e., site communications, signage, temporary barricades, etc.) and facilitate completion of the pilot testing activities for Test Area #2.

Periodic monitoring was performed using hand-held monitoring instruments within the work area, at the testing area perimeter, and at the location of injection/extraction points to confirm that oxygen, volatile organic vapors, carbon dioxide, methane, and explosive vapors in ambient air were less than established action levels. Monitoring activities for the pilot-scale testing program are further detailed in Section 5.7.

5.4 Field Installations

To facilitate pneumatic testing, the following sparge/injection points, extraction points, and monitoring points were installed/constructed prior to the testing operations:

- Six injection/sparge points (SP-201S through SP-203S and SP-201D through SP-203D).
- Two SVE wells (SVE-201 and SVE-202).
- Five vapor monitoring cluster points (VP-201, VP-202, VP-204, VP-205, and VP-206) and one vapor monitoring point (VP-203).

The layout of the injection, extraction, and monitoring points for Test Area #2 is shown on Figure 5. The field installation activities were performed between April 10, 2006 and April 14, 2006. Drilling services and sparge/well point construction activities were performed by ARCADIS BBL's subcontractor, Parratt Wolff. ARCADIS BBL and RCC

personnel observed the drilling and sparge/well point construction activities to confirm that installations were conducted appropriately. Details associated with the installation/construction of the sparge/injection points, extraction points, and monitoring points are presented below.

5.4.1 Injection/Sparge Points

The pneumatic testing at Test Area #2 included the installation of three injection/sparge clusters (SP-201 through SP-203). Each injection/sparge cluster included the installation of one shallow injection/sparge point (screened approximately 14 to 15 feet bgs) and one deep injection/sparge point (screened approximately 19 to 20 feet bgs). The shallow injection/sparge points were designated with an "S" identifier, and the deep injection/sparge points were designated with a "D" identifier. The layout of the injection/sparge points is shown on Figure 5.

Prior to installation, one soil boring was completed at each injection/sparge point location using 3.25-inch ID hollow-stem augers. Soil borings at the shallow injection/sparge points were completed in overburden to depths of approximately 15 feet bgs, and soil borings at the deep injection/sparge points were completed in overburden to depths of approximately 20 feet bgs. Upon completing the borehole, a 1-foot long, sintered stainless steel screen with a 100-micron slot size was connected to 3/8-inch outer diameter stainless steel tubing and placed into the borehole. A Morie #00 sand pack was placed to within 1 foot above the slotted screen, a hydrated bentonite seal was placed to within approximately 3 feet bgs, and a Morie #2 sand pack was placed to within approximately 1 foot bgs. A flush-mount steel curb box was placed over the risers. In addition, during the installation of sparge points SP-201S, SP-201D, and SP-202D, void spaces were encountered in the boreholes from approximately 1 foot bgs extending to approximately 3.5 feet bgs due to loose soil/fill conditions. To protect the sparge points and to safely restore the high-traffic area, PVC casings were installed around the sparge points and the void spaces were filled with a flowable fill mixture. Details regarding the construction of the injection/sparge points are included in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b) (Appendix B). Construction details for the sparge points within Test Area #2 are summarized in Table 5 of this summary report.

5.4.2 Soil Vapor Extraction Wells

The pilot-scale testing included the construction of two SVE wells (SVE-201 and SVE-202) within Test Area #2 to facilitate collection of volatilized organic vapors resulting

from the testing operations. The layout of the SVE wells is shown on Figure 5. Prior to installation, one soil boring was completed in overburden to a depth of approximately 7 feet bgs at each SVE well location using 6.25-inch ID hollow-stem augers. Upon completing the borehole, a 5-foot long, 4-inch diameter, 0.020-inch slotted schedule 40 PVC screen was connected to a 4-inch diameter, schedule 40 PVC riser and placed into the borehole. The SVE wells were screened within the vadose zone soil at a depth of approximately 1.5 to 6.5 feet bgs. A Morie #2 sand pack was placed in the borehole to within approximately 1 foot bgs, and a hydrated bentonite seal was placed to within approximately 0.5 feet bgs. A flush-mount steel curb box was placed over the risers. Details regarding the construction of the SVE wells are included in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b). Construction details for the SVE wells within Test Area #2 are summarized in Table 5 of this summary report.

5.4.3 Vapor Monitoring Points

Five vapor monitoring cluster points (VP-201, VP-202, VP-204, VP-205, and VP-206) and one vapor monitoring point (VP-203) were installed to facilitate subsurface monitoring for the presence of volatile organic vapors and other indicator parameters. Each vapor monitoring cluster included the installation of one shallow vapor monitoring point (screened above the groundwater table at approximately 1.5 to 4 feet bgs) and one deep vapor monitoring point (screened below the groundwater table at approximately 8 to 18 feet bgs) installed within a single borehole. Shallow vapor monitoring points were designated with an "S" identifier and the deep vapor monitoring points were designated with a "D" identifier. Vapor monitoring point VP-203 included the installation of a single monitoring point screened from approximately 3 feet bgs straddling the groundwater table and extending to 18 feet bgs. The layout of the vapor monitoring points within Test Area #2 is shown on Figure 5.

Prior to installation of each vapor monitoring point, one soil boring was completed in overburden to a depth of approximately 18 feet bgs using 4.25-inch ID hollow-stem augers. Upon completing the borehole at each vapor monitoring cluster location, a 10-foot-long, 1-inch diameter, 0.020-inch slotted schedule 40 PVC screen was connected to a 1-inch diameter, schedule 40 PVC riser and lowered into the bottom of the borehole (to construct the deep vapor monitoring point). A Morie #2 sand pack was placed to within 1 foot above the slotted screen and a hydrated bentonite seal was placed to within 1-foot above the sand pack. After installing the deep vapor monitoring point, the shallow vapor monitoring point was constructed in the same borehole using a 2.5-foot-long, 1-inch diameter, 0.020-inch slotted schedule 40 PVC screen connected to a 1-inch diameter, schedule 40 PVC riser. A Morie #2 sand pack was placed to

within approximately 1 foot bgs and a flush-mount steel curb box was placed over the risers. Upon completing the borehole at vapor monitoring point VP-203, a 15-foot long, 2-inch diameter, 0.020-inch slotted schedule 40 PVC screen was connected to a 2-inch diameter, schedule 40 PVC riser casing and placed into the borehole. Vapor monitoring point VP-203 was screened within the vadose zone soil at a depth of approximately 3 to 18 feet bgs. A Morie #2 sand pack was placed in the borehole to within approximately 2 feet bgs and a hydrated bentonite seal was placed to within approximately 1 foot bgs. A flush-mount steel curb box was placed over the riser. During installation of vapor monitoring point VP-201, a void space was encountered within the borehole from approximately 1 foot bgs to 3 feet bgs due to loose soil/fill conditions. To protect the vapor monitoring point and to safely restore the high-traffic area, PVC casing was installed around the vapor monitoring point and the void space was filled with flowable fill. Details regarding the construction of the vapor monitoring points are included in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b). Construction details for the vapor monitoring points within Test Area #2 are summarized in Table 5 of this summary report.

5.4.4 Equipment Decontamination and Waste Material Handling

Drilling and sampling equipment were decontaminated prior to initiating drilling activities, between each boring, and at the completion of the drilling activities. Excess soil cuttings, disposable sampling materials, purge water, decontamination fluids, and PPE generated during the field activities were containerized in 55-gallon drums and staged within the fenced area at Test Area #1 prior to subsequent offsite disposal in accordance with applicable regulations.

5.5 System Mobilization

Following field installations, the Test Area #2 testing system components were mobilized to the site and set up. The Test Area #2 testing system included a mobile trailer unit containing equipment, instrumentation, controls, and associated piping/hosing to deliver pressurized air and helium into saturated overburden. The mobile trailer unit was staged in the immediate vicinity of the test area and was powered by a portable generator. The testing system included an air sparge and delivery system, helium tracer delivery system, vapor extraction and treatment system, monitoring equipment, instrumentation, and controls. The air sparge/delivery system was connected to the in-situ injection/sparge points through a manifold and plastic piping/hosing. The SVE system was staged in the mobile trailer and included a vacuum blower, moisture separator, and vapor-phase activated carbon. The vapor

extraction and treatment system components were connected to the in-situ SVE well points through plastic piping/hosing. Additional details associated with the pilot-scale treatability testing system are included in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b).

5.6 Performance Testing

Following system mobilization, in-situ performance testing was conducted by RCC between April 17, 2006 and April 19, 2006. The in-situ performance testing at Test Area #2 was conducted to evaluate the pneumatics of gaseous injection/extraction based on physical effects and geochemical effects observed at the injection/extraction points and at nearby monitoring points. Performance testing for the injection/sparge points consisted of applying pressurized air into the saturated subsurface at variable flowrates and measuring the corresponding air pressures. SVE performance testing was conducted at variable operating rates to measure the applied vacuum pressures and flowrates for the SVE points. In conjunction with the performance testing, radius of influence testing was conducted to evaluate the effective range of the injection/sparge system, evaluate the sparge delivery/distribution through the target zone, and monitor geochemical effects resulting from the sparging. Radius of influence testing for the injection/sparge points was conducted using air and helium by applying pressure/flowrate at the sparge point(s) and monitoring nearby vapor monitoring points and groundwater monitoring wells for: induced vacuum/pressures; induced flowrates; groundwater table elevations; groundwater indicator parameters; soil-gas indicator parameters; and helium concentrations. Radius of influence testing for the SVE points was conducted to establish the effective range of the SVE system to capture soil gas generated during sparging operations and prevent fugitive volatile organic vapor emissions during sparge operation. The performance testing and radius of influence testing performed by RCC and the findings for the testing activities are summarized in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b).

5.7 Monitoring

Prior to, during, and following testing applications, monitoring activities were performed to confirm that the testing system was functioning appropriately, to confirm that vapor concentrations of volatile organic compounds were less than established action levels, and to evaluate subsurface conditions and the effectiveness of the testing operations. Monitoring activities conducted in connection with the testing applications are described below.

5.7.1 System Monitoring

Testing operations were monitored to confirm that the system was functioning appropriately and to determine necessary maintenance/adjustments. Routine monitoring and O&M activities included reviewing equipment operations and performance, performing system adjustments (as needed) to conduct the testing activities, and monitoring process conditions (i.e., injection pressure, vacuum pressure, flow rates, helium tracer concentrations, oxygen concentrations, volatile organic vapor concentrations, and carbon dioxide concentrations).

5.7.2 Work Area Monitoring

Air monitoring was conducted in the work area using hand-held direct-reading instruments during testing operations to confirm that concentrations of volatile organic vapors and concentrations of other parameters were less than established action levels. Routine monitoring performed using hand-held monitoring instruments within the work area and at the location of injection/extraction points indicated that oxygen, volatile organic vapors, explosive vapors, carbon dioxide, and/or methane were not present in ambient air at concentrations exceeding established action levels.

5.7.3 In-Situ Monitoring

In-situ monitoring was performed to evaluate subsurface conditions, the effectiveness of testing operations, and the effect of testing activities on groundwater quality. In-situ monitoring was conducted prior to, during, and following the testing applications. Results for in-situ monitoring conducted prior to the testing activities served as a baseline for evaluating the effectiveness and impact of the air sparging applications. The in-situ monitoring activities included groundwater monitoring and in-situ vapor monitoring as discussed below.

5.7.3.1 Groundwater Monitoring

Groundwater monitoring was performed to document groundwater quality prior to, during, and following the testing applications. Groundwater monitoring consisted of the following activities:

- Probing existing groundwater monitoring wells and the deep vapor monitoring points in the vicinity of the test area for the depth to groundwater and the presence of LNAPL and/or DNAPL.

- Measuring in-situ groundwater parameters (including temperature, pH, conductivity, dissolved oxygen, and oxidation-reduction potential) using direct-reading field instruments.

Prior to, during, and following the in-situ testing activities, groundwater monitoring activities were performed at monitoring wells MW-26S and MW-26D. Periodic groundwater monitoring was also conducted at vapor monitoring points VP-201D, VP-202D, VP-203, VP-204D, VP-205D, and VP-206D. Groundwater monitoring results are included in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b).

5.7.4 In-situ Vapor Monitoring

In-situ vapor monitoring was performed to evaluate subsurface gas distribution, the effectiveness of the SVE system, and the effectiveness of testing operations. The in-situ vapor monitoring activities were conducted prior to, during, and following the testing applications using field instruments to measure the relative concentrations of oxygen, volatile organic vapors, explosive vapors, carbon dioxide, helium, and methane. Vapor monitoring activities were conducted at each vapor monitoring point (VP-201 through VP-206), after the vapor phase granulated activated carbon unit located at the end of the SVE train, and occasionally at nearby groundwater monitoring wells. Vapor monitoring results are included in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b).

6. Pilot-Scale Testing Results

6.1 General

This section summarizes the results for the pilot-scale treatability testing program. Results for the pilot-scale treatability testing program are also summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A to this summary report) and the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b) (Appendix B to this summary report). A summary of the results for the treatability testing completed for each test area is presented below.

6.2 Test Area #1 – In-Situ Treatability Testing Results

The results for the in-situ treatability testing activities implemented at Test Area #1 are summarized below.

6.2.1 Performance Testing Results

Performance testing implemented prior to in-situ ozone injection indicated that the oxidant could be adequately applied and distributed to the subsurface as part of the testing program. In-situ monitoring indicated that induced pressures and induced flow were observed at nearby monitoring points during the performance testing phase. Based on the monitoring data generated during performance testing, the injection radius of influence for Test Area #1 was approximately 14 feet and the soil-vapor extraction radius of influence for Test Area #1 was approximately 30 feet. Additional details are provided in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a).

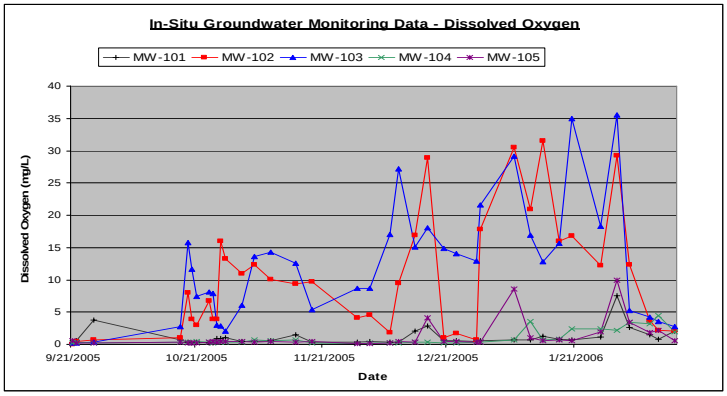
6.2.2 Safety

Monitoring during the pilot-scale testing indicated that in-situ chemical oxidation using ozone can be performed in a safe and controlled manner. Potential health and safety risks during the pilot-scale testing program were minimized through delivery of ozone via ozone-resistant inner tubing with outer secondary containment piping, work area and perimeter air monitoring, and an automated monitoring system to shutdown the testing equipment and notify project personnel if action levels were exceeded and/or if inappropriate operating conditions were encountered. During the in-situ pilot-scale testing, work area and perimeter air monitoring in conjunction with automated monitoring systems indicated that VOCs, ozone, or other parameters were not detected above action levels.

6.2.3 Groundwater Monitoring Data

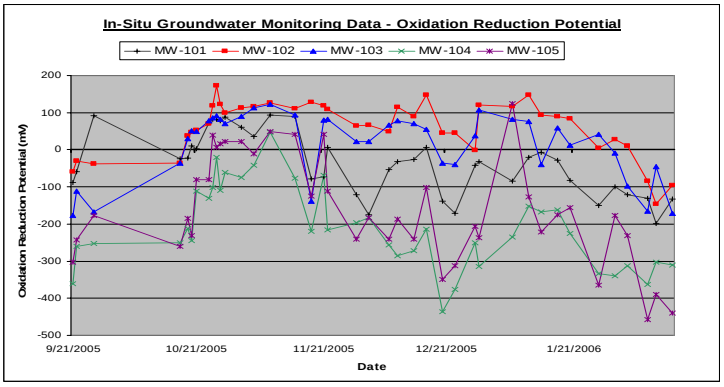
During pilot-scale testing, in-situ groundwater monitoring was performed to evaluate geochemical effects associated with oxidant injection. The results of the groundwater monitoring during the in-situ pilot testing suggests evidence of oxidation and stimulation of aerobic biodegradation. During pilot testing, the following indicators were observed:

- Dissolved oxygen concentrations increased significantly at monitoring wells MW-102 and MW-103. As shown on Figure 4, monitoring well MW-103 is located within the limits of the test area and monitoring well MW-102 is located approximately 45 feet north of the center of the test area. The maximum concentrations of dissolved oxygen at monitoring wells MW-102 and MW-103 were greater than 30 milligrams per liter (mg/L). Significant increases in dissolved oxygen concentrations were not observed at monitoring wells MW-101, MW-104, and MW-105 (located east, south, and southeast of the test area, respectively) during the in-situ testing activities. The detected dissolved oxygen concentrations indicate that the injected ozone/oxygen feed was effectively distributed through the subsurface within and surrounding the test area. However, the data does suggest that oxidant distribution may not be uniform and there is some evidence of preferential subsurface migration pathways from the test area toward MW-102 (located approximately 45 feet north of the center of the test area). Dissolved oxygen concentrations detected during pilot-test monitoring are shown on the chart below and summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A, Table 8 and Chart 18).



- Oxidation-reduction potential (ORP) increased significantly at monitoring wells MW-102 and MW-103. ORP increased from negative values (representative of reducing or anaerobic conditions) to positive values (representative of oxidizing

conditions) during the in-situ pilot testing. Slight increases in ORP were also observed at other nearby monitoring wells during in-situ testing activities. The ORP measurements are consistent with the results for dissolved oxygen monitoring described above and indicate that the injected ozone/oxygen feed was effectively distributed through the subsurface resulting in a change to oxidizing conditions in the subsurface within and surrounding the test area. Post-test monitoring indicated that dissolved oxygen was consumed rapidly and that ORP decreased to reducing conditions. ORP measurements during pilot-test monitoring are shown on the chart below and summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A, Table 8 and Chart 19).



- Dissolved ozone was detected at trace concentrations during some monitoring events and was not detected during other monitoring events. The lack of measurable dissolved ozone levels is an indication that the ozone injected into the subsurface (approximately 27 pounds per day) was readily consumed. Dissolved ozone concentrations during pilot-test monitoring are summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A, Table 9).

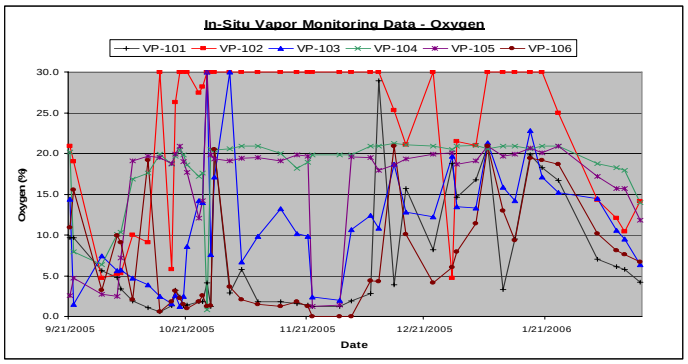
- Slight reductions in pH and alkalinity were observed during pilot-test monitoring and are an indication that oxidative conditions in the subsurface were promoted during in-situ pilot-testing. The pH and alkalinity data generated during pilot-test monitoring are summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A, Tables 8 and 12 and Charts 16 and 17).

- There was no visible evidence of increased NAPL accumulations in groundwater monitoring wells installed as part of the pilot test. Routine monitoring for LNAPL and DNAPL throughout the pilot testing did not identify measurable increases in NAPL within the monitoring wells.

6.2.4 In-Situ Vapor Monitoring

In-situ vapor monitoring performed during the pilot testing also suggests evidence of oxidant distribution, oxidation, and stimulation of aerobic biodegradation. During pilot testing, the following indicators were observed:

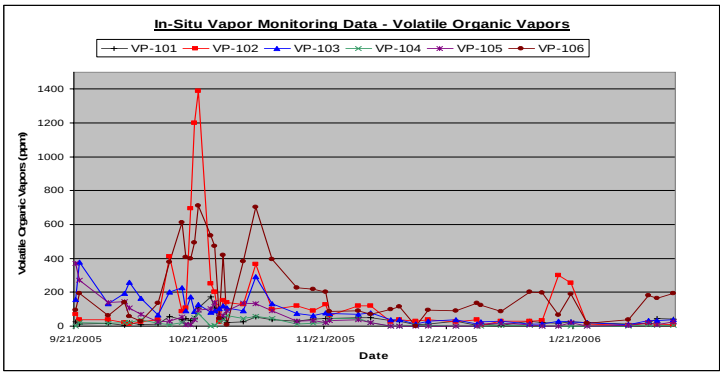
- Oxygen concentrations increased significantly at vapor monitoring points screened within the vadose zone inside the test area and surrounding the test area. Oxygen was detected at concentrations greater than 30% at vapor monitoring point VP-102S during several rounds of monitoring. Oxygen concentrations also increased at other vapor monitoring points during the in-situ testing and decreased after injection of the oxidant feed was shutdown. Oxygen concentrations detected during pilot-test monitoring are shown on the chart below and summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A, Table 7 and Chart 11).



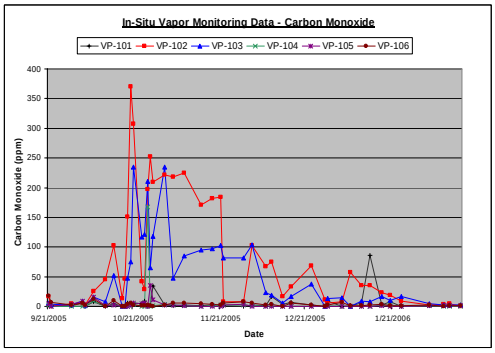
- Limited concentrations of ozone were detected at shallow vapor monitoring points during the injection activities. The lack of detected ozone concentrations during in-situ vapor monitoring is an indication that ozone injected into the saturated zone (approximately 27 pounds per day) reacted rapidly within the saturated zone. Ozone concentrations detected during pilot-test monitoring are summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A, Table 7).

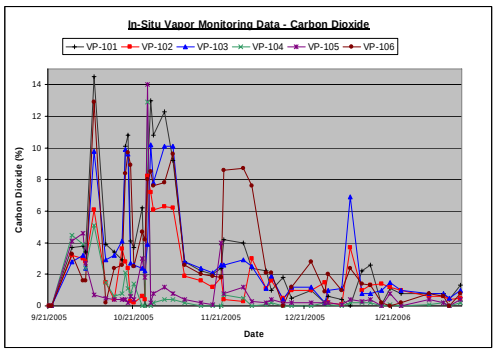
- Volatile organic vapor concentrations measured using a PID increased at several vapor monitoring points during the initial 4 weeks of pilot testing, followed by a gradual reduction in concentrations as the testing operations progressed. The initial increase in volatile organic vapor concentrations may be attributed to VOCs being volatilized as a result of oxidant sparging within the saturated zone and the gradual decrease in volatile organic vapor concentrations related to continued

operation of the SVE system within the vadose zone during testing operations. Volatile organic vapor concentrations detected during pilot-test monitoring are shown on the chart below and summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A, Table 7 and Chart 10).



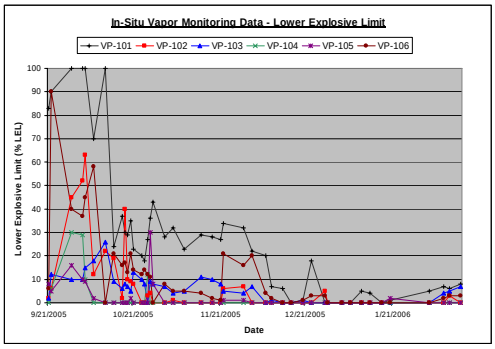
- Carbon dioxide and carbon monoxide were detected at increased concentrations during the initial phase of pilot test operations and the concentrations leveled off as the testing activities progressed. The increased concentrations of carbon dioxide and carbon monoxide appear to indicate that breakdown of organic compounds occurred during oxidant injection. Carbon dioxide and carbon monoxide concentrations detected during pilot-test monitoring are shown on the charts below and summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A, Table 7 and Charts 12 and 13).

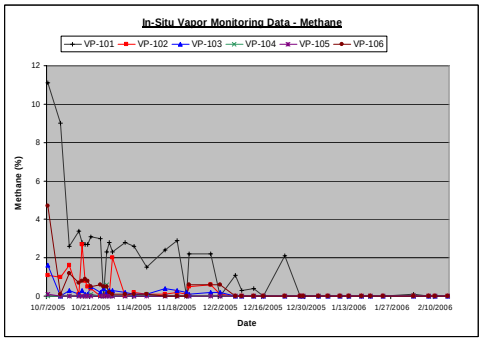




- Similar to the trends observed for volatile organic vapors, carbon dioxide, and carbon monoxide, the lower explosive limit (LEL) values and methane concentrations generally increased during the initial phase of testing followed by a gradual decrease in concentrations. The presence of methane during baseline

monitoring is an indication that subsurface conditions at select areas of the site were consistent with anaerobic (methanogenic) conditions prior to in-situ testing using ozone/oxygen which stimulated a reversal of subsurface conditions to an aerobic environment. The initial increase in LEL values may be related to VOCs being volatilized during initial sparging within the saturated zone with the gradual decrease in LEL values related to continued operation of the SVE system to extract volatilized organic vapors and methane within the vadose zone as testing progressed. LEL and methane measured during pilot-test monitoring are shown on the charts below and summarized in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A, Table 7 and Charts 14 and 15).





6.2.5 Groundwater Sampling Analytical Results

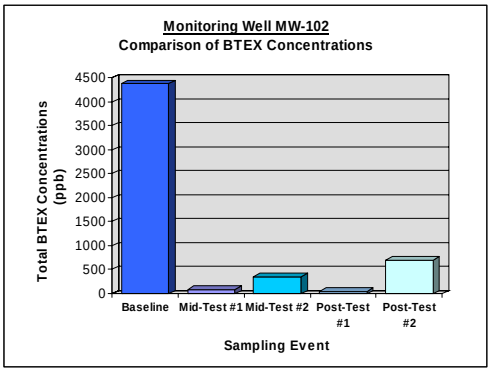
The analytical results for groundwater sampling conducted prior to, during, and following the pilot testing indicates that the oxidation of VOCs and SVOCs and stimulation of aerobic biodegradation occurred. The groundwater analytical results are summarized in Tables 6 through 10 attached this summary report. The groundwater analytical results indicate the following:

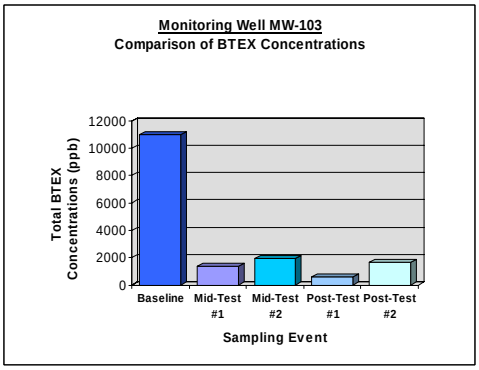
- Reductions in BTEX and PAH concentrations were detected for groundwater samples collected from monitoring wells MW-102 and MW-103. For groundwater samples collected from MW-103 as part of post-test sampling event #1, BTEX and PAH concentrations were reduced by 95% and 92%, respectively, compared with baseline concentrations. Similarly, the analytical results for groundwater samples collected from monitoring well MW-102 (located approximately 45 feet north of the center of the test area) during post-test sampling event #1 indicated that BTEX and PAH concentrations were reduced by 99% and 99.7%, respectively. BTEX and PAH concentrations in groundwater samples collected from monitoring wells MW-104 and MW-105, which are located farther outside and hydraulically downgradient

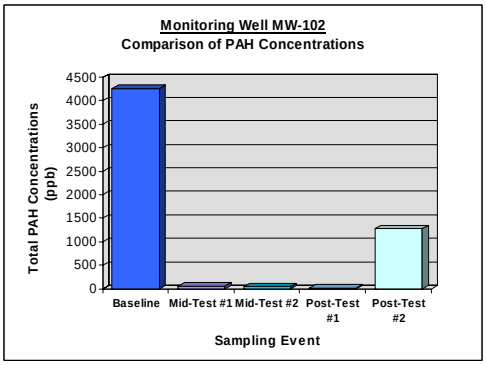
of the test area, were also reduced compared with baseline concentrations. However, the percent reductions at MW-104 and MW-105 were less than the constituent reductions detected at MW-102 and MW-103. The BTEX and PAH concentrations detected in groundwater samples collected from MW-102, MW-103, and MW-105 indicated a slight rebound as part of post-test sampling event #2 (approximately 4 weeks following shutdown of the testing system), while BTEX and PAH concentrations during post-test sampling event #2 for monitoring well MW-104 indicated a greater reduction in constituent concentrations. The rebound of BTEX and PAH concentrations at monitoring wells MW-102, MW-103, and MW-105 is not unexpected since absorbed source materials remain within the test area and both absorbed-phase source materials and dissolved constituents remain hydraulically upgradient of the test area following treatability testing. BTEX concentrations for groundwater samples collected from monitoring well MW-101 (located upgradient of the test area) were slightly reduced compared with baseline concentrations; however, the analytical results indicate an increase in PAH concentrations for MW-101 as part of both post-test sampling events. A summary the BTEX and PAH concentrations detected in groundwater samples collected during the pilot test is presented below.

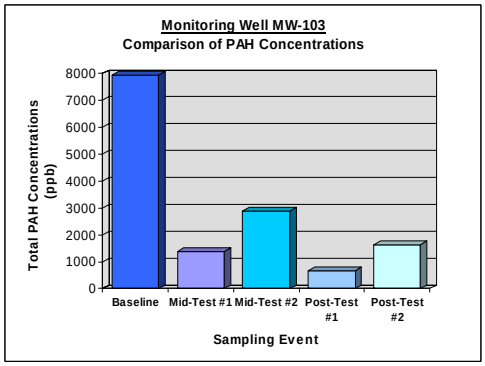
Monitoring Well ID	Parameter	Baseline Sampling	Post-Test Sampling Event #1	% Reduction vs. Baseline	Post-Test Sampling Event #2	% Reduction vs. Baseline
MW-101	BTEX	6,260 ppb	5,485 ppb	12%	6,192 ppb	1%
	PAHs	10,200 ppb	12,090 ppb	(-19%)	15,020 ppb	(-47%)
MW-102	BTEX	4,379 ppb	43 ppb	99%	703 ppb	84%
	PAHs	4,259 ppb	15 ppb	99.7%	1,279 ppb	70%
MW-103	BTEX	10,990 ppb	566 ppb	95%	1,659 ppb	85%
	PAHs	7,930 ppb	672 ppb	92%	1,465 ppb	82%
MW-104	BTEX	20,800 ppb	17,800 ppb	14%	10,700 ppb	49%
	PAHs	14,440 ppb	13,290 ppb	8%	11,220 ppb	22%
MW-105	BTEX	29,300 ppb	14,500 ppb	51%	26,000 ppb	11%
	PAHs	14,210 ppb	8,270 ppb	42%	14,100 ppb	1%

Charts presenting the BTEX and PAH concentrations detected in groundwater samples collected from monitoring wells MW-102 and MW-103 during the pilot test are shown below.









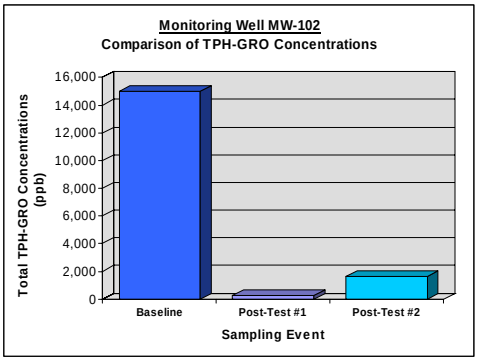
The groundwater analytical results for TCL VOCs and TCL SVOCs are presented in Tables 6 and 7 of this summary report, respectively. Tables 8 and 9 of this summary report provide a comparison of BTEX and PAH concentrations detected for each round of sampling, including molar concentrations and percent reductions.

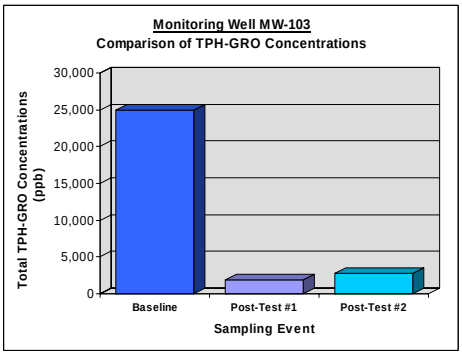
- Reductions in TPH concentrations (TPH-GRO and TPH-DRO) were measured in groundwater samples collected from monitoring wells MW-102 and MW-103. For groundwater samples collected from MW-103 as part of post-test sampling event #1, TPH-GRO and TPH-DRO concentrations were reduced by 93% and 55%, respectively, compared with baseline concentrations. Similarly, the analytical results for groundwater samples collected from monitoring well MW-102 during post-test sampling event #1 indicated that TPH-GRO and TPH-DRO concentrations were reduced by 98% and 90%, respectively. Similar to the BTEX and PAH results described above, TPH concentrations in groundwater samples collected from monitoring wells MW-104 and MW-105 were also reduced compared with baseline concentrations. However, the percent reductions at MW-104 and MW-105 were less than the constituent reductions detected at MW-102

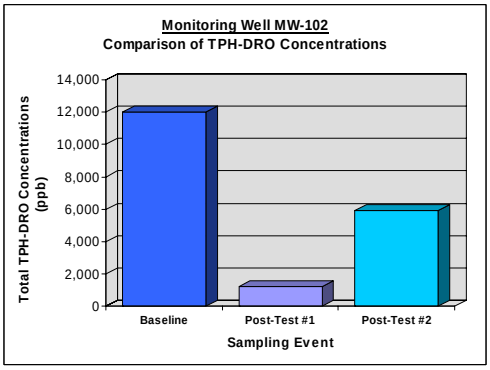
and MW-103. The TPH concentrations in groundwater samples collected from monitoring wells MW-102, MW-103, and MW-105 indicated a slight rebound as part of post-test sampling event #2. Consistent with the BTEX and PAH results described above, TPH concentrations in groundwater samples collected for post-test sampling event #2 at monitoring well MW-104 showed a greater reduction in TPH concentrations than the post-test #1 sampling event. TPH concentrations for groundwater samples collected from MW-101 were reduced compared with baseline concentrations for post-test sampling event #1, but TPH-DRO concentrations detected during post-test sampling event #2 were greater than baseline concentrations. A summary of TPH concentrations for groundwater samples collected during the pilot test is presented below.

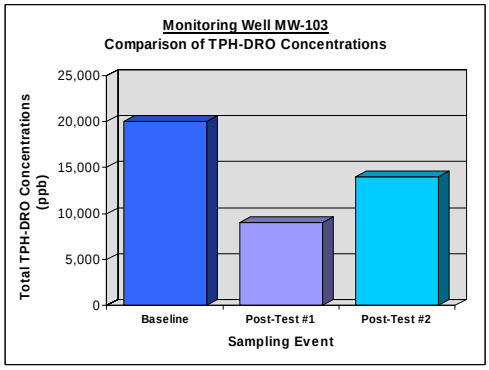
Monitoring Well ID	Parameter	Baseline Sampling	Post-Test Sampling Event #1	% Reduction vs. Baseline	Post-Test Sampling Event #2	% Reduction vs. Baseline
MW-101	TPH-GRO	21,000 ppb	9,400 ppb	55%	8,100 ppb	61%
	TPH-DRO	17,000 ppb	13,000 ppb	24%	19,000 ppb	(-12%)
MW-102	TPH-GRO	15,000 ppb	280 ppb	98%	1,600 ppb	89%
	TPH-DRO	12,000 ppb	1,200 ppb	90%	5,900 ppb	51%
MW-103	TPH-GRO	25,000 ppb	1,800 ppb	93%	2,700 ppb	89%
	TPH-DRO	20,000 ppb	9,000 ppb	55%	14,000 ppb	30%
MW-104	TPH-GRO	52,000 ppb	23,000 ppb	52%	14,000 ppb	73%
	TPH-DRO	25,000 ppb	20,000 ppb	20%	19,000 ppb	24%
MW-105	TPH-GRO	54,000 ppb	19,000 ppb	65%	34,000 ppb	37%
	TPH-DRO	24,000 ppb	18,000 ppb	25%	23,000 ppb	4%

Charts presenting the TPH-GRO and TPH-DRO concentrations detected in groundwater samples collected from monitoring wells MW-102 and MW-103 during the pilot test are shown below.









The groundwater analytical results for TPH and other miscellaneous parameters (e.g., alkalinity, nitrate/nitrite, bromide/bromate, iron, manganese, microbial plate count, etc.) are presented in Table 10 of this summary report.

- Microbial plate counts increased in groundwater samples collected while the pilot-test system operated. Microbial plate counts then decreased in groundwater samples collected as part of post-test sampling event #2, consistent with the reduction in dissolved oxygen and ORP summarized in Section 6.2.3. The groundwater analytical results for microbial plate count are summarized in Table 10 of this summary report.

Additional discussion of the analytical results for groundwater samples collected during the pilot testing are presented in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A).

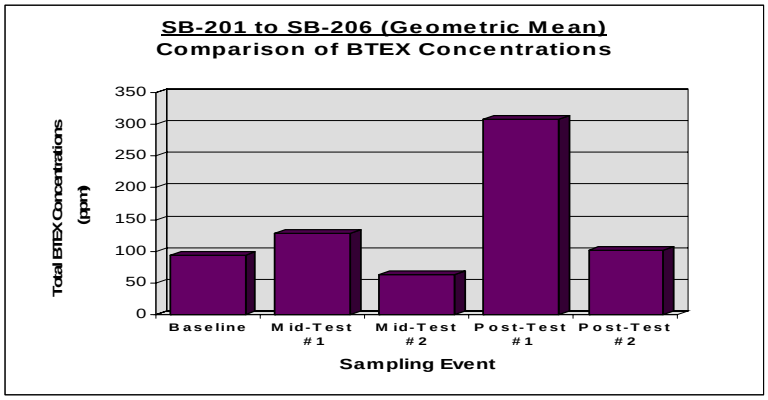
6.2.6 Soil Sampling Analytical Results

The analytical results for soil sampling conducted prior to, during, and following the pilot testing indicate significant variability. The analytical results for soil sampling indicate the following:

- The analytical results for soil samples collected during the pilot-test activities indicate that BTEX concentrations were highly variable from sampling event to sampling event. For example, at soil boring SB-201, BTEX concentrations detected as part of mid-test sampling events #1 and #2 decreased by 83% and 79%, respectively; however, sampling as part of post-test sampling events #1 and #2 showed an increase in BTEX concentrations of 465% and 6%, respectively. Similarly, the analytical results for soil samples collected at SB-204 had increases in BTEX concentrations during mid-test sampling events #1 and #2 and post-test sampling event #1 of 1,352%, 163%, and 142%, respectively, while a 53% decrease in BTEX concentrations was detected in soil as part of post-test sampling event #2. Overall, the arithmetic mean of BTEX concentrations detected as part of post-test sampling event #2 indicated a reduction of 16% compared with baseline concentrations; however, these results do not appear to be a reliable indicator of oxidation based on the significant variability observed between sampling events. A summary of the BTEX concentrations detected in soil samples collected during the pilot test is presented below.

Soil Boring IDs	Baseline Sampling	Mid-Test Sampling Event #1	Mid-Test Sampling Event #2	% Reduction vs. Baseline	Post-Test Sampling Event #1	% Reduction vs. Baseline	Post-Test Sampling Event #2	% Reduction vs. Baseline
SB-201	53 ppm	8.7 ppm	11 ppm	79%	297 ppm	(-465%)	56 ppm	(-6%)
SB-202	31 ppm	20 ppm	12 ppm	64%	217 ppm	(-593%)	71 ppm	(-126%)
SB-203	39 ppm	189 ppm	360 ppm	(-933%)	87 ppm	(-126%)	186 ppm	(-384%)
SB-204	97 ppm	1,410 ppm	255 ppm	(-162%)	235 ppm	(-142%)	45 ppm	53%
SB-205	564 ppm	940 ppm	67 ppm	88%	521 ppm	8%	81 ppm	86%
SB-206	192 ppm	101 ppm	82 ppm	60%	1,240 ppm	(-546%)	383 ppm	(-100%)
SB-201 to SB-206 (arithmetic mean)	163 ppm	445 ppm	131 ppm	18%	433 ppm	(166%)	137 ppm	16%
SB-201 to SB-206 (geometric mean)	93 ppm	128 ppm	64 ppm	32%	308 ppm	(-229%)	101 ppm	(-8%)

A chart presenting the geometric mean of BTEX concentrations detected in soil samples collected from soil borings SB-201 through SB-206 during the pilot test is shown below.

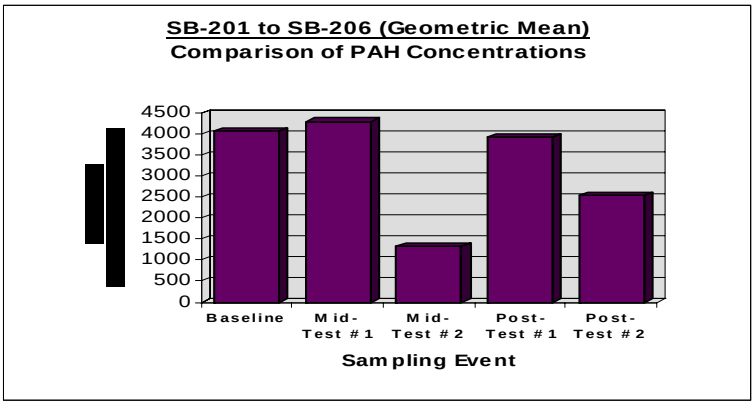


The soil analytical results for TCL VOCs are presented in Table 11 of this summary report. A comparison of BTEX concentrations detected in soil samples collected during each round of sampling is presented in Table 12 of this summary report.

- The PAH analytical results for soil samples collected during the pilot-test were also highly variable for the different sampling events. For example, compared with baseline concentrations, total PAH concentrations at SB-204 increased by 2,674% during mid-test sampling event #1, decreased by 7% during mid-test sampling event #2, increased by 648% during post-test sampling event #1, and decreased by 24% during post-test sampling event #2. Overall, the arithmetic mean and geometric mean of PAH concentrations detected as part of post-test sampling event #2 indicated a reduction of 53% and 38%, respectively, compared with baseline concentrations. However, these results do not appear to be a reliable indicator of oxidation based on the significant variability observed between sampling events. The PAH analytical results for soil samples collected at sample locations SB-202, SB-205, and SB-206 showed the least variability between sampling events. A summary of PAH concentrations detected in soil samples collected during the pilot test is presented below.

Soil Boring IDs	Baseline Sampling	Mid-Test Sampling Event #1	Mid-Test Sampling Event #2	% Reduction vs. Baseline	Post-Test Sampling Event #1	% Reduction vs. Baseline	Post-Test Sampling Event #2	% Reduction vs. Baseline
SB-201	588 ppm	1,382 ppm	327 ppm	44%	407 ppm	31%	2,014 ppm	(-243%)
SB-202	2,155 ppm	1,071 ppm	582 ppm	73%	1,370 ppm	36%	2,340 ppm	(-9%)
SB-203	5,258 ppm	4,719 ppm	22,070 ppm	(-320%)	2,846 ppm	46%	2,278 ppm	57%
SB-204	2,931 ppm	81,310 ppm	2,735 ppm	7%	21,930 ppm	(-648%)	2,228 ppm	24%
SB-205	17,700 ppm	3,896 ppm	177 ppm	99%	6,699 ppm	62%	1,101 ppm	94%
SB-206	13,140 ppm	2,829 ppm	2,688 ppm	80%	15,790 ppm	(-20%)	9,979 ppm	24%
SB-201 to SB-206 (arithmetic mean)	7,123 ppm	16,168 ppm	4,779 ppm	33%	8,785 ppm	(-23%)	3,355 ppm	53%
SB-201 to SB-206 (geometric mean)	4,069 ppm	4,293 ppm	1,327 ppm	67%	3,929 ppm	3%	2,531 ppm	38%

A chart presenting the geometric mean of PAH concentrations detected in soil samples collected from soil borings SB-201 through SB-206 during the pilot test is shown below.



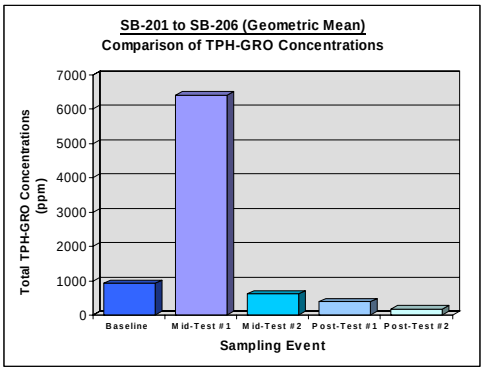
The soil analytical results for TCL SVOCs are presented in Table 13 attached to this summary report. A comparison of PAH concentrations detected in soil

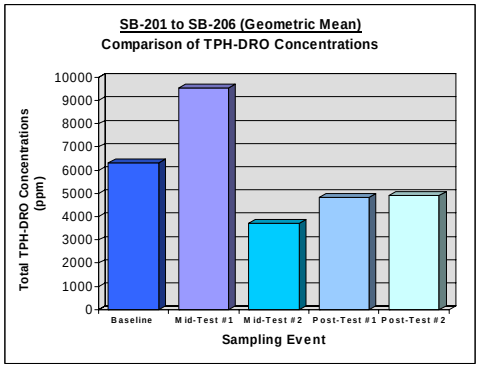
samples collected during each round of sampling are presented in Table 14 of this summary report.

- Similar to the BTEX and PAH analytical results described above, the TPH analytical results for soil samples collected during the pilot-test showed a high degree of a variability for the different sampling events. The greatest variability for TPH data was detected for the analytical results for mid-test sampling event #1. Overall, the arithmetic mean and geometric mean for mid-test sampling event #2, post-test sampling event #1, and post-test sampling event #2 indicated relatively consistent reductions in TPH concentrations compared with baseline concentrations. A summary of TPH-GRO and TPH-DRO concentrations detected in soil samples collected during the pilot test is presented below.

Soil Boring IDs	TPH	Baseline Sampling	Mid-Test Sampling Event #1	Mid-Test Sampling Event #2	Post-Test Sampling Event #1	% Reduction vs. Baseline	Post-Test Sampling Event #2	% Reduction vs. Baseline
SB-201	TPH-GRO	270 ppm	1,500 ppm	160 ppm	84 ppm	69%	130 ppm	52%
	TPH-DRO	1,700 ppm	2,300 ppm	840 ppm	390 ppm	77%	3,500 ppm	(-106%)
SB-202	TPH-GRO	420 ppm	1,300 ppm	370 ppm	300 ppm	29%	77 ppm	82%
	TPH-DRO	3,300 ppm	1,700 ppm	1,400 ppm	6,000 ppm	(-82%)	3,400 ppm	(-3%)
SB-203	TPH-GRO	1,200 ppm	11,000 ppm	4,500 ppm	280 ppm	77%	460 ppm	62%
	TPH-DRO	14,000 ppm	15,000 ppm	21,000 ppm	5,400 ppm	61%	7,800 ppm	44%
SB-204	TPH-GRO	640 ppm	10,000 ppm	1,700 ppm	450 ppm	30%	96 ppm	85%
	TPH-DRO	4,400 ppm	160,000 ppm	15,000 ppm	7,900 ppm	(-80%)	4,100 ppm	7%
SB-205	TPH-GRO	4,700 ppm	41,000 ppm	280 ppm	1,600 ppm	66%	61 ppm	99%
	TPH-DRO	20,000 ppm	12,000 ppm	1,000 ppm	9,300 ppm	54%	2,300 ppm	89%
SB-206	TPH-GRO	1,500 ppm	7,900 ppm	8,700 ppm	400 ppm	59%	1,700 ppm	20%
	TPH-DRO	9,300 ppm	6,700 ppm	7,100 ppm	14,000 ppm	(-51%)	16,000 ppm	(-72%)
SB-201 to SB-206 (arithmetic mean)	TPH-GRO	1,455 ppm	12,117 ppm	1,235 ppm	554 ppm	62%	337 ppm	77%
	TPH-DRO	8,783 ppm	32,950 ppm	7,723 ppm	7,165 ppm	18%	6,183 ppm	30%
SB-201 to SB-206 (geometric mean)	TPH-GRO	922 ppm	6,412 ppm	608 ppm	382 ppm	59%	179 ppm	81%
	TPH-DRO	6,329 ppm	9,541 ppm	3,715 ppm	4,849 ppm	23%	4,910 ppm	22%

Charts presenting the geometric mean of TPH-GRO and TPH-DRO concentrations detected in soil samples collected from soil borings SB-201 through SB-206 during the pilot test are shown below.





The soil analytical results for TPH and other miscellaneous parameters (e.g., TOC, iron, manganese, microbial plate count, etc.) are presented in Table 15 of this summary report.

- Increases in bacteria were measured in soil samples collected while the pilot-test system operated. With the exception of soil samples collected at SB-204 and SB-206, microbial plate counts decreased in soil samples collected during post-test sampling event #2 consistent with the reduction in dissolved oxygen and ORP concentrations summarized in Section 6.2.3. The microbial plate count results for soil samples collected as part of the pilot test are presented in Table 15 of this summary report.

- Soil samples collected as part of the pilot-test sampling program did not indicate any visible evidence of "bleaching" (i.e., discoloration of soils by the oxidation process); however, some physical changes in the soil characteristics was observed during the different sampling events. A summary of subsurface conditions encountered during each soil sampling event is presented in Table 4 of this summary report.

6.3 Test Area #2 – Pneumatic Testing Results

Performance testing implemented as part of the pneumatic testing for Test Area #2 indicate that the oxidant could be generally applied and distributed to the subsurface in the area. In-situ monitoring indicated that induced pressures and induced flow were

observed at nearby monitoring points during the pneumatic testing. In addition, injected helium was detected at nearby monitoring points during the radius of influence testing. Based on the monitoring data, the injection radius of influence for Test Area #2 was between approximately 7 feet and 17.5 feet. The shallow depth to groundwater at Test Area #2 during the testing activities (approximately 1.5 to 6 feet bgs) limited the effectiveness of the SVE system and extraction wells. Additional details are provided in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007a).

7. Conclusions

This section presents conclusions that are supported by the results for the pilot-scale treatability testing program. The results for the pilot-scale treatability testing program are summarized in Section 6 of this report, in the *Pilot-Scale Treatability Report – Test Area #1* (RCC, 2007a) (Appendix A to this summary report), and in the *Pilot-Scale Treatability Report – Test Area #2* (RCC, 2007b) (Appendix B to this summary report). Conclusions based on the results for the pilot-scale treatability testing program are presented below:

- Performance testing and radius of influence testing implemented at Test Area #1 prior to in-situ treatability testing indicated that injected oxidant could be adequately applied and distributed into the subsurface with induced pressures and flow observed at nearby monitoring points.

- Performance testing implemented as part of the pneumatic testing for Test Area #2 indicated that the oxidant could be applied and distributed to the subsurface in the area based on induced pressures and induced flow were observed at nearby monitoring points. The results indicate that, with appropriate controls and monitoring, effective distribution of gaseous oxidants could be implemented in the northwestern portion of the site. However, the shallow depth to groundwater in the northwestern portion of the site may limit the ability to implement an SVE system in conjunction with an in-situ chemical oxidation program.

- Monitoring during the pilot-test indicated that, with appropriate design, control measures, and monitoring, in-situ chemical oxidation using ozone can be implemented in a controlled manner and be protective of the health and safety of personnel implementing the work activities and National Grid personnel working at the site.

- The results of groundwater monitoring during the in-situ pilot testing suggests evidence of oxidation and stimulation of aerobic biodegradation. Key indicators include increases in dissolved oxygen and ORP within and surrounding the test area during the injection activities. The increased dissolved oxygen and ORP measurements are an indication that the injected ozone/oxygen feed was distributed through the subsurface within and surrounding the test area and that subsurface conditions shifted to an environment suitable for oxidation and stimulation of aerobic biodegradation. In-situ groundwater monitoring after the completion of the pilot test indicated that dissolved oxygen was consumed rapidly

and that ORP decreased to reducing/anaerobic conditions. Another indication that oxidative conditions in the subsurface were promoted during in-situ pilot-testing is based on slight reductions in pH and alkalinity during pilot-test monitoring. Although indicator parameters were favorable to oxidation/biodegradation, it is not clear how much effect ozone in the oxidant feed (i.e., approximately 93% oxygen and 4.4% ozone and 27 pounds per day ozone) had in changes to the oxidative conditions or whether the observed conditions would result from the injection of oxygen alone.

- Dissolved ozone was detected at trace concentrations in groundwater samples and limited concentrations of ozone were detected in soil-vapor at shallow vapor monitoring points. The lack of detected ozone concentrations is an indication that the injected ozone was readily reduced/consumed by the impacted groundwater and/or absorbed organics in soil within the test area.

- There was no visible evidence of increased NAPL accumulations in monitoring wells installed as part of the pilot test. This observation suggests that in-situ chemical oxidation using ozone/oxygen sparging may not promote desorption and mobilization of NAPL absorbed to soils at the site.

- The results of in-situ vapor monitoring performed during the pilot testing suggest evidence of oxidant distribution, oxidation, and stimulation of aerobic biodegradation. Key indicators include increased concentrations of oxygen in the soil vapor inside and surrounding the test area. The increase in oxygen concentrations in soil vapor are not unexpected considering that the oxidant injected into the subsurface contained approximately 93% oxygen and 4.4% ozone. It is not clear whether ozone in the oxidant feed provided any additional influence in promoting the observed conditions or whether the observed conditions would result from the injection of oxygen alone. Additional indicators observed during the in-situ vapor monitoring include increased concentrations of volatile organic vapors, carbon monoxide, and carbon dioxide and decreased concentrations of methane and LEL. The increase of volatile organic vapor concentrations may be attributed to volatilization of VOCs from groundwater and/or subsurface soil during the oxidant sparging process. The monitoring results indicate that the presence of methane during baseline monitoring is an indication that subsurface conditions prior to in-situ pilot testing were representative of anaerobic (methanogenic) conditions at select areas and that in-situ injection of ozone and oxygen stimulated an aerobic environment.

- The analytical results for groundwater sampling conducted prior to, during, and following the pilot testing indicates that oxidation and stimulation of aerobic biodegradation occurred. Reductions in BTEX and PAH concentrations were detected for groundwater samples collected from monitoring wells MW-103 and MW-102. TPH concentrations were also reduced in groundwater samples collected from MW-102 and MW-103. The reductions in BTEX, PAH, and TPH groundwater analytical results for monitoring wells MW-102 and MW-103 correspond favorably with the increased concentrations of dissolved oxygen and ORP detected at these monitoring wells during the testing activities. BTEX and PAH concentrations in groundwater samples collected from monitoring wells MW-104 and MW-105, also located outside of the test area, were also reduced compared with baseline concentrations, but at a lower percentage than at monitoring wells MW-102 and MW-103. Both the groundwater monitoring results and the groundwater sampling results indicate that that there appears to be preferential subsurface migration from the test area toward MW-102 (which located approximately 45 feet north of the center of the test area). Furthermore, the data generated during the groundwater monitoring and sampling suggests that if the oxidant feed can be effectively distributed to an area stimulating oxidative/aerobic conditions (as evidenced by increased dissolved oxygen and ORP at monitoring wells MW-102 and MW-103), dissolved-phase BTEX and PAHs can be effectively oxidized in groundwater.

- The analytical results for groundwater sampling conducted as part of post-test sampling event #2 (approximately 4 weeks following shutdown of the testing system) indicate that a slight rebound was observed in BTEX and PAH concentrations at MW-102 and MW-103. The rebound of BTEX and PAH concentrations at these monitoring wells is not unexpected since absorbed source materials remain within the test area and both absorbed-phase source materials and dissolved constituents remain hydraulically upgradient of the test area following treatability testing.

- The analytical results for soil sampling conducted prior to, during, and following the pilot testing indicate significant variability. BTEX, PAH, and TPH analytical results for soil samples collected during the pilot-test indicate that concentrations were highly variable from sampling event to sampling event. Subsurface soil conditions in the test area appear to be heterogeneous in some areas. The subsurface soil sampling approach for the pilot test consisted of completing soil borings adjacent to and as close as practical (within approximately 3 feet) to the baseline soil boring locations. This approach results in variability in the sample matrix and ultimately

the constituent concentrations detected within the soil samples. The heterogeneous nature of the soils may also result in preferential pathways of subsurface migration that interfere with the distribution of the oxidant feed within the soil pore spaces of the test area. The variability of the soil sampling data does not provide a reliable indicator for calculating mass loading rates, rates of oxidation, or what anticipated extent of full-scale remediation would be required to achieve potential cleanup goals for the test area.

- Microbial plate counts increased in groundwater and soil samples collected while the pilot-test system operated. The microbial plate counts generally decreased in samples collected as part of post-test sampling event #2. The fluctuations in microbial plate counts were consistent with the trends in dissolved oxygen and ORP measured during groundwater monitoring prior to, during, and following the pilot testing, which indicate that the in-situ oxidant injection stimulated aerobic biodegradation conditions.

In summary, the analytical results for in-situ groundwater monitoring, in-situ vapor monitoring, and groundwater sampling show evidence that oxidation and stimulation of aerobic biodegradation occurred as part of the pilot test to reduce the concentrations of MGP-related constituent concentrations within the aqueous matrix. However, the analytical results for soil sampling indicate that MGP-related constituents remain within the test area following the pilot test and that if in-situ chemical oxidation is a feasible alternative, additional oxidant application would be necessary in the test area to achieve potential cleanup goals.

During the planning of the pilot test, it was not anticipated that complete oxidation or reduction of constituents of concern would occur. The primary goal of the pilot test was to evaluate the effectiveness of in-situ chemical oxidation using ozone to reduce the concentrations of MGP-related constituents at the site. The data generated during the pilot test would then be used to determine estimated rates of reduction using the technology to remediate MGP-related constituents at the site. However, while there is some soil analytical data that indicates favorable results for the in-situ chemical oxidation testing, the variability of the soil sampling data does not provide a reliable indicator for calculating mass loading rates, rates of oxidation, and what anticipated extent of full-scale remediation would be required. It may be possible to overcome the variability of soil sampling results associated with the heterogeneity in subsurface conditions through additional application of oxidant within the area.

The results of the pilot-scale treatability test suggest the in-situ chemical oxidation may not be a completely feasible technology for source removal/reduction. However, as demonstrated by the reduction in dissolved-phase concentrations of MGP-related constituents, the technology may have some application (possibly in conjunction with other remedial technologies) to target certain areas of the site or to address specific objectives. Further evaluation of the feasibility, potential application, and estimated costs associated with in-situ chemical oxidation as part of the overall remedial strategy for addressing MGP-related impacts at the National Grid North Albany Service Center will be performed in connection with the completion of a feasibility study for the site.

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Tables

TABLE 1
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
MONITORING, INJECTION, AND EXTRACTION WELL CONSTRUCTION SUMMARY - TEST AREA #1

Well ID	Installation Date	Northing *	Easting *	Ground Surface Elevation *	Top of PVC Well Elevation *	Surface Completion	Well Material	Screen Slot Size	Depth to Bedrock	Bedrock Elevation	Depth to Screened Interval (ft. bgs)		Elevation of Screened Interval * (ft. AMSL)		Sump Length	Total Depth
		(ft.)	(ft.)	(ft., AMSL)	(ft., AMSL)			(in.)	(ft. bgs)	(ft. AMSL)	Top	Bottom	Top	Bottom	(ft.)	(ft. bgs)
Groundwater Monitoring Wells																
MW-101	6/15/2005	1,398,150.21	696,921.97	20.50	20.22	Flushmount	2" PVC	0.02	--	--	4.11	16.11	16.39	4.39	2	18.11
MW-102	6/14/2005	1,398,168.17	696,983.61	20.36	20.14	Flushmount	2" PVC	0.02	--	--	2.92	12.92	17.44	7.44	2	14.92
MW-103	6/17/2005	1,398,115.15	696,977.66	20.16	19.89	Flushmount	2" PVC	0.02	17.0	3.16	3.14	17.14	17.02	3.02	2	19.14
MW-104	6/15/2005	1,398,060.99	696,962.21	19.69	19.32	Flushmount	2" PVC	0.02	18.5	1.19	3.02	19.02	16.67	0.67	2	21.02
MW-105	6/17/2005	1,398,067.96	697,019.40	19.98	19.67	Flushmount	2" PVC	0.02	20.6	-0.62	2.97	20.97	17.01	-0.99	2	22.97
MW-5R	6/21/2005	1,398,094.57	697,030.31	20.62	20.37	Flushmount	2" PVC	0.02	20.0	0.62	3.08	21.08	17.54	-0.46	2	23.08
Soil Vapor Extraction Wells																
SVE-101	8/25/2005	NA	NA	NA	NA	Stickup	4" PVC	0.02	NA	NA	2.0	5.0	NA	NA	NA	5.0
SVE-102	8/25/2005	NA	NA	NA	NA	Stickup	4" PVC	0.02	NA	NA	2.0	5.0	NA	NA	NA	5.0
SVE-103	8/25/2005	NA	NA	NA	NA	Stickup	4" PVC	0.02	NA	NA	2.0	5.0	NA	NA	NA	5.0
Injection/Sparge Points																
SP-101S	8/30/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	10.5	11.5	NA	NA	NA	12.0
SP-101D	8/30/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	14.5	15.5	NA	NA	NA	16.0
SP-102S	8/31/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	10.5	11.5	NA	NA	NA	12.0
SP-102D	8/31/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	14.5	15.5	NA	NA	NA	16.0
SP-103S	8/31/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	10.5	11.5	NA	NA	NA	12.0
SP-103D	8/31/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	14.5	15.5	NA	NA	NA	16.0
SP-104S	8/30/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	10.5	11.5	NA	NA	NA	12.0
SP-104D	8/30/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	14.5	15.5	NA	NA	NA	16.0
SP-105S	8/30/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	10.5	11.5	NA	NA	NA	12.0
SP-105D	8/31/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	14.5	15.5	NA	NA	NA	16.0
SP-106S	9/1/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	10.5	11.5	NA	NA	NA	12.0
SP-106D	9/1/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	14.5	15.5	NA	NA	NA	16.0
SP-107S	8/26/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	10.5	11.5	NA	NA	NA	12.0
SP-107D	8/26/2005	NA	NA	NA	NA	Stickup	3/8" Stainless	Sinter 100µ pore size	NA	NA	14.5	15.5	NA	NA	NA	16.0
Vapor Monitoring Cluster Points																
VP-101S	8/29/2005	NA	NA	NA	NA	Flushmount	1" PVC	0.02	NA	NA	3.0	6.0	NA	NA	NA	18.0
VP-101D							1" PVC	0.02	NA	NA	7.5	17.5	NA	NA	NA	
VP-102S	8/29/2005	NA	NA	NA	NA	Flushmount	1" PVC	0.02	NA	NA	3.0	6.0	NA	NA	NA	18.0
VP-102D							1" PVC	0.02	NA	NA	7.5	17.5	NA	NA	NA	
VP-103S	9/1/2005	NA	NA	NA	NA	Flushmount	1" PVC	0.02	NA	NA	3.0	6.0	NA	NA	NA	18.0
VP-103D							1" PVC	0.02	NA	NA	7.5	17.5	NA	NA	NA	
VP-104S	8/26/2005	NA	NA	NA	NA	Flushmount	1" PVC	0.02	NA	NA	3.0	6.0	NA	NA	NA	18.0
VP-104D							1" PVC	0.02	NA	NA	7.5	17.5	NA	NA	NA	
VP-105S	9/2/2005	NA	NA	NA	NA	Flushmount	1" PVC	0.02	NA	NA	3.0	6.0	NA	NA	NA	18.0
VP-105D							1" PVC	0.02	NA	NA	7.5	17.5	NA	NA	NA	
VP-106S	9/1/2005	NA	NA	NA	NA	Flushmount	1" PVC	0.02	NA	NA	3.0	6.0	NA	NA	NA	18.0
VP-106D							1" PVC	0.02	NA	NA	7.5	17.5	NA	NA	NA	

TABLE 1
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
MONITORING, INJECTION, AND EXTRACTION WELL CONSTRUCTION SUMMARY - TEST AREA #1

Notes:
1. ft - feet.
2. in - inches.
3. Vertical control referenced to the National Geodetic Vertical Datum (NGVD) of 1988 and horizontal control referenced to the State Plane Coordinate System NAD83.
4. bgs - below ground surface.
5. PVC - polyvinyl chloride.
6. dia. - diameter.
7. NA - Not Available/Applicable.
8. AMSL - above mean sea level.

TABLE 2

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABLITY TESTING PROGRAM
ANALYTICAL SAMPLE SUMMARY - SUBSURFACE SOIL

Matrix	Sample Location	Sample ID	Date Sampled	SDG#	Analyses									
					TCL VOCs	TCL SVOCs	TPH-DRO/ TPH-GRO	TOC	pH	Total Fe	Total Mn	Total Br	Total Plate Count	Hydrocarbon Depleting Plate Count
Baseline Sampling Event														
Subsurface Soil	SB-201-BAS	SB-201-BAS (14'-15')	6/14/2005	209829	X									
		SB-201-BAS (10'-15')	6/14/2005	209829		X	X / X	X	X	X	X	X		X
		SP-101D (10-15')	8/30/2005	210636	X								X	
	SB-202-BAS	SB-202-BAS (12'-14')	6/15/2005	209874	X									
		SB-202-BAS (10'-15')	6/15/2005	209874		X	X / X	X	X	X	X	X		X
		SP-107D (10-15')	8/25/2005	210616	X								X	
	SB-203-BAS	SB-203-BAS (12'-14')	6/16/2005	209874	X									
		FD061605 [SB-203-BAS (12'-14')]	6/16/2005	209874	X									
		SB-203-BAS (10'-15')	6/16/2005	209874		X	X / X	X	X	X	X	X		X
		FD061605 [SB-203-BAS (10'-15')]	6/16/2005	209874		X	X / X	X	X	X	X	X		X
		SP-102D (10-15')	8/31/2005	210636	X								X	
	SB-204-BAS	SB-204-BAS (14'-15')	6/14/2005	209829	X									
		SB-204-BAS (10'-15')	6/14/2005	209829		X	X / X	X	X	X	X	X		X
		SP-104D (10-15')	8/30/2005	210636	X								X	
		DUP-01 [SP-104D (10-15')]	8/30/2005	210636	X								X	
	SB-205-BAS	SB-205-BAS (10'-12')	6/16/2005	209874	X									
		SB-205-BAS (10'-15')	6/16/2005	209874		X	X / X	X	X	X	X	X		X
		SP-103D (10-15')	8/31/2005	210616	X								X	
	SB-206-BAS	SB-206-BAS (10'-12')	6/21/2005	209927	X									
		SB-206-BAS (10'-15')	6/21/2005	209927		X	X / X	X	X	X	X	X		X
		VP-103 (10-15')	9/1/2005	210636	X								X	
Mid-Test Sampling Event #1 - November 2005														
Subsurface Soil	SB-201-MT1	SB-201-MT1 (10'-15')	11/16/2005	211359	X	X	X / X	X	X					
	SB-202-MT1	SB-202-MT1 (10'-15')	11/16/2006	211359	X	X	X / X	X	X					
	SB-203-MT1	SB-203-MT1 (10'-15')	11/17/2005	211359	X	X	X / X	X	X					
	SB-204-MT1	SB-204-MT1 (10'-15')	11/17/2005	211359	X	X	X / X	X	X					
	SB-205-MT1	SB-205-MT1 (10'-15')	11/17/2005	211359	X	X	X / X	X	X					
	SB-206-MT1	SB-206-MT1 (10'-15')	11/17/2005	211359	X	X	X / X	X	X					
		DUP-2-MT1 [SB-206-MT1 (10'-15')]	11/17/2005	211359	X	X	X / X	X	X					

TABLE 2

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABLITY TESTING PROGRAM
ANALYTICAL SAMPLE SUMMARY - SUBSURFACE SOIL

Matrix	Sample Location	Sample ID	Date Sampled	SDG#	Analyses									
					TCL VOCs	TCL SVOCs	TPH-DRO/ TPH-GRO	TOC	pH	Total Fe	Total Mn	Total Br	Total Plate Count	Hydrocarbon Depleting Plate Count
Mid-Test Sampling Event #2 - December 2005														
Subsurface Soil	SB-201-MT2	SB-201-MT2 (10'-15')	12/21/2005	211735	X	X	X / X	X	X					
		SB-201-MT2 (10'-10.2')	12/21/2005	211735	X									
	SB-202-MT2	SB-202-MT2 (10'-15')	12/21/2005	211735	X	X	X / X	X	X					
		SB-202-MT2 (10'-10.5')	12/21/2005	211735	X									
	SB-203-MT2	SB-203-MT2 (10'-15')	12/22/2005	211735	X	X	X / X	X	X					
		SB-203-MT2 (11'-13.5')	12/22/2005	211735	X									
	SB-204-MT2	SB-204-MT2 (10'-15')	12/21/2005	211735	X	X	X / X	X	X					
		SB-204-MT2 (12'-13.2')	12/21/2005	211735	X									
	SB-205-MT2	SB-205-MT2 (10'-15')	12/22/2005	211735	X	X	X / X	X	X					
		SB-205-MT2 (12'-15')	12/22/2005	211735	X									
	SB-206-MT2	SB-206-MT2 (10'-15')	12/22/2005	211735	X	X	X / X	X	X					
		DUP-2-MT2 [SB-206-MT2 (10'-15')]	12/22/2005	211735	X	X	X / X	X	X					
		DUP-2-MT2 [SB-206-MT2 (10'-15')]	12/22/2005	211735	X	X	X / X	X	X					
		SB-206-MT2 (14'-14.7')	12/22/2005	211735	X									
Post-Test Sampling Event #1 - February 2006														
Subsurface Soil	SB-201-PT1	SB-201-PT1 (10'-15')	2/1/2006	212029	X	X	X / X	X	X	X	X	X	X	X
		SB-201-PT1 (12'-14')	2/1/2006	212029	X									
	SB-202-PT1	SB-202-PT1 (10'-15')	2/2/2006	212029	X	X	X / X	X	X	X	X	X	X	X
		SB-202-PT1 (12'-14')	2/2/2006	212029	X									
	SB-203-PT1	SB-203-PT1 (10'-15')	2/1/2006	212029	X	X	X / X	X	X	X	X	X	X	X
		SB-203-PT1 (12'-14')	2/1/2006	212029	X									
	SB-204-PT1	SB-204-PT1 (10'-15')	2/2/2006	212029	X	X	X / X	X	X	X	X	X	X	X
		SB-204-PT1 (12'-14')	2/2/2006	212029	X									
	SB-205-PT1	SB-205-PT1 (10'-15')	2/1/2006	212029	X	X	X / X	X	X	X	X	X	X	X
		SB-205-PT1 (12'-14')	2/1/2006	212029	X									
	SB-206-PT1	SB-206-PT1 (10'-15')	2/2/2006	212029	X	X	X / X	X	X	X	X	X	X	X
		SB-DUP1-PT1 [SB-206-PT1 (10'-15')]	2/2/2006	212029	X	X	X / X	X	X	X	X	X	X	X
		SB-206-PT1 (10'-12')	2/2/2006	212029	X									
	SP-107S-PT1	SP-107S-PT1 (10'-15')	2/2/2006	212029	X	X								
		SP-107S-PT1 (12'-14')	2/2/2006	212029	X									
	SP-107D-PT1	SP-107D-PT1 (10'-15')	2/2/2006	212029	X	X								
		SP-107D-PT1 (12'-14')	2/2/2006	212029	X									

TABLE 2

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABLITY TESTING PROGRAM
ANALYTICAL SAMPLE SUMMARY - SUBSURFACE SOIL

Matrix	Sample Location	Sample ID	Date Sampled	SDG#	Analyses									
					TCL VOCs	TCL SVOCs	TPH-DRO/ TPH-GRO	TOC	pH	Total Fe	Total Mn	Total Br	Total Plate Count	Hydrocarbon Depleting Plate Count
Post-Test Sampling Event #2 - March 2006														
Subsurface Soil	SB-201-PT2	SB-201-PT2 (10'-15')	3/1/2006	212259	X	X	X / X	X	X				X	X
		DUP-01 [SB-201-PT2 (10-15')]	3/1/2006	212259	X	X	X / X	X	X				X	X
		SB-201-PT2 (10'-12')	3/1/2006	212259	X									
	SB-202-PT2	SB-202-PT2 (10'-15')	3/2/2006	212259	X	X	X / X	X	X				X	X
		SB-202-PT2 (14'-16')	3/2/2006	212259	X									
	SB-203-PT2	SB-203-PT2 (10'-15')	3/2/2006	212259	X	X	X / X	X	X				X	X
		SB-203-PT2 (14'-16')	3/2/2006	212259	X									
	SB-204-PT2	SB-204-PT2 (10'-15')	3/2/2006	212259	X	X	X / X	X	X				X	X
		SB-204-PT2 (10'-12')	3/2/2006	212259	X									
	SB-205-PT2	SB-205-PT2 (10'-15')	3/1/2006	212259	X	X	X / X	X	X				X	X
		SB-205-PT2 (12'-14')	3/1/2006	212259	X									
	SB-206-PT2	SB-206-PT2 (10'-15')	3/1/2006	212259	X	X	X / X	X	X				X	X
		SB-206-PT2 (10'-12')	3/1/2006	212259	X									
	SP-107S-PT2	SP-107S-PT2 (10'-15')	3/2/2006	212259	X	X								
	SP-107D-PT2	SP-107D-PT2 (10'-15')	3/2/2006	212259	X	X								

TABLE 2

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABLITY TESTING PROGRAM
ANALYTICAL SAMPLE SUMMARY - SUBSURFACE SOIL

Notes:

1. SDG - Sample delivery group.
2. Sample designations indicate the following:
   - SB - Soil boring.
   - SP - Sparge/injection point.
   - VP - Vapor monitoring point.
   - FD - Field duplicate sample. Sample ID shown in brackets indicates location where duplicate sample was collected.
   - DUP - Field duplicate sample. Sample ID shown in brackets indicates location where duplicate sample was collected.
   - BAS - Samples collected as part of the baseline samling event.
   - MT1 - Samples collected as part of the Mid-Test Sampling Event #1 during November 2005.
   - MT2 - Samples collected as part of the Mid-Test Sampling Event #2 during December 2005.
   - PT1 - Samples collected as part of the Post-Test Sampling Event #1 during February 2006.
   - PT2 - Samples collected as part of the Post-Test Sampling Event #2 during March 2006.
3. Samples were analyzed using the following methods as referenced in the New York State Department of Environmental Conservation (NYSDEC) 2000 Analytical Service Protocol (ASP):
   - TCL VOCs - Target Compound List Volatile Organic Compounds using United States Environmental Protection Agency (USEPA) SW-846 Method 8260.
   - TCL SVOCs - Semi-Volatile Organic Compounds using USEPA SW-846 Method 8270.
   - TPH DRO/GRO - Total Petroleum Hydrocarbons Diesel Range Organics/Gas Range Organics using USEPA SW-846 Method 8015.
   - TOC - Total organic carbon using the Lloyd Kahn Method.
   - pH - Using USEPA SW-846 Method 9045.
   - Total Br - Total bromide using USEPA Method 300.1.
   - Total Fe - Total iron using USEPA SW-846 Method 6010.
   - Total Mn - Total manganese using USEPA SW-846 Method 6010.
   - Total Plate Count and Hydrocarbon Depleting Plate Count using Method SM 9215 and Method SM 9215M, respectively.
4. Baseline samples collected during August 2005 were collected from the 10 to 15-foot depth interval below ground surface during the installation of sparge points and vapor monitoring points. Samples collected from these locations were submitted for laboratory analysis for TCL VOCs and total plate count. The analytical results for these samples have been used for comparison purposes with nearby baseline soil sampling locations SB-201-BAS through SB-206-BAS as referenced above.

TABLE 3

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABLITY TESTING PROGRAM
ANALYTICAL SAMPLE SUMMARY - GROUNDWATER

Matrix	Sample Location	Sample ID	Date Sampled	SDG#	Analyses																
					TCL VOCs	TCL SVOCs	TPH GRO	TPH DRO	TOC	pH	Total Phosphorus	TKN	Nitrite/ Nitrate	Bromide/ Bromate	Total / Filtered Fe	Total / Filtered Mn	ORP	COD	Alkalinity	Total Plate Count	Hydrocarbon Depleting Plate Count
Baseline Sampling Event																					
Groundwater	MW-5R	MW-5R	6/29/2005	210011	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
		FD062905 (MW-5R-DUP)	6/29/2005	210011	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-14	MW-14	6/29/2005	210011	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-26S	MW-26S	6/29/2005	210011	X	X	X	X	X	X							X	X			
	MW-26D	MW-26D	6/29/2005	210011	X	X	X	X	X	X							X	X			
	MW-27S	MW-27S	6/28/2005	210011	X	X	X	X	X	X							X	X			
	MW-27D	MW-27D	6/28/2005	210011	X	X	X	X	X	X							X	X			
	MW-28S	MW-28S	6/28/2005	210011	X	X	X	X	X	X							X	X			
	MW-28D	MW-28D	6/28/2005	210011	X	X	X	X	X	X							X	X			
	MW-101	MW-101	6/30/2005	210011	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-102	MW-102	6/30/2005	210011	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-103	MW-103	6/30/2005	210011	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-104	MW-104	6/30/2005	210011	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-105	MW-105	6/29/2005	210011	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
Mid-Testing Sampling Event #1 - November 2005																					
Groundwater	MW-101	MW-101	11/15/2005	211359	X	X	X / X		X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-102	MW-102	11/14/2005	211359	X	X	X / X		X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
		DUP-1-MT1 (MW-102-DUP)	11/14/2005	211359	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-103	MW-103	11/15/2005	211359	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-104	MW-104	11/15/2005	211359	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-105	MW-105	11/15/2005	211359	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-14	MW-14	11/16/2005	211359	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X

TABLE 3

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABLITY TESTING PROGRAM
ANALYTICAL SAMPLE SUMMARY - GROUNDWATER

Matrix	Sample Location	Sample ID	Date Sampled	SDG#	Analyses																
					TCL VOCs	TCL SVOCs	TPH GRO	TPH DRO	TOC	pH	Total Phosphorus	TKN	Nitrite/ Nitrate	Bromide/ Bromate	Total / Filtered Fe	Total / Filtered Mn	ORP	COD	Alkalinity	Total Plate Count	Hydrocarbon Depleting Plate Count
Mid-Testing Sampling Event #2 - December 2005																					
Groundwater	MW-101	MW-101-MT2	12/19/2005	211671	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
		DUP-1-MT2 (MW-101-MT2)	12/19/2005	211671	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-102	MW-102-MT2	12/19/2005	211671	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-103	MW-103-MT2	12/20/2005	211671	X	X	X		X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
		MW-103-MT2b	12/22/2005	211671		X		X													
	MW-104	MW-104-MT2	12/20/2005	211671	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-105	MW-105-MT2	12/19/2005	211671	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-14	MW-14-MT2	12/20/2005	211671	X	X	X			X			X / X	X / X	X / X	X / X				X	X
		MW-14-MT2b	12/22/2005	211671		X		X													
	MW-5R	MW-105-MT2	12/20/2005	211671	X	X	X			X			X / X	X / X	X / X	X / X				X	X
		MW-105-MT2b	12/22/2005	211671		X		X													
Post-Testing Sampling Event #1 - January/February 2006																					
Groundwater	MW-101	MW-101-PT1	2/1/2006	212006	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-102	MW-102-PT1	2/1/2006	212006	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-103	MW-103-PT1	2/1/2006	212006	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-104	MW-104-PT1	2/1/2006	212006	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-105	MW-105-PT1	2/1/2006	212006	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
		DUP-1-PT1 (MW-105-PT1)	2/1/2006	212006	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-14	MW-14-PT1	2/1/2006	212006	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-5R	MW-5-PT1	2/1/2006	212006	X	X	X	X	X	X	X	X	X / X	X / X	X / X	X / X	X	X	X	X	X
	MW-26S	MW-26S	1/31/2006	212006	X	X	X	X	X	X							X	X			
	MW-26D	MW-26D	1/31/2006	212006	X	X	X	X	X	X							X	X			
	MW-27S	MW-27S	1/31/2006	212006	X	X	X	X	X	X							X	X			
	MW-27D	MW-27D	1/31/2006	212006	X	X	X	X	X	X							X	X			
	MW-28S	MW-28S	1/31/2006	212006	X	X	X	X	X	X							X	X			
	MW-28D	MW-28D	1/31/2006	212006	X	X	X	X	X	X							X	X			

TABLE 3

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABLITY TESTING PROGRAM
ANALYTICAL SAMPLE SUMMARY - GROUNDWATER

Matrix	Sample Location	Sample ID	Date Sampled	SDG#	Analyses																
					TCL VOCs	TCL SVOCs	TPH GRO	TPH DRO	TOC	pH	Total Phosphorus	TKN	Nitrite/ Nitrate	Bromide/ Bromate	Total / Filtered Fe	Total / Filtered Mn	ORP	COD	Alkalinity	Total Plate Count	Hydrocarbon Depleting Plate Count
Post-Testing Sampling Event #2 - February/March 2006																					
Groundwater	MW-101	MW-101-PT2	3/2/2006	212247	X	X	X	X	X	X							X	X		X	X
	MW-102	MW-102-PT2	2/28/2006	212247	X	X	X	X	X	X							X	X		X	X
	MW-103	MW-103-PT2	2/28/2006	212247	X	X	X	X	X	X							X	X		X	X
		DUP-1-PT2 (MW-103-PT2)	2/28/2006	212247	X	X	X	X	X	X							X	X		X	X
	MW-104	MW-104-PT2	2/28/2006	212247	X	X	X	X	X	X							X	X		X	X
	MW-105	MW-105-PT2	3/2/2006	212247	X	X	X	X	X	X							X	X		X	X
	MW-14	MW-14-PT2	2/28/2006	212247	X	X	X	X	X	X							X	X		X	X
	MW-5R	MW-5R-PT2	2/28/2006	212247	X	X	X	X	X	X							X	X		X	X
	MW-26S	MW-26S-PT2	2/28/2006	212247	X		X		X	X							X	X			
		MW-26S-PT2	3/2/2006	212247		X		X													
	MW-26D	MW-26D-PT2	2/28/2006	212247	X	X	X	X	X	X							X	X			
	MW-27S	MW-27S-PT2	2/28/2006	212247	X	X	X	X	X	X							X	X			
	MW-27D	MW-27D-PT2	2/28/2006	212247	X	X	X	X	X	X							X	X			
	MW-28S	MW-28S-PT2	2/27/2006	212247	X	X	X	X	X	X							X	X			
	MW-28D	MW-28D-PT2	2/27/2006	212247	X	X	X	X	X	X							X	X			

TABLE 3

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PILOT-SCALE TREATABLITY TESTING PROGRAM
ANALYTICAL SAMPLE SUMMARY - GROUNDWATER

Notes:

1. SDG - Sample delivery group.
2. Sample designations indicate the following:
   - MW - Monitoring well.
   - FD - Field duplicate sample. Sample ID shown in brackets indicates location where duplicate sample was collected.
   - DUP - Field duplicate sample. Sample ID shown in brackets indicates location where duplicate sample was collected.
   - BAS - Samples collected as part of the baseline samling event.
   - MT1 - Samples collected as part of the Mid-Test Sampling Event #1 during November 2005.
   - MT2 - Samples collected as part of the Mid-Test Sampling Event #2 during December 2005.
   - PT1 - Samples collected as part of the Post-Test Sampling Event #1 during January and February 2006.
   - PT2 - Samples collected as part of the Post-Test Sampling Event #2 during February and March 2006.
3. Samples were analyzed using the following methods:
   - TCL VOCs - Target Compound List Volatile Organic Compounds using United States Environmental Protection Agency (USEPA) SW-846 Method 8260.
   - TCL SVOCs - Semi-Volatile Organic Compounds using USEPA SW-846 Method 8270.
   - TPH DRO/GRO - Total Petroleum Hydrocarbons Diesel Range Organics/Gas Range Organics using USEPA SW-846 Method 8015.
   - TOC - Total organic carbon using USEPA SW-846 Method 9010.
   - pH - Using USEPA SW-846 Method 9045.
   - Total Br - Total bromide using USEPA Method 300.1.
   - Total/Filtered Fe - Total/filtered iron using Method USEPA SW-846 Method 6010.
   - Total/Filtered Mn - Total/filtered manganese using USEPA SW-846 Method 6010.
   - ORP - Oxidation-reduction potential using ASTM Method 1498.
   - COD - Chemical oxidant demand using EPA Method 410.
   - TKN - Total Kjeldahl Nitrogen using EPA Method 351.4.
   - Alkalinity using Method SM18-2320B.
   - Total phosphorus using Method 365.3.
   - Nitrate/Nitrite using Method SM28-4500.
   - Bromide/Bromate using EPA Method 300.1.
   - Total Plate Count and Hydrocarbon Depleting Plate Count using Method SM 9215 and Method SM 9215M, respectively.

TABLE 4

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PILOT-SCALE TREATABILITY TESTING PROGRAM
SUMMARY OF SUBSURFACE CONDITIONS DURING SOIL SAMPLING EVENTS - TEST AREA #1

Sample Interval (feet bgs)	Baseline (June 2005)			Mid-Test #1 (November 2005)			Mid-Test #2 (December 2005)			Post-Test #1 (February 2006)			Post-Test #2 (March 2006)		
	Stratigraphic Description	Percent Recovery	Headspace (split-spoon/ jar) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)
SB-201															
0-2	Black CINDERS, some slag and ash, odor, no sheen, dry	93.3	3.4/ NA	Black fine to coarse SAND, little cinders and silt, dry to moist, moderate MGP-type odor, below 2'	57.5	2.2	Black fine to coarse SAND, little cinders & silt, dry to moist, moderate MGP-type odor below 2' bgs	67.5	19.2	Black (stained), fine to coarse SAND, little cinders, dry to moist, moderate MGP-type odor below 2' bgs, dense, trace oily black NAPL	75	40.4	Same as PT1 for this depth interval, trace brick at 2' bgs	67.5	28.7
2-4	Black CINDERS and ASH, strong hydrocarbon odor, slight sheen, moist	85	5.7/ NA			116			36.5			35.9			32.1
4-6	Black SAND, trace to little tar-like blebs (OLM), strong odor, sheen, moist	85	11.6/ NA	Black (stained) fine to medium SAND, little silt, moist to wet, little black stringy-sticky NAPL, increasing below 6' in silty matrix, strong MGP-type odor	87.5	183	Brown fine to medium SAND & fine to medium GRAVEL, moist to wet, little black staining, little black slightly sticky NAPL	52.5	138	Black (stained), fine to coarse SAND, trace gravel/slag/cinders, little oily black NAPL, moderate MGP-type odor below 2' bgs, wet	62.5	21.2	Same as PT1 for this depth interval, wet at 7' bgs	NR	152
6-8	Black SAND, slag and brick fragments, tar-like material, strong odor, sheen, wet	90	21.1/ NA			516			221			170			470
8-10	Same as above, trace tar-like blebs (OLM)	45	8.9/ NA	SAA	80	664	SAA	55	195	Brown/olive-green SILT & fine SAND, little orangish-gray mottling below 10', strong MGP-type odor, some oily black NAPL, wet	62.5	12.2	SAA with little gray silt below 11' bgs	42.5	420
10-12	Brown to tan, SAND, trace tar-like blebs (OLM), strong odor, sheen, wet	55	9.6/ 15.5			483			29.5			7.3			123
12-14	Same as above (SAA), trace Clay mottled gray	45	13.2/ 5.2	SAA, little to trace NAPL as above	87.5	174	SAA except no NAPL/staining/sheen below 13' bgs, light brown SILT, trace gravel	57.5	91.6	Brown/olive-green SILT & fine SAND, trace to little oily black NAPL, strong MGP-type odor, wet, some black staining	72.5	19.8	Same as PT1with trace gray clay	65	12.2
14-16	Black SAND, trace shale fragments, trace tar-like blebs (OLM), odor, sheen	60	16.9/ 27.8			21.7			447			4.5			86.6
16-18	No Recovery	0	NA	Dark brown SILT, some black staining, moist to wet, strong MGP-type odor, trace NAPL as above, shale fragments in shoe, refusal at 19' bgs	90	64.2	16 to 17' bgs: dark brown SILT w/ some black staining, strong MGP-type odor, trace NAPL. 17 to 19': light orangish brown silt and some gravel, no staining/sheen/NAPL	50	49.2	Dark brown/olive-green, fine SAND, some silt, some angular fine to medium Gravel, trace oily black NAPL, weak MGP-type odor, wet, refusal at 18' bgs	80	27.6	16 to 17' bgs: gray/olive, fine SAND, some silt, trace clay w\ fine gravel, no odor, wet. 17 to 18.2' bgs: brown, fine SAND and black shale gravel, trace silt, wet. 18.2 to 19.4' bgs: gray, coarse SAND (shale), some silt, trace fine gravel (shale), wet	85	33.4
18-20	Black to gray weathered SHALE fragments, trace black tar-like blebs, sheen, staining	30	NA			14.9			NA			34.4			44.7

TABLE 4

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PILOT-SCALE TREATABILITY TESTING PROGRAM
SUMMARY OF SUBSURFACE CONDITIONS DURING SOIL SAMPLING EVENTS - TEST AREA #1

Sample Interval (feet bgs)	Baseline (June 2005)			Mid-Test #1 (November 2005)			Mid-Test #2 (December 2005)			Post-Test #1 (February 2006)			Post-Test #2 (March 2006)		
	Stratigraphic Description	Percent Recovery	Headspace (split-spoon/ jar) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)
SB-202															
0-2	Black CINDERS/ASH, little gray & white slag, trace brick fragments, dry	80	1.2/ NA	Black (stained) SAND, little cinders, dry to moist, moderate MGP-type odor below 2' bgs, trace oily black NAPL (0.5-3'), trace sticky tar-like NAPL (3-4')	67.5	15.6	Black (stained) SAND, little cinders, dry to moist, moderate MGP-type odor below 2' bgs, trace oily black NAPL (0.5-3'), trace sticky NAPL (3-4')	65	16.9	Same as MT2 for this depth interval	55	14.6	Same as MT2 and PT1 for this depth interval	85	0.8
2-4	At 2.8', Black TAR-LIKE MATERIAL, trace tar-like blebs (OLM), strong odor, heavy sheen	65	4.9/ NA			100			71.4			NA			2.9
4-6	Black, SAND, trace black solid/pliable tar-like material and tar-like blebs (OLM), wet	80	2.1/ NA	Black (stained) SAND, sample bound by black-hardened, sticky tar-like NAPL, trace blackish-brown oily NAPL, very strong MGP-type odor	82.5	152	Black (stained) SAND, sticky (gummy) tar-like NAPL, very strong MGP-type odor, not bound like MT1 sample	50	389	Same as MT2 for this depth interval	62.5	198.5	Same as MT2 and PT1 for this depth interval, anomalous very hard, 0.5' thick interval 7' to 7.5' bgs, black, tar-like consistency with cinder	62.5	101
6-8	Black SAND, slag and brick fragments, tar-like material, strong odor, sheen, wet	75	3.6/ NA			429			359			340			448
8-10	Brown to tan, SILT and very fine SAND, trace tar-like blebs (OLM), strong odor, moist	85	0.9/ 2.9	Brown SILT & SAND, some sticky and oily black NAPL, strong MGP-type odor, some black staining	77.5	575	Brown SILT & fine SAND, some black oily NAPL, very strong MGP-type odor, some black staining, not sticky NAPL like MT1	62.5	77.8	Same as MT2 for this depth interval	75	79.6	8' to 8.7' bgs: black stained SILT and fine SAND, oily residue, pooled in first 0.2', smeared throughout, strong MGP-type odor, wet. 8.7' to 10.1' bgs: brown becoming olive/brown, SILT, little fine gravel, little odor, wet	52.5	611
10-12	Brown to tan, SAND, trace tar-like blebs (OLM), odor, sheen, wet, (to 12.5')	40	0.0/ 1.5			50.2			58.4			341			41
12-14	Tan medium to coarse SAND, with some fine SAND, Rock fragments, odor, wet	75	0.0/ 2.3	Light brown SAND, trace to little black oily NAPL, strong MGP-type odor, some black staining	90	120	Light brown medium to coarse SAND and some fine sand, trace to little black oily NAPL, strong MGP-type odor, some black staining	50	280	Same as MT2 for this depth interval	55	144	Same as MT2 and PT1 for this depth interval	80	27.9
14-16	SAA	95	1.2/ 1.1			22.5			NA			10.7			162
16-18	Brown, SILT and very fine to fine sand, trace tar-like blebs (OLM), odor, sheen, moist	75	0.0/ NA	Brown SILT & fine SAND, trace black oily NAPL, strong MGP-type odor, some black staining, Refusal at 19.5', SHALE at tip	60	52.5	Brown SILT & fine SAND, strong MGP-type odor, very trace amounts of black oily NAPL in upper portion of sample, some black staining, shale in shoe	52.5	79.6	Same as MT2 for this depth interval	60	30.8	Same as MT2 and PT1 for this depth interval, except 18.5' to 19.5' bgs - light GRAY, fine to medium, loose gravel, some fine sand/silt, oil pooled (trace) in this interval, wet (oozing)	92.5	50.2
18-20	SAA, little to some weathered shale fragments	80	0.0/ NA			22.7			NA			4.2			152

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PILOT-SCALE TREATABILITY TESTING PROGRAM
SUMMARY OF SUBSURFACE CONDITIONS DURING SOIL SAMPLING EVENTS - TEST AREA #1

Sample Interval (feet bgs)	Baseline (June 2005)			Mid-Test #1 (November 2005)			Mid-Test #2 (December 2005)			Post-Test #1 (February 2006)			Post-Test #2 (March 2006)		
	Stratigraphic Description	Percent Recovery	Headspace (split-spoon/ jar) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)
SB-203															
0-2	Black CINDERS/ASH, little to some slag (black), trace wood and glass, odor, dry	55	0.3/ NA	Blackish-brown, fine to coarse SAND, little gravel and brick, slight MGP-type odor, dry	35	9.3	Blackish-brown, fine to coarse SAND, little gravel and red brick, slight MGP-type odor, dry to moist	55	4.9	Blackish-brown, fine to coarse SAND, little fine gravel and red brick, slight MGP-type odor, trace black oily NAPL blebs below 2.5' bgs, dry to moist	70	22.1	0' to 0.5' bgs: gray, fine to medium GRAVEL, dry. 0.5' to 2.2' bgs: dark brown, fine to medium SAND, some fine gravel, damp. 2.2' to 2.7' bgs: dark brown, fine GRAVEL, some coarse sand, little fine to medium sand, white/sheening oils, moist to wet	67.5	0.6
2-4	At 2.5', Black SAND, trace tar-like blebs (OLM), odor, heavy sheen, moist to wet	60	0.9/ NA			NA			9.3			10.4			1.3
4-6	Black SAND, trace tar-like blebs (OLM), strong odor, heavy sheen, wet	NR	1.2/ NA	Black (stained) SAND, some/little gravel, little red brick, moderate MGP-type odor, Little to some black/brown oily NAPL, moist to wet	37.5	116	Blackish-brown, fine SAND and red BRICK, slight MGP odor	5	27.1	Black (stained), fine to medium SAND, little fine gravel, moderate MGP-type odor, little to some black oily NAPL, moist to wet	20	111	Black stained, fine GRAVEL, some coarse sand, little fine to medium sand, MGP-type oil pooled below 5' bgs, sheen, strong MGP-type odor, wet	60	36.8
6-8	Black SAND, trace tar-like blebs (OLM), odor, sheen, wet	NR	1.2/ NA			NA			NA			NA			36.7
8-10	Same as above, trace tar like blebs (OLM) continues to 10.5'	25	1.1/ 2.3	SAA	22.5	266	Blackish-brown, fine to coarse SAND, moderate MGP-type odor, little to some black oily NAPL, moist to wet	65	424	Black WOOD, little fine sand, strong MGP-type odor, some black oily NAPL (blebs all over wood), wet	37.5	139	8' to 9.2' bgs: SAA. 9.2' to 10.6' bgs: gray/olive, SILT and fine SAND, little medium to coarse sand, trace fine gravel and clay, wet, sheen	65	194
10-12	Brown to black, SAND, trace tar-like blebs (OLM), sheen, odor, wet	55	0.9/ 1.2			NA			509			NA			87
12-14	SAA	30	3.1/ 7.9	Black (stained) fine to coarse SAND, little blackish-brown oily NAPL, wet, moderate rainbow sheen, strong MGP-type odor	NR	NA	Blackish-brown, fine to coarse SAND & fine GRAVEL, slight MGP-type odor	0	76.1	Brownish-black (stained) fine to medium SAND, trace coarse sand, fine gravel, strong MGP-type odor, some black oily NAPL, wet	75	288	SAA until 13' to 14.3' bgs: light gray, SHALE/SILTSTONE fragments. 14.3' to 14.9' bgs: black stained, fine GRAVEL, little sand, MGP OLM pools, sheen strong odor. 14.9' to 15.2' bgs: gray/tan, fine GRAVEL, little fine to coarse sand, trace MGP staining smear, odor, wet	80	121
14-16	Brown to black, SAND and shale fragments, trace tar-like blebs (OLM), odor, sheen	35	2.3/ 5.6			173			280			127			153
16-18	Olive green SHALE, trace tar-like blebs (OLM), odor, sheen. Refusal at 17.5'	40	0.2/ NA	Greenish-brown SILT with black staining, moderate MGP-type odor, little rainbow sheen, trace black oily NAPL, wet	NR	NA	Blackish-brown SILT & fine to coarse SAND, little black oily NAPL, wet	7.5	151	Olive-green/ black SILT, little fine sand, and angular medium gravel (shale), slight MGP-type odor, wet	50	22.3	Same as PT1 to 18' bgs, more fine gravel. 18' to 18.9' bgs: gray, fine to medium GRAVEL (shale fragments), pooled NAPL oily sheen, strong MGP-type odor, wet	72.5	26
18-20	NA	NA	NA			273			NA			19.6			23

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PILOT-SCALE TREATABILITY TESTING PROGRAM
SUMMARY OF SUBSURFACE CONDITIONS DURING SOIL SAMPLING EVENTS - TEST AREA #1

Sample Interval (feet bgs)	Baseline (June 2005)			Mid-Test #1 (November 2005)			Mid-Test #2 (December 2005)			Post-Test #1 (February 2006)			Post-Test #2 (March 2006)		
	Stratigraphic Description	Percent Recovery	Headspace (split-spoon/ jar) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)
SB-204															
0-2	Black fine to med SAND, trace cinders/ash/slag and brick fragments, dry	95	0.0/ NA	Blackish-brown, fine to coarse SAND, little to trace gravel and red brick fragments, dry, no odor	67.5	9.6	Blackish-brown, fine to coarse SAND, little to trace fine gravel and red brick, dry, no odor	55	2.2	Blackish-brown, fine to coarse SAND, little fine gravel, weak MGP-type odor, dry	77.5	12.2	Same at PT1 for this depth interval, except 3' to 3.6' bgs - trace oily NAPL present	90	0.8
2-4	SAA, black Oil/Tar-like material at 3.7 ft. bgs, odor and sheen, moist to wet	85	0.3/ NA			235			NA			51.9			10
4-6	Black fine to medium SAND, little coarse sand, trace tar-like blebs, wet	62.5	8.3/ NA	Black (stained), SAND, little brownish-black oily NAPL, some slight sheen, strong MGP-type odor, moist to wet	62.5	597	SAA, little black oily NAPL, strong MGP-type odor, moist to wet	60	105	Black (stained), fine to medium SAND, little silt, coarse sand and fine gravel, moderate MGP-type odor, little black oily & tar like NAPL, wet	57.5	314	4' to 4.5' bgs: black TAR-like material with cinders imbedded, very stiff. 4.5' to 5.8' bgs: same as PT1. 5.8' to 6.5' bgs: very oily NAPL, MGP-type odor, heavy sheen, same as PT1	62.5	51.6
6-8	Black fibrous/stringy TAR-like material, trace Gravel, sheen, odor & staining, moist to wet	45	11.6/ NA			466			236			297			210
8-10	SAA to 9.5', Tan SILT & CLAY, trace fibrous material, tar-like blebs (OLM), odor, moist	55	3.3/ NA	Black hardened TAR and fine SAND, very dense, strong MGP-type odor, difficult to break apart tar	5	268	Black hardened TAR with fine SAND, very dense, strong MGP-type odor, difficult to break apart tar	20	107	Black hardened TAR with fine SAND, very dense, strong MGP-type odor, difficult to break apart tar	55	162	8' to 8.8' bg: black stained, fine to coarse SAND, little fine gravel, wet, MGP oily coating/sheen, strong MGP-odor. 8.8' to 9.4': black stained SILT, trace fine sand, wet, oily coating strong MGP-type odor. 9.4' to 10' bgs: gray/tan/olive, fine to medium gravel, some sand, wet	50	246
10-12	Brown to tan SAND, trace tar-like blebs (OLM), moist, odor	60	0.3/ 15.5			NA			NA			NA			146
12-14	SILTY CLAY and gravel, trace tar like blebs (OLM), wet, transition at 12.5' to brown SAND, wet, odor	75	0.0/ 4.5	SAA	12.5	303	SAA	30	278	12 to 12.4' bgs: SAA sticky TLM. 12.4: Brown/olive-green, fine SAND and SILT, moderate MGP-type odor, trace black oily NAPL, wet, some black staining	55	289	Same as PT1 for this depth interval	65	74.7
14-16	Brown to tan, mottled gray SILTY CLAY, shale fragments, moist to wet	55	0.0/ 45.6			NA			NA			40.3			384
16-18	Orangish SILTY CLAY, moist, odor, no sheen, no blebs or staining	50	0.0/ NA	Brown SILT w/ shale fragments, little brownish black oily NAPL (approximately 15, 0.5-mm size, blebs), little rainbow sheen, weak MGP-type odor, refusal at 18 feet bgs	5	NA	Brown SILT with shale fragments, trace black oily NAPL, weak MGP-type odor, refusal at 19 feet bgs	47.5	140	Olive-green SILT/sandy SILT, some angular fine to medium. Gravel (shale), some orange mottling, weak MGP-type odor, trace OLM blebs, wet	60	42.4	Olive/gray, fine to medium GRAVEL (shale weathered), some medium to coarse sand, trace silt, OLM at approximately 18.5' bgs, wet	70	19.6
18-20	Brown to dark gray SILT, trace shale fragment, slight odor, trace tar-like blebs, sheen, moist to dry	60	NA			NA			NA			56.4			28.2

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ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
SUMMARY OF SUBSURFACE CONDITIONS DURING SOIL SAMPLING EVENTS - TEST AREA #1

Sample Interval (feet bgs)	Baseline (June 2005)			Mid-Test #1 (November 2005)			Mid-Test #2 (December 2005)			Post-Test #1 (February 2006)			Post-Test #2 (March 2006)		
	Stratigraphic Description	Percent Recovery	Headspace (split-spoon/ jar) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)
SB-205															
0-2	ASPHALT (0-0.3') then CRUSHED STONE	60	5.6/ NA	Blackish-brown, fine to coarse SAND, little gravel and red brick fragments, weak MGP-type odor, dense, dry, concrete 1-1.3' bgs.	35	6.9	Blackish-brown, fine to coarse SAND, little gravel and red brick, weak MGP-type odor, dense, dry	15	0.3	Blackish-brown, fine to coarse SAND, little fine gravel, weak MGP-type odor, dry	15	2	0 to 0.5' bgs: dark gray/black, ASPHALT with gravel, 0.5-1' - gray fine GRAVEL, some coarse sand, little fine sand,, dry. 1 to 2.4' bgs: dark brown fine to medium SAND, some fine gravel, trace sheen at 2.4' and 1.2' bgs, slight rust-colored staining at 3' and 3.9' bgs	60	0.7
2-4	Black CINDER/ASH, trace brick, concrete and tar-like blebs (OLM), odor, sheen, moist	60	2.9/ NA			NA			NA			NA			0
4-6	Black SILT and very fine SAND, very tacky trace tar-like material (TLM), strong odor, sheen, wet	25	11.5/ NA	Black (stained) SAND and GRAVEL, moderate MGP-type odor, moderate rainbow sheen, some brownish-black oily NAPL, dense, wet	7.5	228	Black (stained), fine to medium SAND, little silt, moderate MGP-type odor, little to some black oily NAPL, moist to wet	15	216	Black (stained), fine to medium SAND, little silt, coarse sand and fine gravel, moderate MGP-type odor, little black oily & tar-like NAPL, wet	5	9.6	Same as PT1 for this depth interval	32.5	119
6-8	Black SAND, trace solid/pliable tar-like material (TLM), strong odor, sheen, wet	25	12.6/ NA			NA			NA			NA			565
8-10	SAA	60	9.5/ NA	Black (stained) SAND and SILT, moderate to strong MGP-type odor, moderate rainbow sheen, some black oily NAPL, wet	45	427	Black (stained), fine to medium SAND & SILT, strong MGP-type odor, some black oily NAPL, wet dense	10	668	Black (stained), fine to medium SAND and WOOD, little silt, little black oily NAPL, strong MGP-type odor, wet	35	488	8' to 8.6' bgs: black oily stained, fine to coarse SAND, some fine gravel, wet, strong MGP-type odor. 8.6' to 9.3' bgs: olive/brown, fine SAND, little fine gravel and coarse sand, trace silt/clay, wet, odor	32.5	711
10-12	Black SAND, trace tar-like blebs (OLM), odor, sheen, wet	45	8.2/ 23.1			NA			NA			NA			188
12-14	SAA	55	5.9/ 19.8	Black (stained) SILT, slight MGP-type odor, moderate sheen, some black oily NAPL (more than above), wet	65	1476	SAA, little black oily NAPL	50	466	Black (stained) fine SAND and SILT, little fine gravel, little black oily NAPL, moderate to strong MGP-type odor, wet	37.5	182	Same as PT1 for this depth interval	37.5	205
14-16	Black SAND, trace gravel/shale fragments, trace tar-like blebs (OLM), odor, sheen, wet	40	4.2/ 15.6	Greenish brown SILT w/ black staining, moderate MGP-type odor, little black oily NAPL & sheen		324			NA			NA			32
16-18	Tan to dark brown SILT (to 16.8'), odor, 16.8' change to Olive green SHALE, Refusal at 17.5' bgs	100	2.1/ NA	Black (stained) SAND, little to some black oily NAPL and rainbow sheen, wet, moderate MGP-type odor, refusal at 19.0	67.5	212	Greenish-brown SILT with little to some black staining, little shale fragments, moderate MGP-type odor, trace black oily NAPL, wet	50	229	Brown/olive-green SILT (gray mottling) with some black staining, MGP-type odor, trace black oily NAPL blebs on exterior of sample (likely from above)	52.5	191	16' to 17' bgs: olive/tan SILT, trace MGP-type blebs on outside of soil (carried from other depth). 17' to 18' bgs: gray/olive, fine SAND and fine GRAVEL, little silt, trace coarse sand, wet, NAPL blebs. 18' to 20' bgs: gray/olive brown SILT, little fine gravel (shale), wet	95	60
18-20	NA	NA	NA			NA			NA			NA			156

TABLE 4

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
SUMMARY OF SUBSURFACE CONDITIONS DURING SOIL SAMPLING EVENTS - TEST AREA #1

Sample Interval (feet bgs)	Baseline (June 2005)			Mid-Test #1 (November 2005)			Mid-Test #2 (December 2005)			Post-Test #1 (February 2006)			Post-Test #2 (March 2006)		
	Stratigraphic Description	Percent Recovery	Headspace (split-spoon/ jar) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)	Stratigraphic Description	Percent Recovery	Headspace (bag) (ppm)
SB-206															
0-2	Dark brown to black, SAND, trace slag and cinders/ash, odor, moist	40	0.6/ NA	Black SAND, little-trace blackish-brown, oily NAPL, slight MGP-type odor and rainbow sheen, moist	60	12.2	Black, fine to medium SAND, with little fine gravel, trace brown oily NAPL, slight MGP-type odor, moist	72.5	6.1	Black, fine to medium SAND, with little fine gravel, trace brown oily NAPL, slight MGP-type odor, moist	55	10.7	0' to 0.5' bgs: gray, fine to medium GRAVEL, trace fine to coarse sand, dry. 0.5' to 1.0' bgs: dark brown, fine to medium SAND, oily NAPL at 0.7' bgs, moist. 1' to 1.2': BRICK. 1.2' to 1.5' bgs: brown, fine to medium SAND, slight MGP-type odor, oily appearance, moist	37.5	3.5
2-4	SAA	40	1.3/ NA			615			57.9			33.5			3.1
4-6	Black SILT and SAND, trace tar-like blebs (OLM), odor, sheen, wet	55	2.8/ NA	SAA, little-some blackish-brown oily NAPL, moderate MGP-type odor and rainbow sheen	55	205	SAA, little to some black oily NAPL, moderate MGP-type odor, moist to wet	62.5	189	SAA, little to some black oily NAPL, moderate MGP-type odor, moist to wet	55	372	Same as PT1 for this depth interval	55	186
6-8	Black SAND, little gravel, trace tar-like blebs (OLM), odor, sheen, wet	30	1.6/ NA			371			164			323			412
8-10	SAA	60	2.5/ NA	Black (stained) SAND, little gravel, some to ~5% pore volume blackish-brown oily NAPL, very strong MGP-type odor, moderate rainbow sheen, wet	60	110.1	Black (stained), fine to coarse SAND, little fine gravel, some saturation (~5%) black oily NAPL, very strong MGP-type odor, wet	30	603	Tan/olive-green, fine sand, little fine gravel and medium to coarse sand, some black staining, some black oily NAPL, strong MGP-type odor, wet	60	786	Same as PT1 for this depth interval	47.5	436
10-12	Black SILT and very fine SAND, trace tar-like blebs (OLM), odor, sheen, wet,	45	3.2/ 5.6			254			NA			416			256
12-14	SAA to 12.5', Black SAND, trace tar-like blebs (OLM), odor, sheen, wet	60	1.9/ 4.2	SAA with little to some SILT	55	398	SAA, little to some black oily NAPL, moderate MGP-type odor	67.5	123	SAA with little to some silt	22.5	80.5	Same as PT1 for this depth interval	100	161
14-16	Black SAND trace gravel & shale, trace tar-like blebs (OLM), odor, sheen	55	1.1/ 2.3			383			207			NA			240
16-18	Tan to dark brown SILT (to 16.2'), odor, 16.2' change to Olive green SHALE	85	0.1/ NA	SAA, trace to little blackish-brown oily NAPL, slight MGP-type odor, moderate rainbow sheen, wet, rock fragments in shoe.	60	275	SAA, some silt, little staining, no NAPL, slight MGP-type odor, wet	75	92.1	SAA, little staining, no NAPL, slight MGP-type odor, wet	45	330	Same as PT1 for this depth interval	100	165
18-20	NA	NA	NA			71.9			NA			NA			135

TABLE 5
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
MONITORING, INJECTION, AND EXTRACTION WELL CONSTRUCTION SUMMARY - TEST AREA #2

Well ID	Installation Date	Northing *	Easting *	Ground Surface Elevation *	Top of PVC Well Elevation *	Surface Completion	Well Material	Screen Slot Size	Depth to Screened Interval (ft. bgs)		Total Depth
		(ft.)	(ft.)	(ft., AMSL)	(ft., AMSL)			(in.)	Top	Bottom	(ft. bgs)
Soil Vapor Extraction Wells											
SVE-201	4/14/2006	NA	NA	NA	NA	Flushmount	4" PVC	0.02	1.5	6.5	7.0
SVE-202	4/14/2006	NA	NA	NA	NA	Flushmount	4" PVC	0.02	1.5	6.5	7.0
Injection/Sparge Points											
SP-201S	4/11/2006	NA	NA	NA	NA	Flushmount	3/8" Stainless	Sinter 100µ pore size	14.0	15.0	15.0
SP-201D	4/11/2006	NA	NA	NA	NA	Flushmount	3/8" Stainless	Sinter 100µ pore size	19.0	20.0	20.0
SP-202S	4/13/2006	NA	NA	NA	NA	Flushmount	3/8" Stainless	Sinter 100µ pore size	14.0	15.0	15.0
SP-202D	4/13/2006	NA	NA	NA	NA	Flushmount	3/8" Stainless	Sinter 100µ pore size	19.0	20.0	20.0
SP-203S	4/12/2006	NA	NA	NA	NA	Flushmount	3/8" Stainless	Sinter 100µ pore size	14.0	15.0	15.0
SP-203D	4/12/2006	NA	NA	NA	NA	Flushmount	3/8" Stainless	Sinter 100µ pore size	19.0	20.0	20.0
Vapor Monitoring Cluster Points											
VP-201S	4/10/2006	NA	NA	NA	NA	Flushmount	1" PVC	0.02	1.5	4.0	18.0
VP-201D					NA		1" PVC	0.02	7.5	17.5	
VP-202S	4/11/2006	NA	NA	NA	NA	Flushmount	1" PVC	0.02	1.5	4.0	18.0
VP-202D					NA		1" PVC	0.02	8.0	18.0	
VP-203	4/13/2006	NA	NA	NA	NA	Flushmount	1" PVC	0.02	3.0	18.0	18.0
VP-204S	4/13/2006	NA	NA	NA	NA	Flushmount	1" PVC	0.02	1.5	5.0	18.0
VP-204D					NA		1" PVC	0.02	8.0	18.0	
VP-205S	4/11/2006	NA	NA	NA	NA	Flushmount	1" PVC	0.02	1.5	4.0	18.0
VP-205D					NA		1" PVC	0.02	8.0	18.0	
VP-206S	4/11/2006	NA	NA	NA	NA	Flushmount	1" PVC	0.02	1.5	4.0	18.0
VP-206D					NA		1" PVC	0.02	8.0	18.0	

Notes:
1. ft - feet.
2. in - inches.
3. Vertical control referenced to the National Geodetic Vertical Datum (NGVD) of 1988 and horizontal control referenced to the State Plane Coordinate System NAD83.
4. bgs - below ground surface.
5. PVC - polyvinyl chloride.
6. dia. - diameter.
7. NA - Not Available/Applicable.
8. AMSL - above mean sea level.

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-101 (Upgradient of Test Area)					
		Baseline	Mid-Test #1	Mid-Test #2		Post-Test #1	Post-Test #2
		MW-101 6/30/2005 (ppb)	MW-101-MT1 11/15/2005 (ppb)	MW-101-MT2 12/21/2005 (ppb)	DUP-1-MT2 12/21/2005 (ppb)	MW-101-PT1 2/1/2006 (ppb)	MW-101-PT2 3/2/2006 (ppb)
TCL VOCs							
1,1,1-Trichloroethane	5	250 U	100 U	100 U	100 U	200 U	100 U
1,1,2,2-Tetrachloroethane	5	250 U	100 U	100 U	100 U	200 U	100 U
1,1,2-Trichloroethane	1	250 U	100 U	100 U	100 U	200 U	100 U
1,1-Dichloroethane	5	250 U	100 U	100 U	100 U	200 U	100 U
1,1-Dichloroethene	5	250 U	100 U	100 U	100 U	200 U	100 U
1,2-Dichloroethane	0.6	250 U	100 U	100 U	100 U	200 U	100 U
1,2-Dichloropropane	1	250 U	100 U	100 U	100 U	200 U	100 U
2-Butanone	50	500 U	200 U	200 U	200 U	400 U	200 U
2-Hexanone	50	500 U	200 U	200 U	200 U	400 U	200 UJ
4-Methyl-2-pentanone	NA	500 U	200 U	200 U	200 U	400 U	200 U
Acetone	50	500 UJ	200 U	200 U	200 U	400 UJ	200 U
Benzene	1	**2600**	**3200**	**1600**	**1600**	**1400**	**1700**
Bromodichloromethane	50	250 U	100 U	100 U	100 U	200 U	100 U
Bromoform	50	250 U	100 U	100 U	100 U	200 U	100 U
Bromomethane	5	250 UJ	100 U	100 U	100 U	200 UJ	100 U
Carbon Disulfide	60	250 U	**76 J**	100 U	100 U	200 UJ	100 U
Carbon Tetrachloride	5	250 UJ	100 U	100 U	100 U	200 U	100 U
Chlorobenzene	5	250 U	100 U	100 U	100 U	200 U	100 U
Chloroethane	5	250 U	100 U	100 U	100 U	200 U	100 U
Chloroform	7	250 U	100 U	100 U	100 U	200 U	100 U
Chloromethane	5	250 U	100 U	100 U	100 U	200 U	100 U
cis-1,2-Dichloroethene	5	250 U	100 U	100 U	100 U	200 U	100 U
cis-1,3-Dichloropropene	0.4	250 U	100 U	100 U	100 U	200 UJ	100 U
Dibromochloromethane	50	250 U	100 U	100 U	100 U	200 U	100 U
Ethylbenzene	5	**1900**	**3400**	**1900**	**1800**	**2100**	**2400**
Methylene Chloride	5	250 UJ	**60 J**	**73 J**	**53 J**	**17 J**	**15 J**
Styrene	5	250 U	**610**	100 UJ	100 U	200 UJ	100 U
Tetrachloroethene	5	250 U	100 U	**320**	**18**	200 U	100 U
Toluene	5	**60 J**	**820**	**88 J**	**85 J**	**85 J**	**92 J**
trans-1,2-Dichloroethene	5	250 U	100 U	100 U	100 U	200 U	100 U
trans-1,3-Dichloropropene	0.4	250 U	100 U	100 U	100 U	200 UJ	100 U
Trichloroethene	5	250 U	100 U	100 U	100 U	200 U	100 U
Vinyl Chloride	2	250 U	100 U	100 U	100 U	200 U	100 U
Xylene (total)	5	**1700**	**1600**	**1600**	**1600**	**1900**	**2000**
Total VOCs	NA	**6,260 J**	**9,766 J**	**5,581 J**	**5,156 J**	**5,502 J**	**6,207 J**
Total BTEX	NA	**6,260 J**	**9,020**	**5,188 J**	**5,085 J**	**5,485 J**	**6,192 J**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-102 (Sidegradient of Test Area)					
		Baseline	Mid-Test #1		Mid-Test #2	Post-Test #1	Post-Test #2
		MW-102 6/30/2005 (ppb)	MW-102-MT1 11/14/2005 (ppb)	DUP-1-MT1 11/14/2005 (ppb)	MW-102-MT2 12/19/2005 (ppb)	MW-102-PT1 2/1/2006 (ppb)	MW-102-PT2 2/28/2006 (ppb)
TCL VOCs							
1,1,1-Trichloroethane	5	250 U	5 U	5 U	5 U	5 U	10 U
1,1,2,2-Tetrachloroethane	5	250 U	5 U	5 U	5 U	5 U	10 U
1,1,2-Trichloroethane	1	250 U	5 U	5 U	5 U	5 U	10 U
1,1-Dichloroethane	5	250 U	5 U	5 U	5 U	5 U	10 U
1,1-Dichloroethene	5	250 U	5 U	5 U	5 U	5 U	10 U
1,2-Dichloroethane	0.6	250 U	5 U	5 U	5 U	5 U	10 U
1,2-Dichloropropane	1	250 U	5 U	5 U	5 U	5 U	10 U
2-Butanone	50	500 U	10 U	10 U	10 U	10 U	20 U
2-Hexanone	50	500 U	10 U	10 U	10 U	10 U	20 UJ
4-Methyl-2-pentanone	NA	500 U	10 U	10 U	10 U	10 UJ	20 U
Acetone	50	500 UJ	3.4 J	4.1 J	4 J	4.2 J	11 J
Benzene	1	**2800**	**43**	**15**	**140**	**25**	**300**
Bromodichloromethane	50	250 U	5 U	5 U	5 U	5 U	10 U
Bromoform	50	250 U	5 U	5 U	5 U	5 U	10 U
Bromomethane	5	250 UJ	5 U	5 U	5 U	5 UJ	10 U
Carbon Disulfide	60	250 U	5 U	5 U	5 U	5 UJ	10 U
Carbon Tetrachloride	5	250 UJ	5 U	5 U	5 U	5 U	10 U
Chlorobenzene	5	250 U	5 U	5 U	5 U	5 U	10 U
Chloroethane	5	250 U	5 U	5 U	5 U	5 U	10 U
Chloroform	7	250 U	5 U	5 U	5 U	5 U	10 U
Chloromethane	5	250 U	5 U	5 U	5 U	5 U	10 U
cis-1,2-Dichloroethene	5	250 U	5 U	5 U	5 U	5 U	10 U
cis-1,3-Dichloropropene	0.4	250 U	5 U	5 U	5 U	5 UJ	10 U
Dibromochloromethane	50	250 U	5 U	5 U	5 U	5 U	10 U
Ethylbenzene	5	**1200**	**29**	2.9 J	**120**	**8.2**	**270**
Methylene Chloride	5	250 UJ	0.51 J	1.3 J	5 U	5 UJ	1.3 J
Styrene	5	250 UJ	5 U	5 U	5 U	5 UJ	10 U
Tetrachloroethene	5	250 U	5 U	5 U	5 U	5 U	10 U
Toluene	5	**19 J**	5 U	5 U	1.5 J	0.3 J	2.8 J
trans-1,2-Dichloroethene	5	250 U	5 U	5 U	5 U	5 U	10 U
trans-1,3-Dichloropropene	0.4	250 U	5 U	5 U	5 U	5 UJ	10 U
Trichloroethene	5	250 U	5 U	5 U	5 U	5 U	10 U
Vinyl Chloride	2	250 U	5 U	5 U	5 U	5 U	10 U
Xylene (total)	5	**360**	**11**	1.8 J	**88**	**9.1**	**130**
Total VOCs	NA	**4,379 J**	**87 J**	**25 J**	**354 J**	**47 J**	**715 J**
Total BTEX	NA	**4,379 J**	**83**	**20 J**	**350 J**	**43 J**	**703 J**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-103 (Within Test Area)					
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2	
		MW-103 6/30/2005 (ppb)	MW-103-MT1 11/15/2005 (ppb)	MW-103-MT2 12/20/2005 (ppb)	MW-103-PT1 2/1/2006 (ppb)	MW-103-PT2 2/28/2006 (ppb)	DUP-1-PT2 2/28/2006 (ppb)
TCL VOCs							
1,1,1-Trichloroethane	5	500 U	25 U	50 U	25 U	50 U	50 U
1,1,2,2-Tetrachloroethane	5	500 U	25 U	50 U	25 U	50 U	50 U
1,1,2-Trichloroethane	1	500 U	25 U	50 U	25 U	50 U	50 U
1,1-Dichloroethane	5	500 U	25 U	50 U	25 U	50 U	50 U
1,1-Dichloroethene	5	500 U	25 U	50 U	25 U	50 U	50 U
1,2-Dichloroethane	0.6	500 U	25 U	50 U	25 U	50 U	50 U
1,2-Dichloropropane	1	500 U	25 U	50 U	25 U	50 U	50 U
2-Butanone	50	1000 U	50 U	100 U	32 J	100 U	100 U
2-Hexanone	50	1000 U	50 U	100 U	50 U	100 UJ	100 UJ
4-Methyl-2-pentanone	NA	1000 U	50 U	100 U	50 UJ	100 U	100 U
Acetone	50	1000 UJ	**75**	**71 J**	**150 J**	**57 J**	25 J
Benzene	1	**7100**	**580**	**840**	**230**	**1100**	**1100**
Bromodichloromethane	50	500 U	25 U	50 U	25 U	50 U	50 U
Bromoform	50	500 UJ	25 U	50 U	25 U	50 U	50 U
Bromomethane	5	500 UJ	25 U	50 U	25 UJ	50 U	50 U
Carbon Disulfide	60	500 U	25 U	50 U	25 UJ	50 U	50 U
Carbon Tetrachloride	5	500 U	25 U	50 U	25 U	50 U	50 U
Chlorobenzene	5	500 U	25 U	50 U	25 U	50 U	50 U
Chloroethane	5	500 U	25 U	50 U	25 U	50 U	50 U
Chloroform	7	500 U	25 U	50 U	25 U	50 U	50 U
Chloromethane	5	500 U	25 U	50 U	25 U	50 U	50 U
cis-1,2-Dichloroethene	5	500 U	25 U	50 U	25 U	50 U	50 U
cis-1,3-Dichloropropene	0.4	500 U	25 U	50 U	25 UJ	50 U	50 U
Dibromochloromethane	50	500 U	25 U	50 U	25 U	50 U	50 U
Ethylbenzene	5	**1600**	**260**	**370**	**61**	**130**	**140**
Methylene Chloride	5	500 UJ	**15 J**	**40 J**	25 UJ	**7.1 J**	50 U
Styrene	5	500 UJ	25 U	50 U	25 UJ	50 U	50 U
Tetrachloroethene	5	500 U	25 U	**47 J**	25 U	50 U	50 U
Toluene	5	**690**	**46**	**93**	**45**	**58**	**59**
trans-1,2-Dichloroethene	5	500 U	25 U	50 U	25 U	50 U	50 U
trans-1,3-Dichloropropene	0.4	500 U	25 U	50 U	25 UJ	50 U	50 U
Trichloroethene	5	500 U	25 U	50 U	25 U	50 U	50 U
Vinyl Chloride	2	500 U	25 U	50 U	25 U	50 U	50 U
Xylene (total)	5	**1600**	**510**	**610**	**230**	**360**	**360**
Total VOCs	NA	**13,990 J**	**1,486 J**	**2,071 J**	**748 J**	**1,712 J**	**1,684 J**
Total BTEX	NA	**10,990**	**1,396**	**1,913 J**	**566**	**1,648**	**1,659**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-104 (Downgradient of Test Area)				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		MW-104 6/30/2005 (ppb)	MW-104-MT1 11/15/2005 (ppb)	MW-104-MT2 12/20/2005 (ppb)	MW-104-PT1 2/1/2006 (ppb)	MW-104-PT2 2/28/2006 (ppb)
TCL VOCs						
1,1,1-Trichloroethane	5	1000 U	100 U	200 U	500 U	100 U
1,1,2,2-Tetrachloroethane	5	1000 U	100 U	200 U	500 U	100 U
1,1,2-Trichloroethane	1	1000 U	100 U	200 U	500 U	100 U
1,1-Dichloroethane	5	1000 U	100 U	200 U	500 U	100 U
1,1-Dichloroethene	5	1000 U	100 U	200 U	500 U	100 U
1,2-Dichloroethane	0.6	1000 U	100 U	200 U	500 U	100 U
1,2-Dichloropropane	1	1000 U	100 U	200 U	500 U	100 U
2-Butanone	50	2000 U	200 U	400 U	1000 U	200 U
2-Hexanone	50	2000 U	200 U	400 U	1000 U	200 UJ
4-Methyl-2-pentanone	NA	2000 U	200 U	400 U	1000 UJ	200 U
Acetone	50	2000 UJ	200 U	400 U	1000 UJ	**51 J**
Benzene	1	**9600**	**3200**	**4600**	**6600**	**3700**
Bromodichloromethane	50	1000 U	100 U	200 U	500 U	100 U
Bromoform	50	1000 U	100 U	200 U	500 U	100 U
Bromomethane	5	1000 UJ	100 U	200 U	500 UJ	100 U
Carbon Disulfide	60	1000 U	**78 J**	**75 J**	**140 J**	**100**
Carbon Tetrachloride	5	1000 U	100 U	200 U	500 U	100 U
Chlorobenzene	5	1000 U	100 U	200 U	500 U	100 U
Chloroethane	5	1000 U	100 U	200 U	500 U	100 U
Chloroform	7	1000 U	100 U	200 U	500 U	100 U
Chloromethane	5	1000 U	100 U	200 U	500 U	100 U
cis-1,2-Dichloroethene	5	1000 U	100 U	200 U	500 U	100 U
cis-1,3-Dichloropropene	0.4	1000 U	100 U	200 U	500 UJ	100 U
Dibromochloromethane	50	1000 U	100 U	200 U	500 U	100 U
Ethylbenzene	5	**3400**	**3600**	**2900**	**4500**	**3900**
Methylene Chloride	5	1000 UJ	**61 J**	**170 J**	**81 J**	**13 J**
Styrene	5	**3800 J**	**580**	**1900**	**3600 J**	**1100**
Tetrachloroethene	5	1000 U	100 U	**270**	500 U	100 U
Toluene	5	**4500**	**830**	**2300**	**3600**	**1200**
trans-1,2-Dichloroethene	5	1000 U	100 U	200 U	500 U	100 U
trans-1,3-Dichloropropene	0.4	1000 U	100 U	200 U	500 UJ	100 U
Trichloroethene	5	1000 U	100 U	200 U	500 U	100 U
Vinyl Chloride	2	1000 U	100 U	200 U	500 U	100 U
Xylene (total)	5	**3300**	**1700**	**2000**	**3100**	**1900**
Total VOCs	NA	**24,600 J**	**10,049 J**	**14,540 J**	**21,621 J**	**11,964 J**
Total BTEX	NA	**20,800**	**9,330**	**11,800**	**17,800**	**10,700**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-105 (Downgradient of Test Area)					
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1		Post-Test #2
		MW-105 6/29/2005 (ppb)	MW-105-MT1 11/15/2005 (ppb)	MW-105-MT2 12/19/2005 (ppb)	MW-105-PT1 2/1/2006 (ppb)	DUP-1-PT1 2/1/2006 (ppb)	MW-105-PT2 3/2/2006 (ppb)
TCL VOCs							
1,1,1-Trichloroethane	5	1000 U	500 U	100 U	500 U	500 U	500 U
1,1,2,2-Tetrachloroethane	5	1000 U	500 U	100 U	500 U	500 U	500 U
1,1,2-Trichloroethane	1	1000 U	500 U	100 U	500 U	500 U	500 U
1,1-Dichloroethane	5	1000 U	500 U	100 U	500 U	500 U	500 U
1,1-Dichloroethene	5	1000 U	500 U	100 U	500 U	500 U	500 U
1,2-Dichloroethane	0.6	1000 U	500 U	100 U	500 U	500 U	500 U
1,2-Dichloropropane	1	1000 U	500 U	100 U	500 U	500 U	500 U
2-Butanone	50	2000 U	1000 U	200 U	1000 U	1000 U	1000 U
2-Hexanone	50	2000 U	1000 U	200 U	1000 U	1000 U	1000 UJ
4-Methyl-2-pentanone	NA	2000 U	1000 U	200 U	1000 UJ	1000 UJ	1000 U
Acetone	50	2000 UJ	1000 U	**54 J**	**240 J**	**190 J**	1000 U
Benzene	1	**12000**	**8500**	**1700**	**4700**	**5400**	**7900**
Bromodichloromethane	50	1000 U	500 U	100 U	500 U	500 U	500 U
Bromoform	50	1000 U	500 U	100 U	500 U	500 U	500 U
Bromomethane	5	1000 UJ	500 U	100 U	500 UJ	500 UJ	500 U
Carbon Disulfide	60	1000 U	500 U	100 U	500 UJ	500 UJ	500 U
Carbon Tetrachloride	5	1000 UJ	500 U	100 U	500 U	500 U	500 U
Chlorobenzene	5	1000 U	500 U	100 U	500 U	500 U	500 U
Chloroethane	5	1000 U	500 U	100 U	500 U	500 U	500 U
Chloroform	7	1000 U	500 U	100 U	500 U	500 U	500 U
Chloromethane	5	1000 U	500 U	100 U	500 U	500 U	500 U
cis-1,2-Dichloroethene	5	1000 U	500 U	100 U	500 U	500 U	500 U
cis-1,3-Dichloropropene	0.4	1000 U	500 U	100 U	500 UJ	500 UJ	500 U
Dibromochloromethane	50	1000 U	500 U	100 U	500 U	500 U	500 U
Ethylbenzene	5	**3000**	**3000**	**170**	**1700**	**2100**	**4000**
Methylene Chloride	5	1000 UJ	**260 J**	**90 J**	500 UJ	500 UJ	**89 J**
Styrene	5	**3300 J**	**2600**	**210**	**1700 J**	**1700 J**	**2600**
Tetrachloroethene	5	1000 U	500 U	**940**	500 U	500 U	500 U
Toluene	5	**10000**	**8100**	**760**	**5800**	**6500**	**9400**
trans-1,2-Dichloroethene	5	1000 U	500 U	100 U	500 U	500 U	500 U
trans-1,3-Dichloropropene	0.4	1000 U	500 U	100 U	500 UJ	500 UJ	500 U
Trichloroethene	5	1000 U	500 U	100 U	500 U	500 U	500 U
Vinyl Chloride	2	1000 U	500 U	100 U	500 U	500 U	500 U
Xylene (total)	5	**4300**	**3800**	**230**	**2300**	**2900**	**4700**
Total VOCs	NA	**32,600 J**	**26,260 J**	**4,154 J**	**16,440 J**	**18,790 J**	**28,689 J**
Total BTEX	NA	**29,300**	**23,400**	**2,860**	**14,500**	**16,900**	**26,000**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-14 (Downgradient of Test Area)				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		MW-14 6/29/2005 (ppb)	MW-14-MT1 11/16/2005 (ppb)	MW-14-MT2 12/20/2005 (ppb)	MW-14-PT1 2/1/2006 (ppb)	MW-14-PT2 2/28/2006 (ppb)
TCL VOCs						
1,1,1-Trichloroethane	5	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	1	5 U	5 U	5 U	5 U	5 U
2-Butanone	50	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50	10 U	10 U	10 U	10 U	10 UJ
4-Methyl-2-pentanone	NA	10 U	10 U	10 U	10 UJ	10 U
Acetone	50	10 UJ	3.9 J	19	18	10 U
Benzene	1	**26**	**23**	**33**	0.93 J	**17**
Bromodichloromethane	50	5 U	5 U	5 U	5 U	5 U
Bromoform	50	5 U	5 U	5 U	5 U	5 U
Bromomethane	5	5 UJ	5 U	5 U	5 UJ	5 U
Carbon Disulfide	60	5 U	5 U	5 U	5 UJ	5 U
Carbon Tetrachloride	5	5 UJ	5 U	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U	5 U	5 U
Chloromethane	5	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U	5 UJ	5 U
Dibromochloromethane	50	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	2.1 J	1.2 J	4.3 J
Methylene Chloride	5	5 UJ	0.76 J	5 U	5 UJ	5 U
Styrene	5	5 UJ	5 U	5 U	5 UJ	5 U
Tetrachloroethene	5	5 U	5 U	5 U	5 U	5 U
Toluene	5	0.52 J	0.56 J	0.60 J	0.57 J	1.3 J
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U	5 UJ	5 U
Trichloroethene	5	5 U	5 U	5 U	5 U	5 U
Vinyl Chloride	2	5 U	5 U	5 U	5 U	5 U
Xylene (total)	5	3.7 J	3.3 J	4.5 J	5 U	4.9 J
Total VOCs	NA	**30 J**	**32 J**	**59 J**	**21 J**	**28 J**
Total BTEX	NA	**30 J**	**27 J**	**40 J**	**2.7 J**	**28 J**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-26D (Upgradient of Test Area)			MW-26S (Upgradient of Test Area)		
		Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
		MW-26D 6/29/2005 (ppb)	MW-26D-PT1 1/31/2006 (ppb)	MW-26D-PT2 2/27/2006 (ppb)	MW-26S 6/29/2005 (ppb)	MW-26S-PT1 1/31/2006 (ppb)	MW-26S-PT2 2/27/2006 (ppb)
TCL VOCs							
1,1,1-Trichloroethane	5	50 U	50 U	20 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	50 U	50 U	20 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1	50 U	50 U	20 U	5 U	5 U	5 U
1,1-Dichloroethane	5	50 U	50 U	20 U	5 U	5 U	5 U
1,1-Dichloroethene	5	50 U	50 U	20 U	5 U	5 U	5 U
1,2-Dichloroethane	0.6	50 U	50 U	20 U	5 U	5 U	5 U
1,2-Dichloropropane	1	50 U	50 U	20 U	5 U	5 U	5 U
2-Butanone	50	100 U	100 U	40 U	10 U	10 U	10 U
2-Hexanone	50	100 U	100 U	40 UJ	10 U	10 U	10 UJ
4-Methyl-2-pentanone	NA	100 U	100 UJ	40 U	10 U	10 UJ	10 U
Acetone	50	100 UJ	100 UJ	40 U	10 UJ	10 UJ	8.5 J
Benzene	1	**58**	**61**	**58**	5 U	5 U	**6.7**
Bromodichloromethane	50	50 U	50 U	20 U	5 U	5 U	5 U
Bromoform	50	50 U	50 U	20 U	5 U	5 U	5 U
Bromomethane	5	50 UJ	50 UJ	20 U	5 UJ	5 UJ	5 U
Carbon Disulfide	60	50 U	50 UJ	20 U	5 U	5 UJ	5 U
Carbon Tetrachloride	5	50 UJ	50 U	20 U	5 UJ	5 U	5 U
Chlorobenzene	5	50 U	50 U	20 U	5 UJ	5 U	5 U
Chloroethane	5	50 U	50 U	20 U	5 U	5 U	5 U
Chloroform	7	50 U	50 U	20 U	5 U	5 U	5 U
Chloromethane	5	50 U	50 U	20 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5	50 U	50 U	20 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	50 U	50 UJ	20 U	5 U	5 UJ	5 U
Dibromochloromethane	50	50 U	50 U	20 U	5 U	5 U	5 U
Ethylbenzene	5	**460**	**490**	**510**	5 U	5 U	**58**
Methylene Chloride	5	50 UJ	50 UJ	20 U	5 UJ	5 UJ	5 U
Styrene	5	50 UJ	50 UJ	20 U	5 U	5 UJ	5 U
Tetrachloroethene	5	50 U	50 U	20 U	0.57 J	5 U	5 U
Toluene	5	**20 J**	**19**	**19 J**	5 U	5 U	1.8 J
trans-1,2-Dichloroethene	5	50 U	50 U	20 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	50 U	50 UJ	20 U	5 U	5 UJ	5 U
Trichloroethene	5	50 U	50 U	20 U	5 U	5 U	5 U
Vinyl Chloride	2	50 U	50 U	20 U	5 U	5 U	5 U
Xylene (total)	5	**250**	**260**	**270**	5 U	5 U	**31**
Total VOCs	NA	**788 J**	**830**	**857 J**	**0.57 J**	**5 U**	**106 J**
Total BTEX	NA	**788 J**	**830**	**857 J**	**5 U**	**5 U**	**98 J**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-27D			MW-27S		
		Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
		MW-27D 6/28/2005 (ppb)	MW-27D-PT1 1/31/2006 (ppb)	MW-27D-PT2 2/28/2006 (ppb)	MW-27S 6/28/2005 (ppb)	MW-27S-PT1 1/31/2006 (ppb)	MW-27S-PT2 2/28/2006 (ppb)
TCL VOCs							
1,1,1-Trichloroethane	5	50 U	5 U	5 U	100 U	50 U	25 U
1,1,2,2-Tetrachloroethane	5	50 U	5 U	5 U	100 U	50 U	25 U
1,1,2-Trichloroethane	1	50 U	5 U	5 U	100 U	50 U	25 U
1,1-Dichloroethane	5	50 U	5 U	5 U	100 U	50 U	25 U
1,1-Dichloroethene	5	50 U	5 U	5 U	100 U	50 U	25 U
1,2-Dichloroethane	0.6	50 U	5 U	5 U	100 U	50 U	25 U
1,2-Dichloropropane	1	50 U	5 U	5 U	100 U	50 U	25 U
2-Butanone	50	100 U	10 U	10 U	200 U	100 U	50 U
2-Hexanone	50	100 U	10 U	10 UJ	200 U	100 U	50 UJ
4-Methyl-2-pentanone	NA	100 U	10 UJ	10 U	200 U	100 UJ	50 U
Acetone	50	100 UJ	10 UJ	10 U	200 UJ	17 J	17 J
Benzene	1	**480**	**14**	**110**	**1400**	**790**	**470**
Bromodichloromethane	50	50 U	5 U	5 U	100 U	50 U	25 U
Bromoform	50	50 U	5 U	5 U	100 U	50 U	25 U
Bromomethane	5	50 UJ	5 UJ	5 U	100 UJ	50 UJ	25 U
Carbon Disulfide	60	50 U	5 UJ	5 U	100 U	50 UJ	25 U
Carbon Tetrachloride	5	50 UJ	5 U	5 U	100 UJ	50 U	25 U
Chlorobenzene	5	50 U	5 U	5 U	100 U	50 U	25 U
Chloroethane	5	50 U	5 U	5 U	100 U	50 U	25 U
Chloroform	7	50 U	5 U	5 U	100 U	50 U	25 U
Chloromethane	5	50 U	5 U	5 U	100 U	50 U	25 U
cis-1,2-Dichloroethene	5	50 U	5 U	5 U	100 U	50 U	25 U
cis-1,3-Dichloropropene	0.4	50 U	5 UJ	5 U	100 U	50 UJ	25 U
Dibromochloromethane	50	50 U	5 U	5 U	100 U	50 U	25 U
Ethylbenzene	5	**320**	**16**	**92**	**320**	**220**	**92**
Methylene Chloride	5	50 UJ	5 UJ	5 U	100 UJ	4.7 J	25 U
Styrene	5	50 UJ	5 UJ	5 U	100 UJ	50 UJ	25 U
Tetrachloroethene	5	50 U	5 U	5 U	100 U	50 U	25 U
Toluene	5	**5.4 J**	0.53 J	1.2 J	**14 J**	**7.3 J**	3.6 J
trans-1,2-Dichloroethene	5	50 U	5 U	5 U	100 U	50 U	25 U
trans-1,3-Dichloropropene	0.4	50 U	5 UJ	5 U	100 U	50 UJ	25 U
Trichloroethene	5	50 U	5 U	5 U	100 U	50 U	25 U
Vinyl Chloride	2	50 U	5 U	5 U	100 U	50 U	25 U
Xylene (total)	5	**85**	**13**	**30**	**84 J**	**76**	**27**
Total VOCs	NA	**890 J**	**44 J**	**233 J**	**1,818 J**	**1,115 J**	**610 J**
Total BTEX	NA	**890 J**	**44 J**	**233 J**	**1,818 J**	**1,093 J**	**593 J**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-28D			MW-28S		
		Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
		MW-28D 6/28/2005 (ppb)	MW-28D-PT1 1/31/2006 (ppb)	MW-28D-PT2 2/27/2006 (ppb)	MW-28S 6/28/2005 (ppb)	MW-28S-PT1 1/31/2006 (ppb)	MW-28S-PT2 2/27/2006 (ppb)
TCL VOCs							
1,1,1-Trichloroethane	5	20 U	5 U	10 U	100 U	200 U	50 U
1,1,2,2-Tetrachloroethane	5	20 U	5 U	10 U	100 U	200 U	50 U
1,1,2-Trichloroethane	1	20 U	5 U	10 U	100 U	200 U	50 U
1,1-Dichloroethane	5	20 U	5 U	10 U	100 U	200 U	50 U
1,1-Dichloroethene	5	20 U	5 U	10 U	100 U	200 U	50 U
1,2-Dichloroethane	0.6	20 U	5 U	10 U	100 U	200 U	50 U
1,2-Dichloropropane	1	20 U	5 U	10 U	100 U	200 U	50 U
2-Butanone	50	40 U	1.5 J	20 U	200 U	400 U	100 U
2-Hexanone	50	40 U	10 U	20 UJ	200 U	400 U	100 UJ
4-Methyl-2-pentanone	NA	40 U	1.7 J	20 U	200 U	400 UJ	100 U
Acetone	50	40 UJ	11 J	20 U	200 UJ	**76 J**	100 U
Benzene	1	**110**	**8.5**	**100**	**750**	**2100**	**1800**
Bromodichloromethane	50	20 U	5 U	10 U	100 U	200 U	50 U
Bromoform	50	20 U	5 U	10 U	100 U	200 U	50 U
Bromomethane	5	20 UJ	5 UJ	10 U	100 UJ	200 UJ	50 U
Carbon Disulfide	60	20 U	5 UJ	10 U	**110**	**71 J**	**86**
Carbon Tetrachloride	5	20 UJ	5 U	10 U	100 UJ	200 U	50 U
Chlorobenzene	5	20 U	5 U	10 U	100 U	200 U	50 U
Chloroethane	5	20 U	5 U	10 U	100 U	200 U	50 U
Chloroform	7	20 U	5 U	10 U	100 U	200 U	50 U
Chloromethane	5	20 U	5 U	10 U	100 U	200 U	50 U
cis-1,2-Dichloroethene	5	20 U	5 U	10 U	100 U	200 U	50 U
cis-1,3-Dichloropropene	0.4	20 U	5 UJ	10 U	100 U	200 UJ	50 U
Dibromochloromethane	50	20 U	5 U	10 U	100 U	200 U	50 U
Ethylbenzene	5	**250**	**6.4**	**270**	**1500**	**1500**	**1600**
Methylene Chloride	5	20 UJ	5 UJ	10 U	100 UJ	**28 J**	50 U
Styrene	5	**9.7 J**	5 UJ	**14**	**410 J**	**360 J**	**290**
Tetrachloroethene	5	20 U	5 U	10 U	100 U	200 U	50 U
Toluene	5	**34**	1.4 J	**39**	**660**	**1200**	**1000**
trans-1,2-Dichloroethene	5	20 U	5 U	10 U	100 U	200 U	50 U
trans-1,3-Dichloropropene	0.4	20 U	5 UJ	10 U	100 U	200 UJ	50 U
Trichloroethene	5	20 U	5 U	10 U	100 U	200 U	50 U
Vinyl Chloride	2	20 U	5 U	10 U	100 U	200 U	50 U
Xylene (total)	5	**110**	**8.3**	**130**	**2000**	**2000**	**2000**
Total VOCs	NA	**514 J**	**39 J**	**553**	**5,430 J**	**7,335 J**	**6,776**
Total BTEX	NA	**504**	**25 J**	**539**	**4,910**	**6,800 J**	**6,400**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-5R (Downgradient of Test Area)				
		Baseline		Mid-Test #2	Post-Test #1	Post-Test #2
		MW-5R 6/29/2005 (ppb)	MW-5R-DUP 6/29/2005 (ppb)	MW-5R-MT2 12/20/2005 (ppb)	MW-5R-PT1 2/1/2006 (ppb)	MW-5R-PT2 2/28/2006 (ppb)
TCL VOCs						
1,1,1-Trichloroethane	5	250 U	250 U	100 U	200 U	200 U
1,1,2,2-Tetrachloroethane	5	250 U	250 U	100 U	200 U	200 U
1,1,2-Trichloroethane	1	250 U	250 U	100 U	200 U	200 U
1,1-Dichloroethane	5	250 U	250 U	100 U	200 U	200 U
1,1-Dichloroethene	5	250 U	250 U	100 U	200 U	200 U
1,2-Dichloroethane	0.6	250 U	250 U	100 U	200 U	200 U
1,2-Dichloropropane	1	250 U	250 U	100 U	200 U	200 U
2-Butanone	50	500 U	500 U	200 U	400 U	400 U
2-Hexanone	50	500 U	500 U	200 U	400 U	400 UJ
4-Methyl-2-pentanone	NA	500 U	500 U	200 U	400 UJ	400 U
Acetone	50	500 UJ	500 UJ	200 U	400 UJ	**190 J**
Benzene	1	**3400 J**	**3400**	**2700**	**3300**	**4700**
Bromodichloromethane	50	250 U	250 U	100 U	200 U	200 U
Bromoform	50	250 U	250 U	100 U	200 U	200 U
Bromomethane	5	250 UJ	250 UJ	100 U	200 UJ	200 U
Carbon Disulfide	60	250 U	250 U	100 U	200 UJ	200 U
Carbon Tetrachloride	5	250 UJ	250 UJ	100 U	200 U	200 U
Chlorobenzene	5	250 U	250 U	100 U	200 U	200 U
Chloroethane	5	250 U	250 U	100 U	200 U	200 U
Chloroform	7	250 U	250 U	100 U	200 U	200 U
Chloromethane	5	250 U	250 U	100 U	200 U	200 U
cis-1,2-Dichloroethene	5	250 U	250 U	100 U	200 U	200 U
cis-1,3-Dichloropropene	0.4	250 U	250 U	100 U	200 UJ	200 U
Dibromochloromethane	50	250 U	250 U	100 U	200 U	200 U
Ethylbenzene	5	**760**	**720**	**1800**	**1100**	**1500**
Methylene Chloride	5	250 UJ	250 UJ	**69 J**	200 UJ	**35 J**
Styrene	5	250 UJ	250 UJ	100 U	**25 J**	**25 J**
Tetrachloroethene	5	250 U	250 U	100 U	200 U	200 U
Toluene	5	**280**	**280**	**200**	**380**	**490**
trans-1,2-Dichloroethene	5	250 U	250 U	100 U	200 U	200 U
trans-1,3-Dichloropropene	0.4	250 U	250 U	100 U	200 UJ	200 U
Trichloroethene	5	250 U	250 U	100 U	200 U	200 U
Vinyl Chloride	2	250 U	250 U	100 U	200 U	200 U
Xylene (total)	5	**520**	**500**	**510**	**690**	**990**
Total VOCs	NA	**4,960 J**	**4,900**	**5,279 J**	**5,495 J**	**7,930 J**
Total BTEX	NA	**4,960 J**	**4,900**	**5,210**	**5,470**	**7,680**

TABLE 6
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL VOCs (ppb)

Notes:

1. Groundwater samples collected by ARCADIS BBL.
2. Samples analyzed by Severn Trent Laboratories, Inc. (Shelton, Connecticut) for target compound list (TCL) volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) SW-846 Method 8260.
3. Concentrations reported in parts per billion (ppb) or micrograms per liter (ug/L).
4. U - Compound was not detected at a concentration exceeding the laboratory detection limit. The listed value represents the laboratory detection limit.
5. J - Indicates an estimated value. The result is less than the specified quantitation limit, but greater than or equal to the method detection limit.
6. UJ - The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
7. Shaded and bold values indicates that the compound was detected at a concentration exceeding the groundwater standards and/or guidance values as presented in the New York State Department of Environmental Conservation (NYSDEC) document entitled, "Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (reissued June 1998).
8. NA - Not available. Indicates no water quality standard or guidance value listed in TOGS 1.1.1 for this compound.
9. BTEX - Benzene, toluene, ethylbenzene, and xylenes.
10. Analytical results for Mid-Test #1 and Mid-Test #2 sampling events have not been validated.

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-101 (Upgradient of Test Area)					
		Baseline	Mid-Test #1	Mid-Test #2		Post-Test #1	Post-Test #2
		MW-101 6/30/2005 (ppb)	MW-101-MT1 11/15/2005 (ppb)	MW-101-MT2 12/19/2005 (ppb)	DUP-1-MT2 12/19/2005 (ppb)	MW-101-PT1 2/1/2006 (ppb)	MW-101-PT2 3/2/2006 (ppb)
TCL SVOCs							
1,2,4-Trichlorobenzene	5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
1,2-Dichlorobenzene	3	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
1,3-Dichlorobenzene	3	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
1,4-Dichlorobenzene	3	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2,2'-oxybis(1-Chloropropane)	5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2,4,5-Trichlorophenol	NA	11000 U	5000 U	12000 U	10000 U	10000 U	12000 U
2,4,6-Trichlorophenol	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2,4-Dichlorophenol	5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2,4-Dimethylphenol	50	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2,4-Dinitrophenol	10	11000 UJ	5000 U	12000 U	10000 U	10000 U	12000 UJ
2,4-Dinitrotoluene	5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2,6-Dinitrotoluene	5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2-Chloronaphthalene	10	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2-Chlorophenol	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2-Methylnaphthalene *	NA	500 J	430 J	1900 J	670 J	670 J	780 J
2-Methylphenol	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
2-Nitroaniline	5	11000 U	5000 U	12000 U	10000 U	10000 U	12000 U
2-Nitrophenol	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
3,3'-Dichlorobenzidine	5	4300 U	2000 U	5000 U	4000 U	4000 U	4700 UJ
3-Nitroaniline	5	11000 U	5000 U	12000 U	10000 U	10000 U	12000 UJ
4,6-Dinitro-2-methylphenol	NA	11000 UJ	5000 U	2500 U	2000 U	2000 U	12000 UJ
4-Bromophenyl-phenylether	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
4-Chloro-3-methylphenol	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
4-Chloroaniline	5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
4-Chlorophenyl-phenylether	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
4-Methylphenol	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
4-Nitroaniline	5	4300 U	2000 U	5000 U	4000 U	4000 U	4700 U
4-Nitrophenol	NA	11000 U	5000 U	12000 U	10000 U	10000 U	12000 U
Acenaphthene *	20	2200 U	**150 J**	**750 J**	**240 J**	**250 J**	**240 J**
Acenaphthylene *	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Anthracene *	50	2200 UJ	1000 U	2500 U	2000 U	2000 U	2300 UJ
Benzo(a)anthracene *[C]	0.002	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Benzo(a)pyrene *[C]	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-101 (Upgradient of Test Area)					
		Baseline	Mid-Test #1	Mid-Test #2		Post-Test #1	Post-Test #2
		MW-101 6/30/2005 (ppb)	MW-101-MT1 11/15/2005 (ppb)	MW-101-MT2 12/19/2005 (ppb)	DUP-1-MT2 12/19/2005 (ppb)	MW-101-PT1 2/1/2006 (ppb)	MW-101-PT2 3/2/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Benzo(g,h,i)perylene *	NA	2200 UJ	1000 U	2500 U	2000 U	2000 U	2300 U
Benzo(k)fluoranthene *[C]	0.002	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Benzyl alcohol	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Bis(2-chloroethoxy) methane	5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Bis(2-chloroethyl) ether	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Bis(2-ethylhexyl) phthalate	5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Butylbenzyl phthalate	50	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Carbazole	NA	2200 UJ	1000 U	2500 U	2000 U	2000 U	2300 UJ
Chrysene *[C]	0.002	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Di-n-butyl phthalate	50	2200 UJ	1000 U	2500 U	2000 U	2000 U	2300 UJ
Di-n-octyl phthalate	50	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Dibenzo(a,h)anthracene *[C]	NA	2200 UJ	1000 U	2500 U	2000 U	2000 U	2300 U
Dibenzofuran	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Diethylphthalate	50	**500 J**	1000 U	2500 U	2000 U	2000 U	2300 U
Dimethylphthalate	50	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Fluoranthene *	50	2200 U	1000 U	**400 J**	2000 U	2000 U	2300 U
Fluorene *	50	2200 U	1000 U	**390 J**	2000 U	2000 U	2300 U
Hexachlorobenzene	0.04	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Hexachlorobutadiene	0.5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Hexachlorocyclopentadiene	5	2200 U	1000 U	2500 U	2000 U	2000 UJ	2300 UJ
Hexachloroethane	5	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	2200 UJ	1000 U	2500 U	2000 U	2000 U	2300 U
Isophorone	50	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
N-Nitroso-di-N-propylamine	NA	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
N-Nitrosodiphenylamine	50	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Naphthalene *	10	**9700**	**5900**	**18000**	**14000**	**11000**	**14000**
Nitrobenzene	0.4	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Pentachlorophenol	1	11000 U	5000 U	12000 U	10000 U	10000 U	12000 U
Phenanthrene *	50	2200 UJ	1000 U	**1200 J**	2000 U	**170 J**	2300 U
Phenol	1	2200 U	1000 U	2500 U	2000 U	2000 U	2300 U
Pyrene *	50	2200 UJ	1000 U	**630 J**	2000 U	2000 U	2300 U
Total SVOCs	NA	**10,700 J**	**6,480 J**	**23,270 J**	**14,910 J**	**12,090 J**	**15,020 J**
Total PAHs *	NA	**10,200 J**	**6,480 J**	**23,270 J**	**14,910 J**	**12,090 J**	**15,020 J**
Total C-PAHs *[C]	NA	**2,200 U**	**1,000 U**	**2,500 U**	**2,000 U**	**2,000 U**	**2,300 U**

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-102 (Sidegradient of Test Area)					
		Baseline	Mid-Test #1		Mid-Test #2	Post-Test #1	Post-Test #2
		MW-102 6/30/2005 (ppb)	MW-102-MT1 11/14/05 (ppb)	DUP-1-MT1 11/14/05 (ppb)	MW-102-MT2 12/19/2005 (ppb)	MW-102-PT1 2/1/2006 (ppb)	MW-102-PT2 2/28/2006 (ppb)
SVOCs							
1,2,4-Trichlorobenzene	5	560 U	11 U	11 U	10 U	10 U	250 U
1,2-Dichlorobenzene	3	560 U	11 U	11 U	10 U	10 U	250 U
1,3-Dichlorobenzene	3	560 U	11 U	11 U	10 U	10 U	250 U
1,4-Dichlorobenzene	3	560 U	11 U	11 U	10 U	10 U	250 U
2,2'-oxybis(1-Chloropropane)	5	560 U	11 U	11 U	10 U	10 U	250 U
2,4,5-Trichlorophenol	NA	2800 U	56 U	53 U	50 U	50 U	1200 U
2,4,6-Trichlorophenol	NA	560 U	11 U	11 U	10 U	10 U	250 U
2,4-Dichlorophenol	5	560 U	56 U	11 U	10 U	10 U	250 U
2,4-Dimethylphenol	50	560 U	11 U	11 U	10 U	10 U	250 U
2,4-Dinitrophenol	10	2800 UJ	11 U	11 U	50 U	50 U	1200 U
2,4-Dinitrotoluene	5	560 U	11 U	11 U	10 U	10 U	250 U
2,6-Dinitrotoluene	5	560 U	11 U	11 U	10 U	10 U	250 U
2-Chloronaphthalene	10	560 U	11 U	11 U	10 U	10 U	250 U
2-Chlorophenol	NA	560 U	11 U	11 U	10 U	10 U	250 U
2-Methylnaphthalene *	NA	250 J	3 J	0.9 J	5 J	10 U	43 J
2-Methylphenol	NA	560 U	1 J	0.9 J	10 U	10 U	250 U
2-Nitroaniline	5	2800 U	56 U	53 U	50 U	50 U	1200 U
2-Nitrophenol	NA	560 U	11 U	11 U	10 U	10 U	250 U
3,3'-Dichlorobenzidine	5	1100 U	22 U	21 U	20 U	20 U	500 U
3-Nitroaniline	5	2800 U	56 U	53 U	50 U	50 U	1200 U
4,6-Dinitro-2-methylphenol	NA	2800 UJ	56 U	53 U	50 U	50 U	1200 U
4-Bromophenyl-phenylether	NA	560 U	11 U	11 U	10 U	10 U	250 U
4-Chloro-3-methylphenol	NA	560 U	11 U	11 U	10 U	10 U	250 U
4-Chloroaniline	5	560 U	11 U	11 U	10 U	10 U	250 U
4-Chlorophenyl-phenylether	NA	560 U	11 U	11 U	10 U	10 U	250 U
4-Methylphenol	NA	560 U	11 U	11 U	10 U	10 U	250 U
4-Nitroaniline	5	1100 U	22 U	21 U	20 U	20 U	500 U
4-Nitrophenol	NA	2800 U	56 U	53 U	50 U	50 U	1200 U
Acenaphthene *	20	**180 J**	4 J	2 J	**21**	13	**110 J**
Acenaphthylene *	NA	560 U	3 J	2 J	10 U	0.8 J	250 U
Anthracene *	50	560 UJ	2 J	1 J	10 U	10 U	250 U
Benzo(a)anthracene *[C]	0.002	560 U	11 U	11 U	10 U	10 U	250 U
Benzo(a)pyrene *[C]	NA	560 U	11 U	11 U	10 U	10 U	250 U

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-102 (Sidegradient of Test Area)					
		Baseline	Mid-Test #1		Mid-Test #2	Post-Test #1	Post-Test #2
		MW-102 6/30/2005 (ppb)	MW-102-MT1 11/14/05 (ppb)	DUP-1-MT1 11/14/05 (ppb)	MW-102-MT2 12/19/2005 (ppb)	MW-102-PT1 2/1/2006 (ppb)	MW-102-PT2 2/28/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	560 U	11 U	11 U	10 U	10 U	250 U
Benzo(g,h,i)perylene *	NA	560 UJ	11 U	11 U	10 U	10 U	250 UJ
Benzo(k)fluoranthene *[C]	0.002	560 U	11 U	11 U	10 U	10 U	250 U
Benzyl alcohol	NA	560 U	11 U	11 U	10 U	10 U	250 U
Bis(2-chloroethoxy) methane	5	560 U	11 U	11 U	10 U	10 U	250 U
Bis(2-chloroethyl) ether	NA	560 U	11 U	11 U	10 U	10 U	250 U
Bis(2-ethylhexyl) phthalate	5	560 U	11 U	11 U	10 U	10 U	250 U
Butylbenzyl phthalate	50	560 U	11 U	11 U	10 U	10 U	250 U
Carbazole	NA	560 UJ	2 J	11 U	2 J	10 U	250 U
Chrysene *[C]	0.002	560 U	11 U	11 U	10 U	10 U	250 U
Di-n-butyl phthalate	50	560 UJ	11 U	11 U	10 U	10 U	250 U
Di-n-octyl phthalate	50	560 U	11 U	11 U	10 U	10 U	250 U
Dibenzo(a,h)anthracene *[C]	NA	560 UJ	11 U	11 U	10 U	10 U	250 UJ
Dibenzofuran	NA	560 U	11 U	11 U	10 U	10 U	250 U
Diethylphthalate	50	560 U	11 U	11 U	10 U	10 U	250 U
Dimethylphthalate	50	560 U	11 U	11 U	10 U	10 U	250 U
Fluoranthene *	50	560 U	11 U	11 U	10 U	10 U	250 U
Fluorene *	50	**55 J**	1 J	0.8 J	3 J	1 J	26 J
Hexachlorobenzene	0.04	560 U	11 U	11 U	10 U	10 U	250 U
Hexachlorobutadiene	0.5	560 U	11 U	11 U	10 U	10 U	250 U
Hexachlorocyclopentadiene	5	560 U	11 U	11 U	10 U	10 UJ	250 U
Hexachloroethane	5	560 U	11 U	11 U	10 U	10 U	250 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	560 UJ	11 U	11 U	10 U	10 U	250 UJ
Isophorone	50	560 U	11 U	11 U	10 U	10 U	250 U
N-Nitroso-di-N-propylamine	NA	560 U	11 U	11 U	10 U	10 U	250 U
N-Nitrosodiphenylamine	50	560 U	11 U	11 U	10 U	10 U	250 U
Naphthalene *	10	**3700**	**43**	5 J	**21**	10 U	**1100**
Nitrobenzene	0.4	560 U	11 U	11 U	10 U	10 U	250 U
Pentachlorophenol	1	2800 U	56 U	53 U	50 U	50 U	1200 U
Phenanthrene *	50	**74 J**	1 J	0.8 J	0.8 J	10 U	250 U
Phenol	1	560 U	1 J	1 J	10 U	10 U	250 U
Pyrene *	50	560 UJ	11 U	11 U	10 U	10 U	250 U
Total SVOCs	NA	**4,259 J**	**61 J**	**14 J**	**53 J**	**15 J**	**1,279 J**
Total PAHs *	NA	**4,259 J**	**57 J**	**13 J**	**51 J**	**15 J**	**1,279 J**
Total C-PAHs *[C]	NA	**560 U**	**11 U**	**11 U**	**10 U**	**10 U**	**250 U**

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-103 (Within Test Area)					
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2	
		MW-103 6/30/2005 (ppb)	MW-103-MT1 11/15/2005 (ppb)	MW-103-MT2b 12/22/2005 (ppb)	MW-103-PT1 2/1/2006 (ppb)	MW-103-PT2 2/28/2006 (ppb)	DUP-1-PT2 2/28/2006 (ppb)
SVOCs							
1,2,4-Trichlorobenzene	5	1000 U	52 U	200 U	50 U	250 U	270 U
1,2-Dichlorobenzene	3	1000 U	52 U	200 U	50 U	250 U	270 U
1,3-Dichlorobenzene	3	1000 U	52 U	200 U	50 U	250 U	270 U
1,4-Dichlorobenzene	3	1000 U	52 U	200 U	50 U	250 U	270 U
2,2'-oxybis(1-Chloropropane)	5	1000 U	52 U	200 U	50 U	250 U	270 U
2,4,5-Trichlorophenol	NA	5000 U	260 U	1000 U	250 U	1200 U	1300 U
2,4,6-Trichlorophenol	NA	1000 U	52 U	200 U	50 U	250 U	270 U
2,4-Dichlorophenol	5	1000 U	52 U	200 U	50 U	250 U	270 U
2,4-Dimethylphenol	50	1000 U	52 U	200 U	8 J	250 U	270 U
2,4-Dinitrophenol	10	5000 UJ	260 U	1000 U	250 U	1200 U	1300 U
2,4-Dinitrotoluene	5	1000 U	52 U	200 U	50 U	250 U	270 U
2,6-Dinitrotoluene	5	1000 U	52 U	200 U	50 U	250 U	270 U
2-Chloronaphthalene	10	1000 U	52 U	200 U	50 U	250 U	270 U
2-Chlorophenol	NA	1000 U	52 U	200 U	50 U	250 U	270 U
2-Methylnaphthalene *	NA	780 J	120	510	94	230 J	200 J
2-Methylphenol	NA	1000 U	7 J	200 U	50 U	250 U	270 U
2-Nitroaniline	5	5000 U	260 U	1000 U	250 U	1200 U	1300 U
2-Nitrophenol	NA	1000 U	52 U	200 U	50 U	250 U	270 U
3,3'-Dichlorobenzidine	5	2000 U	100 U	400 U	100 U	500 UJ	530 UJ
3-Nitroaniline	5	5000 U	260 U	1000 U	250 U	1200 U	1300 U
4,6-Dinitro-2-methylphenol	NA	5000 UJ	260 U	1000 U	250 U	1200 U	1300 U
4-Bromophenyl-phenylether	NA	1000 U	52 U	200 U	50 U	250 U	270 U
4-Chloro-3-methylphenol	NA	1000 U	52 U	200 U	50 U	250 U	270 U
4-Chloroaniline	5	1000 U	52 U	200 U	50 U	250 U	270 U
4-Chlorophenyl-phenylether	NA	1000 U	52 U	200 U	50 U	250 U	270 U
4-Methylphenol	NA	1000 U	10 J	15 J	50 U	250 U	33 J
4-Nitroaniline	5	2000 U	100 U	400 U	100 U	500 U	530 U
4-Nitrophenol	NA	5000 U	260 U	1000 U	250 U	R	1300 U
Acenaphthene *	20	**240 J**	**340**	**350**	**210**	**200 J**	**200 J**
Acenaphthylene *	NA	1000 U	42 J	34 J	14 J	250 U	270 U
Anthracene *	50	1000 UJ	**62**	48 J	16 J	250 U	270 U
Benzo(a)anthracene *[C]	0.002	1000 U	**31 J**	**26 J**	50 U	250 U	270 U
Benzo(a)pyrene *[C]	NA	1000 U	26 J	23 J	50 U	250 U	270 U

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-103 (Within Test Area)					
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2	
		MW-103 6/30/2005 (ppb)	MW-103-MT1 11/15/2005 (ppb)	MW-103-MT2b 12/22/2005 (ppb)	MW-103-PT1 2/1/2006 (ppb)	MW-103-PT2 2/28/2006 (ppb)	DUP-1-PT2 2/28/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	1000 U	**23 J**	200 U	50 U	250 U	270 U
Benzo(g,h,i)perylene *	NA	1000 UJ	8 J	200 U	50 U	250 UJ	270 UJ
Benzo(k)fluoranthene *[C]	0.002	1000 U	**6 J**	200 U	50 U	250 U	270 U
Benzyl alcohol	NA	1000 U	52 U	200 U	50 U	250 U	270 U
Bis(2-chloroethoxy) methane	5	1000 U	52 U	200 U	50 U	250 U	270 U
Bis(2-chloroethyl) ether	NA	1000 U	52 U	200 U	50 U	250 U	270 U
Bis(2-ethylhexyl) phthalate	5	1000 U	52 U	200 U	50 U	250 U	270 U
Butylbenzyl phthalate	50	1000 U	52 U	200 U	50 U	250 U	270 U
Carbazole	NA	1000 UJ	6 J	200 U	50 U	250 U	270 U
Chrysene *[C]	0.002	1000 U	**29 J**	**20 J**	50 U	250 U	270 U
Di-n-butyl phthalate	50	1000 UJ	52 U	200 U	50 U	250 U	270 U
Di-n-octyl phthalate	50	1000 U	52 U	200 U	50 U	250 U	270 U
Dibenzo(a,h)anthracene *[C]	NA	1000 UJ	52 U	200 U	50 U	250 UJ	270 UJ
Dibenzofuran	NA	1000 U	10 J	200 U	5 J	250 U	270 U
Diethylphthalate	50	1000 U	52 U	200 U	50 U	250 U	270 U
Dimethylphthalate	50	1000 U	52 U	200 U	50 U	250 U	270 U
Fluoranthene *	50	1000 U	**93**	**55 J**	10 J	250 U	270 U
Fluorene *	50	1000 U	**130**	**130 J**	**52**	**58 J**	**53 J**
Hexachlorobenzene	0.04	1000 U	52 U	200 U	50 U	250 U	270 U
Hexachlorobutadiene	0.5	1000 U	52 U	200 U	50 U	250 U	270 U
Hexachlorocyclopentadiene	5	1000 U	52 U	200 U	50 U	250 U	270 UJ
Hexachloroethane	5	1000 U	52 U	200 U	50 U	250 U	270 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	1000 UJ	**7 J**	200 U	50 U	250 UJ	270 UJ
Isophorone	50	1000 U	52 U	200 U	50 U	250 U	270 U
N-Nitroso-di-N-propylamine	NA	1000 U	52 U	200 U	50 U	250 U	270 U
N-Nitrosodiphenylamine	50	1000 U	52 U	200 U	50 U	250 U	270 U
Naphthalene *	10	**6800**	**130**	**1400**	**210**	**1100**	**960**
Nitrobenzene	0.4	1000 U	52 U	200 U	50 U	250 U	270 U
Pentachlorophenol	1	5000 U	260 U	1000 U	250 U	1200 U	1300 U
Phenanthrene *	50	**110 J**	**260**	**200**	45 J	**53 J**	**52 J**
Phenol	1	1000 U	**14 J**	**17 J**	**4 J**	250 U	270 U
Pyrene *	50	1000 UJ	**82**	**95 J**	21 J	250 U	270 U
Total SVOCs	NA	**7,930 J**	**1,436 J**	**2,923 J**	**689 J**	**1,641 J**	**1,498 J**
Total PAHs *	NA	**7,930 J**	**1,389 J**	**2,891 J**	**672 J**	**1,641 J**	**1,465 J**
Total C-PAHs *[C]	NA	**1,000 U**	**122 J**	**69 J**	**50 U**	**250 U**	**270 U**

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-104 (Downgradient of Test Area)				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		MW-104 6/30/2005 (ppb)	MW-104-MT1 11/15/2005 (ppb)	MW-104-MT2 12/20/2005 (ppb)	MW-104-PT1 2/1/2006 (ppb)	MW-104-PT2 2/28/2006 (ppb)
TCL SVOCs						
1,2,4-Trichlorobenzene	5	2000 U	4000 U	2300 U	2000 U	2500 U
1,2-Dichlorobenzene	3	2000 U	4000 U	2300 U	2000 U	2500 U
1,3-Dichlorobenzene	3	2000 U	4000 U	2300 U	2000 U	2500 U
1,4-Dichlorobenzene	3	2000 U	4000 U	2300 U	2000 U	2500 U
2,2'-oxybis(1-Chloropropane)	5	2000 U	4000 U	2300 U	2000 U	2500 U
2,4,5-Trichlorophenol	NA	10000 U	20000 U	12000 U	10000 U	12000 U
2,4,6-Trichlorophenol	NA	2000 U	4000 U	2300 U	2000 U	2500 U
2,4-Dichlorophenol	5	2000 U	4000 U	2300 U	2000 U	2500 U
2,4-Dimethylphenol	50	2000 U	4000 U	2300 U	2000 U	2500 U
2,4-Dinitrophenol	10	10000 UJ	20000 U	12000 U	10000 U	12000 U
2,4-Dinitrotoluene	5	2000 U	4000 U	2300 U	2000 U	2500 U
2,6-Dinitrotoluene	5	2000 U	4000 U	2300 U	2000 U	2500 U
2-Chloronaphthalene	10	2000 U	4000 U	2300 U	2000 U	2500 U
2-Chlorophenol	NA	2000 U	4000 U	2300 U	2000 U	2500 U
2-Methylnaphthalene *	NA	520 J	650 J	550 J	540 J	540 J
2-Methylphenol	NA	2000 U	4000 U	2300 U	2000 U	2500 U
2-Nitroaniline	5	10000 UJ	20000 U	12000 U	10000 U	12000 U
2-Nitrophenol	NA	2000 U	4000 U	2300 U	2000 U	2500 U
3,3'-Dichlorobenzidine	5	4000 U	8000 U	4700 U	4000 U	5000 U
3-Nitroaniline	5	10000 U	20000 U	12000 U	10000 U	12000 U
4,6-Dinitro-2-methylphenol	NA	10000 UJ	20000 U	12000 U	10000 U	12000 U
4-Bromophenyl-phenylether	NA	2000 U	4000 U	2300 U	2000 U	2500 U
4-Chloro-3-methylphenol	NA	2000 U	4000 U	2300 U	2000 U	2500 U
4-Chloroaniline	5	2000 U	4000 U	2300 U	2000 U	2500 U
4-Chlorophenyl-phenylether	NA	2000 U	4000 U	2300 U	2000 U	2500 U
4-Methylphenol	NA	2000 U	4000 U	2300 U	2000 U	2500 U
4-Nitroaniline	5	4000 U	8000 U	4700 U	4000 U	5000 U
4-Nitrophenol	NA	10000 UJ	20000 U	12000 U	10000 U	12000 U
Acenaphthene *	20	2000 U	4000 U	2300 U	2000 U	2500 U
Acenaphthylene *	NA	780 J	830 J	730 J	750 J	680 J
Anthracene *	50	2000 UJ	4000 U	2300 U	2000 U	2500 U
Benzo(a)anthracene *[C]	0.002	2000 U	4000 U	2300 U	2000 U	2500 U
Benzo(a)pyrene *[C]	NA	2000 U	4000 U	2300 U	2000 U	2500 U

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Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-104 (Downgradient of Test Area)				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		MW-104 6/30/2005 (ppb)	MW-104-MT1 11/15/2005 (ppb)	MW-104-MT2 12/20/2005 (ppb)	MW-104-PT1 2/1/2006 (ppb)	MW-104-PT2 2/28/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	2000 U	4000 U	2300 U	2000 U	2500 U
Benzo(g,h,i)perylene *	NA	2000 UJ	4000 U	2300 U	2000 U	2500 UJ
Benzo(k)fluoranthene *[C]	0.002	2000 U	4000 U	2300 U	2000 U	2500 U
Benzyl alcohol	NA	2000 U	4000 U	2300 U	2000 U	2500 U
Bis(2-chloroethoxy) methane	5	2000 U	4000 U	2300 U	2000 U	2500 U
Bis(2-chloroethyl) ether	NA	2000 U	4000 U	2300 U	2000 U	2500 U
Bis(2-ethylhexyl) phthalate	5	2000 U	4000 U	2300 U	2000 U	2500 U
Butylbenzyl phthalate	50	2000 U	4000 U	2300 U	2000 U	2500 U
Carbazole	NA	2000 UJ	4000 U	2300 U	2000 U	2500 U
Chrysene *[C]	0.002	2000 U	4000 U	2300 U	2000 U	2500 U
Di-n-butyl phthalate	50	2000 UJ	4000 U	2300 U	2000 U	2500 U
Di-n-octyl phthalate	50	2000 U	4000 U	2300 U	2000 U	2500 U
Dibenzo(a,h)anthracene *[C]	NA	2000 UJ	4000 U	2300 U	2000 U	2500 UJ
Dibenzofuran	NA	2000 U	4000 U	2300 U	2000 U	2500 U
Diethylphthalate	50	2000 U	4000 U	2300 U	2000 U	2500 U
Dimethylphthalate	50	2000 U	4000 U	2300 U	2000 U	2500 U
Fluoranthene *	50	2000 U	4000 U	2300 U	2000 U	2500 U
Fluorene *	50	2000 U	4000 U	2300 U	2000 U	2500 U
Hexachlorobenzene	0.04	2000 U	4000 U	2300 U	2000 U	2500 U
Hexachlorobutadiene	0.5	2000 U	4000 U	2300 U	2000 U	2500 U
Hexachlorocyclopentadiene	5	2000 U	4000 U	2300 U	2000 UJ	2500 U
Hexachloroethane	5	2000 U	4000 U	2300 U	2000 U	2500 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	2000 UJ	4000 U	2300 U	2000 U	2500 UJ
Isophorone	50	2000 U	4000 U	2300 U	2000 U	2500 U
N-Nitroso-di-N-propylamine	NA	2000 U	4000 U	2300 U	2000 U	2500 U
N-Nitrosodiphenylamine	50	2000 U	4000 U	2300 U	2000 U	2500 U
Naphthalene *	10	**13000**	**15000**	**13000**	**12000**	**10000**
Nitrobenzene	0.4	2000 U	4000 U	2300 U	2000 U	2500 U
Pentachlorophenol	1	10000 U	20000 U	12000 U	10000 U	12000 U
Phenanthrene *	50	**140 J**	4000 U	2300 U	2000 U	2500 U
Phenol	1	2000 U	4000 U	2300 U	2000 U	2500 U
Pyrene *	50	2000 UJ	4000 U	2300 U	2000 U	2500 U
Total SVOCs	NA	**14,440 J**	**16,480 J**	**14,280 J**	**13,290 J**	**11,220 J**
Total PAHs *	NA	**14,440 J**	**16,480 J**	**14,280 J**	**13,290 J**	**11,220 J**
Total C-PAHs *[C]	NA	**2,000 U**	**4,000 U**	**2,300 U**	**2,000 U**	**2,500 U**

TABLE 7
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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-105 (Downgradient of Test Area)					
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1		Post-Test #2
		MW-105 6/29/2005 (ppb)	MW-105-MT1 11/15/2005 (ppb)	MW-105-MT2 12/19/2005 (ppb)	MW-105-PT1 2/1/2006 (ppb)	DUP-1-PT1 2/1/2006 (ppb)	MW-105-PT2 3/2/2006 (ppb)
SVOCs							
1,2,4-Trichlorobenzene	5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
1,2-Dichlorobenzene	3	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
1,3-Dichlorobenzene	3	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
1,4-Dichlorobenzene	3	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
2,2'-oxybis(1-Chloropropane)	5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
2,4,5-Trichlorophenol	NA	10000 U	10000 U	21000 U	5000 U	5000 U	10000 U
2,4,6-Trichlorophenol	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
2,4-Dichlorophenol	5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
2,4-Dimethylphenol	50	2000 U	2000 U	21000 U	1000 U	1000 U	2000 U
2,4-Dinitrophenol	10	10000 UJ	10000 U	4300 U	5000 U	5000 U	10000 U
2,4-Dinitrotoluene	5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
2,6-Dinitrotoluene	5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
2-Chloronaphthalene	10	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
2-Chlorophenol	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
2-Methylnaphthalene *	NA	840 J	720 J	630 J	430 J	380 J	670 J
2-Methylphenol	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
2-Nitroaniline	5	10000 UJ	10000 U	21000 U	5000 U	5000 U	10000 U
2-Nitrophenol	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
3,3'-Dichlorobenzidine	5	4000 U	4000 U	8500 U	2000 U	2000 U	4000 UJ
3-Nitroaniline	5	10000 U	10000 U	21000 U	5000 U	5000 U	10000 U
4,6-Dinitro-2-methylphenol	NA	10000 UJ	10000 U	21000 U	5000 U	5000 U	10000 U
4-Bromophenyl-phenylether	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
4-Chloro-3-methylphenol	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
4-Chloroaniline	5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
4-Chlorophenyl-phenylether	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
4-Methylphenol	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
4-Nitroaniline	5	4000 U	4000 U	8500 U	2000 U	2000 U	4000 U
4-Nitrophenol	NA	10000 UJ	10000 U	21000 U	5000 U	5000 U	10000 U
Acenaphthene *	20	**170 J**	2000 U	4300 U	1000 U	1000 U	2000 U
Acenaphthylene *	NA	200 J	360 J	4300 U	240 J	220 J	430 J
Anthracene *	50	2000 UJ	2000 U	4300 U	1000 U	1000 U	2000 U
Benzo(a)anthracene *[C]	0.002	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Benzo(a)pyrene *[C]	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U

TABLE 7
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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-105 (Downgradient of Test Area)					
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1		Post-Test #2
		MW-105 6/29/2005 (ppb)	MW-105-MT1 11/15/2005 (ppb)	MW-105-MT2 12/19/2005 (ppb)	MW-105-PT1 2/1/2006 (ppb)	DUP-1-PT1 2/1/2006 (ppb)	MW-105-PT2 3/2/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Benzo(g,h,i)perylene *	NA	2000 UJ	2000 U	4300 U	1000 U	1000 U	2000 U
Benzo(k)fluoranthene *[C]	0.002	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Benzyl alcohol	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Bis(2-chloroethoxy) methane	5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Bis(2-chloroethyl) ether	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Bis(2-ethylhexyl) phthalate	5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Butylbenzyl phthalate	50	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Carbazole	NA	2000 UJ	2000 U	4300 U	1000 U	1000 U	2000 U
Chrysene *[C]	0.002	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Di-n-butyl phthalate	50	2000 UJ	2000 U	4300 U	1000 U	1000 U	2000 UJ
Di-n-octyl phthalate	50	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Dibenzo(a,h)anthracene *[C]	NA	2000 UJ	2000 U	4300 U	1000 U	1000 U	2000 U
Dibenzofuran	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Diethylphthalate	50	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Dimethylphthalate	50	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Fluoranthene *	50	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Fluorene *	50	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Hexachlorobenzene	0.04	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Hexachlorobutadiene	0.5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Hexachlorocyclopentadiene	5	2000 U	2000 U	4300 U	1000 UJ	1000 UJ	2000 UJ
Hexachloroethane	5	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	2000 UJ	2000 U	4300 U	1000 U	1000 U	2000 U
Isophorone	50	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
N-Nitroso-di-N-propylamine	NA	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
N-Nitrosodiphenylamine	50	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Naphthalene *	10	**13000**	**13000**	**12000**	**7600**	**6400**	**13000**
Nitrobenzene	0.4	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Pentachlorophenol	1	10000 U	10000 U	21000 U	5000 U	5000 U	10000 U
Phenanthrene *	50	2000 UJ	2000 U	4300 U	1000 U	**68 J**	2000 U
Phenol	1	2000 U	2000 U	4300 U	1000 U	1000 U	2000 U
Pyrene *	50	2000 UJ	2000 U	4300 U	1000 U	1000 U	2000 UJ
Total SVOCs	NA	**14,210 J**	**14,080 J**	**16,300 J**	**8,270 J**	**7,068 J**	**14,100 J**
Total PAHs *	NA	**14,210 J**	**14,080 J**	**12,630 J**	**8,270 J**	**7,068 J**	**14,100 J**
Total C-PAHs *[C]	NA	**2,000 U**	**2,000 U**	**4,300 U**	**1,000 U**	**1,000 U**	**2,000 U**

TABLE 7
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NORTH ALBANY SERVICE CENTER
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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-14 (Downgradient of Test Area)				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		MW-14 6/29/2005 (ppb)	MW-14-MT1 11/16/2005 (ppb)	MW-14-MT2b 12/22/2005 (ppb)	MW-14-PT1 2/1/2006 (ppb)	MW-14-PT2 2/28/2006 (ppb)
SVOCs						
1,2,4-Trichlorobenzene	5	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	3	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	3	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	3	10 U	10 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane)	5	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	NA	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	NA	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	5	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	50	10 U	10 U	2 J	10 U	10 U
2,4-Dinitrophenol	10	50 UJ	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	5	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	5	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	10	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	NA	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene *	NA	10 U	10 U	3 J	1 J	2 J
2-Methylphenol	NA	10 U	10 U	1 J	10 U	10 U
2-Nitroaniline	5	50 UJ	50 U	**50 J**	50 U	50 U
2-Nitrophenol	NA	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	5	20 U	20 U	20 U	20 U	20 UJ
3-Nitroaniline	5	50 U	50 U	50 U	50 U	50 U
4,6-Dinitro-2-methylphenol	NA	50 UJ	50 U	50 U	50 U	50 U
4-Bromophenyl-phenylether	NA	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	NA	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	5	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	NA	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	NA	10 U	10 U	1 J	10 U	10 U
4-Nitroaniline	5	20 U	20 U	20 U	20 U	20 U
4-Nitrophenol	NA	50 UJ	50 U	50 U	50 U	50 U
Acenaphthene *	20	**52**	**66**	**46**	**64**	**60**
Acenaphthylene *	NA	10 U	10 U	5 J	1 J	1 J
Anthracene *	50	1 J	1 J	5 J	10 U	1 J
Benzo(a)anthracene *[C]	0.002	10 U	10 U	**9 J**	10 U	10 U
Benzo(a)pyrene *[C]	NA	10 U	10 U	9 J	10 U	10 U

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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-14 (Downgradient of Test Area)				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		MW-14 6/29/2005 (ppb)	MW-14-MT1 11/16/2005 (ppb)	MW-14-MT2b 12/22/2005 (ppb)	MW-14-PT1 2/1/2006 (ppb)	MW-14-PT2 2/28/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	10 U	10 U	**7 J**	10 U	10 U
Benzo(g,h,i)perylene *	NA	10 UJ	10 U	8 J	10 U	10 UJ
Benzo(k)fluoranthene *[C]	0.002	10 U	10 U	**2 J**	10 U	10 U
Benzyl alcohol	NA	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethoxy) methane	5	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	NA	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl) phthalate	5	10 U	10 U	2 J	10 U	10 U
Butylbenzyl phthalate	50	10 U	10 U	6 J	10 U	10 U
Carbazole	NA	10 UJ	1 J	6 J	1 J	1 J
Chrysene *[C]	0.002	10 U	10 U	**6 J**	10 U	10 U
Di-n-butyl phthalate	50	10 UJ	10 U	10 U	10 U	10 U
Di-n-octyl phthalate	50	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene *[C]	NA	10 UJ	10 U	10 U	10 U	10 UJ
Dibenzofuran	NA	10 U	10 U	0.9 J	10 U	10 U
Diethylphthalate	50	10 U	10 U	10 U	10 U	10 U
Dimethylphthalate	50	10 U	10 U	10 U	10 U	10 U
Fluoranthene *	50	10 U	10 U	15	10 U	10 U
Fluorene *	50	4 J	8 J	10	8 J	6 J
Hexachlorobenzene	0.04	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	0.5	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	5	10 U	10 U	10 U	10 UJ	10 U
Hexachloroethane	5	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	10 UJ	10 U	**5 J**	10 U	10 UJ
Isophorone	50	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-N-propylamine	NA	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	50	10 U	10 U	10 U	10 U	10 U
Naphthalene *	10	3 J	2 J	**10**	**19**	**32**
Nitrobenzene	0.4	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	1	50 U	50 U	50 U	50 U	50 U
Phenanthrene *	50	7 J	7 J	30	4 J	8 J
Phenol	1	10 U	10 U	0.8	10 U	10 U
Pyrene *	50	10 UJ	1 J	32	10 U	10 U
Total SVOCs	NA	**67 J**	**86 J**	**272 J**	**98 J**	**111 J**
Total PAHs *	NA	**67 J**	**85 J**	**202 J**	**97 J**	**110 J**
Total C-PAHs *[C]	NA	**10 U**	**10 U**	**38 J**	**10 U**	**10 U**

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-26D (Upgradient of Test Area)			MW-26S (Upgradient of Test Area)		
		Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
		MW-26D 6/29/2005 (ppb)	MW-26D-PT1 1/31/2006 (ppb)	MW-26D-PT2 2/27/2006 (ppb)	MW-26S 6/29/2005 (ppb)	MW-26S-PT1 1/31/2006 (ppb)	MW-26S-PT2 3/2/2006 (ppb)
TCL SVOCs							
1,2,4-Trichlorobenzene	5	1000 U	1000 U	500 U	10 U	10 U	10 U
1,2-Dichlorobenzene	3	1000 U	1000 U	500 U	10 U	10 U	10 U
1,3-Dichlorobenzene	3	1000 U	1000 U	500 U	10 U	10 U	10 U
1,4-Dichlorobenzene	3	1000 U	1000 U	500 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane)	5	1000 U	1000 U	500 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	NA	5000 U	5000 U	2500 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
2,4-Dichlorophenol	5	1000 U	1000 U	500 U	10 U	10 U	10 U
2,4-Dimethylphenol	50	1000 U	1000 U	500 U	10 U	10 U	10 U
2,4-Dinitrophenol	10	5000 UJ	5000 U	2500 U	50 UJ	50 U	50 UJ
2,4-Dinitrotoluene	5	1000 U	1000 U	500 U	10 U	10 U	10 U
2,6-Dinitrotoluene	5	1000 U	1000 U	500 U	10 U	10 U	10 U
2-Chloronaphthalene	10	1000 U	1000 U	500 U	10 U	10 U	10 U
2-Chlorophenol	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
2-Methylnaphthalene *	NA	220 J	220 J	320 J	10 U	10 U	2 J
2-Methylphenol	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
2-Nitroaniline	5	5000 U	5000 U	2500 U	50 U	50 U	50 U
2-Nitrophenol	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	5	2000 U	2000 U	1000 U	20 U	20 U	20 UJ
3-Nitroaniline	5	5000 U	5000 U	2500 U	50 U	50 U	50 UJ
4,6-Dinitro-2-methylphenol	NA	5000 UJ	5000 U	2500 U	50 UJ	50 U	50 UJ
4-Bromophenyl-phenylether	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
4-Chloroaniline	5	1000 U	1000 U	500 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	NA	1000 U	1000 UJ	500 U	10 U	10 U	10 U
4-Methylphenol	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
4-Nitroaniline	5	2000 U	2000 U	1000 U	20 U	20 U	20 U
4-Nitrophenol	NA	5000 U	5000 U	2500 U	50 U	50 U	50 U
Acenaphthene *	20	**190 J**	**150 J**	**220 J**	10 U	10 U	5 J
Acenaphthylene *	NA	1000 U	1000 U	500 U	8 J	10 U	2 J
Anthracene *	50	1000 UJ	1000 U	500 U	2 J	10 U	10 UJ
Benzo(a)anthracene *[C]	0.002	1000 U	1000 U	500 U	3 J	10 U	10 U
Benzo(a)pyrene *[C]	NA	1000 U	1000 U	500 U	7 J	10 U	10 U

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GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-26D (Upgradient of Test Area)			MW-26S (Upgradient of Test Area)		
		Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
		MW-26D 6/29/2005 (ppb)	MW-26D-PT1 1/31/2006 (ppb)	MW-26D-PT2 2/27/2006 (ppb)	MW-26S 6/29/2005 (ppb)	MW-26S-PT1 1/31/2006 (ppb)	MW-26S-PT2 3/2/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	1000 U	1000 U	500 U	**2 J**	10 U	10 U
Benzo(g,h,i)perylene *	NA	1000 UJ	1000 U	500 UJ	13 J	10 U	1 J
Benzo(k)fluoranthene *[C]	0.002	1000 U	1000 U	500 U	**3 J**	10 U	10 U
Benzyl alcohol	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
Bis(2-chloroethoxy) methane	5	1000 U	1000 U	500 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
Bis(2-ethylhexyl) phthalate	5	1000 U	1000 U	500 U	10 U	10 U	10 U
Butylbenzyl phthalate	50	1000 U	1000 U	500 U	10 U	10 U	10 U
Carbazole	NA	1000 UJ	1000 U	500 U	10 UJ	10 U	10 UJ
Chrysene *[C]	0.002	1000 U	1000 U	500 U	**3 J**	10 U	10 U
Di-n-butyl phthalate	50	1000 UJ	1000 U	500 U	10 UJ	10 U	10 UJ
Di-n-octyl phthalate	50	1000 U	1000 U	500 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene *[C]	NA	1000 UJ	1000 U	500 UJ	2 J	10 U	10 U
Dibenzofuran	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
Diethylphthalate	50	1000 U	1000 U	500 U	10 U	10 U	10 U
Dimethylphthalate	50	1000 U	1000 U	500 U	10 U	10 U	10 U
Fluoranthene *	50	1000 U	1000 U	500 U	4 J	10 U	10 U
Fluorene *	50	1000 U	1000 UJ	**91 J**	10 U	10 U	2 J
Hexachlorobenzene	0.04	1000 U	1000 U	500 U	10 U	10 U	10 U
Hexachlorobutadiene	0.5	1000 U	1000 U	500 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	5	1000 U	1000 U	500 U	10 U	10 UJ	10 UJ
Hexachloroethane	5	1000 U	1000 U	500 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	1000 UJ	1000 U	500 UJ	**7 J**	10 U	10 U
Isophorone	50	1000 U	1000 U	500 U	10 U	10 U	10 U
N-Nitroso-di-N-propylamine	NA	1000 U	1000 U	500 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	50	1000 U	1000 U	500 U	10 U	10 U	10 U
Naphthalene *	10	**3200**	**3000**	**3700**	10 U	10 U	6 J
Nitrobenzene	0.4	1000 U	1000 U	500 U	10 U	10 U	10 U
Pentachlorophenol	1	5000 U	5000 UJ	2500 U	50 U	50 U	50 U
Phenanthrene *	50	**99 J**	**77 J**	**110 J**	10 UJ	10 U	2 J
Phenol	1	1000 U	1000 U	500 U	10 U	10 U	10 U
Pyrene *	50	1000 UJ	1000 U	500 U	9 J	10 U	1 J
Total SVOCs	NA	**3,709 J**	**3,447 J**	**4,441 J**	**63 J**	**50 U**	**21 J**
Total PAHs *	NA	**3,709 J**	**3,447 J**	**4,441 J**	**63 J**	**10 U**	**21 J**
Total C-PAHs *[C]	NA	**1,000 U**	**1,000 U**	**500 U**	**27 J**	**10 U**	**10 U**

TABLE 7
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GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-27D			MW-27S		
		Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
		MW-27D 6/28/2005 (ppb)	MW-27D-PT1 1/31/2006 (ppb)	MW-27D-PT2 2/28/2006 (ppb)	MW-27S 6/28/2005 (ppb)	MW-27S-PT1 1/31/2006 (ppb)	MW-27S-PT2 2/28/2006 (ppb)
SVOCs							
1,2,4-Trichlorobenzene	5	200 U	200 U	100 U	50 U	10 U	10 U
1,2-Dichlorobenzene	3	200 U	200 U	100 U	50 U	10 U	10 U
1,3-Dichlorobenzene	3	200 U	200 U	100 U	50 U	10 U	10 U
1,4-Dichlorobenzene	3	200 U	200 U	100 U	50 U	10 U	10 U
2,2'-oxybis(1-Chloropropane)	5	200 U	200 U	100 U	50 U	10 U	10 U
2,4,5-Trichlorophenol	NA	1000 U	1000 U	500 U	250 U	50 U	52 U
2,4,6-Trichlorophenol	NA	200 U	200 U	100 U	50 U	10 U	10 U
2,4-Dichlorophenol	5	200 U	200 U	100 U	50 U	10 U	10 U
2,4-Dimethylphenol	50	200 U	200 U	100 U	50 U	10 U	0.9 J
2,4-Dinitrophenol	10	1000 UJ	1000 U	500 U	250 UJ	50 U	52 U
2,4-Dinitrotoluene	5	200 U	200 U	100 U	50 U	10 U	10 U
2,6-Dinitrotoluene	5	200 U	200 U	100 U	50 U	10 U	10 U
2-Chloronaphthalene	10	200 U	200 U	100 U	50 U	10 U	10 U
2-Chlorophenol	NA	200 U	200 U	100 U	50 U	10 U	10 U
2-Methylnaphthalene *	NA	110 J	120 J	87 J	50 U	10 U	10 U
2-Methylphenol	NA	200 U	200 U	100 U	50 U	10 U	10 U
2-Nitroaniline	5	1000 UJ	1000 U	500 U	250 UJ	50 U	52 U
2-Nitrophenol	NA	200 U	200 U	100 U	50 U	10 U	10 U
3,3'-Dichlorobenzidine	5	400 U	400 U	200 U	100 U	20 U	21 U
3-Nitroaniline	5	1000 U	1000 U	500 U	250 U	50 U	52 U
4,6-Dinitro-2-methylphenol	NA	1000 UJ	1000 U	500 U	250 UJ	50 U	52 U
4-Bromophenyl-phenylether	NA	200 U	200 U	100 U	50 U	10 U	10 U
4-Chloro-3-methylphenol	NA	200 U	200 U	100 U	50 U	10 U	10 U
4-Chloroaniline	5	200 U	200 U	100 U	50 U	10 U	10 U
4-Chlorophenyl-phenylether	NA	200 U	200 U	100 U	50 U	10 U	10 U
4-Methylphenol	NA	200 U	200 U	100 U	50 U	10 U	10 U
4-Nitroaniline	5	400 U	400 U	200 U	100 U	20 U	21 U
4-Nitrophenol	NA	1000 UJ	1000 U	500 U	250 UJ	50 U	52 U
Acenaphthene *	20	**150 J**	**190 J**	**160**	**90**	**29**	**24**
Acenaphthylene *	NA	200 U	200 U	100 U	4 J	3 J	2 J
Anthracene *	50	200 UJ	200 U	13 J	9 J	3 J	3 J
Benzo(a)anthracene *[C]	0.002	200 U	200 U	100 U	50 U	10 U	10 U
Benzo(a)pyrene *[C]	NA	200 U	200 U	100 U	50 U	10 U	10 U

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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-27D			MW-27S		
		Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
		MW-27D 6/28/2005 (ppb)	MW-27D-PT1 1/31/2006 (ppb)	MW-27D-PT2 2/28/2006 (ppb)	MW-27S 6/28/2005 (ppb)	MW-27S-PT1 1/31/2006 (ppb)	MW-27S-PT2 2/28/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	200 U	200 U	100 U	50 U	10 U	10 U
Benzo(g,h,i)perylene *	NA	200 UJ	200 U	100 UJ	50 UJ	10 UJ	10 UJ
Benzo(k)fluoranthene *[C]	0.002	200 U	200 U	100 U	50 U	10 UJ	10 U
Benzyl alcohol	NA	200 U	200 U	100 U	50 U	10 U	10 U
Bis(2-chloroethoxy) methane	5	200 U	200 U	100 U	50 U	10 U	10 U
Bis(2-chloroethyl) ether	NA	200 U	200 U	100 U	50 U	10 U	10 U
Bis(2-ethylhexyl) phthalate	5	200 U	200 U	100 U	50 U	10 U	10 U
Butylbenzyl phthalate	50	200 U	200 U	100 U	50 U	10 U	10 U
Carbazole	NA	200 UJ	200 U	100 U	50 UJ	10 U	10 U
Chrysene *[C]	0.002	200 U	200 U	100 U	50 U	10 U	10 U
Di-n-butyl phthalate	50	200 UJ	200 U	100 U	50 UJ	10 U	10 U
Di-n-octyl phthalate	50	200 U	200 U	100 U	50 U	10 UJ	10 U
Dibenzo(a,h)anthracene *[C]	NA	200 UJ	200 U	100 UJ	50 UJ	10 UJ	10 UJ
Dibenzofuran	NA	200 U	200 U	100 U	50 U	10 U	10 U
Diethylphthalate	50	200 U	200 U	100 U	50 U	10 U	10 U
Dimethylphthalate	50	200 U	200 U	100 U	50 U	10 U	10 U
Fluoranthene *	50	200 U	200 U	100 U	8 J	4 J	3 J
Fluorene *	50	39 J	44 J	**51 J**	25 J	6 J	6 J
Hexachlorobenzene	0.04	200 U	200 U	100 U	50 U	10 U	10 U
Hexachlorobutadiene	0.5	200 U	200 U	100 U	50 U	10 U	10 U
Hexachlorocyclopentadiene	5	200 U	200 UJ	100 U	50 U	10 UJ	10 U
Hexachloroethane	5	200 U	200 U	100 U	50 U	10 U	10 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	200 UJ	200 U	100 UJ	50 UJ	10 UJ	10 UJ
Isophorone	50	200 U	200 U	100 U	50 U	10 U	10 U
N-Nitroso-di-N-propylamine	NA	200 U	200 U	100 U	50 U	10 U	10 U
N-Nitrosodiphenylamine	50	200 U	200 U	100 U	50 U	10 U	10 U
Naphthalene *	10	**1200**	**1100**	**500**	**190**	**19**	**20**
Nitrobenzene	0.4	200 U	200 U	100 U	50 U	10 U	10 U
Pentachlorophenol	1	1000 U	1000 U	500 U	250 U	50 U	52 U
Phenanthrene *	50	**63 J**	**69 J**	**74 J**	36 J	4 J	8 J
Phenol	1	200 U	200 U	100 U	**3 J**	10 U	**2 J**
Pyrene *	50	200 UJ	200 U	13 J	10 J	5 J	5 J
Total SVOCs	NA	**1,562 J**	**1,523 J**	**898 J**	**375 J**	**73 J**	**74 J**
Total PAHs *	NA	**1,562 J**	**1,523 J**	**898 J**	**372 J**	**73 J**	**71 J**
Total C-PAHs *[C]	NA	**200 U**	**200 U**	**100 U**	**50 U**	**10 U**	**10 U**

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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-28D			MW-28S		
		Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
		MW-28D 6/28/2005 (ppb)	MW-28D-PT1 1/31/2006 (ppb)	MW-28D-PT2 2/27/2006 (ppb)	MW-28S 6/28/2005 (ppb)	MW-28S-PT1 1/31/2006 (ppb)	MW-28S-PT2 2/27/2006 (ppb)
SVOCs							
1,2,4-Trichlorobenzene	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
1,2-Dichlorobenzene	3	200 U	50 U	250 U	2000 U	2500 U	5000 U
1,3-Dichlorobenzene	3	200 U	50 U	250 U	2000 U	2500 U	5000 U
1,4-Dichlorobenzene	3	200 U	50 U	250 U	2000 U	2500 U	5000 U
2,2'-oxybis(1-Chloropropane)	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
2,4,5-Trichlorophenol	NA	1000 U	250 U	1200 U	10000 U	12000 U	25000 U
2,4,6-Trichlorophenol	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
2,4-Dichlorophenol	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
2,4-Dimethylphenol	50	200 U	50 U	250 U	2000 U	2500 U	5000 U
2,4-Dinitrophenol	10	1000 UJ	250 U	1200 U	10000 UJ	12000 U	25000 U
2,4-Dinitrotoluene	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
2,6-Dinitrotoluene	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
2-Chloronaphthalene	10	200 U	50 U	250 U	2000 U	2500 U	5000 U
2-Chlorophenol	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
2-Methylnaphthalene *	NA	36 J	5 J	40 J	290 J	310 J	470 J
2-Methylphenol	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
2-Nitroaniline	5	1000 UJ	250 U	1200 U	10000 UJ	12000 U	25000 U
2-Nitrophenol	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
3,3'-Dichlorobenzidine	5	400 U	100 U	500 U	4000 U	5000 U	10000 U
3-Nitroaniline	5	1000 U	250 U	1200 U	10000 U	12000 U	25000 U
4,6-Dinitro-2-methylphenol	NA	1000 UJ	250 U	1200 U	10000 UJ	12000 U	25000 U
4-Bromophenyl-phenylether	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
4-Chloro-3-methylphenol	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
4-Chloroaniline	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
4-Chlorophenyl-phenylether	NA	200 U	50 UJ	250 U	2000 U	2500 UJ	5000 U
4-Methylphenol	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
4-Nitroaniline	5	400 U	100 U	500 U	4000 U	5000 U	10000 U
4-Nitrophenol	NA	1000 UJ	250 U	1200 U	10000 UJ	12000 U	25000 U
Acenaphthene *	20	**23 J**	5 J	**25 J**	2000 U	2500 U	5000 U
Acenaphthylene *	NA	16 J	6 J	34 J	230 J	320 J	550 J
Anthracene *	50	200 UJ	50 U	250 U	2000 UJ	2500 U	5000 U
Benzo(a)anthracene *[C]	0.002	200 U	50 U	250 U	2000 U	2500 U	5000 U
Benzo(a)pyrene *[C]	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U

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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-28D			MW-28S		
		Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
		MW-28D 6/28/2005 (ppb)	MW-28D-PT1 1/31/2006 (ppb)	MW-28D-PT2 2/27/2006 (ppb)	MW-28S 6/28/2005 (ppb)	MW-28S-PT1 1/31/2006 (ppb)	MW-28S-PT2 2/27/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	200 U	50 U	250 U	2000 U	2500 U	5000 U
Benzo(g,h,i)perylene *	NA	200 UJ	50 U	250 UJ	2000 UJ	2500 U	5000 UJ
Benzo(k)fluoranthene *[C]	0.002	200 U	50 U	250 U	2000 U	2500 U	5000 U
Benzyl alcohol	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
Bis(2-chloroethoxy) methane	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
Bis(2-chloroethyl) ether	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
Bis(2-ethylhexyl) phthalate	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
Butylbenzyl phthalate	50	200 U	50 U	250 U	2000 U	2500 U	5000 U
Carbazole	NA	200 UJ	50 U	250 U	2000 UJ	2500 U	5000 U
Chrysene *[C]	0.002	200 U	50 U	250 U	2000 U	2500 U	5000 U
Di-n-butyl phthalate	50	200 UJ	50 U	250 U	2000 UJ	2500 U	5000 U
Di-n-octyl phthalate	50	200 U	50 U	250 U	2000 U	2500 U	5000 U
Dibenzo(a,h)anthracene *[C]	NA	200 UJ	50 UJ	250 UJ	2000 UJ	2500 U	5000 UJ
Dibenzofuran	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
Diethylphthalate	50	200 U	50 U	250 U	2000 U	2500 U	5000 U
Dimethylphthalate	50	200 U	50 U	250 U	2000 U	2500 U	5000 U
Fluoranthene *	50	200 U	50 U	250 U	2000 UJ	2500 U	5000 U
Fluorene *	50	200 U	50 U	250 U	2000 U	2500 UJ	5000 U
Hexachlorobenzene	0.04	200 U	50 U	250 U	2000 U	2500 U	5000 U
Hexachlorobutadiene	0.5	200 U	50 U	250 U	2000 U	2500 U	5000 U
Hexachlorocyclopentadiene	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
Hexachloroethane	5	200 U	50 U	250 U	2000 U	2500 U	5000 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	200 UJ	50 UJ	250 UJ	2000 UJ	2500 U	5000 UJ
Isophorone	50	200 U	50 U	250 U	2000 U	2500 U	5000 U
N-Nitroso-di-N-propylamine	NA	200 U	50 U	250 U	2000 U	2500 U	5000 U
N-Nitrosodiphenylamine	50	200 U	50 U	250 U	2000 U	2500 U	5000 U
Naphthalene *	10	**1000**	**240**	**880**	**9100**	**12000**	**18000**
Nitrobenzene	0.4	200 U	50 U	250 U	2000 U	2500 U	5000 U
Pentachlorophenol	1	1000 U	250 U	1200 U	10000 U	12000 UJ	25000 U
Phenanthrene *	50	200 UJ	50 U	250 U	2000 UJ	2500 U	5000 U
Phenol	1	200 U	50 U	250 U	2000 U	2500 U	5000 U
Pyrene *	50	200 UJ	50 U	250 U	2000 UJ	2500 U	5000 U
Total SVOCs	NA	**1,075 J**	**295 J**	**979 J**	**9,620 J**	**12,630 J**	**19,020 J**
Total PAHs *	NA	**1,075 J**	**245 J**	**979 J**	**9,620 J**	**12,630 J**	**19,020 J**
Total C-PAHs *[C]	NA	**200 U**	**50 U**	**250 U**	**2,000 U**	**2,500 U**	**5,000 U**

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-5R (Downgradient of Test Area)				
		Baseline		Mid-Test #2	Post-Test #1	Post-Test #2
		MW-5R 6/29/2005 (ppb)	MW-5R-DUP 6/29/2005 (ppb)	MW-5R-MT2b 12/22/2005 (ppb)	MW-5R-PT1 2/1/2006 (ppb)	MW-5R-PT2 2/28/2006 (ppb)
TCL SVOCs						
1,2,4-Trichlorobenzene	5	1000 U	1000 U	1000 U	500 U	1100 U
1,2-Dichlorobenzene	3	1000 U	1000 U	1000 U	500 U	1100 U
1,3-Dichlorobenzene	3	1000 U	1000 U	1000 U	500 U	1100 U
1,4-Dichlorobenzene	3	1000 U	1000 U	1000 U	500 U	1100 U
2,2'-oxybis(1-Chloropropane)	5	1000 U	1000 U	1000 U	500 U	1100 U
2,4,5-Trichlorophenol	NA	5000 U	5000 U	5000 U	2500 U	5300 U
2,4,6-Trichlorophenol	NA	1000 U	1000 U	1000 U	500 U	1100 U
2,4-Dichlorophenol	5	1000 U	1000 U	1000 U	500 U	1100 U
2,4-Dimethylphenol	50	1000 U	1000 U	1000 U	500 U	1100 U
2,4-Dinitrophenol	10	5000 UJ	5000 UJ	5000 U	2500 U	5300 U
2,4-Dinitrotoluene	5	1000 U	1000 U	1000 U	500 U	1100 U
2,6-Dinitrotoluene	5	1000 U	1000 U	1000 U	500 U	1100 U
2-Chloronaphthalene	10	1000 U	1000 U	1000 U	500 U	1100 U
2-Chlorophenol	NA	1000 U	1000 U	1000 U	500 U	1100 U
2-Methylnaphthalene *	NA	450 J	370 J	300 J	190 J	320 J
2-Methylphenol	NA	1000 U	1000 U	1000 U	500 U	1100 U
2-Nitroaniline	5	5000 U	5000 UJ	5000 U	2500 U	5300 U
2-Nitrophenol	NA	1000 U	1000 U	1000 U	500 U	1100 U
3,3'-Dichlorobenzidine	5	2000 U	2000 U	2000 U	1000 U	2100 UJ
3-Nitroaniline	5	5000 U	5000 U	5000 U	2500 U	5300 U
4,6-Dinitro-2-methylphenol	NA	5000 UJ	5000 UJ	5000 U	2500 U	5300 U
4-Bromophenyl-phenylether	NA	1000 U	1000 U	1000 U	500 U	1100 U
4-Chloro-3-methylphenol	NA	1000 U	1000 U	1000 U	500 U	1100 U
4-Chloroaniline	5	1000 U	1000 U	1000 U	500 U	1100 U
4-Chlorophenyl-phenylether	NA	1000 U	1000 U	1000 U	500 U	1100 U
4-Methylphenol	NA	1000 U	1000 U	1000 U	500 U	1100 U
4-Nitroaniline	5	2000 U	2000 U	2000 U	1000 U	2100 U
4-Nitrophenol	NA	5000 U	5000 UJ	5000 U	2500 U	5300 U
Acenaphthene *	20	**240 J**	**230 J**	**190 J**	**91 J**	**140 J**
Acenaphthylene *	NA	1000 U	1000 U	1000 U	500 U	1100 U
Anthracene *	50	1000 UJ	1000 UJ	1000 U	500 U	1100 U
Benzo(a)anthracene *[C]	0.002	1000 U	1000 U	1000 U	500 U	1100 U
Benzo(a)pyrene *[C]	NA	1000 U	1000 U	1000 U	500 U	1100 U

TABLE 7
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NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Parameter	NYSDEC Groundwater Standards and Guidance Values (ppb)	MW-5R (Downgradient of Test Area)				
		Baseline		Mid-Test #2	Post-Test #1	Post-Test #2
		MW-5R 6/29/2005 (ppb)	MW-5R-DUP 6/29/2005 (ppb)	MW-5R-MT2b 12/22/2005 (ppb)	MW-5R-PT1 2/1/2006 (ppb)	MW-5R-PT2 2/28/2006 (ppb)
Benzo(b)fluoranthene *[C]	0.002	1000 U	1000 U	1000 U	500 U	1100 U
Benzo(g,h,i)perylene *	NA	1000 UJ	1000 UJ	1000 U	500 U	1100 UJ
Benzo(k)fluoranthene *[C]	0.002	1000 U	1000 U	1000 U	500 U	1100 U
Benzyl alcohol	NA	1000 U	1000 U	1000 U	500 U	1100 U
Bis(2-chloroethoxy) methane	5	1000 U	1000 U	1000 U	500 U	1100 U
Bis(2-chloroethyl) ether	NA	1000 U	1000 U	1000 U	500 U	1100 U
Bis(2-ethylhexyl) phthalate	5	1000 U	1000 U	1000 U	500 U	1100 U
Butylbenzyl phthalate	50	1000 U	1000 U	1000 U	500 U	1100 U
Carbazole	NA	1000 UJ	1000 UJ	1000 U	500 U	1100 U
Chrysene *[C]	0.002	1000 U	1000 U	1000 U	500 U	1100 U
Di-n-butyl phthalate	50	1000 UJ	1000 UJ	1000 U	500 U	1100 U
Di-n-octyl phthalate	50	1000 U	1000 U	1000 U	500 U	1100 U
Dibenzo(a,h)anthracene *[C]	NA	1000 UJ	1000 UJ	1000 U	500 U	1100 UJ
Dibenzofuran	NA	1000 U	1000 U	1000 U	500 U	1100 U
Diethylphthalate	50	1000 U	1000 U	1000 U	500 U	1100 U
Dimethylphthalate	50	1000 U	1000 U	1000 U	500 U	1100 U
Fluoranthene *	50	1000 U	1000 U	1000 U	500 U	1100 U
Fluorene *	50	**93 J**	**81 J**	**81 J**	500 U	1100 U
Hexachlorobenzene	0.04	1000 U	1000 U	1000 U	500 U	1100 U
Hexachlorobutadiene	0.5	1000 U	1000 U	1000 U	500 U	1100 U
Hexachlorocyclopentadiene	5	1000 U	1000 U	1000 U	500 U	1100 UJ
Hexachloroethane	5	1000 U	1000 U	1000 U	500 U	1100 U
Indeno(1,2,3-cd)pyrene *[C]	0.002	1000 UJ	1000 UJ	1000 U	500 U	1100 UJ
Isophorone	50	1000 U	1000 U	1000 U	500 U	1100 U
N-Nitroso-di-N-propylamine	NA	1000 U	1000 U	1000 U	500 U	1100 U
N-Nitrosodiphenylamine	50	1000 U	1000 U	1000 U	500 U	1100 U
Naphthalene *	10	**4400**	**4100**	**4100**	**2900**	**4700**
Nitrobenzene	0.4	1000 U	1000 U	1000 U	500 U	1100 U
Pentachlorophenol	1	5000 U	5000 U	5000 U	2500 U	5300 U
Phenanthrene *	50	**190 J**	**180 J**	**91 J**	49 J	**72 J**
Phenol	1	1000 U	1000 U	1000 U	500 U	1100 U
Pyrene *	50	1000 UJ	1000 UJ	1000 U	500 U	1100 U
Total SVOCs	NA	**5,373 J**	**4,961 J**	**4,762 J**	**3,230 J**	**5,232 J**
Total PAHs *	NA	**5,373 J**	**4,961 J**	**4,762 J**	**3,230 J**	**5,232 J**
Total C-PAHs *[C]	NA	**1,000 U**	**1,000 U**	**1,000 U**	**500 U**	**1100 U**

TABLE 7
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR TCL SVOCs (ppb)

Notes:

1. Groundwater samples collected by ARCADIS BBL.
2. Samples analyzed by Severn Trent Laboratories, Inc. (Shelton, Connecticut) for target compound list (TCL) semi-volatile organic compounds (SVOCs) using United States Environmental Protection Agency (USEPA) SW-846 Method 8270.
3. Concentrations reported in parts per billion (ppb) or micrograms per liter (ug/L).
4. U - Compound was not detected at a concentration exceeding the laboratory detection limit. The listed value represents the laboratory detection limit.
5. J - Indicates an estimated value. The result is less than the specified quantitation limit, but greater than or equal to the method detection limit.
6. UJ - The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
7. R - The sample results are rejected due to matrix spike/matrix spike duplicate recovery outside of control limits. The analysis is invalid and provides no information as to whether the compound is present or not.
8. * - Total polynuclear aromatic hydrocarbons (PAHs) calculated based the following constituents: 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.
9. $*^{C}$ - Total cargenogenic PAHs (C-PAHs) calculated based the following constituents: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.
10. Shaded and bold values indicates that the compound was detected at a concentration exceeding the groundwater standards or guidance values as presented in the New York State Department of Environmental Conservation (NYSDEC) document entitled, "Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (reissued June 1998).
11. NA - Not available. Indicates no groundwater water quality standard or guidance value listed in TOGS 1.1.1 for this compound.
12. Analytical results for Mid-Test #1 and Mid-Test #2 sampling events have not been validated.

TABLE 8
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS - COMPARISON OF BTEX CONCENTRATIONS

Parameter	MW-101 (Upgradient of Test Area #1)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/21/2005				2/1/2006				3/2/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
Benzene	2,600	3.33E-05	3,200	***-23.08%***	4.10E-05	***-23.08%***	1,600	***38.46%***	2.05E-05	***38.46%***	1,400	***46.15%***	1.79E-05	***46.15%***	1,700	***34.62%***	2.18E-05	***34.62%***
Ethylbenzene	1,900	1.79E-05	3,400	***-78.95%***	3.20E-05	***-78.95%***	1,800	***5.26%***	1.70E-05	***5.26%***	2,100	***-10.53%***	1.98E-05	***-10.53%***	2,400	***-26.32%***	2.26E-05	***-26.32%***
Toluene	60	6.51E-07	820	***-1266.67%***	8.90E-06	***-1266.67%***	85	***-41.67%***	9.23E-07	***-41.67%***	85	***-41.67%***	9.23E-07	***-41.67%***	92	***-53.33%***	9.99E-07	***-53.33%***
Xylene	1,700	1.60E-05	1,600	***5.88%***	1.51E-05	***5.88%***	1,600	***5.88%***	1.51E-05	***5.88%***	1,900	***-11.76%***	1.79E-05	***-11.76%***	2,000	***-17.65%***	1.88E-05	***-17.65%***
Total BTEX	6,260	6.78E-05	9,020	***-44.09%***	9.70E-05	***-42.92%***	5,085	***18.77%***	5.34E-05	***21.25%***	5,485	***12.38%***	5.65E-05	***16.69%***	6,192	***1.09%***	6.42E-05	***5.36%***

Parameter	MW-102 (Sidegradient of Test Area #1)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/14/2005				12/19/2005				2/1/2006				2/28/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
Benzene	2,800	3.58E-05	43	***98.46%***	5.51E-07	***98.46%***	140	***95.00%***	1.79E-06	***95.00%***	25	***99.11%***	3.20E-07	***99.11%***	300	***89.29%***	3.84E-06	***89.29%***
Ethylbenzene	1,200	1.13E-05	29	***97.58%***	2.73E-07	***97.58%***	120	***90.00%***	1.13E-06	***90.00%***	8.2	***99.32%***	7.72E-08	***99.32%***	270	***77.50%***	2.54E-06	***77.50%***
Toluene	19	2.06E-07	ND	***100.00%***	ND	***100.00%***	1.5	***92.11%***	1.63E-08	***92.11%***	0.3	***98.42%***	3.26E-09	***98.42%***	2.8	***85.26%***	3.04E-08	***85.26%***
Xylene	360	3.39E-06	11	***96.94%***	1.04E-07	***96.94%***	88	***75.56%***	8.29E-07	***75.56%***	9.1	***97.47%***	8.57E-08	***97.47%***	130	***63.89%***	1.22E-06	***63.89%***
Total BTEX	4,379	5.07E-05	83	***98.10%***	9.27E-07	***98.17%***	350	***92.02%***	3.77E-06	***92.58%***	43	***99.03%***	4.86E-07	***99.04%***	703	***83.95%***	7.64E-06	***84.95%***

Parameter	MW-103 (Within Test Area #1)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/20/2005				2/1/2006				2/28/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
Benzene	7,100	9.09E-05	580	***91.83%***	7.43E-06	***91.83%***	840	***88.17%***	1.08E-05	***88.17%***	230	***96.76%***	2.94E-06	***96.76%***	1,100	***84.51%***	1.41E-05	***84.51%***
Ethylbenzene	1,600	1.51E-05	260	***83.75%***	2.45E-06	***83.75%***	370	***76.88%***	3.49E-06	***76.88%***	61	***96.19%***	5.75E-07	***96.19%***	140	***91.25%***	1.32E-06	***91.25%***
Toluene	690	7.49E-06	46	***93.33%***	4.99E-07	***93.33%***	93	***86.52%***	1.01E-06	***86.52%***	45	***93.48%***	4.88E-07	***93.48%***	59	***91.45%***	6.40E-07	***91.45%***
Xylene	1,600	1.51E-05	510	***68.13%***	4.80E-06	***68.13%***	610	***61.88%***	5.75E-06	***61.88%***	230	***85.63%***	2.17E-06	***85.63%***	360	***77.50%***	3.39E-06	***77.50%***
Total BTEX	10,990	1.29E-04	1,396	***87.30%***	1.52E-05	***88.19%***	1,913	***82.59%***	2.10E-05	***83.67%***	566	***94.85%***	6.17E-06	***95.20%***	1,659	***84.90%***	1.94E-05	***84.88%***

Parameter	MW-104 (Downgradient of Test Area #1)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/20/2005				2/1/2006				2/28/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
Benzene	9,600	1.23E-04	3,200	***66.67%***	4.10E-05	***66.67%***	4,600	***52.08%***	5.89E-05	***52.08%***	6,600	***31.25%***	8.45E-05	***31.25%***	3,700	***61.46%***	4.74E-05	***61.46%***
Ethylbenzene	3,400	3.20E-05	3,600	***-5.88%***	3.39E-05	***-5.88%***	2,900	***14.71%***	2.73E-05	***14.71%***	4,500	***-32.35%***	4.24E-05	***-32.35%***	3,900	***-14.71%***	3.67E-05	***-14.71%***
Toluene	4,500	4.88E-05	830	***81.56%***	9.01E-06	***81.56%***	2,300	***48.89%***	2.50E-05	***48.89%***	3,600	***20.00%***	3.91E-05	***20.00%***	1,200	***73.33%***	1.30E-05	***73.33%***
Xylene	3,300	3.11E-05	1,700	***48.48%***	1.60E-05	***48.48%***	2,000	***39.39%***	1.88E-05	***39.39%***	3,100	***6.06%***	2.92E-05	***6.06%***	1,900	***42.42%***	1.79E-05	***42.42%***
Total BTEX	20,800	2.35E-04	9,330	***55.14%***	9.99E-05	***57.46%***	11,800	***43.27%***	1.30E-04	***44.64%***	17,800	***14.42%***	1.95E-04	***16.90%***	10,700	***48.56%***	1.15E-04	***51.02%***

TABLE 8
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS - COMPARISON OF BTEX CONCENTRATIONS

Parameter	MW-105 (Downgradient of Test Area #1)																	
	Baseline 6/29/2005		Mid-Test #1 11/15/2005				Mid-Test #2 12/19/2005				Post-Test #1 2/1/2006				Post-Test #2 3/2/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
Benzene	12,000	1.54E-04	8,500	***29.17%***	1.09E-04	***29.17%***	1,700	***85.83%***	2.18E-05	***85.83%***	4,700	***60.83%***	6.02E-05	***60.83%***	7,900	***34.17%***	1.01E-04	***34.17%***
Ethylbenzene	3,000	2.83E-05	3,000	***0.00%***	2.83E-05	***0.00%***	170	***94.33%***	1.60E-06	***94.33%***	1,700	***43.33%***	1.60E-05	***43.33%***	4,000	***-33.33%***	3.77E-05	***-33.33%***
Toluene	10,000	1.09E-04	8,100	***19.00%***	8.79E-05	***19.00%***	760	***92.40%***	8.25E-06	***92.40%***	5,800	***42.00%***	6.30E-05	***42.00%***	9,400	***6.00%***	1.02E-04	***6.00%***
Xylene	4,300	4.05E-05	3,800	***11.63%***	3.58E-05	***11.63%***	230	***94.65%***	2.17E-06	***94.65%***	2,300	***46.51%***	2.17E-05	***46.51%***	4,700	***-9.30%***	4.43E-05	***-9.30%***
Total BTEX	29,300	3.31E-04	23,400	***20.14%***	2.61E-04	***21.19%***	2,860	***90.24%***	3.38E-05	***89.79%***	14,500	***50.51%***	1.61E-04	***51.41%***	26,000	***11.26%***	2.85E-04	***13.84%***

Parameter	MW-14 (Downgradient of Test Area #1)																	
	Baseline 6/29/2005		Mid-Test #1 11/16/2005				Mid-Test #2 12/20/2005				Post-Test #1 2/1/2006				Post-Test #2 2/28/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
Benzene	26	3.33E-07	23	***11.54%***	2.94E-07	***11.54%***	33	***-26.92%***	4.22E-07	***-26.92%***	0.9	***96.42%***	1.19E-08	***96.42%***	17	***34.62%***	2.18E-07	***34.62%***
Ethylbenzene	ND	ND	ND	***NA***	ND	***NA***	2.1	***NA***	1.98E-08	***NA***	1.2	***NA***	1.13E-08	***NA***	4.3	***NA***	4.05E-08	***NA***
Toluene	0.5	5.64E-09	0.6	***-7.69%***	6.08E-09	***-7.69%***	0.6	***-15.38%***	6.51E-09	***-15.38%***	0.6	***-9.62%***	6.19E-09	***-9.62%***	1.3	***-150.00%***	1.41E-08	***-150.00%***
Xylene	3.7	3.49E-08	3.3	***10.81%***	3.11E-08	***10.81%***	5	***-21.62%***	4.24E-08	***-21.62%***	ND	***100.00%***	ND	***100.00%***	4.9	***-32.43%***	4.62E-08	***-32.43%***
Total BTEX	30	3.73E-07	27	***11.12%***	3.32E-07	***11.18%***	40	***-33.02%***	4.91E-07	***-31.55%***	2.7	***91.07%***	2.94E-08	***92.13%***	28	***9.00%***	3.18E-07	***14.72%***

Notes:

1. Concentrations reported in:
   - parts per billion (ppb) or micrograms per liter (µg/L)
   - moles per liter (mol/L)
2. BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes (total).
3. NA - Not applicable.
4. ND - Not detected.
5. Percent reduction versus baseline calculated based on the following formula:
   % reduction = [(Baseline Total BTEX Concentration - Mid-Test/Post-Test Total BTEX Concentration)÷ Baseline Total BTEX Concentration] x 100.
6. Analytical results for Mid-Test #1 and Mid-Test #2 sampling events have not been validated.

TABLE 9
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS - COMPARISON OF PAH CONCENTRATIONS

Parameter	MW-101 (Upgradient of Test Area #1)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/21/2005				2/1/2006				3/2/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
2-Methylnaphthalene	500	3.52E-06	430	***14.00%***	3.02E-06	***14.00%***	1,900	***-280.00%***	1.34E-05	***-280.00%***	670	***-34.00%***	4.71E-06	***-34.00%***	780	***-56.00%***	5.49E-06	***-56.00%***
Acenaphthene	ND	ND	150	***NA***	9.73E-07	***NA***	750	***NA***	4.86E-06	***NA***	250	***NA***	1.62E-06	***NA***	240	***NA***	1.56E-06	***NA***
Acenaphthylene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Anthracene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)pyrene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(b)fluoranthene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(g,h,i)perylene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(k)fluoranthene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Chrysene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	ND	ND	ND	***NA***	ND	***NA***	400	***NA***	1.98E-06	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluorene	ND	ND	ND	***NA***	ND	***NA***	390	***NA***	2.35E-06	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Indeno(1,2,3-cd)pyrene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Naphthalene	9,700	7.57E-05	5,900	***39.18%***	4.60E-05	***39.18%***	18,000	***-85.57%***	1.40E-04	***-85.57%***	11,000	***-13.40%***	8.58E-05	***-13.40%***	14000	***-44.33%***	1.09E-04	***-44.33%***
Phenanthrene	ND	ND	ND	***NA***	ND	***NA***	1,200	***NA***	6.73E-06	***NA***	170	***NA***	9.54E-07	***NA***	ND	***NA***	ND	***NA***
Pyrene	ND	ND	ND	***NA***	ND	***NA***	630	***NA***	3.11E-06	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Total PAHs	10,200	7.92E-05	6,480	***36.47%***	5.00E-05	***36.83%***	23,270	***-128.14%***	1.73E-04	***-118.24%***	12,090	***-18.53%***	9.31E-05	***-17.57%***	15,020	***-47.25%***	1.16E-04	***-46.81%***
Total C-PAHs	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***

Parameter	MW-102 (Sidegradient of Test Area #1)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/14/2005				12/19/2005				2/1/2006				2/28/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
2-Methylnaphthalene	250	1.76E-06	3	***98.80%***	2.11E-08	***98.80%***	5	***98.00%***	3.52E-08	***98.00%***	ND	***100.00%***	ND	***100.00%***	43	***82.80%***	3.02E-07	***82.80%***
Acenaphthene	180	1.17E-06	4	***97.78%***	2.59E-08	***97.78%***	21	***88.33%***	1.36E-07	***88.33%***	13	***92.78%***	8.43E-08	***92.78%***	110	***38.89%***	7.13E-07	***38.89%***
Acenaphthylene	ND	ND	3	***NA***	1.97E-08	***NA***	ND	***NA***	ND	***NA***	0.8	***NA***	5.26E-09	***NA***	ND	***NA***	ND	***NA***
Anthracene	ND	ND	2	***NA***	1.12E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)pyrene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(b)fluoranthene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(g,h,i)perylene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(k)fluoranthene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Chrysene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluorene	55	3.31E-07	1	***98.18%***	6.02E-09	***98.18%***	3	***94.55%***	1.80E-08	***94.55%***	1	***98.18%***	6.02E-09	***98.18%***	26	***52.73%***	1.56E-07	***52.73%***
Indeno(1,2,3-cd)pyrene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Naphthalene	3,700	2.89E-05	43	***98.84%***	3.35E-07	***98.84%***	21	***99.43%***	1.64E-07	***99.43%***	ND	***100.00%***	ND	***100.00%***	1100	***70.27%***	8.58E-06	***70.27%***
Phenanthrene	74	4.15E-07	1	***98.65%***	5.61E-09	***98.65%***	1	***98.92%***	4.49E-09	***98.92%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***
Pyrene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Total PAHs	4,259	3.25E-05	57	***98.66%***	4.25E-07	***98.69%***	51	***98.81%***	3.58E-07	***98.90%***	15	***99.65%***	9.56E-08	***99.71%***	1,279	***69.97%***	9.75E-06	***70.02%***
Total C-PAHs	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***

TABLE 9
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS - COMPARISON OF PAH CONCENTRATIONS

Parameter	MW-103 (Within Test Area #1)															
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/20/2005				2/1/2006				2/28/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
2-Methylnaphthalene	780	5.49E-06	120	***84.62%***	8.44E-07	***84.62%***	510	***34.62%***	3.59E-06	***34.62%***	94	***87.95%***	6.61E-07	***87.95%***	200	***74.36%***	1.41E-06	***74.36%***
Acenaphthene	240	1.56E-06	340	***-41.67%***	2.20E-06	***-41.67%***	350	***-45.83%***	2.27E-06	***-45.83%***	210	***12.50%***	1.36E-06	***12.50%***	200	***16.67%***	1.30E-06	***16.67%***
Acenaphthylene	ND	ND	42	***NA***	2.76E-07	***NA***	34	***NA***	2.23E-07	***NA***	14	***NA***	9.20E-08	***NA***	ND	***NA***	ND	***NA***
Anthracene	ND	ND	62	***NA***	3.48E-07	***NA***	48	***NA***	2.69E-07	***NA***	16	***NA***	8.98E-08	***NA***	ND	***NA***	ND	***NA***
Benzo(a)anthracene *[C]	ND	ND	31	***NA***	1.36E-07	***NA***	26	***NA***	1.14E-07	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)pyrene *[C]	ND	ND	26	***NA***	1.03E-07	***NA***	23	***NA***	9.12E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(b)fluoranthene *[C]	ND	ND	23	***NA***	9.12E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(g,h,i)perylene	ND	ND	8	***NA***	2.90E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(k)fluoranthene *[C]	ND	ND	6	***NA***	2.38E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Chrysene *[C]	ND	ND	29	***NA***	1.27E-07	***NA***	20	***NA***	8.76E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	ND	ND	93	***NA***	4.60E-07	***NA***	55	***NA***	2.72E-07	***NA***	10	***NA***	4.94E-08	***NA***	ND	***NA***	ND	***NA***
Fluorene	ND	ND	130	***NA***	7.82E-07	***NA***	130	***NA***	7.82E-07	***NA***	52	***NA***	3.13E-07	***NA***	53	***NA***	3.19E-07	***NA***
Indeno(1,2,3-cd)pyrene *[C]	ND	ND	7	***NA***	2.53E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Naphthalene	6,800	5.31E-05	130	***98.09%***	1.01E-06	***98.09%***	1,400	***79.41%***	1.09E-05	***79.41%***	210	***96.91%***	1.64E-06	***96.91%***	960	***85.88%***	7.49E-06	***85.88%***
Phenanthrene	110	6.17E-07	260	***-136.36%***	1.46E-06	***-136.36%***	200	***-81.82%***	1.12E-06	***-81.82%***	45	***59.09%***	2.52E-07	***59.09%***	52	***52.73%***	2.92E-07	***52.73%***
Pyrene	ND	ND	82	***NA***	4.05E-07	***NA***	95	***NA***	4.70E-07	***NA***	21	***NA***	1.04E-07	***NA***	ND	***NA***	ND	***NA***
Total PAHs	7,930	6.07E-05	1,389	***82.48%***	8.33E-06	***86.28%***	2,891	***63.54%***	2.02E-05	***66.71%***	672	***91.53%***	4.56E-06	***92.49%***	1,465	***81.53%***	1.08E-05	***82.20%***
Total C-PAHs	ND	ND	122	***NA***	5.06E-07	***NA***	69	***NA***	2.93E-07	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***

Parameter	MW-104 (Downgradient of Test Area #1)															
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/20/2005				2/1/2006				2/28/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
2-Methylnaphthalene	520	3.66E-06	650	***-25.00%***	4.57E-06	***-25.00%***	550	***-5.77%***	3.87E-06	***-5.77%***	540	***-3.85%***	3.80E-06	***-3.85%***	540	***-3.85%***	3.80E-06	***-3.85%***
Acenaphthene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Acenaphthylene	780	5.12E-06	830	***-6.41%***	5.45E-06	***-6.41%***	730	***6.41%***	4.80E-06	***6.41%***	750	***3.85%***	4.93E-06	***3.85%***	680	***12.82%***	4.47E-06	***12.82%***
Anthracene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)pyrene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(b)fluoranthene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(g,h,i)perylene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(k)fluoranthene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Chrysene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluorene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Indeno(1,2,3-cd)pyrene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Naphthalene	13,000	1.01E-04	15,000	***-15.38%***	1.17E-04	***-15.38%***	13,000	***0.00%***	1.01E-04	***0.00%***	12,000	***7.69%***	9.36E-05	***7.69%***	10,000	***23.08%***	7.80E-05	***23.08%***
Phenanthrene	140	7.86E-07	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***
Pyrene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Total PAHs	14,440	1.11E-04	16,480	***-14.13%***	1.27E-04	***-14.47%***	14,280	***1.11%***	1.10E-04	***0.81%***	13,290	***7.96%***	1.02E-04	***7.79%***	11,220	***22.30%***	8.63E-05	***22.26%***
Total C-PAHs	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***

TABLE 9
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS - COMPARISON OF PAH CONCENTRATIONS

Parameter	MW-105 (Downgradient of Test Area #1)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/29/2005		11/15/2005				12/19/2005				2/1/2006				3/2/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
2-Methylnaphthalene	840	5.91E-06	720	***14.29%***	5.06E-06	***14.29%***	630	***25.00%***	4.43E-06	***25.00%***	430	***48.81%***	3.02E-06	***48.81%***	670	***20.24%***	4.71E-06	***20.24%***
Acenaphthene	170	1.10E-06	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***
Acenaphthylene	200	1.31E-06	360	***-80.00%***	2.37E-06	***-80.00%***	ND	***100.00%***	ND	***100.00%***	240	***-20.00%***	1.58E-06	***100.00%***	430	***-115.00%***	2.83E-06	***-115.00%***
Anthracene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)anthracene *C	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)pyrene *C	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(b)fluoranthene *C	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(g,h,i)perylene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(k)fluoranthene *C	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Chrysene *C	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Dibenzo(a,h)anthracene *C	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluorene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Indeno(1,2,3-cd)pyrene *C	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Naphthalene	13,000	1.01E-04	13,000	***0.00%***	1.01E-04	***0.00%***	12,000	***7.69%***	9.36E-05	***7.69%***	7,600	***41.54%***	5.93E-05	***41.54%***	13,000	***0.00%***	1.01E-04	***0.00%***
Phenanthrene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Pyrene	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Total PAHs	14,210	1.10E-04	14,080	***0.91%***	1.09E-04	***0.82%***	12,630	***11.12%***	9.81E-05	***10.66%***	8,270	***41.80%***	6.39E-05	***41.78%***	14,100	***0.77%***	1.09E-04	***0.72%***
Total C-PAHs	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***

Parameter	MW-14 (Downgradient of Test Area #1)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/29/2005		11/16/2005				12/20/2005				2/1/2006				2/28/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(ug/L)	(mol/L)	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline	(ug/L)	vs. Baseline	(mol/L)	vs. Baseline
2-Methylnaphthalene	ND	ND	ND	***NA***	ND	***NA***	3	***NA***	2.11E-08	***NA***	1	***NA***	7.03E-09	***NA***	2	***NA***	1.41E-08	***NA***
Acenaphthene	52	3.37E-07	66	***-26.92%***	4.28E-07	***-26.92%***	46.0	***11.54%***	2.98E-07	***11.54%***	64	***-23.08%***	4.15E-07	***-23.08%***	60	***-15.38%***	3.89E-07	***-15.38%***
Acenaphthylene	ND	ND	ND	***NA***	ND	***NA***	5.0	***NA***	3.29E-08	***NA***	1.0	***NA***	6.57E-09	***NA***	1	***NA***	6.57E-09	***NA***
Anthracene	1	5.61E-09	1	***0.00%***	5.61E-09	***0.00%***	5.0	***-400.00%***	2.81E-08	***-400.00%***	ND	***100.00%***	ND	***100.00%***	1	***0.00%***	5.61E-09	***0.00%***
Benzo(a)anthracene *C	ND	ND	ND	***NA***	ND	***NA***	9.0	***NA***	3.94E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(a)pyrene *C	ND	ND	ND	***NA***	ND	***NA***	9.0	***NA***	3.57E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(b)fluoranthene *C	ND	ND	ND	***NA***	ND	***NA***	7.0	***NA***	2.77E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(g,h,i)perylene	ND	ND	ND	***NA***	ND	***NA***	8.0	***NA***	2.90E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(k)fluoranthene *C	ND	ND	ND	***NA***	ND	***NA***	2.0	***NA***	7.93E-09	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Chrysene *C	ND	ND	ND	***NA***	ND	***NA***	6.0	***NA***	2.63E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Dibenzo(a,h)anthracene *C	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	ND	ND	ND	***NA***	ND	***NA***	15.0	***NA***	7.42E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluorene	4	2.41E-08	8	***-100.00%***	4.81E-08	***-100.00%***	10.0	***-150.00%***	6.02E-08	***-150.00%***	8	***-100.00%***	4.81E-08	***NA***	6	***-50.00%***	3.61E-08	***-50.00%***
Indeno(1,2,3-cd)pyrene *C	ND	ND	ND	***NA***	ND	***NA***	5.0	***NA***	1.81E-08	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Naphthalene	3	2.34E-08	2	***33.33%***	1.56E-08	***33.33%***	10.0	***-233.33%***	7.80E-08	***-233.33%***	19	***-533.33%***	1.48E-07	***-533.33%***	32	***-966.67%***	2.50E-07	***-966.67%***
Phenanthrene	7	3.93E-08	7	***0.00%***	3.93E-08	***0.00%***	30.0	***-328.57%***	1.68E-07	***-328.57%***	4	***42.86%***	2.24E-08	***NA***	8	***-14.29%***	4.49E-08	***-14.29%***
Pyrene	ND	ND	1.0	***NA***	4.94E-09	***NA***	32	***NA***	1.58E-07	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Total PAHs	67	4.30E-07	85	***-26.87%***	5.42E-07	***-26.07%***	202	***-201.49%***	1.10E-06	***-156.84%***	97	***-44.78%***	6.47E-07	***-50.72%***	110	***-64.18%***	7.46E-07	***-73.66%***
Total C-PAHs	ND	ND	ND	***NA***	ND	***NA***	38	***NA***	1.55E-07	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***

TABLE 9
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS - COMPARISON OF PAH CONCENTRATIONS

Notes:

1. Concentrations reported in:
   - parts per billion (ppb) or micrograms per liter (µg/L)
   - moles per liter (mol/L)
2. Total polynuclear aromatic hydrocarbons (PAHs) calculated based the following constituents: 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.
3. *[C] - Total carcenogenic PAHs (C-PAHs) calculated based the following constituents: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.
4. NA - Not applicable.
5. ND - Not detected.
6. Percent reduction versus baseline calculated based on the following formula:
   % reduction = [(Baseline Total PAH Concentration - Mid-Test/Post-Test Total PAH Concentration) ÷ Baseline Total PAH Concentration] x 100.
7. Analytical results for Mid-Test #1 and Mid-Test #2 sampling events have not been validated.

TABLE 10
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

Parameter	Units	MW-101					
		Baseline	Mid-Test #1	Mid-Test #2		Post-Test #1	Post-Test #2
		MW-101 6/30/2005	MW-101-MT1 11/15/2005	MW-101-MT2 12/19/2005	DUP-1-MT2 12/19/2005	MW-101-PT1 2/1/2006	MW-101-PT2 3/2/2006
Total Petroleum Hydrocarbons (TPH)							
TPH-Diesel Range Organics (DRO)	mg/L	17	15	14	28	13	19
TPH-Gasoline Range Organics (GRO)	mg/L	21	7.4	17	18	9.4	8.1
Inorganics - Unfiltered							
Iron	ug/L	11,400 J	3,920	13,400	13,500	17,700 J	NA
Manganese	ug/L	531	386	560	560	2,380	NA
Inorganics - Filtered							
Iron - Filtered	ug/L	12,200 J	3,510	244	138 B	17,700	NA
Manganese - Filtered	ug/L	528	390	549	553	2,380	NA
Miscellaneous Parameters							
Total Organic Carbon (TOC)	mg/L	17	12	29	24	33	23
pH	pH Units	7.33	7.39	7.29	7.40	7.17	7.26
Total Kjeldahl Nitrogen (TKN)	mg/L	2.96	1.45	2.59	2.50	1.58	NA
Alkalinity, Total as $CaCO_3$	mg/L	461	224	494	495	454	NA
Nitrate as N (NO_3-N)	mg/L	0.1 U	0.108	0.1 U	0.1 U	0.1 U	NA
Nitrite as N (NO_2-N)	mg/L	0.5 U	0.139	0.1 U	0.1 U	0.5 U	NA
Bromide	mg/L	0.1 U	0.1 U	0.1 U	0.068 B	0.1 U	NA
Bromate	ug/L	100 U	10 U	40 U	40 U	40 U	NA
Phosphorous, Total as P	mg/L	0.285	0.080 B	0.298	0.293	0.274	NA
Oxidation-Reduction Potential (ORP)	mV	270	390	400	290	340	380
Chemical Oxygen Demand (COD)	mg/L	39.8 J	42.2	57.9	56.3	83.4	72.0
Biological Parameters							
Total Plate Count	CFUs/mL	130,000	15,000,000	48,000	1,900	3,000,000	2,100
Hydrocarbon-Depleting Plate Count	CFUs/mL	1,300	480,000	1,900	2,300	300	1,100

TABLE 10
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

Parameter	Units	MW-102				
		Baseline	Mid-Test #1		Mid-Test #2	Post-Test #1
		MW-102 6/30/2005	MW-102-MT1 11/14/05	DUP-1-MT1 11/14/05	MW-102-MT2 12/19/2005	MW-102-PT1 2/1/2006
Total Petroleum Hydrocarbons (TPH)						
TPH-Diesel Range Organics (DRO)	mg/L	12	2.5	2.3	3.2	1.2
TPH-Gasoline Range Organics (GRO)	mg/L	15	0.40	0.44	2.6	0.28
Inorganics - Unfiltered						
Iron	ug/L	9,990 J	594	544	4,280	2,000 J
Manganese	ug/L	3,090	2,360	2,400	3,220	1,800
Inorganics - Filtered						
Iron - Filtered	ug/L	11,300 J	230	232	91.1 B	1,800
Manganese - Filtered	ug/L	3,310	2,460	2,320	3,070	1,880
Miscellaneous Parameters						
Total Organic Carbon (TOC)	mg/L	22	16	15	19	8.1
pH	pH Units	7.3	7.54	7.55	7.01	7.12
Total Kjeldahl Nitrogen (TKN)	mg/L	8.17	3.20	3.08	2.96	0.757
Alkalinity, Total as $CaCO_3$	mg/L	692	630	627	580	356
Nitrate as N (NO_3-N)	mg/L	0.046 B	0.1 U	0.1 U	0.1 U	0.0480 B
Nitrite as N (NO_2-N)	mg/L	0.5 U	0.447 B	0.200 B	0.5 U	0.5 U
Bromide	mg/L	0.26	0.1 U	0.1 U	0.1 U	0.1 U
Bromate	ug/L	100 U	40 U	40 U	40 U	40 U
Phosphorous, Total as P	mg/L	0.1 U	0.198	0.126	0.108	0.0997
Oxidation-Reduction Potential (ORP)	mV	270	400	400	410	350
Chemical Oxygen Demand (COD)	mg/L	68.7 J	77.0	70.7	51.9	25.8
Biological Parameters						
Total Plate Count	CFUs/mL	43,000	4,200,000	3,200,000	120,000	210,000
Hydrocarbon-Depleting Plate Count	CFUs/mL	940	2,300	440,000	200,000	6,800

TABLE 10
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

			MW-103						
		Post-Test #2	Baseline	Mid-Test #1	Mid-Test #2		Post-Test #1	Post-Test #2	
Parameter	Units	MW-102-PT2 2/28/2006	MW-103 6/30/2005	MW-103-MT1 11/15/2005	MW-103-MT2 12/20/2005	MW-103-MT2b 12/22/2005	MW-103-PT1 2/1/2006	MW-103-PT2 2/28/2006	DUP-1-PT2 2/28/2006
Total Petroleum Hydrocarbons (TPH)									
TPH-Diesel Range Organics (DRO)	mg/L	5.9	20	19	NA	21	9	14	13
TPH-Gasoline Range Organics (GRO)	mg/L	1.6	25	3.5	6.0	NA	1.8	2.7	3.1
Inorganics - Unfiltered									
Iron	ug/L	NA	1,250 J	23,100	14,800	NA	8,780 J	NA	NA
Manganese	ug/L	NA	881	5,640	9,800	NA	1,040	NA	NA
Inorganics - Filtered									
Iron - Filtered	ug/L	NA	585 J	4,420	220	NA	8,700	NA	NA
Manganese - Filtered	ug/L	NA	1,390	7,240	11,000	NA	1,080	NA	NA
Miscellaneous Parameters									
Total Organic Carbon (TOC)	mg/L	16	51	82	79	NA	140	88	88
pH	pH Units	7.11	7.95	7.05	7.16	NA	6.59	6.56	6.54
Total Kjeldahl Nitrogen (TKN)	mg/L	NA	6.98	3.64	3.70	NA	7.36	NA	NA
Alkalinity, Total as $CaCO_3$	mg/L	NA	293	165	304	NA	216	NA	NA
Nitrate as N (NO_3-N)	mg/L	NA	0.1 U	0.0360 B	0.212	NA	0.0980 B	NA	NA
Nitrite as N (NO_2-N)	mg/L	NA	0.5 U	0.925 B	0.5 U	NA	0.5 U	NA	NA
Bromide	mg/L	NA	0.101	0.1 U	0.1 U	NA	0.1 U	NA	NA
Bromate	ug/L	NA	100 U	40 U	40 U	NA	40 U	NA	NA
Phosphorous, Total as P	mg/L	NA	0.1 U	0.180	0.089 B	NA	0.110	NA	NA
Oxidation-Reduction Potential (ORP)	mV	180	270	380	270	NA	320	180	190
Chemical Oxygen Demand (COD)	mg/L	49.5	148 J	282	204	NA	360	236	226
Biological Parameters									
Total Plate Count	CFUs/mL	1,700	160,000	17,000,000	1,200,000	NA	5,300,000	2,300	2,800
Hydrocarbon-Depleting Plate Count	CFUs/mL	1,400	760	9,900,000	500,000	NA	4,300,000	1,200 J	2,300 J

TABLE 10
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

		MW-104						
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2	Baseline	Mid-Test #1
Parameter	Units	MW-104 6/30/2005	MW-104-MT1 11/15/2005	MW-104-MT2 12/20/2005	MW-104-PT1 2/1/2006	MW-104-PT2 2/28/2006	MW-105 6/29/2005	MW-105-MT1 11/15/2005
Total Petroleum Hydrocarbons (TPH)								
TPH-Diesel Range Organics (DRO)	mg/L	25	26	22	20	19	24	31
TPH-Gasoline Range Organics (GRO)	mg/L	52	31	6.0	23	14	54	38
Inorganics - Unfiltered								
Iron	ug/L	1,030 J	1,010	846	1,310 J	NA	553 J	574
Manganese	ug/L	15 U	15 U	15 U	15 U	NA	15 U	25.4
Inorganics - Filtered								
Iron - Filtered	ug/L	1,040 J	1,020	834	1,020	NA	769 J	427
Manganese - Filtered	ug/L	15 U	15 U	15 U	15 U	NA	22.5	15 U
Miscellaneous Parameters								
Total Organic Carbon (TOC)	mg/L	31	32	33	43	36	34	35
pH	pH Units	11.77	11.56	11.31	11.18	9.55	11.79	11.53
Total Kjeldahl Nitrogen (TKN)	mg/L	5.76	4.52	4.63	3.65	NA	5.41	6.66
Alkalinity, Total as $CaCO_3$	mg/L	842	632	306	235	NA	844	586
Nitrate as N (NO_3-N)	mg/L	0.1 U	0.1 U	0.207	0.1 U	NA	0.046 B	0.039 B
Nitrite as N (NO_2-N)	mg/L	1 U	0.545 B	1 U	0.5 U	NA	0.5 U	1 U
Bromide	mg/L	0.1 U	0.1 U	0.1 U	0.1 U	NA	0.1 U	0.1 U
Bromate	ug/L	100 U	40 U	40 U	40 U	NA	100 U	40 U
Phosphorous, Total as P	mg/L	0.1 U	0.040 B	0.033 B	0.0216 B	NA	0.1 U	0.040
Oxidation-Reduction Potential (ORP)	mV	30	130	140	-160	180	30	40
Chemical Oxygen Demand (COD)	mg/L	129 J	155	132	143	143	141 J	146
Biological Parameters								
Total Plate Count	CFUs/mL	300 U	190 J	300 U	300 U	210 J	890	260,000
Hydrocarbon-Depleting Plate Count	CFUs/mL	300 U	110 J	300 U	300 U	300 U	590	86,000

TABLE 10
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

		MW-105					
		Mid-Test #2	Post-Test #1		Post-Test #2	Baseline	Mid-Test #1
Parameter	Units	MW-105-MT2 12/19/2005	MW-105-PT1 2/1/2006	DUP-1-PT1 2/1/2006	MW-105-PT2 3/2/2006	MW-14 6/29/2005	MW-14-MT1 11/16/2005
Total Petroleum Hydrocarbons (TPH)							
TPH-Diesel Range Organics (DRO)	mg/L	17	18	2.8	23	0.99	0.98
TPH-Gasoline Range Organics (GRO)	mg/L	40	19	17	34	0.48	0.37
Inorganics - Unfiltered							
Iron	ug/L	380	338 J	297 J	NA	6,780 J	5,780
Manganese	ug/L	15 U	15 U	15 U	NA	6,920	6,320
Inorganics - Filtered							
Iron - Filtered	ug/L	359	303	299	NA	6,630 J	6,210
Manganese - Filtered	ug/L	15 U	15 U	11.1	NA	6,600	6,550
Miscellaneous Parameters							
Total Organic Carbon (TOC)	mg/L	29	28	24	50	13	9.9
pH	pH Units	11.46	11.45	11.43	11.49	7.55	7.60
Total Kjeldahl Nitrogen (TKN)	mg/L	4.93	2.63	2.77	NA	6.32	7.94
Alkalinity, Total as $CaCO_3$	mg/L	498	476	488	NA	569	591
Nitrate as N (NO_3-N)	mg/L	0.051 B	0.149	0.184	NA	0.1 U	0.1 U
Nitrite as N (NO_2-N)	mg/L	0.5 U	0.5 U	0.1 U	NA	122	3.39
Bromide	mg/L	0.075	0.1 U	0.1 U	NA	0.121	0.1 U
Bromate	ug/L	40 U	40 U	40 U	NA	100 U	40 U
Phosphorous, Total as P	mg/L	0.100 U	0.0186 BJ	0.0334 BJ	NA	0.31	0.240
Oxidation-Reduction Potential (ORP)	mV	170	-160	-130	190	260	260
Chemical Oxygen Demand (COD)	mg/L	127	110	102	161.0	40.2 J	44.5
Biological Parameters							
Total Plate Count	CFUs/mL	690	300 U	300 U	300 U	NA	1,800
Hydrocarbon-Depleting Plate Count	CFUs/mL	300 U	300 U	300 U	300 U	NA	1,400

TABLE 10
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

		MW-14				MW-26D		
		Mid-Test #2		Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
Parameter	Units	MW-14-MT2 12/20/2005	MW-14-MT2b 12/22/2005	MW-14-PT1 2/1/2006	MW-14-PT2 2/28/2006	MW-26D 6/29/2005	MW-26D-PT1 1/31/2006	MW-26D-PT2 2/27/2006
Total Petroleum Hydrocarbons (TPH)								
TPH-Diesel Range Organics (DRO)	mg/L	NA	2.2	1.1	1.1	7.4	6.4	5.6
TPH-Gasoline Range Organics (GRO)	mg/L	0.26	NA	0.17	0.16	6.6	4	4.2
Inorganics - Unfiltered								
Iron	ug/L	4,270	NA	2,870 J	NA	NA	NA	NA
Manganese	ug/L	6,310	NA	6,410	NA	NA	NA	NA
Inorganics - Filtered								
Iron - Filtered	ug/L	310	NA	2,830	NA	NA	NA	NA
Manganese - Filtered	ug/L	6,330	NA	6,220	NA	NA	NA	NA
Miscellaneous Parameters								
Total Organic Carbon (TOC)	mg/L	NA	NA	8.6	15	14	19	16
pH	pH Units	NA	NA	7.50	7.51	7.63	7.51	7.49
Total Kjeldahl Nitrogen (TKN)	mg/L	NA	NA	5.79	NA	NA	NA	NA
Alkalinity, Total as $CaCO_3$	mg/L	NA	NA	592	NA	NA	NA	NA
Nitrate as N (NO_3-N)	mg/L	1 U	NA	0.1 U	NA	NA	NA	NA
Nitrite as N (NO_2-N)	mg/L	1 U	NA	0.5 U	NA	NA	NA	NA
Bromide	mg/L	1 U	NA	0.1 U	NA	NA	NA	NA
Bromate	ug/L	40 U	NA	40 U	NA	NA	NA	NA
Phosphorous, Total as P	mg/L	NA	NA	0.232	NA	NA	NA	NA
Oxidation-Reduction Potential (ORP)	mV	NA	NA	350	380	250	340	240
Chemical Oxygen Demand (COD)	mg/L	NA	NA	48.4	45.5	33.9 J	46.8	41.9
Biological Parameters								
Total Plate Count	CFUs/mL	300 U	NA	2,300	12,000	NA	NA	NA
Hydrocarbon-Depleting Plate Count	CFUs/mL	300 U	NA	300 U	2,100	NA	NA	NA

TABLE 10
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

Parameter	Units	MW- Baseline MW-26S 6/29/2005	Post-Test #1 MW-26S-PT1 1/31/2006
Total Petroleum Hydrocarbons (TPH)			
TPH-Diesel Range Organics (DRO)	mg/L	1.3	0.5 U
TPH-Gasoline Range Organics (GRO)	mg/L	0.05 U	0.05 U
Inorganics - Unfiltered			
Iron	ug/L	NA	NA
Manganese	ug/L	NA	NA
Inorganics - Filtered			
Iron - Filtered	ug/L	NA	NA
Manganese - Filtered	ug/L	NA	NA
Miscellaneous Parameters			
Total Organic Carbon (TOC)	mg/L	2.8	1.9
pH	pH Units	7.7	7.66
Total Kjeldahl Nitrogen (TKN)	mg/L	NA	NA
Alkalinity, Total as $CaCO_3$	mg/L	NA	NA
Nitrate as N (NO_3-N)	mg/L	NA	NA
Nitrite as N (NO_2-N)	mg/L	NA	NA
Bromide	mg/L	NA	NA
Bromate	ug/L	NA	NA
Phosphorous, Total as P	mg/L	NA	NA
Oxidation-Reduction Potential (ORP)	mV	340	340
Chemical Oxygen Demand (COD)	mg/L	41.8 J	11.4
Biological Parameters			
Total Plate Count	CFUs/mL	NA	NA
Hydrocarbon-Depleting Plate Count	CFUs/mL	NA	NA

TABLE 10
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NORTH ALBANY SERVICE CENTER
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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

		26S		MW-27D			
		Post-Test #2		Baseline	Post-Test #1	Post-Test #2	Baseline
Parameter	Units	MW-26S-PT2 2/27/2006	MW-26S-PT2 3/2/2006	MW-27D 6/28/2005	MW-27D-PT1 1/31/2006	MW-27D-PT2 2/28/2006	MW-27S 6/28/2005
Total Petroleum Hydrocarbons (TPH)							
TPH-Diesel Range Organics (DRO)	mg/L	NA	11	5.0	4.8	4.6	4.3
TPH-Gasoline Range Organics (GRO)	mg/L	0.14	NA	1.9	0.4	0.68	3.1
Inorganics - Unfiltered							
Iron	ug/L	NA	NA	NA	NA	NA	NA
Manganese	ug/L	NA	NA	NA	NA	NA	NA
Inorganics - Filtered							
Iron - Filtered	ug/L	NA	NA	NA	NA	NA	NA
Manganese - Filtered	ug/L	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters							
Total Organic Carbon (TOC)	mg/L	4.6	NA	14	15	12	23
pH	pH Units	7.58	NA	7.13	7.20	7.20	7.01
Total Kjeldahl Nitrogen (TKN)	mg/L	NA	NA	NA	NA	NA	NA
Alkalinity, Total as $CaCO_3$	mg/L	NA	NA	NA	NA	NA	NA
Nitrate as N (NO_3-N)	mg/L	NA	NA	NA	NA	NA	NA
Nitrite as N (NO_2-N)	mg/L	NA	NA	NA	NA	NA	NA
Bromide	mg/L	NA	NA	NA	NA	NA	NA
Bromate	ug/L	NA	NA	NA	NA	NA	NA
Phosphorous, Total as P	mg/L	NA	NA	NA	NA	NA	NA
Oxidation-Reduction Potential (ORP)	mV	240	NA	230	350	170	240
Chemical Oxygen Demand (COD)	mg/L	19.0	NA	37.2 J	46.8	41.2	69.1 J
Biological Parameters							
Total Plate Count	CFUs/mL	NA	NA	NA	NA	NA	NA
Hydrocarbon-Depleting Plate Count	CFUs/mL	NA	NA	NA	NA	NA	NA

TABLE 10
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NORTH ALBANY SERVICE CENTER
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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

		MW-27S		MW-28D			MW-28S		
		Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2	Baseline	Post-Test #1	Post-Test #2
Parameter	Units	MW-27S-PT1 1/31/2006	MW-27S-PT2 2/28/2006	MW-28D 6/28/2005	MW-28D-PT1 1/31/2006	MW-28D-PT2 2/27/2006	MW-28S 6/28/2005	MW-28S-PT1 1/31/2006	MW-28S-PT2 2/27/2006
Total Petroleum Hydrocarbons (TPH)									
TPH-Diesel Range Organics (DRO)	mg/L	3.8	4.9	2.5	0.81	2.2	16	16	14
TPH-Gasoline Range Organics (GRO)	mg/L	0.46	0.78	4.0	0.05 U	1.3	16	12	11
Inorganics - Unfiltered									
Iron	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics - Filtered									
Iron - Filtered	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Manganese - Filtered	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters									
Total Organic Carbon (TOC)	mg/L	34	36	15	120	21	36	47	46
pH	pH Units	7.31	6.90	7.7	7.52	7.52	11.68	11.54	11.54
Total Kjeldahl Nitrogen (TKN)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity, Total as $CaCO_3$	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate as N (NO_3-N)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite as N (NO_2-N)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Bromate	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorous, Total as P	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Oxidation-Reduction Potential (ORP)	mV	340	320	220	220	210	NA	-3	90
Chemical Oxygen Demand (COD)	mg/L	89.0	36.0	48.1 J	126	68.0	232 J	211	226
Biological Parameters									
Total Plate Count	CFUs/mL	NA	NA	NA	NA	NA	NA	NA	NA
Hydrocarbon-Depleting Plate Count	CFUs/mL	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 10
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NORTH ALBANY SERVICE CENTER
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PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

Parameter	Units	MW-5R					
		Baseline		Mid-Test #2		Post-Test #1	Post-Test #2
		MW-5R 6/29/2005	MW-5R-DUP 6/29/2005	MW-5R-MT2 12/20/2005	MW-5R-MT2b 12/20/2005	MW-5R-PT1 2/1/2006	MW-5R-PT2 2/28/2006
Total Petroleum Hydrocarbons (TPH)							
TPH-Diesel Range Organics (DRO)	mg/L	11	14	NA	14	7.2	14
TPH-Gasoline Range Organics (GRO)	mg/L	14	14	9.7	NA	7.4	9.6
Inorganics - Unfiltered							
Iron	ug/L	8,610 J	8,690 J	8,460	NA	4,960 J	NA
Manganese	ug/L	1,160	1,150	930	NA	672	NA
Inorganics - Filtered							
Iron - Filtered	ug/L	8,450 J	7,380 J	2,380	NA	3,640	NA
Manganese - Filtered	ug/L	1,130	1,160	883	NA	679	NA
Miscellaneous Parameters							
Total Organic Carbon (TOC)	mg/L	30	31	NA	NA	37	41
pH	pH Units	6.88	6.89	NA	NA	7.31	7.10
Total Kjeldahl Nitrogen (TKN)	mg/L	4.37	4.55	NA	NA	3.22	NA
Alkalinity, Total as $CaCO_3$	mg/L	436	439	NA	NA	547	NA
Nitrate as N (NO_3-N)	mg/L	0.1 U	0.1 U	0.1 U	NA	0.428	NA
Nitrite as N (NO_2-N)	mg/L	0.5 U	0.5 U	0.5 U	NA	0.5 U	NA
Bromide	mg/L	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA
Bromate	ug/L	100 U	100 U	40 U	NA	40 U	NA
Phosphorous, Total as P	mg/L	0.365	0.349	NA	NA	0.117	NA
Oxidation-Reduction Potential (ORP)	mV	270	360	NA	NA	330	190
Chemical Oxygen Demand (COD)	mg/L	124 J	125 J	NA	NA	126	134
Biological Parameters							
Total Plate Count	CFUs/mL	95,000	3,100	480	NA	76,000	54,000
Hydrocarbon-Depleting Plate Count	CFUs/mL	52,000	1,800	390	NA	1,260	31,000

TABLE 10

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
GROUNDWATER ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

Notes:

1. Groundwater samples collected by ARCADIS BBL.
2. Samples analyzed by Severn Trent Laboratories, Inc. (Shelton, Connecticut).
3. U - Compound was not detected at a concentration exceeding the laboratory detection limit. The listed value represents the laboratory detection limit.
4. B - The reported value was obtained from a reading less than the contract required detection limit, but greater than or equal to the instrument detection limit.
5. J - Indicates an estimated value. The result is less than the specified quantitation limit, but greater than or equal to the method detection limit.
6. NA - Sample not analyzed for respective parameter.
7. Analytical results for Mid-Test #2 and Mid-Test #2 sampling events have not been validated.
8. ug/L - micrograms per liter, equivalent to parts per billion.
9. mg/L - milligrams per liter, equivalent to parts per million.
10. CFU/mL - colliform units per milliliter.
11. mV - millivolt.

TABLE 11
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL VOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-201									
		Baseline		Mid-Test #1	Mid-Test #2		Post-Test #1		Post-Test #2		
		SB-201-BAS (14 - 15') 6/14/2005 (ppm)	SP-101D (SB-201-BAS) (10 - 15') 8/30/2005 (ppm)	SB-201-MT1 (10-15') 11/16/2005 (ppm)	SB-201-MT2 (10-15') 12/21/2005 (ppm)	SB-201-MT2 (10-10.2') 12/21/2005 (ppm)	SB-201-PT1 (10-15') 2/1/2006 (ppm)	SB-201-PT1 (12-14') 2/1/2006 (ppm)	SB-201-PT2 (10-15') 3/1/2006 (ppm)	DUP-01 (SB-201-PT2) (10-15') 3/1/2006 (ppm)	SB-201-PT2 (10-12') 3/1/2006 (ppm)
TCL VOCs											
1,1,1-Trichloroethane	0.8	0.93 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
1,1,2,2-Tetrachloroethane	0.6	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
1,1,2-Trichloroethane	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
1,1-Dichloroethane	0.2	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
1,1-Dichloroethene	0.4	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
1,2-Dichloroethane	0.1	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 UJ	0.029 U	1.2 U	5.6 U	1.2 U
1,2-Dichloropropane	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
2-Butanone	0.3	1.2 U	5.6 UJ	0.57 U	2.8 U	0.011 U	5.6 U	0.058 U	1.2 U	5.6 U	1.2 U
2-Hexanone	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.058 UJ	1.2 UJ	5.6 UJ	1.2 UJ
4-Methyl-2-Pentanone	1	1.2 U	2.8 U	0.57 U	2.8 U	0.011 U	5.6 U	0.058 U	1.2 U	5.6 U	1.2 U
Acetone	0.2	2.9 U	7.1 UJ	**0.32 J**	6.9 U	0.0071 J	14 UJ	0.120 UJ	2.9 U	14 U	3.1 U
Benzene	0.06	**2.0**	**2.6 J**	**0.35 J**	2.8 U	0.016	**16**	0.058	**1.7 J**	**7.2 J**	**5.1**
Bromodichloromethane	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Bromoform	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 UJ	1.2 U	5.6 U	1.2 U
Bromomethane	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 UJ	0.029 U	1.2 U	5.6 U	1.2 U
Carbon Disulfide	2.7	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Carbon Tetrachloride	0.6	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Chlorobenzene	1.7	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Chloroethane	1.9	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Chloroform	0.3	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Chloromethane	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
cis-1,2-Dichloroethene	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
cis-1,3-Dichloropropene	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Dibromochloromethane	NA	1.2 U	2.8 U	0.57 U	2.8 U	0.0057 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Ethylbenzene	5.5	**14**	**34**	4.5	4.2	0.110	**180 J**	0.48	**24 J**	**93 J**	**23**
Methylene Chloride	0.1	1.2 U	2.8 U	**0.39 J**	**2.2 J**	0.023 U	**0.83 J**	0.120 U	1.2 U	5.6 U	1.2 U
Styrene	NA	2.6	2.8 UJ	0.33 J	0.4 J	0.015	10	0.029 U	8.5 J	26 J	1.9
Tetrachloroethene	1.4	1.2 U	2.8 U	0.57 U	2.8 U	2.8 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Toluene	1.5	**3.3**	2.8 U	0.28 J	0.33 J	0.020	**12**	0.0069 J	**5.8 J**	**21 J**	**7.9**
trans-1,2-Dichloroethene	0.3	1.2 U	2.8 U	0.57 U	2.8 U	2.8 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
trans-1,3-Dichloropropene	NA	1.2 U	2.8 U	0.57 U	2.8 U	2.8 U	5.6 U	0.029 UJ	1.2 U	5.6 U	1.2 U
Trichloroethene	0.7	1.2 U	2.8 U	0.57 U	2.8 U	2.8 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Vinyl Chloride	0.2	1.2 U	2.8 U	0.57 U	2.8 U	2.8 U	5.6 U	0.029 U	1.2 U	5.6 U	1.2 U
Xylene (Total)	1.2	**12**	**16**	**3.6**	**6.7**	0.190	**89 J**	0.25	**24 J**	**87 J**	**28**
Total VOCs	NA	**34**	**53 J**	**9.8 J**	**14 J**	**0.36 J**	**308 J**	**0.79 J**	**64 J**	**234 J**	**66 J**
Total BTEX	NA	**31**	**53 J**	**8.7 J**	**11 J**	**0.34**	**297**	**0.79 J**	**56 J**	**208 J**	**64**

TABLE 11
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL VOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-202								
		Baseline		Mid-Test #1	Mid-Test #2		Post-Test #1		Post-Test #2	
		SB-202-BAS (12 - 14') 6/15/2005 (ppm)	SP-107D (SB-202-BAS) (10 - 15') 8/25/2005 (ppm)	SB-202-MT1 (10-15') 11/16/2005 (ppm)	SB-202-MT2 (10-15') 12/21/2005 (ppm)	SB-202-MT2 (10-10.5') 12/21/2005 (ppm)	SB-202-PT1 (10-15') 2/2/2006 (ppm)	SB-202-PT1 (10-12') 2/2/2006 (ppm)	SB-202-PT2 (10-15') 3/2/2006 (ppm)	SB-202-PT2 (14-16') 3/2/2006 (ppm)
TCL VOCs										
1,1,1-Trichloroethane	0.8	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
1,1,2,2-Tetrachloroethane	0.6	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
1,1,2-Trichloroethane	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
1,1-Dichloroethane	0.2	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
1,1-Dichloroethene	0.4	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
1,2-Dichloroethane	0.1	3.1 U	1.1 U	0.58 U	0.57 U	0.57 UJ	5.6 UJ	5.9 UJ	1.1 U	2.2 U
1,2-Dichloropropane	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
2-Butanone	0.3	**2.3 J**	1.8 UJ	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
2-Hexanone	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
4-Methyl-2-Pentanone	1	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Acetone	0.2	**2.8 J**	2.8 UJ	**0.43 J**	**0.41 J**	**0.40 J**	14 UJ	15 UJ	2.8 U	**0.88 J**
Benzene	0.06	**32**	**2.4**	**1.4**	**0.25 J**	**7.0**	**18**	**22**	**3.8**	**8.1**
Bromodichloromethane	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Bromoform	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Bromomethane	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 UJ	5.9 UJ	1.1 U	2.2 U
Carbon Disulfide	2.7	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Carbon Tetrachloride	0.6	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Chlorobenzene	1.7	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Chloroethane	1.9	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Chloroform	0.3	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Chloromethane	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
cis-1,2-Dichloroethene	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
cis-1,3-Dichloropropene	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Dibromochloromethane	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Ethylbenzene	5.5	**75**	**19**	**11**	**5.9**	**14**	**96**	**100**	**43**	**69**
Methylene Chloride	0.1	3.1 UJ	1.1 UJ	**0.4 J**	**0.59**	**0.53 B**	**1.1 J**	**1.2 J**	1.1 U	2.2 U
Styrene	NA	8.2	1.1 U	0.17 J	0.23 J	0.089 J	20	32	1.1 U	0.380 J
Tetrachloroethene	1.4	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Toluene	1.5	**32**	0.21 J	1.4	0.39 J	0.94 J	**41**	**59**	1.1 J	**2.4**
trans-1,2-Dichloroethene	0.3	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
trans-1,3-Dichloropropene	NA	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Trichloroethene	0.7	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Vinyl Chloride	0.2	3.1 U	1.1 U	0.58 U	0.57 U	0.57 U	5.6 U	5.9 U	1.1 U	2.2 U
Xylene (Total)	1.2	**77**	**9.7**	**6.0**	**5.0**	**18**	**62**	**76**	**23**	**36**
Total VOCs	NA	**229 J**	**31**	**21 J**	**13 J**	**41 J**	**238 J**	**290 J**	**71 J**	**117 J**
Total BTEX	NA	**216**	**31**	**20**	**12 J**	**40 J**	**217**	**257**	**71 J**	**116**

TABLE 11
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL VOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-203									
		Baseline			Mid-Test #1	Mid-Test #2		Post-Test #1		Post-Test #2	
		SB-203-BAS (12 - 14') 6/16/2005 (ppm)	FD061605 (SB-203-BAS) (12 - 14') 6/16/2005 (ppm)	SP-102D (SB-203-BAS) (10 - 15') 8/31/2005 (ppm)	SB-203-MT1 (10-15') 11/17/2005 (ppm)	SB-203-MT2 (10-15') 12/22/2005 (ppm)	SB-203-MT2 (11-13.5') 12/22/2005 (ppm)	SB-203-PT1 (10-15') 2/1/2006 (ppm)	SB-203-PT1 (12-14') 2/1/2006 (ppm)	SB-203-PT2 (10-15') 3/2/2006 (ppm)	SB-203-PT2 (14-16') 3/2/2006 (ppm)
TCL VOCs											
1,1,1-Trichloroethane	0.8	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 UJ	2.8 U	2.4 U
1,1,2,2-Tetrachloroethane	0.6	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
1,1,2-Trichloroethane	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
1,1-Dichloroethane	0.2	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
1,1-Dichloroethene	0.4	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
1,2-Dichloroethane	0.1	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 UJ	2.8 UJ	2.8 U	2.4 U
1,2-Dichloropropane	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
2-Butanone	0.3	12 U	12 U	2.9 UJ	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
2-Hexanone	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
4-Methyl-2-Pentanone	1	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Acetone	0.2	31 U	31 U	7.1 UJ	6.4 U	150 U	73 U	**0.41 J**	**1.5 J**	7.1 U	6.1 U
Benzene	0.06	**16**	**16**	**2.7 J**	**15**	**77**	**310**	**5.4**	**12**	**12**	**9.9**
Bromodichloromethane	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Bromoform	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Bromomethane	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 UJ	2.8 U	2.8 U	2.4 U
Carbon Disulfide	2.7	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Carbon Tetrachloride	0.6	12 U	12 U	2.9 UJ	2.5 U	59 U	29 U	1.1 U	2.8 UJ	2.8 U	2.4 U
Chlorobenzene	1.7	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Chloroethane	1.9	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Chloroform	0.3	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Chloromethane	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
cis-1,2-Dichloroethene	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
cis-1,3-Dichloropropene	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Dibromochloromethane	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Ethylbenzene	5.5	**91**	**95**	**22**	**87**	**23 J**	**110**	**37**	**69**	**99**	**63**
Methylene Chloride	0.1	12 UJ	12 U	2.9 UJ	**1.4 J**	**64**	**32 J**	1.1 U	2.8 U	2.8 U	2.4 U
Styrene	NA	12 U	12 U	2.9 U	0.3 J	89	430	1.1 U	2.8 U	2.8 U	2.4 U
Tetrachloroethene	1.4	12 U	12 U	2.9 UJ	2.5 U	59 U	29 U	1.1 U	2.8 UJ	2.8 U	2.4 U
Toluene	1.5	**6.9 J**	**6.1 J**	0.8 J	**2.1 J**	**140**	**610**	0.47 J	0.7 J	**2.3 J**	**4.2**
trans-1,2-Dichloroethene	0.3	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
trans-1,3-Dichloropropene	NA	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Trichloroethene	0.7	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Vinyl Chloride	0.2	12 U	12 U	2.9 U	2.5 U	59 U	29 U	1.1 U	2.8 U	2.8 U	2.4 U
Xylene (Total)	1.2	**73**	**77**	**13**	**85**	**120**	**570**	**44**	**62**	**73**	**60**
Total VOCs	NA	**187 J**	**194 J**	**39 J**	**191 J**	**513 J**	**2,062 J**	**87 J**	**145 J**	**186 J**	**137**
Total BTEX	NA	**187 J**	**194 J**	**39 J**	**189 J**	**360 J**	**1,600**	**87 J**	**144 J**	**186 J**	**137**

TABLE 11
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL VOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-204								
		Baseline		Mid-Test #1	Mid-Test #2		Post-Test #1		Post-Test #2	
		SB-204-BAS (14 - 15') 6/14/2005 (ppm)	SP-104D (SB-204-BAS) (10 - 15') 8/30/2005 (ppm)	SB-204-MT1 (10-15') 11/17/2005 (ppm)	SB-204-MT2 (10-15') 12/21/2005 (ppm)	SB-204-MT2 (12-13.2') 12/21/2005 (ppm)	SB-204-PT1 (10-15') 2/2/2006 (ppm)	SB-204-PT1 (12-14') 2/2/2006 (ppm)	SB-204-PT2 (10-15') 3/2/2006 (ppm)	SB-204-PT2 (10-12') 3/2/2006 (ppm)
TCL VOCs										
1,1,1-Trichloroethane	0.8	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
1,1,2,2-Tetrachloroethane	0.6	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
1,1,2-Trichloroethane	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
1,1-Dichloroethane	0.2	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
1,1-Dichloroethene	0.4	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
1,2-Dichloroethane	0.1	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 UJ	12 UJ	1.2 U	4.2 U
1,2-Dichloropropane	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
2-Butanone	0.3	2.8 U	5.7 UJ	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
2-Hexanone	NA	2.8 U	5.7 UJ	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
4-Methyl-2-Pentanone	1	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Acetone	0.2	6.9 U	14 UJ	**9.9 J**	70 U	**0.32 J**	13 UJ	30 UJ	**0.37 J**	**1.4 J**
Benzene	0.06	**6.0**	**13**	**730**	**25 J**	**0.19 J**	**52**	**230**	**5.6**	**44**
Bromodichloromethane	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Bromoform	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Bromomethane	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 UJ	12 UJ	1.2 U	4.2 U
Carbon Disulfide	2.7	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	1.4 J	1.2 U	4.2 U
Carbon Tetrachloride	0.6	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Chlorobenzene	1.7	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Chloroethane	1.9	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Chloroform	0.3	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Chloromethane	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
cis-1,2-Dichloroethene	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
cis-1,3-Dichloropropene	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Dibromochloromethane	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Ethylbenzene	5.5	**24**	**47**	**260**	**110**	1.1	**85**	**310**	**22**	**120**
Methylene Chloride	0.1	2.8 U	5.7 UJ	**19 J**	**29**	**0.60**	**1.1 J**	**2.5 J**	1.2 U	4.2 U
Styrene	NA	2.8 U	5.7 UJ	130	2.9 J	0.57 U	18	67	1.2 U	4.2 U
Tetrachloroethene	1.4	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Toluene	1.5	0.32 J	1.1 J	**260**	**22 J**	0.072 J	**36**	**150**	0.89 J	**17**
trans-1,2-Dichloroethene	0.3	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
trans-1,3-Dichloropropene	NA	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Trichloroethene	0.7	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Vinyl Chloride	0.2	2.8 U	5.7 U	28 U	28 U	0.57 U	5.3 U	12 U	1.2 U	4.2 U
Xylene (Total)	1.2	**9.8**	**36**	**160**	**98**	**1.6**	**62**	**230**	**17**	**81**
Total VOCs	NA	**40 J**	**97 J**	**1,569 J**	**287 J**	**3.9 J**	**254 J**	**991 J**	**46 J**	**263 J**
Total BTEX	NA	**40 J**	**97 J**	**1,410**	**255 J**	**3.0 J**	**235**	**920**	**45 J**	**262**

TABLE 11
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL VOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-205								
		Baseline		Mid-Test #1	Mid-Test #2		Post-Test #1		Post-Test #2	
		SB-205-BAS (10 - 12') 6/16/2005 (ppm)	SP-103D (SB-205-BAS) (10 - 15') 8/31/2005 (ppm)	SB-205-MT1 (10-15') 11/17/2005 (ppm)	SB-205-MT2 (10-15') 12/21/2005 (ppm)	SB-205-MT2 (12-15') 12/21/2005 (ppm)	SB-205-PT1 (10-15') 2/1/2006 (ppm)	SB-205-PT1 (12-14') 2/1/2006 (ppm)	SB-205-PT2 (10-15') 3/1/2006 (ppm)	SB-205-PT2 (12-14') 3/1/2006 (ppm)
TCL VOCs										
1,1,1-Trichloroethane	0.8	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 UJ	1.2 U	1.3 U	1.2 U
1,1,2,2-Tetrachloroethane	0.6	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
1,1,2-Trichloroethane	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
1,1-Dichloroethane	0.2	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
1,1-Dichloroethene	0.4	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
1,2-Dichloroethane	0.1	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 UJ	1.2 UJ	1.3 U	1.2 U
1,2-Dichloropropane	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
2-Butanone	0.3	30 UJ	5.9 UJ	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
2-Hexanone	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 UJ	1.2 UJ
4-Methyl-2-Pentanone	1	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Acetone	0.2	**11 J**	15 UJ	16 U	2.9 U	**0.38 J**	**2.3 J**	**0.51 J**	3.2 U	3.0 U
Benzene	0.06	**88**	**72**	**150**	**6.2**	**0.24 J**	**71**	**21**	**6.3**	**7.3**
Bromodichloromethane	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Bromoform	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Bromomethane	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 UJ	1.3 U	1.2 U
Carbon Disulfide	2.7	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Carbon Tetrachloride	0.6	30 U	5.9 UJ	6.3 U	1.2 U	0.59 U	5.9 UJ	1.2 U	1.3 U	1.2 U
Chlorobenzene	1.7	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Chloroethane	1.9	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Chloroform	0.3	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Chloromethane	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
cis-1,2-Dichloroethene	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
cis-1,3-Dichloropropene	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Dibromochloromethane	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Ethylbenzene	5.5	**130**	**200**	**180**	**24**	4.5	**110**	**28**	**26**	**23**
Methylene Chloride	0.1	30 UJ	5.9 UJ	**3.4 J**	**1.3**	**0.58 J**	5.9 U	1.2 U	1.3 U	1.2 U
Styrene	NA	53	3.8 J	82	1.2 U	0.68	14	1.9	2.2	1.2 U
Tetrachloroethene	1.4	30 U	5.9 UJ	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Toluene	1.5	**130**	**52**	**290**	**3.2**	1.0	**130**	**23**	**13**	**8.5**
trans-1,2-Dichloroethene	0.3	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
trans-1,3-Dichloropropene	NA	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Trichloroethene	0.7	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 UJ	1.2 U	1.3 U	1.2 U
Vinyl Chloride	0.2	30 U	5.9 U	6.3 U	1.2 U	0.59 U	5.9 U	1.2 U	1.3 U	1.2 U
Xylene (Total)	1.2	**210**	**240**	**320**	**34**	**3.6**	**210**	**57**	**36**	**28**
Total VOCs	NA	**622 J**	**568 J**	**1,025 J**	**69 J**	**11 J**	**537 J**	**131 J**	**84**	**67**
Total BTEX	NA	**558**	**564**	**940**	**67 J**	**9.3 J**	**521**	**129**	**81**	**67**

TABLE 11
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL VOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-206											
		Baseline		Mid-Test #1		Mid-Test #2			Post-Test #1			Post-Test #2	
		SB-206-BAS (10 - 12') 6/21/2005 (ppm)	VP-103 (SB-206-BAS) (10 - 15') 9/1/2005 (ppm)	SB-206-MT1 (10-15') 11/17/2005 (ppm)	DUP-2-MT1 (SB-206-MT1) (10-15') 11/17/2005 (ppm)	SB-206-MT2 (10-15') 12/22/2005 (ppm)	DUP-2-MT2 (SB-206-MT2) (10-15') 12/22/2005 (ppm)	SB-206-MT2 (14-14.7') 12/22/2005 (ppm)	SB-206-PT1 (10-15') 2/2/2006 (ppm)	SB-206-PT1 (10-12') 2/2/2006 (ppm)	SB-DUP-PT1 (10-15') 2/2/2006 (ppm)	SB-206-PT2 (10-15') 3/1/2006 (ppm)	SB-206-PT2 (10-12') 3/1/2006 (ppm)
TCL VOCs													
1,1,1-Trichloroethane	0.8	0.94 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
1,1,2,2-Tetrachloroethane	0.6	0.94 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
1,1,2-Trichloroethane	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
1,1-Dichloroethane	0.2	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
1,1-Dichloroethene	0.4	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
1,2-Dichloroethane	0.1	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 UJ	3.5 UJ	5.9 UJ	6.4 U	5.9 U
1,2-Dichloropropane	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
2-Butanone	0.3	12 UJ	6.3 UJ	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
2-Hexanone	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 UJ	5.9 UJ
4-Methyl-2-Pentanone	1	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Acetone	0.2	29 U	16 UJ	**0.82 J**	**1.2 J**	3.1 U	72 U	6.1 U	32 UJ	**1.2 J**	15 UJ	16 U	15 U
Benzene	0.06	**70**	**31**	**11**	**6**	**4.0**	**110**	**5.7**	**250 J**	**48**	**44 J**	**50**	**45**
Bromodichloromethane	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Bromoform	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Bromomethane	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 UJ	3.5 UJ	5.9 UJ	6.4 U	5.9 U
Carbon Disulfide	2.7	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Carbon Tetrachloride	0.6	12 U	6.3 UJ	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Chlorobenzene	1.7	1.4 J	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Chloroethane	1.9	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Chloroform	0.3	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Chloromethane	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
cis-1,2-Dichloroethene	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
cis-1,3-Dichloropropene	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Dibromochloromethane	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Ethylbenzene	5.5	**83**	**55**	**47**	**63**	**28**	**210**	**31**	**310 J**	**54**	**80 J**	**190 J**	**160**
Methylene Chloride	0.1	12 U	6.3 U	**1.3 J**	**1.7 J**	**1.4**	**28 J**	**2.9**	**2.3 J**	3.5 U	**1.2 J**	6.4 U	5.9 U
Styrene	NA	41	9.1 J	2.1 J	1.0 J	1.2 U	27 J	1.4 J	150 J	30	25 J	2.7	5.9 U
Tetrachloroethene	1.4	12 U	6.3 UJ	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Toluene	1.5	**77**	**36**	**5.6**	**3.9**	**2.1**	**71**	**4.2**	**310 J**	**60**	**55 J**	**13**	**7**
trans-1,2-Dichloroethene	0.3	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
trans-1,3-Dichloropropene	NA	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Trichloroethene	0.7	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Vinyl Chloride	0.2	12 U	6.3 U	2.2 U	2.7 U	1.2 U	29 U	2.4 U	13 U	3.5 U	5.9 U	6.4 U	5.9 U
Xylene (Total)	1.2	**92**	**70**	**37**	**51**	**48**	**180**	**27**	**370 J**	**67**	**88 J**	**130**	**120**
Total VOCs	NA	**364 J**	**201 J**	**105 J**	**128 J**	**84**	**599 J**	**72 J**	**1,392 J**	**260 J**	**308 J**	**386 J**	**332**
Total BTEX	NA	**322**	**192**	**101**	**124**	**82**	**571**	**68**	**1,240 J**	**229 J**	**267 J**	**383 J**	**332**

TABLE 11
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL VOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SP-107S				SP-107D			
		Baseline	Post-Test #1		Post-Test #2	Baseline	Post-Test #1		Post-Test #2
		SP-107D (10-15') 8/25/2005 (ppm)	SP-107S-PT1 (10-15') 2/2/2006 (ppm)	SP-107S-PT1 (12-14') 2/2/2006 (ppm)	SP-107S-PT2 (10-15') 3/2/2006 (ppm)	SP-107D (10-15') 8/25/2005 (ppm)	SP-107D-PT1 (10-15') 2/2/2006 (ppm)	SP-107D-PT1 (12-14') 2/2/2006 (ppm)	SP-107D-PT2 (10-15') 3/2/2006 (ppm)
TCL VOCs									
1,1,1-Trichloroethane	0.8	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
1,1,2,2-Tetrachloroethane	0.6	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
1,1,2-Trichloroethane	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
1,1-Dichloroethane	0.2	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
1,1-Dichloroethene	0.4	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
1,2-Dichloroethane	0.1	1.1 U	1.2 UJ	1.1 UJ	12 U	1.1 U	0.58 UJ	0.028 U	0.6 U
1,2-Dichloropropane	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
2-Butanone	0.3	1.8 UJ	1.2 U	1.1 U	12 U	1.8 UJ	0.58 U	0.056 U	0.6 U
2-Hexanone	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.056 UJ	0.6 U
4-Methyl-2-Pentanone	1	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Acetone	0.2	2.8 UJ	**0.54 J**	**0.36 J**	31 U	2.8 UJ	**0.34 J**	0.11 UJ	**0.45 J**
Benzene	0.06	**2.4**	**4.7**	**4.2**	**61**	**2.4**	**1.5**	0.036	**2.6**
Bromodichloromethane	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Bromoform	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 UJ	0.6 U
Bromomethane	NA	1.1 UJ	1.2 UJ	1.1 UJ	12 U	1.1 UJ	0.58 UJ	0.028 U	0.6 U
Carbon Disulfide	2.7	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.03 J	0.028 U	0.6 U
Carbon Tetrachloride	0.6	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Chlorobenzene	1.7	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Chloroethane	1.9	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Chloroform	0.3	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Chloromethane	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
cis-1,2-Dichloroethene	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
cis-1,3-Dichloropropene	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Dibromochloromethane	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Ethylbenzene	5.5	**19**	**39**	**40**	**280**	**19**	**11**	0.54	**14**
Methylene Chloride	0.1	1.1 UJ	1.2 U	1.1 U	12 U	1.1 UJ	0.58 U	0.11 U	0.6 U
Styrene	NA	1.1 UJ	0.09 J	0.12 J	12 U	1.1 UJ	1.7	0.024 J	0.6 U
Tetrachloroethene	1.4	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Toluene	1.5	0.12 J	0.46 J	0.41 J	**5.3 J**	0.12 J	**2.3**	0.056	0.83
trans-1,2-Dichloroethene	0.3	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
trans-1,3-Dichloropropene	NA	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 UJ	0.6 U
Trichloroethene	0.7	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Vinyl Chloride	0.2	1.1 U	1.2 U	1.1 U	12 U	1.1 U	0.58 U	0.028 U	0.6 U
Xylene (Total)	1.2	**9.7**	**32**	**29**	**300**	**9.7**	**8.7**	0.53	**13**
Total VOCs	NA	**31 J**	**77 J**	**74 J**	**646 J**	**31 J**	**26 J**	**1.2**	**31 J**
Total BTEX	NA	**31 J**	**76 J**	**74 J**	**646 J**	**31 J**	**24**	**1.2**	**30**

TABLE 11
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL VOCs (ppm)

Notes:

1. Subsurface soil samples collected by ARCADIS BBL.
2. Samples analyzed by Severn Trent Laboratories, Inc. (Shelton, New Jersey) for target compound list (TCL) volatile organic compounds (VOCs) using United States Department of Environmental Conservation (USEPA) SW-846 Method 8260.
3. Concentrations reported in parts per million (ppm) or milligrams per kilogram (mg/kg).
4. U - Compound was not detected at a concentration exceeding the laboratory detection limit. The listed value represents the laboratory detection limit.
5. J - Indicates an estimated value. The result is less than the specified quantitation limit, but greater than or equal to the method detection limit.
6. B - Compound was detected in the sample and its associated blank.
7. UJ - The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
8. Shaded and bold values indicates that the compound was detected at a concentration exceeding the recommended soil cleanup objective as presented in the New York State Department of Environmental Conservation (NYSDEC) document entitled, "Technical and Administrative Guidance Memorandum (TAGM): Determination of Soil Cleanup Objectives and Cleanup Levels," HWR-94-4046 (TAGM 4046), dated January 24, 1994.
9. NA - Not available. Indicates no recommended soil cleanup objective listed in the NYSDEC TAGM 4046 for this compound.
10. As per TAGM 4046, Total VOCs < 10 ppm, Total SVOCs < 500 ppm, and Individual SVOCs < 50 ppm.
11. BTEX - Benzene, toluene, ethylbenzene, and xylenes.
12. Baseline samples collected during August 2005 were collected from the 10 to 15-foot depth interval below ground surface during the installation of sparge points and vapor monitoring points. The analytical results for these samples have been used for comparison purposes with nearby baseline soil sampling locations SB-201-BAS through SB-206-BAS. The analytical results for sample SP-107D are also presented for comparison purposes to Post-Test analytical results at sample locations SP-107S and SP-107D.
13. Analytical results for Mid-Test #1 and Mid-Test #2 sampling events have not been validated.

TABLE 12
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS - COMPARISON OF BTEX CONCENTRATIONS

Parameter	SB-201																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	(10-15')		(10-15')				(10-15')				(10-15')				(10-15')			
	8/30/2005		11/16/2005				12/21/2005				2/1/2006				3/1/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
Benzene	2.6	3.33E-05	0.35	***86.54%***	4.48E-06	***86.54%***	ND	***100.00%***	ND	***100.00%***	16	***-515.38%***	2.05E-04	***-515.38%***	1.7	***34.62%***	2.18E-05	***34.62%***
Ethylbenzene	34	3.20E-04	4.5	***86.76%***	4.24E-05	***86.76%***	4.2	***87.65%***	3.96E-05	***87.65%***	180	***-429.41%***	1.70E-03	***-429.41%***	24	***29.41%***	2.26E-04	***29.41%***
Toluene	ND	ND	0.28	***NA***	3.04E-06	***NA***	0.33	***NA***	3.58E-06	***NA***	12	***NA***	1.30E-04	***NA***	5.8	***NA***	6.30E-05	***NA***
Xylene	16	1.51E-04	3.6	***77.50%***	3.39E-05	***77.50%***	6.7	***58.13%***	6.31E-05	***58.13%***	89	***-456.25%***	8.38E-04	***-456.25%***	24	***-50.00%***	2.26E-04	***-50.00%***
Total BTEX	53	5.04E-04	8.7	***83.40%***	8.38E-05	***83.38%***	11	***78.65%***	1.06E-04	***78.93%***	297	***-464.64%***	2.87E-03	***-468.94%***	56	***-5.51%***	5.37E-04	***-6.46%***

Parameter	SB-202																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	(10-15')		(10-15')				(10-15')				(10-15')				(10-15')			
	8/25/2005		11/16/2005				12/21/2005				2/2/2006				3/2/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
Benzene	2.4	3.07E-05	1.4	***41.67%***	1.79E-05	***41.67%***	0.25	***89.58%***	3.20E-06	***89.58%***	18	***-650.00%***	2.30E-04	***-650.00%***	3.8	***-58.33%***	4.86E-05	***-58.33%***
Ethylbenzene	19	1.79E-04	11	***42.11%***	1.04E-04	***42.11%***	5.9	***68.95%***	5.56E-05	***68.95%***	96	***-405.26%***	9.04E-04	***-405.26%***	43	***-126.32%***	4.05E-04	***-126.32%***
Toluene	0.21	2.28E-06	1.4	***-566.67%***	1.52E-05	***-566.67%***	0.39	***-85.71%***	4.23E-06	***-85.71%***	41	***-19423.81%***	4.45E-04	***-19423.81%***	1.1	***-423.81%***	1.19E-05	***-423.81%***
Xylene	9.7	9.14E-05	6	***38.14%***	5.65E-05	***38.14%***	5.0	***48.45%***	4.71E-05	***48.45%***	62	***-539.18%***	5.84E-04	***-539.18%***	23	***-137.11%***	2.17E-04	***-137.11%***
Total BTEX	31	3.03E-04	20	***36.76%***	1.93E-04	***36.29%***	12	***63.14%***	1.10E-04	***63.70%***	217	***-593.07%***	2.16E-03	***-613.29%***	71	***-126.45%***	6.82E-04	***-124.92%***

Parameter	SB-203																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	(10-15')		(10-15')				(10-15')				(10-15')				(10-15')			
	8/31/2005		11/17/2005				12/22/2005				2/1/2006				3/2/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
Benzene	2.7	3.46E-05	15	***-455.56%***	1.92E-04	***-455.56%***	77	***-2751.85%***	9.86E-04	***-2751.85%***	5.4	***-100.00%***	6.91E-05	***-100.00%***	12	***-344.44%***	1.54E-04	***-344.44%***
Ethylbenzene	22	2.07E-04	87	***-295.45%***	8.20E-04	***-295.45%***	23	***-4.55%***	2.17E-04	***-4.55%***	37	***-68.18%***	3.49E-04	***-68.18%***	99	***-350.00%***	9.33E-04	***-350.00%***
Toluene	0.8	8.68E-06	2.1	***-162.50%***	2.28E-05	***-162.50%***	140	***-17400.00%***	1.52E-03	***-17400.00%***	0.47	***41.25%***	5.10E-06	***41.25%***	2.3	***-187.50%***	2.50E-05	***-187.50%***
Xylene	13	1.22E-04	85	***-553.85%***	8.01E-04	***-553.85%***	120	***-823.08%***	1.13E-03	***-823.08%***	44	***-238.46%***	4.14E-04	***-238.46%***	73	***-461.54%***	6.88E-04	***-461.54%***
Total BTEX	39	3.73E-04	189	***-391.17%***	1.84E-03	***-392.04%***	360	***-835.06%***	3.85E-03	***-932.98%***	87	***-125.64%***	8.37E-04	***-124.49%***	186	***-383.90%***	1.80E-03	***-382.33%***

Parameter	SB-204																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	(10-15')		(10-15')				(10-15')				(10-15')				(10-15')			
	8/30/2005		11/17/2005				12/21/2005				2/2/2006				3/2/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
Benzene	13	1.66E-04	730	***-5515.38%***	9.35E-03	***-5515.38%***	25	***-92.31%***	3.20E-04	***-92.31%***	52	***-300.00%***	6.66E-04	***-300.00%***	5.6	***56.92%***	7.17E-05	***56.92%***
Ethylbenzene	47	4.43E-04	260	***-453.19%***	2.45E-03	***-453.19%***	110	***-134.04%***	1.04E-03	***-134.04%***	85	***-80.85%***	8.01E-04	***-80.85%***	22	***53.19%***	2.07E-04	***53.19%***
Toluene	1.1	1.19E-05	260	***-23536.36%***	2.82E-03	***-23536.36%***	22	***-1900.00%***	2.39E-04	***-1900.00%***	36	***-3172.73%***	3.91E-04	***-3172.73%***	0.89	***19.09%***	9.66E-06	***19.09%***
Xylene	36	3.39E-04	160	***-344.44%***	1.51E-03	***-344.44%***	98	***-172.22%***	9.23E-04	***-172.22%***	62	***-72.22%***	5.84E-04	***-72.22%***	17	***52.78%***	1.60E-04	***52.78%***
Total BTEX	97	9.60E-04	1,410	***-1352.11%***	1.61E-02	***-1579.23%***	255	***-162.62%***	2.52E-03	***-162.25%***	235	***-142.02%***	2.44E-03	***-154.23%***	45	***53.15%***	4.49E-04	***53.27%***

TABLE 12
NATIONAL GRID
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PILOT-SCALE TREATABILITY PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS - COMPARISON OF BTEX CONCENTRATIONS

Parameter	SB-205																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	(10-15')		(10-15')				(10-15')				(10-15')				(10-15')			
	8/31/2005		11/17/2005				12/21/2005				2/1/2006				3/1/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
Benzene	72	9.22E-04	150	***-108.33%***	1.92E-03	***-108.33%***	6.2	***91.39%***	7.94E-05	***91.39%***	71	***1.39%***	9.09E-04	***1.39%***	6.3	***91.25%***	8.07E-05	***91.25%***
Ethylbenzene	200	1.88E-03	180	***10.00%***	1.70E-03	***10.00%***	24	***88.00%***	2.26E-04	***88.00%***	110	***45.00%***	1.04E-03	***45.00%***	26	***87.00%***	2.45E-04	***87.00%***
Toluene	52	5.64E-04	290	***-457.69%***	3.15E-03	***-457.69%***	3.2	***93.85%***	3.47E-05	***93.85%***	130	***-150.00%***	1.41E-03	***-150.00%***	13	***75.00%***	1.41E-04	***75.00%***
Xylene	240	2.26E-03	320	***-33.33%***	3.01E-03	***-33.33%***	34	***85.83%***	3.20E-04	***85.83%***	210	***12.50%***	1.98E-03	***12.50%***	36	***85.00%***	3.39E-04	***85.00%***
Total BTEX	564	5.63E-03	940	***-66.67%***	9.78E-03	***-73.65%***	67	***88.05%***	6.60E-04	***88.27%***	521	***7.62%***	5.33E-03	***5.27%***	81	***85.59%***	8.06E-04	***85.69%***

Parameter	SB-206																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	(10-15')		(10-15')				(10-15')				(10-15')				(10-15')			
	9/1/2005		11/17/2005				12/22/2005				2/2/2006				3/1/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
Benzene	31	3.97E-04	11	***64.52%***	1.41E-04	***64.52%***	4.0	***87.10%***	5.12E-05	***87.10%***	250	***-706.45%***	3.20E-03	***-706.45%***	50	***-61.29%***	6.40E-04	***-61.29%***
Ethylbenzene	55	5.18E-04	47	***14.55%***	4.43E-04	***14.55%***	28	***49.09%***	2.64E-04	***49.09%***	310	***-463.64%***	2.92E-03	***-463.64%***	190	***-245.45%***	1.79E-03	***-245.45%***
Toluene	36	3.91E-04	5.6	***84.44%***	6.08E-05	***84.44%***	2.1	***94.17%***	2.28E-05	***94.17%***	310	***-761.11%***	3.36E-03	***-761.11%***	13	***63.89%***	1.41E-04	***63.89%***
Xylene	70	6.59E-04	37	***47.14%***	3.49E-04	***47.14%***	48	***31.43%***	4.52E-04	***31.43%***	370	***-428.57%***	3.49E-03	***-428.57%***	130	***-85.71%***	1.22E-03	***-85.71%***
Total BTEX	192	1.97E-03	101	***47.60%***	9.93E-04	***49.47%***	82	***57.24%***	7.90E-04	***59.80%***	1,240	***-545.83%***	1.30E-02	***-560.06%***	383	***-99.48%***	3.80E-03	***-93.15%***

Parameter	Arithmetic Mean Concentrations (SB-201 through SB-206)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	(10-15')		(10-15')				(10-15')				(10-15')				(10-15')			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
Benzene	21	2.64E-04	151	***-633.83%***	1.94E-03	***-633.83%***	19	***7.96%***	1.79E-04	***32.28%***	69	***-233.39%***	8.80E-04	***-233.39%***	13	***35.81%***	1.69E-04	***35.81%***
Ethylbenzene	63	5.92E-04	98	***-56.37%***	9.25E-04	***-56.37%***	33	***48.25%***	3.06E-04	***48.25%***	136	***-116.98%***	1.28E-03	***-116.98%***	67	***-7.16%***	6.34E-04	***-7.16%***
Toluene	15	1.66E-04	93	***-511.28%***	1.21E-03	***-633.17%***	28	***-83.61%***	3.64E-04	***-119.90%***	88	***-478.59%***	1.12E-03	***-578.58%***	6.0	***60.56%***	6.58E-05	***60.28%***
Xylene	64	6.04E-04	102	***-58.98%***	9.60E-04	***-58.98%***	52	***18.98%***	4.89E-04	***18.98%***	140	***-117.57%***	1.31E-03	***-117.57%***	51	***21.24%***	4.76E-04	***21.24%***
Total BTEX	163	1.63E-03	445	***-173.13%***	5.04E-03	***-209.86%***	131	***19.27%***	1.34E-03	***17.65%***	433	***-165.82%***	4.60E-03	***-183.12%***	137	***15.81%***	1.35E-03	***17.24%***

Parameter	Geometric Mean Concentrations (SB-201 through SB-206)																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	(10-15')		(10-15')				(10-15')				(10-15')				(10-15')			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
Benzene	8.9	1.14E-04	14	***-62.05%***	1.84E-04	***-62.05%***	5.1	***43.03%***	6.47E-05	***43.03%***	34	***-278.41%***	4.30E-04	***-278.41%***	7.2	***19.13%***	9.19E-05	***19.13%***
Ethylbenzene	44	4.15E-04	46	***-4.32%***	4.33E-04	***-4.32%***	19	***57.69%***	1.76E-04	***57.69%***	111	***-151.36%***	1.04E-03	***-151.36%***	47	***-7.12%***	4.45E-04	***-7.12%***
Toluene	2.8	3.04E-05	8.4	***-199.22%***	9.10E-05	***-199.22%***	3.7	***-32.86%***	4.04E-05	***-32.86%***	26	***-840.64%***	2.86E-04	***-840.64%***	3.6	***-28.76%***	3.92E-05	***-28.76%***
Xylene	33	3.08E-04	39	***-19.07%***	3.67E-04	***-19.07%***	29	***10.13%***	2.77E-04	***10.13%***	103	***-214.00%***	9.67E-04	***-214.00%***	38	***-17.47%***	3.62E-04	***-17.47%***
Total BTEX	93	9.20E-04	128	***-36.74%***	1.29E-03	***-40.45%***	64	***32.01%***	6.24E-04	***32.14%***	308	***-229.29%***	3.09E-03	***-236.36%***	101	***-7.66%***	9.83E-04	***-6.89%***

TABLE 12
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NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS - COMPARISON OF BTEX CONCENTRATIONS

Notes:

1. Concentrations reported in:
   - parts per million (ppm) or milligrams per kilogram (mg/kg)
   - moles per kilogram (mol/kg)
2. BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes (total).
3. NA - Not applicable.
4. ND - Not detected.
5. Percent reduction versus baseline calculated based on the following formula:
   % reduction = [(Baseline Total BTEX Concentration - Mid-Test/Post-Test Total BTEX Concentration) ÷ Baseline Total BTEX Concentration] x 100.
6. Arithmetic mean concentrations calculated based on the following formula:
   Arithmetic mean = (SB-201 BTEX concentration + SB-202 BTEX concentration + SB-203 BTEX concentration + SB-204 BTEX concentration + SB-205 BTEX concentration + SB-206 BTEX concentration) / 6. Note: For non-detect values, one-half of the laboratory detection limit was used in the calculation.
7. Geometric mean concentrations calculated based on the following formula:
   Geometric mean = (SB-201 BTEX concentration x SB-202 BTEX concentration x SB-203 BTEX concentration x SB-204 BTEX concentration x SB-205 BTEX concentration x SB-206 BTEX concentration) ^ (1/6). Note: For non-detect values, one-half of the laboratory detection limit was used in the calculation.
8. Analytical results for Mid-Test #1 and Mid-Test #2 sampling events have not been validated.

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
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PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-201					
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2	
		SB-201-BAS (10 - 15') 6/14/2005 (ppm)	SB-201-MT1 (10 - 15') 11/16/2005 (ppm)	SB-201-MT2 (10 - 15') 12/21/2005 (ppm)	SB-201-PT1 (10 - 15') 2/1/2006 (ppm)	SB-201-PT2 (10 - 15') 3/1/2006 (ppm)	DUP-01 (SB-201-PT2) (10 - 15') 3/1/2006 (ppm)
TCL SVOCs							
1,2,4-Trichlorobenzene	3.4	19 U	37 U	14 U	9 U	92 U	91 U
1,2-Dichlorobenzene	7.9	19 U	37 U	14 U	9 U	92 U	91 U
1,3-Dichlorobenzene	1.6	19 U	37 U	14 U	9 U	92 U	91 U
1,4-Dichlorobenzene	8.5	19 U	37 U	14 U	9 U	92 U	91 U
2,2- Oxybis(1-chloropropane)	NA	19 U	37 U	14 U	9 U	92 U	91 U
2,4,5-Trichlorophenol	0.1	19 U	180 U	68 U	45 U	450 U	440 U
2,4,6-Trichlorophenol	NA	91 U	37 U	14 U	9 U	92 U	91 U
2,4-Dichlorophenol	0.4	19 U	37 U	14 U	9 U	92 U	91 U
2,4-Dimethylphenol	NA	19 U	37 U	14 U	9 U	92 U	91 U
2,4-Dinitrophenol	0.2	91 UJ	180 U	68 U	45 U	450 U	440 U
2,4-Dinitrotoluene	NA	3 U	37 U	14 U	9 U	92 U	91 U
2,6-Dinitrotoluene	1	19 U	37 U	14 U	9 U	92 U	91 U
2-Chloronaphthalene	NA	19 U	37 U	14 U	9 U	92 U	91 U
2-Chlorophenol	0.8	19 U	37 U	14 U	9 U	92 U	91 U
2-Methylnaphthalene *	36.4	32 J	**130**	21	32	**200**	**200**
2-Methylphenol	0.1	19 U	37 U	14 U	9 U	92 U	91 U
2-Nitroaniline	0.43	91 U	180 U	68 U	45 U	450 U	440 U
2-Nitrophenol	0.33	19 U	37 U	14 U	9 U	92 U	91 U
3,3'-Dichlorobenzidine	NA	38 U	75 U	28 U	19 U	180 U	180 U
3-Nitroaniline	0.5	91 U	180 U	68 U	45 U	450 U	440 U
4,6-Dinitro-2-methylphenol	NA	91 UJ	180 U	68 U	45 U	450 U	440 U
4-Bromophenyl-phenylether	NA	19 U	37 U	14 U	9 U	92 U	91 U
4-Chloro-3-methylphenol	0.24	19 U	37 U	14 U	9 U	92 U	91 U
4-Chloroaniline	0.22	19 U	37 U	14 U	9 U	92 U	91 U
4-Chlorophenyl-phenylether	NA	19 U	37 U	14 U	9 U	92 U	91 U
4-Methylphenol	0.9	19 UJ	37 U	14 U	9 U	92 U	91 U
4-Nitroaniline	NA	38 U	75 U	28 U	19 U	180 J	180 U
4-Nitrophenol	0.1	91 U	180 U	68 U	45 U	450 U	440 U
Acenaphthene *	50	47	**96**	40	33	45 J	40 J
Acenaphthylene *	41	11 J	29	16	7 J	**110**	**130**
Anthracene *	50	18 J	38	10 J	14	50 J	**65 J**
Benzo(a)anthracene *[C]	0.224	**14 J**	**32 J**	**10 J**	**14**	**48 J**	**60 J**
Benzo(a)pyrene *[C]	0.061	**18 J**	**35 J**	**8 J**	**12**	**49 J**	**57 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
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PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-201					
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2	
		SB-201-BAS (10 - 15') 06/14/05 (ppm)	SB-201-MT1 (10 - 15') 11/16/2005 (ppm)	SB-201-MT2 (10 - 15') 12/21/05 (ppm)	SB-201-PT1 (10 - 15') 2/1/2006 (ppm)	SB-201-PT2 (10 - 15') 3/1/2006 (ppm)	DUP-01 (SB-201-PT2) (10 - 15') 3/1/2006 (ppm)
TCL SVOCs							
Benzo(b)fluoranthene *[C]	1.1	19 U	**31 J**	**8 J**	**12**	**42 J**	**47 J**
Benzo(g,h,i)perylene *	50	11 J	24 J	5 J	11 J	42 J	48 J
Benzo(k)fluoranthene *[C]	1.1	**13 J**	**9 J**	**3 J**	**4 J**	**16 J**	**17 J**
bis(2-Chloroethoxy)methane	NA	19 U	37 U	14 U	9 U	92 U	91 U
bis(2-Chloroethyl)ether	NA	19 U	37 U	14 U	9 U	92 U	91 U
bis(2-Ethylhexyl)phthalate	50	19 U	37 U	14 U	9 U	92 U	91 U
Butylbenzylphthalate	50	19 U	37 U	14 U	9 U	92 U	91 U
Carbazole	NA	19 U	37 U	14 U	2 J	92 U	91 U
Chrysene *[C]	0.4	**15 J**	**29 J**	**8 J**	**13**	**40 J**	**62 J**
Di-n-butylphthalate	8.1	19 U	37 U	14 U	9 U	92 U	91 U
Di-n-octylphthalate	50	19 U	37 U	14 U	9 UJ	92 U	91 U
Dibenzo(a,h)anthracene *[C]	0.014	19 U	37 U	14 U	**2 J**	92 UJ	91 UJ
Dibenzofuran	6.2	3 J	**7 J**	3 J	4 J	92 U	91 U
Diethylphthalate	7.1	19 U	37 U	14 U	9 U	92 U	91 U
Dimethylphthalate	2	19 U	37 U	14 U	9 U	92 U	91 U
Fluoranthene *	50	47	**94**	26	35	**140**	**180**
Fluorene *	50	21 J	47	9 J	17	**63 J**	**72 J**
Hexachlorobenzene	0.41	19 U	37 U	14 U	9 U	92 U	91 U
Hexachlorobutadiene	NA	19 U	37 U	14 U	9 U	92 U	91 U
Hexachlorocyclopentadiene	NA	19 U	37 U	14 U	9 UJ	92 U	91 U
Hexachloroethane	NA	19 U	37 U	14 U	9 U	92 U	91 U
Indeno(1,2,3-cd)pyrene *[C]	3.2	**7 J**	**18 J**	**4 J**	**8 J**	**29 J**	**35 J**
Isophorone	4.4	19 U	37 U	14 U	9 U	92 U	91 U
n-Nitroso-di-n-propylamine	NA	19 U	37 U	14 U	9 U	92 U	91 U
n-Nitrosodiphenylamine	NA	19 U	37 U	14 U	9 U	92 U	91 U
Naphthalene *	13	**180**	**430**	**78**	**78**	**710**	**840**
Nitrobenzene	0.2	19 U	37 U	14 U	9 U	92 U	91 U
Pentachlorophenol	1	91 U	180 U	68 U	45 U	450 U	440 U
Phenanthrene *	50	**94**	**200**	49	**63**	**260**	**340**
Phenol	0.03	19 U	37 U	14 U	9 U	92 U	91 U
Pyrene *	50	**60 J**	**140**	32	**52**	**170**	**270**
Total SVOCs	NA	**591 J**	**1,389 J**	**330 J**	**413 J**	**2,194 J**	**2,463 J**
Total PAHs *	NA	**588 J**	**1,382 J**	**327 J**	**407 J**	**2,014 J**	**2,463 J**
Total C-PAHs *[C]	NA	**67 J**	**154 J**	**41 J**	**65 J**	**224 J**	**278 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-202				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-202-BAS (10 - 15') 6/15/2005 (ppm)	SB-202-MT1 (10 - 15') 11/16/2005 (ppm)	SB-202-MT2 (10 - 15') 12/21/2005 (ppm)	SB-202-PT1 (10 - 15') 2/2/2006 (ppm)	SB-202-PT2 (10 - 15') 3/2/2006 (ppm)
TCL SVOCs						
1,2,4-Trichlorobenzene	3.4	77 U	37 U	14 U	19 U	150 U
1,2-Dichlorobenzene	7.9	77 U	37 U	14 U	19 U	150 U
1,3-Dichlorobenzene	1.6	77 U	37 U	14 U	19 U	150 U
1,4-Dichlorobenzene	8.5	77 U	37 U	14 U	19 U	150 U
2,2- Oxybis(1-chloropropane)	NA	77 U	37 U	14 U	19 U	150 U
2,4,5-Trichlorophenol	0.1	370 U	180 U	68 U	90 U	710 U
2,4,6-Trichlorophenol	NA	77 U	37 U	14 U	19 U	150 U
2,4-Dichlorophenol	0.4	77 U	37 U	14 U	19 U	150 U
2,4-Dimethylphenol	NA	77 U	37 U	14 U	19 U	150 U
2,4-Dinitrophenol	0.2	370 UJ	37 U	68 U	90 U	710 U
2,4-Dinitrotoluene	NA	77 U	37 U	14 U	19 U	150 U
2,6-Dinitrotoluene	1	77 UJ	37 U	14 U	19 U	150 U
2-Chloronaphthalene	NA	77 U	37 U	14 U	19 U	150 U
2-Chlorophenol	0.8	77 U	37 U	14 U	19 U	150 U
2-Methylnaphthalene *	36.4	**96 J**	**59**	33	**88**	**130 J**
2-Methylphenol	0.1	77 U	37 U	14 U	19 U	150 U
2-Nitroaniline	0.43	370 U	180 U	68 U	90 U	710 U
2-Nitrophenol	0.33	77 U	37 U	14 U	19 U	150 U
3,3'-Dichlorobenzidine	NA	150 U	74 U	28 U	37 U	290 U
3-Nitroaniline	0.5	77 U	180 U	68 U	90 U	710 U
4,6-Dinitro-2-methylphenol	NA	370 UJ	180 U	68 U	90 U	710 U
4-Bromophenyl-phenylether	NA	77 U	37 U	14 U	19 U	150 U
4-Chloro-3-methylphenol	0.24	77 U	37 U	14 U	19 U	150 U
4-Chloroaniline	0.22	77 U	37 U	14 U	19 U	150 U
4-Chlorophenyl-phenylether	NA	77 U	37 U	14 U	19 U	150 U
4-Methylphenol	0.9	77 UJ	37 U	14 U	19 U	150 U
4-Nitroaniline	NA	150 U	74 U	28 U	37 U	290 U
4-Nitrophenol	0.1	370 U	180 U	68 U	90 U	710 U
Acenaphthene *	50	**130**	**97**	40	**72**	**130 J**
Acenaphthylene *	41	23 J	18 J	7 J	**59**	36 J
Anthracene *	50	**76 J**	35 J	15	50	**62 J**
Benzo(a)anthracene *[C]	0.224	**55 J**	**27 J**	**14 J**	**41**	**61 J**
Benzo(a)pyrene *[C]	0.061	**63 J**	**33 J**	**7 J**	**44**	**71 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-202				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-202-BAS (10 - 15') 06/15/05 (ppm)	SB-202-MT1 (10 - 15') 11/16/2005 (ppm)	SB-202-MT2 (10 - 15') 12/21/05 (ppm)	SB-202-PT1 (10 - 15') 2/2/2006 (ppm)	SB-202-PT2 (10 - 15') 3/2/2006 (ppm)
TCL SVOCs						
Benzo(b)fluoranthene *[C]	1.1	**36 J**	**30 J**	**13 J**	**39**	**56 J**
Benzo(g,h,i)perylene *	50	38 J	23 J	9 J	38 J	48 J
Benzo(k)fluoranthene *[C]	1.1	**39 J**	**9 J**	**5 J**	**12 J**	**27 J**
bis(2-Chloroethoxy)methane	NA	77 U	37 U	14 U	19 U	150 U
bis(2-Chloroethyl)ether	NA	77 U	37 U	14 U	19 U	150 U
bis(2-Ethylhexyl)phthalate	50	77 U	37 U	14 U	19 U	150 U
Butylbenzylphthalate	50	77 U	37 U	14 U	19 U	150 U
Carbazole	NA	12 J	37 U	14 U	5 J	150 U
Chrysene *[C]	0.4	**59 J**	**26 J**	**13 J**	**40**	**53 J**
Di-n-butylphthalate	8.1	77 U	37 U	14 U	19 U	150 UJ
Di-n-octylphthalate	50	77 U	37 U	14 U	19 UJ	150 U
Dibenzo(a,h)anthracene *[C]	0.014	77 U	37 U	14 U	**6 J**	150 U
Dibenzofuran	6.2	**22 J**	**11 J**	3 J	**10 J**	150 U
Diethylphthalate	7.1	77 U	37 U	14 U	19 U	150 U
Dimethylphthalate	2	77 U	37 U	14 U	19 U	150 U
Fluoranthene *	50	**180**	**96**	47	**140**	**200**
Fluorene *	50	**71 J**	42	14 J	**51**	**67 J**
Hexachlorobenzene	0.41	77 U	37 U	14 U	19 U	150 U
Hexachlorobutadiene	NA	77 U	37 U	14 U	19 U	150 U
Hexachlorocyclopentadiene	NA	77 U	37 U	14 U	19 UJ	150 UJ
Hexachloroethane	NA	77 U	37 U	14 U	19 U	150 U
Indeno(1,2,3-cd)pyrene *[C]	3.2	**29 J**	**16 J**	**7 J**	**30 J**	**39 J**
Isophorone	4.4	77 U	37 U	14 U	19 U	150 U
n-Nitroso-di-n-propylamine	NA	77 U	37 U	14 U	19 U	150 U
n-Nitrosodiphenylamine	NA	77 U	37 U	14 U	19 U	150 U
Naphthalene *	13	**720**	**260**	**210**	**260**	**730**
Nitrobenzene	0.2	77 U	37 U	14 U	19 U	150 U
Pentachlorophenol	1	370 U	180 U	68 U	90 U	710 U
Phenanthrene *	50	**340**	**190**	**89**	**240**	**360**
Phenol	0.03	77 UJ	37 U	14 U	19 U	150 U
Pyrene *	50	**200**	**110**	**59**	**160**	**270 J**
Total SVOCs	NA	**2,189 J**	**1,082 J**	**585 J**	**1,385 J**	**2,340 J**
Total PAHs *	NA	**2,155 J**	**1,071 J**	**582 J**	**1,370 J**	**2,340 J**
Total C-PAHs *[C]	NA	**281 J**	**141 J**	**59 J**	**212 J**	**307 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-203					
		Baseline		Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-203-BAS (10 - 15') 6/16/2005 (ppm)	FD061605 (SB-203-BAS) (10 - 15') 6/16/2005 (ppm)	SB-203-MT1 (10 - 15') 11/17/2005 (ppm)	SB-203-MT2 (10 - 15') 12/22/2005 (ppm)	SB-203-PT1 (10 - 15') 2/1/2006 (ppm)	SB-203-PT2 (10 - 15') 3/2/2006 (ppm)
TCL SVOCs							
1,2,4-Trichlorobenzene	3.4	210 U	200 U	160 U	750 U	71 U	72 U
1,2-Dichlorobenzene	7.9	210 U	200 U	160 U	750 U	71 U	72 U
1,3-Dichlorobenzene	1.6	210 U	200 U	160 U	750 U	71 U	72 U
1,4-Dichlorobenzene	8.5	210 U	200 U	160 U	750 U	71 U	72 U
2,2- Oxybis(1-chloropropane)	NA	210 U	200 U	160 U	750 U	71 U	72 U
2,4,5-Trichlorophenol	0.1	1000 U	980 U	770 U	3600 U	350 U	350 U
2,4,6-Trichlorophenol	NA	210 U	200 U	160 U	750 U	71 U	72 U
2,4-Dichlorophenol	0.4	210 U	200 U	160 U	750 U	71 U	72 U
2,4-Dimethylphenol	NA	210 U	200 U	160 U	750 U	71 U	72 U
2,4-Dinitrophenol	0.2	1000 UJ	980 UJ	770 U	3600 U	350 U	350 UJ
2,4-Dinitrotoluene	NA	210 U	200 U	160 U	750 U	71 U	72 UJ
2,6-Dinitrotoluene	1	210 UJ	200 U	160 U	750 U	71 U	72 U
2-Chloronaphthalene	NA	210 U	200 U	160 U	37 J	71 U	72 U
2-Chlorophenol	0.8	210 U	200 U	160 U	750 U	71 U	72 U
2-Methylnaphthalene *	36.4	**440 J**	**450 J**	**620**	**3100**	**360 J**	**270**
2-Methylphenol	0.1	210 U	200 U	160 U	750 U	71 U	72 U
2-Nitroaniline	0.43	1000 U	980 U	770 U	3600 U	350 U	350 U
2-Nitrophenol	0.33	210 U	200 U	160 U	750 U	71 U	72 U
3,3'-Dichlorobenzidine	NA	410 U	400 U	320 U	1500 U	140 U	140 U
3-Nitroaniline	0.5	1000 U	980 U	770 U	3600 U	350 U	350 U
4,6-Dinitro-2-methylphenol	NA	1000 U	980 U	770 U	3600 U	350 U	350 UJ
4-Bromophenyl-phenylether	NA	210 U	200 U	160 U	750 U	71 U	72 U
4-Chloro-3-methylphenol	0.24	210 U	200 U	160 U	750 U	71 U	72 U
4-Chloroaniline	0.22	210 U	200 U	160 U	750 U	71 U	72 U
4-Chlorophenyl-phenylether	NA	210 U	200 U	160 U	750 U	71 U	72 U
4-Methylphenol	0.9	210 UJ	200 UJ	160 U	750 U	71 U	72 U
4-Nitroaniline	NA	410 U	400 U	320 U	1500 U	140 U	140 U
4-Nitrophenol	0.1	1000 U	980 U	770 U	3600 U	350 U	350 U
Acenaphthene *	50	**350**	**330**	**370**	**240**	**200**	**190**
Acenaphthylene *	41	**110 J**	**83 J**	**56 J**	**1200**	**43 J**	33 J
Anthracene *	50	**170 J**	**150 J**	**160 J**	**550 J**	**91**	**76**
Benzo(a)anthracene *[C]	0.224	**140 J**	**120 J**	**94 J**	**440 J**	**60 J**	**49 J**
Benzo(a)pyrene *[C]	0.061	**170 J**	**130 J**	**96 J**	**440 J**	**63 J**	**48 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-203					
		Baseline		Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-203-BAS (10 - 15') 06/16/05 (ppm)	FD061605 (SB-203-BAS) (10 - 15') 06/16/05 (ppm)	SB-203-MT1 (10 - 15') 11/17/2005 (ppm)	SB-203-MT2 (10 - 15') 12/22/2005 (ppm)	SB-203-PT1 (10 - 15') 2/1/2006 (ppm)	SB-203-PT2 (10 - 15') 3/2/2006 (ppm)
TCL SVOCs							
Benzo(b)fluoranthene *[C]	1.1	**83 J**	**71 J**	**80 J**	**370 J**	**25 J**	**37 J**
Benzo(g,h,i)perylene *	50	**120 J**	**85 J**	**52 J**	**260 J**	71 U	22 J
Benzo(k)fluoranthene *[C]	1.1	**110 J**	**83 J**	**34 J**	**100 J**	**29 J**	**13 J**
bis(2-Chloroethoxy)methane	NA	210 U	200 U	160 U	750 U	71 U	72 U
bis(2-Chloroethyl)ether	NA	210 U	200 U	160 U	750 U	71 U	72 U
bis(2-Ethylhexyl)phthalate	50	210 U	200 U	160 U	750 U	71 U	72 U
Butylbenzylphthalate	50	210 U	200 U	160 U	750 U	71 U	72 U
Carbazole	NA	210 U	200 U	160 U	750 U	71 U	72 UJ
Chrysene *[C]	0.4	**150 J**	**120 J**	**98 J**	**460 J**	**59 J**	**45 J**
Di-n-butylphthalate	8.1	210 U	200 U	160 U	750 U	71 U	72 UJ
Di-n-octylphthalate	50	210 U	200 U	160 U	750 U	71 U	72 U
Dibenzo(a,h)anthracene *[C]	0.014	210 U	200 U	160 U	750 U	**8 J**	72 U
Dibenzofuran	6.2	210 U	200 U	160 U	750 U	71 U	72 U
Diethylphthalate	7.1	210 U	200 U	160 U	750 U	71 U	72 U
Dimethylphthalate	2	210 U	200 U	160 U	750 U	71 U	72 U
Fluoranthene *	50	**370**	**300**	**240**	**1100**	**140**	**140**
Fluorene *	50	**180 J**	**170 J**	**200**	**640**	**110**	**86**
Hexachlorobenzene	0.41	210 U	200 U	160 U	750 U	71 U	72 U
Hexachlorobutadiene	NA	210 U	200 U	160 U	750 U	71 U	72 U
Hexachlorocyclopentadiene	NA	210 U	200 U	160 U	750 U	71 U	72 UJ
Hexachloroethane	NA	210 U	200 U	160 U	750 U	71 U	72 U
Indeno(1,2,3-cd)pyrene *[C]	3.2	**95 J**	200 U	**39 J**	**170 J**	**38 J**	**19 J**
Isophorone	4.4	210 U	200 U	160 U	750 U	71 U	72 U
n-Nitroso-di-n-propylamine	NA	210 U	200 U	160 U	750 U	71 U	72 U
n-Nitrosodiphenylamine	NA	210 U	200 U	160 U	750 U	71 U	72 U
Naphthalene *	13	**1500**	**1500**	**1600**	**8500**	**1000**	**730**
Nitrobenzene	0.2	210 U	200 U	160 U	750 U	71 U	72 U
Pentachlorophenol	1	1000 U	980 U	770 U	3600 U	350 U	350 U
Phenanthrene *	50	**740**	**620**	**620**	**2800 J**	**400**	**330**
Phenol	0.03	210 UJ	200 UJ	160 U	750 U	71 U	72 U
Pyrene *	50	**530**	**440**	**360**	**1700**	**220**	**190**
Total SVOCs	NA	**5,258 J**	**4,652 J**	**4,719 J**	**22,107 J**	**2,846 J**	**2,278 J**
Total PAHs *	NA	**5,258 J**	**4,652 J**	**4,719 J**	**22,070 J**	**2,846 J**	**2,278 J**
Total C-PAHs *[C]	NA	**748 J**	**524 J**	**441 J**	**1,980 J**	**282 J**	**211 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-204				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-204-BAS (10 - 15') 6/14/2005 (ppm)	SB-204-MT1 (10 - 15') 11/17/2005 (ppm)	SB-204-MT2 (10 - 15') 12/21/2005 (ppm)	SB-204-PT1 (10 - 15') 2/2/2006 (ppm)	SB-204-PT2 (10 - 15') 3/2/2006 (ppm)
TCL SVOCs						
1,2,4-Trichlorobenzene	3.4	180 U	3600 U	180 U	1800 U	190 U
1,2-Dichlorobenzene	7.9	180 U	3600 U	180 U	1800 U	190 U
1,3-Dichlorobenzene	1.6	180 U	3600 U	180 U	1800 U	190 U
1,4-Dichlorobenzene	8.5	180 U	3600 U	180 U	1800 U	190 U
2,2- Oxybis(1-chloropropane)	NA	180 U	3600 U	180 U	1800 U	190 U
2,4,5-Trichlorophenol	0.1	870 U	3600 U	180 U	1800 U	910 U
2,4,6-Trichlorophenol	NA	180 U	3600 U	180 U	1800 U	190 U
2,4-Dichlorophenol	0.4	180 U	3600 U	180 U	1800 U	190 U
2,4-Dimethylphenol	NA	180 U	3600 U	180 U	1800 U	190 U
2,4-Dinitrophenol	0.2	180 UJ	3600 U	180 U	1800 U	910 U
2,4-Dinitrotoluene	NA	180 U	3600 U	180 U	1800 U	190 U
2,6-Dinitrotoluene	1	180 UJ	3600 U	180 U	1800 U	190 U
2-Chloronaphthalene	NA	180 U	3600 U	180 U	1800 U	190 U
2-Chlorophenol	0.8	180 U	3600 U	180 U	1800 U	190 U
2-Methylnaphthalene *	36.4	**130 J**	**1300 J**	**160 J**	**590 J**	**170 J**
2-Methylphenol	0.1	180 U	3600 U	180 U	1800 U	190 U
2-Nitroaniline	0.43	870 U	3600 U	180 U	1800 U	910 U
2-Nitrophenol	0.33	180 U	3600 U	180 U	1800 U	190 U
3,3'-Dichlorobenzidine	NA	360 U	3600 U	180 U	3500 U	370 UJ
3-Nitroaniline	0.5	870 U	3600 U	180 U	1800 U	910 U
4,6-Dinitro-2-methylphenol	NA	870 UJ	18000 U	860 U	8500 U	910 U
4-Bromophenyl-phenylether	NA	180 U	3600 U	180 U	1800 U	190 U
4-Chloro-3-methylphenol	0.24	180 U	3600 U	180 U	1800 U	190 U
4-Chloroaniline	0.22	180 U	3600 U	180 U	1800 U	190 U
4-Chlorophenyl-phenylether	NA	180 U	3600 U	180 U	1800 U	190 U
4-Methylphenol	0.9	180 UJ	3600 U	180 U	1800 U	190 U
4-Nitroaniline	NA	360 U	3600 U	180 U	3500 U	370 U
4-Nitrophenol	0.1	870 U	3600 U	180 U	1800 U	910 U
Acenaphthene *	50	**130 J**	3600 U	**120 J**	**320 J**	**140 J**
Acenaphthylene *	41	**50 J**	**3400 J**	41 J	**550 J**	32 J
Anthracene *	50	**74 J**	**1900 J**	**63 J**	**400 J**	**65 J**
Benzo(a)anthracene *[C]	0.224	**62 J**	**1700 J**	**52 J**	**450 J**	**53 J**
Benzo(a)pyrene *[C]	0.061	**77 J**	**2300 J**	**65 J**	**470 J**	**54 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-204				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-204-BAS (10 - 15') 06/14/05 (ppm)	SB-204-MT1 (10 - 15') 11/17/2005 (ppm)	SB-204-MT2 (10 - 15') 12/21/2005 (ppm)	SB-204-PT1 (10 - 15') 2/2/2006 (ppm)	SB-204-PT2 (10 - 15') 3/2/2006 (ppm)
TCL SVOCs						
Benzo(b)fluoranthene *[C]	1.1	180 U	**1800 J**	**60 J**	1800 U	190 U
Benzo(g,h,i)perylene *	50	**56 J**	**2200 J**	39 J	**220 J**	26 J
Benzo(k)fluoranthene *[C]	1.1	180 U	**510 J**	180 U	**220 J**	190 U
bis(2-Chloroethoxy)methane	NA	180 U	3600 U	180 U	1800 U	190 U
bis(2-Chloroethyl)ether	NA	180 U	3600 U	180 U	1800 U	190 U
bis(2-Ethylhexyl)phthalate	50	180 U	3600 U	180 U	1800 U	190 U
Butylbenzylphthalate	50	180 U	3600 U	180 U	1800 U	190 U
Carbazole	NA	180 U	3600 U	180 U	1800 U	190 U
Chrysene *[C]	0.4	**69 J**	**1500 J**	**58 J**	**540 J**	**52 J**
Di-n-butylphthalate	8.1	180 U	3600 U	180 U	1800 U	190 UJ
Di-n-octylphthalate	50	180 U	3600 U	180 U	1800 UJ	190 U
Dibenzo(a,h)anthracene *[C]	0.014	180 U	3600 U	180 U	1800 UJ	190 U
Dibenzofuran	6.2	180 U	3600 U	180 U	1800 U	190 U
Diethylphthalate	7.1	180 U	3600 U	180 U	1800 U	190 U
Dimethylphthalate	2	180 U	3600 U	180 U	1800 U	190 U
Fluoranthene *	50	**230**	**6500**	**200**	**1300 J**	**170 J**
Fluorene *	50	**84 J**	**1800 J**	**68 J**	**470 J**	**71 J**
Hexachlorobenzene	0.41	180 U	3600 U	180 U	1800 U	190 U
Hexachlorobutadiene	NA	180 U	3600 U	180 U	1800 U	190 U
Hexachlorocyclopentadiene	NA	180 U	3600 U	180 U	1800 UJ	190 UJ
Hexachloroethane	NA	180 U	3600 U	180 U	1800 U	190 U
Indeno(1,2,3-cd)pyrene *[C]	3.2	**39 J**	**1400 J**	**29 J**	1800 U	**25 J**
Isophorone	4.4	180 U	3600 U	180 U	1800 U	190 U
n-Nitroso-di-n-propylamine	NA	180 U	3600 U	180 U	1800 U	190 U
n-Nitrosodiphenylamine	NA	180 U	3600 U	180 U	1800 U	190 U
Naphthalene *	13	**1200**	**32000**	**1100**	**11000**	**810**
Nitrobenzene	0.2	180 U	3600 U	180 U	1800 U	190 U
Pentachlorophenol	1	870 U	18000 U	860 U	8500 U	910 U
Phenanthrene *	50	**430**	**13000**	**400**	**2900**	**340**
Phenol	0.03	180 U	3600 U	180 U	1800 U	190 U
Pyrene *	50	**300 J**	**10000**	**280**	**2500**	**220 J**
Total SVOCs	NA	**2,931 J**	**81,310 J**	**2,735 J**	**21,930 J**	**2,228 J**
Total PAHs *	NA	**2,931 J**	**81,310 J**	**2,735 J**	**21,930 J**	**2,228 J**
Total C-PAHs *[C]	NA	**247 J**	**9,210 J**	**264 J**	**1,680 J**	**184 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-205				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-205-BAS (10 - 15') 6/16/2005 (ppm)	SB-205-MT1 (10 - 15') 11/17/2005 (ppm)	SB-205-MT2 (10 - 15') 12/22/2005 (ppm)	SB-205-PT1 (10 - 15') 2/1/2006 (ppm)	SB-205-PT2 (10 - 15') 3/1/2006 (ppm)
TCL SVOCs						
1,2,4-Trichlorobenzene	3.4	780 U	160 U	8 U	200 U	40 U
1,2-Dichlorobenzene	7.9	780 U	160 U	8 U	200 U	40 U
1,3-Dichlorobenzene	1.6	780 U	160 U	8 U	200 U	40 U
1,4-Dichlorobenzene	8.5	780 U	160 U	8 U	200 U	40 U
2,2- Oxybis(1-chloropropane)	NA	780 U	160 U	8 U	200 U	40 U
2,4,5-Trichlorophenol	0.1	3800 U	770 U	8 U	200 U	190 U
2,4,6-Trichlorophenol	NA	780 U	160 U	8 U	200 U	40 U
2,4-Dichlorophenol	0.4	780 U	160 U	8 U	200 U	40 U
2,4-Dimethylphenol	NA	780 U	160 U	8 U	200 U	40 U
2,4-Dinitrophenol	0.2	3800 U	770 U	8 U	200 U	190 U
2,4-Dinitrotoluene	NA	780 U	160 U	8 U	200 U	40 U
2,6-Dinitrotoluene	1	780 UJ	160 U	8 U	200 U	40 U
2-Chloronaphthalene	NA	780 U	160 U	8 U	200 U	40 U
2-Chlorophenol	0.8	780 U	160 U	8 U	200 U	40 U
2-Methylnaphthalene *	36.4	**2200 J**	**610**	23	**1200**	**160**
2-Methylphenol	0.1	780 U	160 U	8 U	200 U	40 U
2-Nitroaniline	0.43	3800 U	770 U	37 U	950 U	190 U
2-Nitrophenol	0.33	780 U	160 U	8 U	200 U	40 U
3,3'-Dichlorobenzidine	NA	1600 U	320 U	15 U	390 U	80 U
3-Nitroaniline	0.5	3800 U	770 U	37 U	950 U	190 U
4,6-Dinitro-2-methylphenol	NA	3800 UJ	770 U	37 U	950 U	190 U
4-Bromophenyl-phenylether	NA	780 U	160 U	8 U	200 U	40 U
4-Chloro-3-methylphenol	0.24	780 U	160 U	8 U	200 U	40 U
4-Chloroaniline	0.22	780 U	160 U	8 U	200 U	40 U
4-Chlorophenyl-phenylether	NA	780 U	160 U	8 U	200 U	40 U
4-Methylphenol	0.9	780 UJ	160 U	8 U	200 U	40 U
4-Nitroaniline	NA	1600 U	320 U	15 U	390 U	80 U
4-Nitrophenol	0.1	3800 U	770 U	37 U	950 U	190 U
Acenaphthene *	50	**490 J**	**250**	8	**370**	**71**
Acenaphthylene *	41	**710 J**	**100 J**	4 J	**290**	24 J
Anthracene *	50	**540 J**	**130 J**	5 J	**280**	36 J
Benzo(a)anthracene *[C]	0.224	**350 J**	**78 J**	**3 J**	**130 J**	**24 J**
Benzo(a)pyrene *[C]	0.061	**340 J**	**69 J**	**2 J**	**100 J**	**20 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-205				
		Baseline	Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-205-BAS (10 - 15') 06/16/05 (ppm)	SB-205-MT1 (10 - 15') 11/17/2005 (ppm)	SB-205-MT2 (10 - 15') 12/22/2005 (ppm)	SB-205-PT1 (10 - 15') 2/1/2006 (ppm)	SB-205-PT2 (10 - 15') 3/1/2006 (ppm)
TCL SVOCs						
Benzo(b)fluoranthene *[C]	1.1	780 U	**57 J**	8 U	200 U	**16 J**
Benzo(g,h,i)perylene *	50	**200 J**	34 J	1 J	**61 J**	14 J
Benzo(k)fluoranthene *[C]	1.1	**180 J**	**21 J**	8 U	200 U	**6 J**
bis(2-Chloroethoxy)methane	NA	780 U	160 U	8 U	200 U	40 U
bis(2-Chloroethyl)ether	NA	780 U	160 U	8 U	200 U	40 U
bis(2-Ethylhexyl)phthalate	50	780 U	160 U	8 U	200 U	40 U
Butylbenzylphthalate	50	780 U	160 U	8 U	200 U	40 U
Carbazole	NA	780 U	160 U	8 U	200 U	40 U
Chrysene *[C]	0.4	**370 J**	**73 J**	**3 J**	**140 J**	**21 J**
Di-n-butylphthalate	8.1	780 U	160 U	8 U	200 U	40 U
Di-n-octylphthalate	50	780 U	160 U	8 U	200 U	40 U
Dibenzo(a,h)anthracene *[C]	0.014	780 U	160 U	8 U	200 U	40 UJ
Dibenzofuran	6.2	780 U	160 U	8 U	200 U	40 U
Diethylphthalate	7.1	780 U	160 U	8 U	200 U	40 U
Dimethylphthalate	2	780 U	160 U	8 U	200 U	40 U
Fluoranthene *	50	**820**	**160**	7 J	**260**	48
Fluorene *	50	**700 J**	**190**	6 J	**320**	**51**
Hexachlorobenzene	0.41	780 U	160 U	8 U	200 U	40 U
Hexachlorobutadiene	NA	780 U	160 U	8 U	200 U	40 U
Hexachlorocyclopentadiene	NA	780 U	160 U	8 U	200 UJ	40 U
Hexachloroethane	NA	780 U	160 U	8 U	200 U	40 U
Indeno(1,2,3-cd)pyrene *[C]	3.2	**100 J**	**24 J**	0.9 J	**48 J**	**10 J**
Isophorone	4.4	780 U	160 U	8 U	200 U	40 U
n-Nitroso-di-n-propylamine	NA	780 U	160 U	8 U	200 U	40 U
n-Nitrosodiphenylamine	NA	780 U	160 U	8 U	200 U	40 U
Naphthalene *	13	**6900**	**1300**	**81**	**2100**	**360**
Nitrobenzene	0.2	780 U	160 U	8 U	200 U	40 U
Pentachlorophenol	1	3800 U	770 U	37 U	950 U	190 U
Phenanthrene *	50	**2400**	**550**	**23**	**980**	**160**
Phenol	0.03	780 UJ	160 U	8 U	200 U	40 U
Pyrene *	50	**1400**	**250**	10	**420**	**80**
Total SVOCs	NA	**17,700 J**	**3,896 J**	**177 J**	**6,699 J**	**1,101 J**
Total PAHs *	NA	**17,700 J**	**3,896 J**	**177 J**	**6,699 J**	**1,101 J**
Total C-PAHs *[C]	NA	**1,340 J**	**322 J**	**9 J**	**418 J**	**97 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-206							
		Baseline	Mid-Test #1		Mid-Test #2		Post-Test #1		Post-Test #2
		SB-206-BAS (10 - 15') 6/21/2005 (ppm)	SB-206-MT1 (10 - 15') 11/17/2005 (ppm)	DUP-2-MT1 (SB-206-MT1) (10 - 15') 11/17/2005 (ppm)	SB-206-MT2 (10 - 15') 12/22/05 (ppm)	DUP-2-MT2 (10 - 15') 12/22/05 (ppm)	SB-206-PT1 (10 - 15') 2/2/2006 (ppm)	SB-DUP-PT1 (10-15') 2/2/2006 (ppm)	SB-206-PT2 (10 - 15') 3/1/2006 (ppm)
TCL SVOCs									
1,2,4-Trichlorobenzene	3.4	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
1,2-Dichlorobenzene	7.9	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
1,3-Dichlorobenzene	1.6	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
1,4-Dichlorobenzene	8.5	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2,2- Oxybis(1-chloropropane)	NA	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2,4,5-Trichlorophenol	0.1	3800 U	350 U	340 U	770 U	890 U	2100 U	1500 U	2000 U
2,4,6-Trichlorophenol	NA	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2,4-Dichlorophenol	0.4	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2,4-Dimethylphenol	NA	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2,4-Dinitrophenol	0.2	3800 UJ	350 U	70 U	160 U	180 U	420 U	760 U	2000 U
2,4-Dinitrotoluene	NA	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2,6-Dinitrotoluene	1	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2-Chloronaphthalene	NA	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2-Chlorophenol	0.8	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2-Methylnaphthalene *	36.4	**670 J**	**230**	**220**	**220**	**240**	**1400**	**1600**	**930**
2-Methylphenol	0.1	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
2-Nitroaniline	0.43	3800 U	350 U	70 U	160 U	180 U	420 U	760 U	2000 U
2-Nitrophenol	0.33	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
3,3'-Dichlorobenzidine	NA	770 U	140 U	340 U	770 U	890 U	850 U	1500 U	830 U
3-Nitroaniline	0.5	3800 U	350 U	140 U	320 U	370 U	2100 U	3700 U	2000 U
4,6-Dinitro-2-methylphenol	NA	3800 UJ	350 U	70 U	160 U	180 U	420 U	760 U	2000 U
4-Bromophenyl-phenylether	NA	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
4-Chloro-3-methylphenol	0.24	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
4-Chloroaniline	0.22	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
4-Chlorophenyl-phenylether	NA	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
4-Methylphenol	0.9	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
4-Nitroaniline	NA	1500 U	140 U	140 U	320 U	370 U	850 U	1500 U	830 U
4-Nitrophenol	0.1	3800 U	350 U	70 U	160 U	180 U	420 U	760 U	2000 U
Acenaphthene *	50	**230 J**	**180**	**160**	**160**	**170 J**	**420**	**410 J**	**640**
Acenaphthylene *	41	**550 J**	**52 J**	26 J	37 J	**52 J**	**730**	**970**	**97 J**
Anthracene *	50	**320 J**	**82**	**70 J**	**78 J**	**89 J**	**400 J**	**500 J**	**290 J**
Benzo(a)anthracene *[C]	0.224	**260 J**	**61 J**	**52 J**	**68 J**	**83 J**	**310 J**	**400 J**	**200 J**
Benzo(a)pyrene *[C]	0.061	**300 J**	**68 J**	**60 J**	**69 J**	**91 J**	**360 J**	**450 J**	**220 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SB-206							
		Baseline	Mid-Test #1		Mid-Test #2		Post-Test #1		Post-Test #2
		SB-206-BAS (10 - 15') 06/21/05 (ppm)	SB-206-MT1 (10 - 15') 11/17/2005 (ppm)	DUP-2-MT1 (SB-206-MT1) (10 - 15') 11/17/2005 (ppm)	SB-206-MT2 (10 - 15') 12/22/05 (ppm)	DUP-2-MT2 (10 - 15') 12/22/05 (ppm)	SB-206-PT1 (10 - 15') 02/02/06 (ppm)	SB-DUP-PT1 (10-15') 2/2/2006 (ppm)	SB-206-PT2 (10 - 15') 3/1/2006 (ppm)
TCL SVOCs									
Benzo(b)fluoranthene *[C]	1.1	770 U	**60 J**	**52 J**	**49 J**	**65 J**	420 U	760 U	**210 J**
Benzo(g,h,i)perylene *	50	**200 J**	**53 J**	39 J	40 J	**56 J**	**310 J**	**420 J**	**130 J**
Benzo(k)fluoranthene *[C]	1.1	**150 J**	**21 J**	**11 J**	**24 J**	**32 J**	420 U	**200 J**	**99 J**
bis(2-Chloroethoxy)methane	NA	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
bis(2-Chloroethyl)ether	NA	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
bis(2-Ethylhexyl)phthalate	50	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Butylbenzylphthalate	50	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Carbazole	NA	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Chrysene *[C]	0.4	**260 J**	**55 J**	**43 J**	**61 J**	**70 J**	**310 J**	**410 J**	**180 J**
Di-n-butylphthalate	8.1	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Di-n-octylphthalate	50	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Dibenzo(a,h)anthracene *[C]	0.014	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 UJ
Dibenzofuran	6.2	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Diethylphthalate	7.1	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Dimethylphthalate	2	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Fluoranthene *	50	**1000**	**140**	**130**	**170**	**290**	**880**	**1100**	**660**
Fluorene *	50	**350 J**	**110**	**87**	**73 J**	**88 J**	**550**	**670 J**	**320 J**
Hexachlorobenzene	0.41	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Hexachlorobutadiene	NA	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Hexachlorocyclopentadiene	NA	770 UJ	72 U	70 U	160 U	180 U	420 UJ	760 UJ	410 U
Hexachloroethane	NA	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Indeno(1,2,3-cd)pyrene *[C]	3.2	**150 J**	**37 J**	**27 J**	**29 J**	**41 J**	**220 J**	**310 J**	**93 J**
Isophorone	4.4	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
n-Nitroso-di-n-propylamine	NA	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
n-Nitrosodiphenylamine	NA	770 UJ	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Naphthalene *	13	**5600**	**990**	**860**	**960**	**1500**	**6300**	**7500**	**3600**
Nitrobenzene	0.2	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Pentachlorophenol	1	3800 U	350 U	340 U	770 U	890 U	850	1500 U	2000 U
Phenanthrene *	50	**1900 J**	**420**	**380**	**390**	**590**	**2300**	**2900**	**1400**
Phenol	0.03	770 U	72 U	70 U	160 U	180 U	420 U	760 U	410 U
Pyrene *	50	**1200**	**270**	**210**	**260**	**380**	**1300**	**1700**	**910**
Total SVOCs	NA	**13,140 J**	**2,829 J**	**2,427 J**	**2,688 J**	**3,837 J**	**15,790 J**	**19,540 J**	**9,979 J**
Total PAHs *	NA	**13,140 J**	**2,829 J**	**2,427 J**	**2,688 J**	**3,837 J**	**15,790 J**	**19,540 J**	**9,979 J**
Total C-PAHs *[C]	NA	**1,120 J**	**302 J**	**245 J**	**300 J**	**382 J**	**1,200 J**	**1,770 J**	**1,002 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SP-107S		SP-107D	
		Post-Test #1	Post-Test #2	Post-Test #1	Post-Test #2
		SP-107S-PT1 (10-15') 2/2/2006 (ppm)	SP-107S-PT2 (10-15') 3/2/2006 (ppm)	SP-107D-PT1 (10-15') 2/2/2006 (ppm)	SP-107D-PT2 (10-15') 3/2/2006 (ppm)
TCL SVOCs					
1,2,4-Trichlorobenzene	3.4	75 U	400 U	38 U	39 U
1,2-Dichlorobenzene	7.9	75 U	400 U	38 U	39 U
1,3-Dichlorobenzene	1.6	75 U	400 U	38 U	39 U
1,4-Dichlorobenzene	8.5	75 U	400 U	38 U	39 U
2,2- Oxybis(1-chloropropane)	NA	75 U	400 U	38 U	39 U
2,4,5-Trichlorophenol	0.1	360 U	1900 U	180 U	190 U
2,4,6-Trichlorophenol	NA	75 U	400 U	38 U	39 U
2,4-Dichlorophenol	0.4	75 U	1900 U	38 U	39 U
2,4-Dimethylphenol	NA	75 U	400 U	38 U	39 U
2,4-Dinitrophenol	0.2	75 U	400 U	38 U	190 UJ
2,4-Dinitrotoluene	NA	75 U	400 U	38 U	39 UJ
2,6-Dinitrotoluene	1	75 U	400 U	38 U	39 U
2-Chloronaphthalene	NA	75 U	400 U	38 U	39 U
2-Chlorophenol	0.8	75 U	400 U	38 U	39 U
2-Methylnaphthalene *	36.4	**240**	**1100**	**74**	**170**
2-Methylphenol	0.1	75 U	400 U	38 U	39 U
2-Nitroaniline	0.43	75 U	1900 U	38 U	190 U
2-Nitrophenol	0.33	75 U	400 U	38 U	39 U
3,3'-Dichlorobenzidine	NA	150 U	790 U	75 U	39 U
3-Nitroaniline	0.5	360 U	1900 U	180 U	190 U
4,6-Dinitro-2-methylphenol	NA	75 U	1900 U	38 U	190 UJ
4-Bromophenyl-phenylether	NA	75 U	400 U	38 U	39 U
4-Chloro-3-methylphenol	0.24	75 U	400 U	38 U	39 U
4-Chloroaniline	0.22	75 U	400 U	38 U	39 U
4-Chlorophenyl-phenylether	NA	75 U	400 U	38 U	39 U
4-Methylphenol	0.9	75 U	400 U	38 U	39 U
4-Nitroaniline	NA	150 U	790 U	75 U	79 U
4-Nitrophenol	0.1	75 U	1900 U	38 U	190 U
Acenaphthene *	50	**160**	**610**	47	**140**
Acenaphthylene *	41	26 J	**100 J**	34 J	27 J
Anthracene *	50	**65 J**	**260 J**	36 J	**88**
Benzo(a)anthracene *[C]	0.224	**46 J**	**190 J**	**32 J**	**50**
Benzo(a)pyrene *[C]	0.061	**41 J**	**170 J**	**35 J**	**49**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Parameter	NYSDEC-Recommended Soil Cleanup Objectives (ppm)	SP-107S		SP-107D	
		Post-Test #1	Post-Test #2	Post-Test #1	Post-Test #2
		SP-107S-PT1 (10-15') 2/2/2006 (ppm)	SP-107S-PT2 (10-15') 3/2/2006 (ppm)	SP-107D-PT1 (10-15') 2/2/2006 (ppm)	SP-107D-PT2 (10-15') 3/2/2006 (ppm)
TCL SVOCs					
Benzo(b)fluoranthene *[C]	1.1	**38 J**	**130 J**	**18 J**	**48**
Benzo(g,h,i)perylene *	50	43 J	**140 J**	37 J	25 J
Benzo(k)fluoranthene *[C]	1.1	**17 J**	**48 J**	**19 J**	**18 J**
bis(2-Chloroethoxy)methane	NA	75 U	400 U	38 U	39 U
bis(2-Chloroethyl)ether	NA	75 U	400 U	38 U	39 U
bis(2-Ethylhexyl)phthalate	50	75 U	400 U	38 U	39 U
Butylbenzylphthalate	50	75 U	400 U	38 U	39 U
Carbazole	NA	75 U	400 U	38 U	16 J
Chrysene *[C]	0.4	**53 J**	**190 J**	**36 J**	**60**
Di-n-butylphthalate	8.1	75 U	400 U	38 U	39 UJ
Di-n-octylphthalate	50	75 UJ	400 U	38 U	39 U
Dibenzo(a,h)anthracene *[C]	0.014	75 UJ	400 U	**5 J**	39 U
Dibenzofuran	6.2	75 U	400 U	**7 J**	**22 J**
Diethylphthalate	7.1	75 U	400 U	38 U	39 U
Dimethylphthalate	2	75 U	400 U	38 U	39 U
Fluoranthene *	50	**150**	**480**	**95**	**160**
Fluorene *	50	**86**	**320 J**	42	**83**
Hexachlorobenzene	0.41	75 U	400 U	38 U	39 U
Hexachlorobutadiene	NA	75 U	400 U	38 U	39 U
Hexachlorocyclopentadiene	NA	75 UJ	400 UJ	38 UJ	39 UJ
Hexachloroethane	NA	75 U	400 U	38 U	39 U
Indeno(1,2,3-cd)pyrene *[C]	3.2	**30 J**	**110 J**	**25 J**	**26 J**
Isophorone	4.4	75 U	400 U	38 U	39 U
n-Nitroso-di-n-propylamine	NA	75 U	400 U	38 U	39 U
n-Nitrosodiphenylamine	NA	75 U	400 U	38 U	39 U
Naphthalene *	13	**700**	**3000**	**340**	**460**
Nitrobenzene	0.2	75 U	400 U	38 U	39 U
Pentachlorophenol	1	350 U	1900 U	180 U	190 U
Phenanthrene *	50	**340**	**1100**	**200**	**320**
Phenol	0.03	75 U	400 U	38 U	39 U
Pyrene *	50	**210**	**650**	**130**	**200**
Total SVOCs	NA	**2,245 J**	**8,598 J**	**1,212 J**	**1,962 J**
Total PAHs *	NA	**2,245 J**	**8,598 J**	**1,205 J**	**1,924 J**
Total C-PAHs *[C]	NA	**225 J**	**838 J**	**170 J**	**251 J**

TABLE 13
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR TCL SVOCs (ppm)

Notes:

1. Subsurface soil samples collected by ARCADIS BBL.
2. Samples analyzed by Severn Trent Laboratories, Inc. (Shelton, New Jersey) for target compound list (TCL) semi-volatile organic compounds (SVOCs) using United States Environmental Protection Agency (USEPA) SW-846 Method 8270.
3. Concentrations reported in parts per million (ppm) or milligrams per kilogram (mg/kg).
4. U - Compound was not detected at a concentration exceeding the laboratory detection limit. The listed value represents the laboratory detection limit.
5. J - Indicates an estimated value. The result is less than the specified quantitation limit, but greater than or equal to the method detection limit.
6. UJ - The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
7. Shaded and bold values indicates that the compound was detected at a concentration exceeding the recommended soil cleanup objective as presented in the New York State Department of Environmental Conservation (NYSDEC) document entitled, "Technical and Administrative Guidance Memorandum (TAGM): Determination of Soil Cleanup Objectives and Cleanup Levels," HWR-94-4046 (TAGM 4046), dated January 24, 1994.
8. NA - Not available. Indicates no recommended soil cleanup objective listed in the NYSDEC TAGM 4046 for this compound.
9. PAHs - Polynuclear aromatic hydrocarbons.
10. C-PAHs - Carcinogenic polynuclear aromatic hydrocarbons.
11. * - Total PAHs calculated based the following constituents: 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.
12. $*^{C}$ - Total C-PAHs calculated based the following constituents: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.
13. Analytical results for Mid-Test #1 and Mid-Test #2 sampling events have not been validated.

TABLE 14

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS - COMPARISON OF PAH CONCENTRATIONS

Parameter	SB-201																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/21/2005				2/1/2006				3/1/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
2-Methylnaphthalene	32	2.25E-04	130	***-306.25%***	9.14E-04	***-306.25%***	21	***34.38%***	1.48E-04	***34.38%***	32	***0.00%***	2.25E-04	***0.00%***	200	***-525.00%***	1.41E-03	***-525.00%***
Acenaphthene	47	3.05E-04	96	***-104.26%***	6.23E-04	***-104.26%***	40	***14.89%***	2.59E-04	***14.89%***	33	***29.79%***	2.14E-04	***29.79%***	45	***4.26%***	2.92E-04	***4.26%***
Acenaphthylene	11	7.23E-05	29	***-163.64%***	1.91E-04	***-163.64%***	16	***-45.45%***	1.05E-04	***-45.45%***	7	***36.36%***	4.60E-05	***36.36%***	110	***-900.00%***	7.23E-04	***-900.00%***
Anthracene	18	1.01E-04	38	***-111.11%***	2.13E-04	***-111.11%***	10	***44.44%***	5.61E-05	***44.44%***	14	***22.22%***	7.86E-05	***22.22%***	50	***-177.78%***	2.81E-04	***-177.78%***
Benzo(a)anthracene *[C]	14	6.13E-05	32	***-128.57%***	1.40E-04	***-128.57%***	10	***28.57%***	4.38E-05	***28.57%***	14	***0.00%***	6.13E-05	***0.00%***	48	***-242.86%***	2.10E-04	***-242.86%***
Benzo(a)pyrene *[C]	18	7.13E-05	35	***-94.44%***	1.39E-04	***-94.44%***	8	***55.56%***	3.17E-05	***55.56%***	12	***33.33%***	4.76E-05	***33.33%***	49	***-172.22%***	1.94E-04	***-172.22%***
Benzo(b)fluoranthene *[C]	ND	ND	31	***NA***	1.23E-04	***NA***	8	***NA***	3.17E-05	***NA***	12	***NA***	4.76E-05	***NA***	42	***NA***	1.66E-04	***NA***
Benzo(g,h,i)perylene	11	3.98E-05	24	***-118.18%***	8.69E-05	***-118.18%***	5	***54.55%***	1.81E-05	***54.55%***	11	***0.00%***	3.98E-05	***0.00%***	42	***-281.82%***	1.52E-04	***-281.82%***
Benzo(k)fluoranthene *[C]	13	5.15E-05	9	***30.77%***	3.57E-05	***30.77%***	3	***76.92%***	1.19E-05	***76.92%***	4	***69.23%***	1.59E-05	***69.23%***	16	***-23.08%***	6.34E-05	***-23.08%***
Chrysene *[C]	15	6.57E-05	29	***-93.33%***	1.27E-04	***-93.33%***	8	***46.67%***	3.50E-05	***46.67%***	13	***13.33%***	5.69E-05	***13.33%***	40	***-166.67%***	1.75E-04	***-166.67%***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	2	***NA***	7.19E-06	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	47	2.32E-04	94	***-100.00%***	4.65E-04	***-100.00%***	26	***44.68%***	1.29E-04	***44.68%***	35	***25.53%***	1.73E-04	***25.53%***	140	***-197.87%***	6.92E-04	***-197.87%***
Fluorene	21	1.26E-04	47	***-123.81%***	2.83E-04	***-123.81%***	9	***57.14%***	5.41E-05	***57.14%***	17	***19.05%***	1.02E-04	***19.05%***	63	***-200.00%***	3.79E-04	***-200.00%***
Indeno(1,2,3-cd)pyrene *[C]	7	2.53E-05	18	***-157.14%***	6.51E-05	***-157.14%***	4	***42.86%***	1.45E-05	***42.86%***	8	***-14.29%***	2.89E-05	***-14.29%***	29	***-314.29%***	1.05E-04	***-314.29%***
Naphthalene	180	1.40E-03	430	***-138.89%***	3.35E-03	***-138.89%***	78	***56.67%***	6.09E-04	***56.67%***	78	***56.67%***	6.09E-04	***56.67%***	710	***-294.44%***	5.54E-03	***-294.44%***
Phenanthrene	94	5.27E-04	200	***-112.77%***	1.12E-03	***-112.77%***	49	***47.87%***	2.75E-04	***47.87%***	63	***32.98%***	3.53E-04	***32.98%***	260	***-176.60%***	1.46E-03	***-176.60%***
Pyrene	60	2.97E-04	140	***-133.33%***	6.92E-04	***-133.33%***	32	***46.67%***	1.58E-04	***46.67%***	52	***13.33%***	2.57E-04	***13.33%***	170	***-183.33%***	8.41E-04	***-183.33%***
Total PAHs	588	3.61E-03	1,382	***-135.03%***	8.57E-03	***-137.81%***	327	***44.39%***	1.98E-03	***45.10%***	407	***30.78%***	2.36E-03	***34.45%***	2,014	***-242.52%***	1.27E-02	***-251.65%***
Total C-PAHs	67	2.75E-04	154	***-129.85%***	6.30E-04	***-128.75%***	41	***38.81%***	1.69E-04	***38.73%***	65	***2.99%***	2.65E-04	***3.58%***	224	***-234.33%***	9.14E-04	***-232.27%***

Parameter	SB-202																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/21/2005				2/1/2006				3/2/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
2-Methylnaphthalene	96	6.75E-04	59	***38.54%***	4.15E-04	***38.54%***	33	***65.63%***	2.32E-04	***65.63%***	88	***8.33%***	6.19E-04	***8.33%***	130	***-35.42%***	9.14E-04	***-35.42%***
Acenaphthene	130	8.43E-04	97	***25.38%***	6.29E-04	***25.38%***	40	***69.23%***	2.59E-04	***69.23%***	72	***44.62%***	4.67E-04	***44.62%***	130	***0.00%***	8.43E-04	***0.00%***
Acenaphthylene	23	1.51E-04	18	***21.74%***	1.18E-04	***21.74%***	7	***69.57%***	4.60E-05	***69.57%***	59	***-156.52%***	3.88E-04	***-156.52%***	36	***-56.52%***	2.37E-04	***-56.52%***
Anthracene	76	4.26E-04	35	***53.95%***	1.96E-04	***53.95%***	15	***80.26%***	8.42E-05	***80.26%***	50	***34.21%***	2.81E-04	***34.21%***	62	***18.42%***	3.48E-04	***18.42%***
Benzo(a)anthracene *[C]	55	2.41E-04	27	***50.91%***	1.18E-04	***50.91%***	14	***74.55%***	6.13E-05	***74.55%***	41	***25.45%***	1.80E-04	***25.45%***	61	***-10.91%***	2.67E-04	***-10.91%***
Benzo(a)pyrene *[C]	63	2.50E-04	33	***47.62%***	1.31E-04	***47.62%***	7	***88.89%***	2.77E-05	***88.89%***	44	***30.16%***	1.74E-04	***30.16%***	71	***-12.70%***	2.81E-04	***-12.70%***
Benzo(b)fluoranthene *[C]	36	1.43E-04	30	***16.67%***	1.19E-04	***16.67%***	13	***63.89%***	5.15E-05	***63.89%***	39	***-8.33%***	1.55E-04	***-8.33%***	56	***-55.56%***	2.22E-04	***-55.56%***
Benzo(g,h,i)perylene	38	1.38E-04	23	***39.47%***	8.32E-05	***39.47%***	9	***76.32%***	3.26E-05	***76.32%***	38	***0.00%***	1.38E-04	***0.00%***	48	***-26.32%***	1.74E-04	***-26.32%***
Benzo(k)fluoranthene *[C]	39	1.55E-04	9	***76.92%***	3.57E-05	***76.92%***	5	***87.18%***	1.98E-05	***87.18%***	12	***69.23%***	4.76E-05	***69.23%***	27	***30.77%***	1.07E-04	***30.77%***
Chrysene *[C]	59	2.58E-04	26	***55.93%***	1.14E-04	***55.93%***	13	***77.97%***	5.69E-05	***77.97%***	40	***32.20%***	1.75E-04	***32.20%***	53	***10.17%***	2.32E-04	***10.17%***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	6	***NA***	2.16E-05	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	180	8.90E-04	96	***46.67%***	4.75E-04	***46.67%***	47	***73.89%***	2.32E-04	***73.89%***	140	***22.22%***	6.92E-04	***22.22%***	200	***-11.11%***	9.89E-04	***-11.11%***
Fluorene	71	4.27E-04	42	***40.85%***	2.53E-04	***40.85%***	14	***80.28%***	8.42E-05	***80.28%***	51	***28.17%***	3.07E-04	***28.17%***	67	***5.63%***	4.03E-04	***5.63%***
Indeno(1,2,3-cd)pyrene *[C]	29	1.05E-04	16	***44.83%***	5.79E-05	***44.83%***	7	***75.86%***	2.53E-05	***75.86%***	30	***-3.45%***	1.09E-04	***-3.45%***	39	***-34.48%***	1.41E-04	***-34.48%***
Naphthalene	720	5.62E-03	260	***63.89%***	2.03E-03	***63.89%***	210	***70.83%***	1.64E-03	***70.83%***	260	***63.89%***	2.03E-03	***63.89%***	730	***-1.39%***	5.70E-03	***-1.39%***
Phenanthrene	340	1.91E-03	190	***44.12%***	1.07E-03	***44.12%***	89	***73.82%***	4.99E-04	***73.82%***	240	***29.41%***	1.35E-03	***29.41%***	360	***-5.88%***	2.02E-03	***-5.88%***
Pyrene	200	9.89E-04	110	***45.00%***	5.44E-04	***45.00%***	59	***70.50%***	2.92E-04	***70.50%***	160	***20.00%***	7.91E-04	***20.00%***	270	***-35.00%***	1.33E-03	***-35.00%***
Total PAHs	2,155	1.32E-02	1,071	***50.30%***	6.38E-03	***51.70%***	582	***72.99%***	3.64E-03	***72.43%***	1,370	***36.43%***	7.92E-03	***40.08%***	2,340	***-8.58%***	1.42E-02	***-7.51%***
Total C-PAHs	281	1.15E-03	141	***49.82%***	5.75E-04	***50.02%***	59	***79.00%***	2.43E-04	***78.92%***	212	***24.56%***	8.61E-04	***25.17%***	307	***-9.25%***	1.25E-03	***-8.65%***

TABLE 14

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS - COMPARISON OF PAH CONCENTRATIONS

Parameter	SB-203																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/21/2005				2/1/2006				3/206			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
2-Methylnaphthalene	440	3.09E-03	620	***-40.91%***	4.36E-03	***-40.91%***	3100	***-604.55%***	2.18E-02	***-604.55%***	360	***18.18%***	2.53E-03	***18.18%***	270	***38.64%***	1.90E-03	***38.64%***
Acenaphthene	350	2.27E-04	370	***-5.71%***	2.40E-03	***-5.71%***	240	***31.43%***	1.56E-03	***31.43%***	200	***42.86%***	1.30E-03	***42.86%***	190	***45.71%***	1.23E-03	***45.71%***
Acenaphthylene	110	7.23E-04	56	***49.09%***	3.68E-04	***49.09%***	1200	***-990.91%***	7.88E-03	***-990.91%***	43	***60.91%***	2.83E-04	***60.91%***	33	***70.00%***	2.17E-04	***70.00%***
Anthracene	170	9.54E-04	160	***5.88%***	8.98E-04	***5.88%***	550	***-223.53%***	3.09E-03	***-223.53%***	91	***46.47%***	5.11E-04	***46.47%***	76	***55.29%***	4.26E-04	***55.29%***
Benzo(a)anthracene *[C]	140	6.13E-04	94	***32.86%***	4.12E-04	***32.86%***	440	***-214.29%***	1.93E-03	***-214.29%***	60	***57.14%***	2.63E-04	***57.14%***	49	***65.00%***	2.15E-04	***65.00%***
Benzo(a)pyrene *[C]	170	6.74E-04	96	***43.53%***	3.80E-04	***43.53%***	440	***-158.82%***	1.74E-03	***-158.82%***	63	***62.94%***	2.50E-04	***62.94%***	48	***71.76%***	1.90E-04	***71.76%***
Benzo(b)fluoranthene *[C]	83	3.29E-04	80	***3.61%***	3.17E-04	***3.61%***	370	***-345.78%***	1.47E-03	***-345.78%***	25	***69.88%***	9.91E-05	***69.88%***	37	***55.42%***	1.47E-04	***55.42%***
Benzo(g,h,i)perylene	120	4.34E-04	52	***56.67%***	1.88E-04	***56.67%***	260	***-116.67%***	9.41E-04	***-116.67%***	ND	***100.00%***	ND	***100.00%***	22	***81.67%***	7.96E-05	***81.67%***
Benzo(k)fluoranthene *[C]	110	4.36E-04	34	***69.09%***	1.35E-04	***69.09%***	100	***9.09%***	3.96E-04	***9.09%***	29	***73.64%***	1.15E-04	***73.64%***	13	***88.18%***	5.15E-05	***88.18%***
Chrysene *[C]	150	6.57E-04	98	***34.67%***	4.29E-04	***34.67%***	460	***-206.67%***	2.01E-03	***-206.67%***	59	***60.67%***	2.58E-04	***60.67%***	45	***70.00%***	1.97E-04	***70.00%***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	8	***NA***	2.87E-05	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	370	1.83E-03	240	***35.14%***	1.19E-03	***35.14%***	1100	***-197.30%***	5.44E-03	***-197.30%***	140	***62.16%***	6.92E-04	***62.16%***	140	***62.16%***	6.92E-04	***62.16%***
Fluorene	180	1.08E-03	200	***-11.11%***	1.20E-03	***-11.11%***	640	***-255.56%***	3.85E-03	***-255.56%***	110	***38.89%***	6.62E-04	***38.89%***	86	***52.22%***	5.17E-04	***52.22%***
Indeno(1,2,3-cd)pyrene *[C]	95	3.44E-04	39	***58.95%***	1.41E-04	***58.95%***	170	***-78.95%***	6.15E-04	***-78.95%***	38	***60.00%***	1.38E-04	***60.00%***	19	***80.00%***	6.88E-05	***80.00%***
Naphthalene	1,500	1.17E-02	1,600	***-6.67%***	1.25E-02	***-6.67%***	8500	***-466.67%***	6.63E-02	***-466.67%***	1,000	***33.33%***	7.80E-03	***33.33%***	730	***51.33%***	5.70E-03	***51.33%***
Phenanthrene	740	4.15E-03	620	***16.22%***	3.48E-03	***16.22%***	2800	***-278.38%***	1.57E-02	***-278.38%***	400	***45.95%***	2.24E-03	***45.95%***	330	***55.41%***	1.85E-03	***55.41%***
Pyrene	530	2.62E-03	360	***32.08%***	1.78E-03	***32.08%***	1700	***-220.75%***	8.41E-03	***-220.75%***	220	***58.49%***	1.09E-03	***58.49%***	190	***64.15%***	9.39E-04	***64.15%***
Total PAHs	5,258	3.19E-02	4,719	***10.25%***	3.02E-02	***5.50%***	22,070	***-319.74%***	1.43E-01	***-348.54%***	2,846	***45.87%***	1.83E-02	***42.78%***	2,278	***56.68%***	1.44E-02	***54.82%***
Total C-PAHs	748	3.05E-03	441	***41.04%***	1.81E-03	***40.56%***	1,980	***-164.71%***	8.16E-03	***-167.43%***	282	***62.30%***	1.15E-03	***62.29%***	211	***71.79%***	8.69E-04	***71.54%***

Parameter	SB-204																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/21/2005				2/1/2006				3/2/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
2-Methylnaphthalene	130	9.14E-04	1,300	***-900.00%***	9.14E-03	***-900.00%***	160	***-23.08%***	1.13E-03	***-23.08%***	590	***-353.85%***	4.15E-03	***-353.85%***	170	***-30.77%***	1.20E-03	***-30.77%***
Acenaphthene	130	8.43E-04	ND	***100.00%***	ND	***100.00%***	120	***7.69%***	7.78E-04	***7.69%***	320	***-146.15%***	2.08E-03	***-146.15%***	140	***-7.69%***	9.08E-04	***-7.69%***
Acenaphthylene	50	3.29E-04	3,400	***-6700.00%***	2.23E-02	***-6700.00%***	41	***18.00%***	2.69E-04	***18.00%***	550	***-1000.00%***	3.61E-03	***-1000.00%***	32	***36.00%***	2.10E-04	***36.00%***
Anthracene	74	4.15E-04	1,900	***-2467.57%***	1.07E-02	***-2467.57%***	63	***14.86%***	3.53E-04	***14.86%***	400	***-440.54%***	2.24E-03	***-440.54%***	65	***12.16%***	3.65E-04	***12.16%***
Benzo(a)anthracene *[C]	62	2.72E-04	1,700	***-2641.94%***	7.45E-03	***-2641.94%***	52	***16.13%***	2.28E-04	***16.13%***	450	***-625.81%***	1.97E-03	***-625.81%***	53	***14.52%***	2.32E-04	***14.52%***
Benzo(a)pyrene *[C]	77	3.05E-04	2,300	***-2887.01%***	9.12E-03	***-2887.01%***	65	***15.58%***	2.58E-04	***15.58%***	470	***-510.39%***	1.86E-03	***-510.39%***	54	***29.87%***	2.14E-04	***29.87%***
Benzo(b)fluoranthene *[C]	ND	ND	1,800	***NA***	7.13E-03	***NA***	60	***NA***	2.38E-04	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Benzo(g,h,i)perylene	56	2.03E-04	2,200	***-3828.57%***	7.96E-03	***-3828.57%***	39	***30.36%***	1.41E-04	***30.36%***	220	***-292.86%***	7.96E-04	***-292.86%***	26	***53.57%***	9.41E-05	***53.57%***
Benzo(k)fluoranthene *[C]	ND	ND	510	***NA***	2.02E-03	***NA***	ND	***NA***	ND	***NA***	220	***NA***	8.72E-04	***NA***	ND	***NA***	ND	***NA***
Chrysene *[C]	69	3.02E-04	1,500	***-2073.91%***	6.57E-03	***-2073.91%***	58	***15.94%***	2.54E-04	***15.94%***	540	***-682.61%***	2.37E-03	***-682.61%***	52	***24.64%***	2.28E-04	***24.64%***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	230	1.14E-03	6,500	***-2726.09%***	3.21E-02	***-2726.09%***	200	***13.04%***	9.89E-04	***13.04%***	1,300	***-465.22%***	6.43E-03	***-465.22%***	170	***26.09%***	8.41E-04	***26.09%***
Fluorene	84	5.05E-04	1,800	***-2042.86%***	1.08E-02	***-2042.86%***	68	***19.05%***	4.09E-04	***19.05%***	470	***-459.52%***	2.83E-03	***-459.52%***	71	***15.48%***	4.27E-04	***15.48%***
Indeno(1,2,3-cd)pyrene *[C]	39	1.41E-04	1,400	***-3489.74%***	5.07E-03	***-3489.74%***	29	***25.64%***	1.05E-04	***25.64%***	ND	***100.00%***	ND	***100.00%***	25	***35.90%***	9.05E-05	***35.90%***
Naphthalene	1,200	9.36E-03	32,000	***-2566.67%***	2.50E-01	***-2566.67%***	1,100	***8.33%***	8.58E-03	***8.33%***	11,000	***-816.67%***	8.58E-02	***-816.67%***	810	***32.50%***	6.32E-03	***32.50%***
Phenanthrene	430	2.41E-03	13,000	***-2923.26%***	7.29E-02	***-2923.26%***	400	***6.98%***	2.24E-03	***6.98%***	2,900	***-574.42%***	1.63E-02	***-574.42%***	340	***20.93%***	1.91E-03	***20.93%***
Pyrene	300	1.48E-03	10,000	***-3233.33%***	4.94E-02	***-3233.33%***	280	***6.67%***	1.38E-03	***6.67%***	2,500	***-733.33%***	1.24E-02	***-733.33%***	220	***26.67%***	1.09E-03	***26.67%***
Total PAHs	2,931	1.86E-02	81,310	***-2674.14%***	5.02E-01	***-2597.90%***	2,735	***6.69%***	1.74E-02	***6.80%***	21,930	***-648.21%***	1.44E-01	***-671.34%***	2,228	***23.98%***	1.41E-02	***24.19%***
Total C-PAHs	247	1.02E-03	9,210	***-3628.74%***	3.74E-02	***-3561.68%***	264	***-6.88%***	1.08E-03	***-6.08%***	1,680	***-580.16%***	7.07E-03	***-593.17%***	184	***25.51%***	7.64E-04	***25.07%***

TABLE 14

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS - COMPARISON OF PAH CONCENTRATIONS

Parameter	SB-205																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/21/2005				2/1/2006				3/1/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
2-Methylnaphthalene	2,200	1.55E-02	610	***72.27%***	4.29E-03	***72.27%***	23	***98.95%***	1.62E-04	***98.95%***	1,200	***45.45%***	8.44E-03	***45.45%***	160	***92.73%***	1.13E-03	***92.73%***
Acenaphthene	490	3.18E-03	250	***48.98%***	1.62E-03	***48.98%***	8	***98.37%***	5.19E-05	***98.37%***	370	***24.49%***	2.40E-03	***24.49%***	71	***85.51%***	4.60E-04	***85.51%***
Acenaphthylene	710	4.66E-03	100	***85.92%***	6.57E-04	***85.92%***	4	***99.44%***	2.63E-05	***99.44%***	290	***59.15%***	1.91E-03	***59.15%***	24	***96.62%***	1.58E-04	***96.62%***
Anthracene	540	3.03E-03	130	***75.93%***	7.29E-04	***75.93%***	5	***99.07%***	2.81E-05	***99.07%***	280	***48.15%***	1.57E-03	***48.15%***	36	***93.33%***	2.02E-04	***93.33%***
Benzo(a)anthracene *[C]	350	1.53E-03	78	***77.71%***	3.42E-04	***77.71%***	3	***99.14%***	1.31E-05	***99.14%***	130	***62.86%***	5.69E-04	***62.86%***	24	***93.14%***	1.05E-04	***93.14%***
Benzo(a)pyrene *[C]	340	1.35E-03	69	***79.71%***	2.73E-04	***79.71%***	2	***99.41%***	7.93E-06	***99.41%***	100	***70.59%***	3.96E-04	***70.59%***	20	***94.12%***	7.93E-05	***94.12%***
Benzo(b)fluoranthene *[C]	ND	ND	57	***NA***	2.26E-04	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	16	***NA***	6.34E-05	***NA***
Benzo(g,h,i)perylene	200	7.24E-04	34	***83.00%***	1.23E-04	***83.00%***	1	***99.50%***	3.62E-06	***99.50%***	61	***69.50%***	2.21E-04	***69.50%***	14	***93.00%***	5.07E-05	***93.00%***
Benzo(k)fluoranthene *[C]	180	7.13E-04	21	***88.33%***	8.32E-05	***88.33%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	ND	***100.00%***	6	***96.67%***	2.38E-05	***96.67%***
Chrysene *[C]	370	1.62E-03	73	***80.27%***	3.20E-04	***80.27%***	3	***99.19%***	1.31E-05	***99.19%***	140	***62.16%***	6.13E-04	***62.16%***	21	***94.32%***	9.20E-05	***94.32%***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	820	4.05E-03	160	***80.49%***	7.91E-04	***80.49%***	7	***99.15%***	3.46E-05	***99.15%***	260	***68.29%***	1.29E-03	***68.29%***	48	***94.15%***	2.37E-04	***94.15%***
Fluorene	700	4.21E-03	190	***72.86%***	1.14E-03	***72.86%***	6	***99.14%***	3.61E-05	***99.14%***	320	***54.29%***	1.93E-03	***54.29%***	51	***92.71%***	3.07E-04	***92.71%***
Indeno(1,2,3-cd)pyrene *[C]	100	3.62E-04	24	***76.00%***	8.68E-05	***76.00%***	0.9	***99.10%***	3.26E-06	***99.10%***	48	***52.00%***	1.74E-04	***52.00%***	10	***90.00%***	3.62E-05	***90.00%***
Naphthalene	6,900	5.38E-02	1,300	***81.16%***	1.01E-02	***81.16%***	81	***98.83%***	6.32E-04	***98.83%***	2,100	***69.57%***	1.64E-02	***69.57%***	360	***94.78%***	2.81E-03	***94.78%***
Phenanthrene	2,400	1.35E-02	550	***77.08%***	3.09E-03	***77.08%***	23	***99.04%***	1.29E-04	***99.04%***	980	***59.17%***	5.50E-03	***59.17%***	160	***93.33%***	8.98E-04	***93.33%***
Pyrene	1,400	6.92E-03	250	***82.14%***	1.24E-03	***82.14%***	10	***99.29%***	4.94E-05	***99.29%***	420	***70.00%***	2.08E-03	***70.00%***	80	***94.29%***	3.96E-04	***94.29%***
Total PAHs	17,700	1.15E-01	3,896	***77.99%***	2.52E-02	***78.16%***	177	***99.00%***	1.19E-03	***98.97%***	6,699	***62.15%***	4.35E-02	***62.25%***	1,101	***93.78%***	7.04E-03	***93.88%***
Total C-PAHs	1,340	5.58E-03	322	***75.97%***	1.33E-03	***76.13%***	9	***99.34%***	3.75E-05	***99.33%***	418	***68.81%***	1.75E-03	***68.57%***	97	***92.76%***	4.00E-04	***92.83%***

Parameter	SB-206																	
	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	6/30/2005		11/15/2005				12/21/2005				2/1/2006				3/1/2006			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
2-Methylnaphthalene	670	4.71E-03	230	***65.67%***	1.62E-03	***65.67%***	220	***67.16%***	1.55E-03	***67.16%***	1,400	***-108.96%***	9.85E-03	***-108.96%***	930	***-38.81%***	6.54E-03	***-38.81%***
Acenaphthene	230	1.49E-03	180	***21.74%***	1.17E-03	***21.74%***	160	***30.43%***	1.04E-03	***30.43%***	420	***-82.61%***	2.72E-03	***-82.61%***	640	***-178.26%***	4.15E-03	***-178.26%***
Acenaphthylene	550	3.61E-03	52	***90.55%***	3.42E-04	***90.55%***	37	***93.27%***	2.43E-04	***93.27%***	730	***-32.73%***	4.80E-03	***-32.73%***	97	***82.36%***	6.37E-04	***82.36%***
Anthracene	320	1.80E-03	82	***74.38%***	4.60E-04	***74.38%***	78	***75.63%***	4.38E-04	***75.63%***	400	***-25.00%***	2.24E-03	***-25.00%***	290	***9.38%***	1.63E-03	***9.37%***
Benzo(a)anthracene *[C]	260	1.14E-03	61	***76.54%***	2.67E-04	***76.54%***	68	***73.85%***	2.98E-04	***73.85%***	310	***-19.23%***	1.36E-03	***-19.23%***	200	***23.08%***	8.76E-04	***23.08%***
Benzo(a)pyrene *[C]	300	1.19E-03	68	***77.33%***	2.69E-04	***77.33%***	69	***77.00%***	2.73E-04	***77.00%***	360	***-20.00%***	1.43E-03	***-20.00%***	220	***26.67%***	8.72E-04	***26.67%***
Benzo(b)fluoranthene *[C]	ND	ND	60	***NA***	2.38E-04	***NA***	49	***NA***	1.94E-04	***NA***	ND	***NA***	ND	***NA***	210	***NA***	8.32E-04	***NA***
Benzo(g,h,i)perylene	200	7.24E-04	53	***73.50%***	1.92E-04	***73.50%***	40	***80.00%***	1.45E-04	***80.00%***	310	***-55.00%***	1.12E-03	***-55.00%***	130	***35.00%***	4.71E-04	***35.00%***
Benzo(k)fluoranthene *[C]	150	5.94E-04	21	***86.00%***	8.32E-05	***86.00%***	24	***84.00%***	9.51E-05	***84.00%***	ND	***100.00%***	ND	***100.00%***	99	***34.00%***	3.92E-04	***34.00%***
Chrysene *[C]	260	1.14E-03	55	***78.85%***	2.41E-04	***78.85%***	61	***76.54%***	2.67E-04	***76.54%***	310	***-19.23%***	1.36E-03	***-19.23%***	180	***30.77%***	7.88E-04	***30.77%***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	1,000	4.94E-03	140	***86.00%***	6.92E-04	***86.00%***	170	***83.00%***	8.41E-04	***83.00%***	880	***12.00%***	4.35E-03	***12.00%***	660	***34.00%***	3.26E-03	***34.00%***
Fluorene	350	2.11E-03	110	***68.57%***	6.62E-04	***68.57%***	73	***79.14%***	4.39E-04	***79.14%***	550	***-57.14%***	3.31E-03	***-57.14%***	320	***8.57%***	1.93E-03	***8.57%***
Indeno(1,2,3-cd)pyrene *[C]	150	5.43E-04	37	***75.33%***	1.34E-04	***75.33%***	29	***80.67%***	1.05E-04	***80.67%***	220	***-46.67%***	7.96E-04	***-46.67%***	93	***38.00%***	3.37E-04	***38.00%***
Naphthalene	5,600	4.37E-02	990	***82.32%***	7.72E-03	***82.32%***	960	***82.86%***	7.49E-03	***82.86%***	6,300	***-12.50%***	4.92E-02	***-12.50%***	3600	***35.71%***	2.81E-02	***35.71%***
Phenanthrene	1,900	1.07E-02	420	***77.89%***	2.36E-03	***77.89%***	390	***79.47%***	2.19E-03	***79.47%***	2,300	***-21.05%***	1.29E-02	***-21.05%***	1400	***26.32%***	7.86E-03	***26.32%***
Pyrene	1,200	5.93E-03	270	***77.50%***	1.33E-03	***77.50%***	260	***78.33%***	1.29E-03	***78.33%***	1,300	***-8.33%***	6.43E-03	***-8.33%***	910	***24.17%***	4.50E-03	***24.17%***
Total PAHs	13,140	8.43E-02	2,829	***78.47%***	1.78E-02	***78.90%***	2,688	***79.54%***	1.69E-02	***79.96%***	15,790	***-20.17%***	1.02E-01	***-20.81%***	9,979	***24.06%***	6.32E-02	***25.06%***
Total C-PAHs	1,120	4.60E-03	302	***73.04%***	1.23E-03	***73.23%***	300	***73.21%***	1.23E-03	***73.22%***	1,200	***-7.14%***	4.94E-03	***-7.27%***	1,002	***10.54%***	4.10E-03	***11.00%***

TABLE 14

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS - COMPARISON OF PAH CONCENTRATIONS

Arithmetic Mean Concentrations (SB-201 through SB-206)

Parameter	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
2-Methylnaphthalene	595	4.18E-03	492	***17.35%***	3.46E-03	***17.35%***	593	***0.31%***	4.17E-03	***0.31%***	612	***-2.86%***	4.30E-03	***-2.86%***	310	***47.87%***	2.18E-03	***47.87%***
Acenaphthene	230	1.49E-03	466	***-102.83%***	3.02E-03	***-102.83%***	101	***55.85%***	6.57E-04	***55.85%***	236	***-2.76%***	1.53E-03	***-2.76%***	203	***11.69%***	1.31E-03	***11.69%***
Acenaphthylene	242	1.59E-03	609	***-151.38%***	4.00E-03	***-151.38%***	218	***10.25%***	1.43E-03	***10.25%***	280	***-15.47%***	1.84E-03	***-15.47%***	55	***77.17%***	3.64E-04	***77.17%***
Anthracene	200	1.12E-03	391	***-95.74%***	2.19E-03	***-95.74%***	120	***39.82%***	6.74E-04	***39.82%***	206	***-3.09%***	1.15E-03	***-3.09%***	97	***51.67%***	5.41E-04	***51.67%***
Benzo(a)anthracene *[C]	147	6.43E-04	332	***-126.11%***	1.45E-03	***-126.11%***	98	***33.37%***	4.29E-04	***33.37%***	168	***-14.07%***	7.34E-04	***-14.07%***	73	***50.62%***	3.18E-04	***50.62%***
Benzo(a)pyrene *[C]	161	6.39E-04	434	***-168.70%***	1.72E-03	***-168.70%***	99	***38.95%***	3.90E-04	***38.95%***	175	***-8.37%***	6.93E-04	***-8.37%***	77	***52.27%***	3.05E-04	***52.27%***
Benzo(b)fluoranthene *[C]	166	6.56E-04	343	***-107.15%***	7.27E-05	***88.93%***	84	***49.27%***	3.33E-04	***49.27%***	214	***-29.44%***	8.49E-04	***NA***	76	***54.10%***	6.14E-05	***90.64%***
Benzo(g,h,i)perylene	104	3.77E-04	398	***-281.76%***	1.44E-03	***-281.76%***	59	***43.36%***	2.14E-04	***43.36%***	113	***-8.00%***	4.07E-04	***-8.00%***	47	***54.88%***	1.70E-04	***54.88%***
Benzo(k)fluoranthene *[C]	97	3.84E-04	101	***-3.78%***	6.21E-05	***83.85%***	38	***61.17%***	1.49E-04	***61.17%***	96	***1.20%***	3.80E-04	***1.20%***	43	***56.01%***	1.06E-04	***72.34%***
Chrysene *[C]	154	6.74E-04	297	***-92.96%***	1.30E-03	***-92.96%***	101	***34.67%***	4.40E-04	***34.67%***	184	***-19.39%***	8.05E-04	***-19.39%***	65	***57.64%***	2.85E-04	***57.64%***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	204	***NA***	ND	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	441	2.18E-03	1,205	***-173.14%***	5.96E-03	***-173.14%***	258	***41.44%***	1.28E-03	***41.44%***	459	***-4.08%***	2.27E-03	***-4.08%***	226	***48.70%***	1.12E-03	***48.70%***
Fluorene	234	1.41E-03	398	***-69.91%***	2.40E-03	***-69.91%***	135	***42.39%***	8.12E-04	***42.39%***	253	***-7.97%***	1.52E-03	***-7.97%***	110	***53.20%***	6.60E-04	***53.20%***
Indeno(1,2,3-cd)pyrene *[C]	70	2.53E-04	256	***-265.24%***	9.25E-04	***-265.24%***	40	***42.88%***	1.45E-04	***42.88%***	207	***-196.19%***	7.50E-04	***-196.19%***	36	***48.81%***	1.30E-04	***48.81%***
Naphthalene	2,683	2.09E-02	6,097	***-127.20%***	4.76E-02	***-127.20%***	1,822	***32.12%***	1.42E-02	***32.12%***	3,456	***-28.81%***	2.70E-02	***-28.81%***	1,157	***56.89%***	9.02E-03	***56.89%***
Phenanthrene	984	5.52E-03	2,497	***-153.73%***	1.40E-02	***-153.73%***	625	***36.47%***	3.51E-03	***36.47%***	1,147	***-16.58%***	6.44E-03	***-16.58%***	475	***51.73%***	2.67E-03	***51.73%***
Pyrene	615	3.04E-03	1,855	***-201.63%***	9.17E-03	***-201.63%***	390	***36.56%***	1.93E-03	***36.56%***	775	***-26.07%***	3.83E-03	***-26.07%***	307	***50.14%***	1.52E-03	***50.14%***
Total PAHs	7,123	4.51E-02	16,168	***-126.99%***	9.87E-02	***-118.95%***	4,779	***32.90%***	3.08E-02	***31.78%***	8,785	***-23.33%***	5.45E-02	***-20.78%***	3,355	***52.90%***	2.08E-02	***53.97%***
Total C-PAHs	795	3.25E-03	1,762	***-121.71%***	5.53E-03	***-70.21%***	458	***42.30%***	1.89E-03	***41.98%***	1,248	***-57.04%***	4.21E-03	***-29.54%***	369	***53.54%***	1.21E-03	***62.91%***

Geometric Mean Concentrations (SB-201 through SB-206)

Parameter	Baseline		Mid-Test #1				Mid-Test #2				Post-Test #1				Post-Test #2			
	Concentration		Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction	Concentration	% Reduction
	(mg/kg)	(mol/kg)	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline	(mg/kg)	vs. Baseline	(mol/kg)	vs. Baseline
2-Methylnaphthalene	252	1.78E-03	309	***-22.31%***	2.17E-03	***-22.31%***	110	***56.56%***	7.71E-04	***56.56%***	316	***-25.35%***	2.23E-03	***-25.35%***	237	***6.10%***	1.67E-03	***6.10%***
Acenaphthene	178	1.15E-03	256	***-43.98%***	1.66E-03	***-43.98%***	62	***64.86%***	4.05E-04	***64.86%***	169	***4.59%***	1.10E-03	***4.59%***	139	***21.97%***	8.98E-04	***21.97%***
Acenaphthylene	90	5.94E-04	90	***0.83%***	5.89E-04	***0.83%***	31	***66.16%***	2.01E-04	***66.16%***	113	***-24.95%***	7.42E-04	***-24.95%***	46	***48.85%***	3.04E-04	***48.85%***
Anthracene	120	6.73E-04	128	***-6.38%***	7.16E-04	***-6.38%***	36	***70.33%***	2.00E-04	***70.33%***	119	***0.68%***	6.68E-04	***0.68%***	74	***38.57%***	4.13E-04	***38.57%***
Benzo(a)anthracene *[C]	92	4.03E-04	93	***-1.29%***	4.08E-04	***-1.29%***	29	***68.00%***	1.29E-04	***68.00%***	92	***-0.44%***	4.05E-04	***-0.44%***	58	***37.43%***	2.52E-04	***37.43%***
Benzo(a)pyrene *[C]	107	4.25E-04	103	***3.85%***	4.08E-04	***3.85%***	25	***77.05%***	9.75E-05	***77.05%***	91	***15.20%***	3.60E-04	***15.20%***	58	***45.50%***	2.31E-04	***45.50%***
Benzo(b)fluoranthene *[C]	85	3.38E-04	88	***-3.00%***	3.48E-04	***NA***	28	***67.49%***	1.10E-04	***NA***	78	***8.77%***	3.08E-04	***NA***	55	***35.44%***	2.18E-04	***NA***
Benzo(g,h,i)perylene	69	2.51E-04	70	***-0.21%***	2.52E-04	***-0.21%***	16	***76.64%***	5.87E-05	***76.64%***	63	***9.71%***	2.27E-04	***9.71%***	36	***48.49%***	1.30E-04	***48.49%***
Benzo(k)fluoranthene *[C]	72	2.84E-04	29	***59.26%***	1.16E-04	***59.26%***	15	***78.62%***	6.07E-05	***78.62%***	43	***39.83%***	1.71E-04	***39.83%***	26	***63.57%***	1.03E-04	***63.57%***
Chrysene *[C]	98	4.29E-04	87	***10.76%***	3.83E-04	***10.76%***	28	***71.15%***	1.24E-04	***71.15%***	95	***3.33%***	4.15E-04	***3.33%***	52	***47.36%***	2.26E-04	***47.36%***
Dibenzo(a,h)anthracene *[C]	ND	ND	ND	***NA***	ND	***NA***	ND	***NA***	ND	***NA***	30	***NA***	1.07E-04	***NA***	ND	***NA***	ND	***NA***
Fluoranthene	290	1.43E-03	261	***9.92%***	1.29E-03	***9.92%***	83	***71.45%***	4.09E-04	***71.45%***	243	***16.23%***	1.20E-03	***16.23%***	166	***42.60%***	8.22E-04	***42.60%***
Fluorene	133	8.00E-04	157	***-17.92%***	9.43E-04	***-17.92%***	37	***72.48%***	2.20E-04	***72.48%***	141	***-6.12%***	8.49E-04	***-6.12%***	87	***34.89%***	5.21E-04	***34.89%***
Indeno(1,2,3-cd)pyrene *[C]	47	1.71E-04	49	***-3.62%***	1.78E-04	***-3.62%***	12	***73.86%***	4.48E-05	***73.86%***	67	***-40.47%***	2.41E-04	***-40.47%***	28	***40.52%***	1.02E-04	***40.52%***
Naphthalene	1,443	1.13E-02	1,395	***3.31%***	1.09E-02	***3.31%***	478	***66.87%***	3.73E-03	***66.87%***	1,198	***16.98%***	9.34E-03	***16.98%***	857	***40.57%***	6.69E-03	***40.57%***
Phenanthrene	599	3.36E-03	643	***-7.29%***	3.61E-03	***-7.29%***	188	***68.68%***	1.05E-03	***68.68%***	584	***2.62%***	3.27E-03	***2.62%***	365	***39.16%***	2.05E-03	***39.16%***
Pyrene	384	1.90E-03	394	***-2.61%***	1.95E-03	***-2.61%***	115	***70.00%***	5.70E-04	***70.00%***	368	***4.07%***	1.82E-03	***4.07%***	228	***40.68%***	1.13E-03	***40.68%***
Total PAHs	4,069	2.55E-02	4,293	***-5.49%***	2.68E-02	***-5.12%***	1,327	***67.39%***	8.43E-03	***66.92%***	3,929	***3.44%***	2.45E-02	***3.84%***	2,531	***37.81%***	1.59E-02	***37.54%***
Total C-PAHs	417	1.71E-03	452	***-8.63%***	1.85E-03	***-8.03%***	122	***70.59%***	5.06E-04	***70.50%***	385	***7.48%***	1.59E-03	***7.27%***	253	***39.36%***	1.04E-03	***39.48%***

TABLE 14

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS - COMPARISON OF PAH CONCENTRATIONS

Notes:

1. Concentrations reported in:
   - parts per million (ppm) or milligrams per kilogram (mg/kg)
   - moles per kilogram (mol/kg)
2. PAHs - Polynuclear Aromatic Hydrocarbons.
4. C-PAHs - Carcinogenic polynuclear aromatic hydrocarbons.
5. Total PAHs calculated based the following constituents: 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.
6. $*^{C}$ - Total C-PAHs calculated based the following constituents: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.
7. NA - Not analyzed / not available.
8. ND - Not detected.
9. Percent reduction versus baseline calculated based on the following formula:
   % reduction = [(Baseline Total PAH Concentration - Mid-Test/Post-Test Total PAH Concentration) ÷ Baseline Total PAH Concentration] x 100.
10. Arithmetic mean concentrations calculated based on the following formula:
    Arithmetic mean = (SB-201 PAH concentration + SB-202 PAH concentration + SB-203 PAH concentration + SB-204 PAH concentration + SB-205 PAH concentration + SB-206 PAH concentration) / 6. Note: For non-detect values, one-half of the laboratory detection limit was used in the calculation.
11. Geometric mean concentrations calculated based on the following formula:
    Geometric mean = (SB-201 PAH concentration x SB-202 PAH concentration x SB-203 PAH concentration x SB-204 PAH concentration x SB-205 PAH concentration x SB-206 PAH concentration) ^ (1/6). Note: For non-detect values, one-half of the laboratory detection limit was used in the calculation.
12. Analytical results for Mid-Test #1 and Mid-Test #2 sampling events have not been validated.

TABLE 15
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

Parameter	Units	SB-201						
		Baseline		Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2	
		SB-201-BAS (10 - 15') 6/14/2005	SP-101D (SB-201-BAS) (10 - 15') 8/30/2005	SB-201-MT1 (10 - 15') 11/16/2005	SB-201-MT2 (10 - 15') 12/21/2005	SB-201-PT1 (10 - 15') 2/1/2006	SB-201-PT2 (10 - 15') 3/1/2006	DUP-01 (SB-201-PT2) (10 - 15') 3/1/2006
Total Petroleum Hydrocarbons								
TPH DRO	ppm	1,700	NA	2,300	840	390	3,500	3,700
TPH GRO	ppm	270	NA	1,500	160	84	130	170
Miscellaneous Parameters								
TOC	ppm	8,300	NA	2,600	3,800	4,300	27,000	16,000
pH	S.U.	8.47	NA	7.80	7.97	8.37	8.60	9.03
Inorganics								
Total Br	ppm	0.027 U	NA	NA	NA	0.10 U	NA	NA
Total Mn	ppm	709	NA	NA	NA	660	NA	NA
Total Fe	ppm	31,200	NA	NA	NA	25,600	NA	NA
Biological Parameters								
Total Plate Count	CFUs/g	NA	102,000	NA	NA	48,000,000	180,000	21,000
Hydrocarbon Depleting Plate Count	CFUs/g	3,000 U	NA	NA	NA	63,000,000	210,000	18,000

Parameter	Units	SB-202					
		Baseline		Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-202-BAS (10 - 15') 6/15/2005	SP-107D (SB-202-BAS) (10 - 15') 8/25/2005	SB-202-MT1 (10 - 15') 11/16/2005	SB-202-MT2 (10 - 15') 12/21/2005	SB-202-PT1 (10 - 15') 2/2/2006	SB-202-PT2 (10 - 15') 3/2/2006
Total Petroleum Hydrocarbons							
TPH DRO	ppm	3,300	NA	1,700	1,400	6,000	3,400
TPH GRO	ppm	420	NA	1,300	370	300	77
Miscellaneous Parameters							
TOC	ppm	23,000	NA	4,400	5,400	80,000	11,000
pH	S.U.	7.72	NA	6.80	7.72	6.78	6.78
Inorganics							
Total Br	ppm	0.027 U	NA	NA	NA	1.1 U	NA
Total Mn	ppm	742	NA	NA	NA	23,500	NA
Total Fe	ppm	26,400	NA	NA	NA	615	NA
Biological Parameters							
Total Plate Count	CFUs/g	NA	3,000 U	NA	NA	2,100,000	2,100,000
Hydrocarbon Depleting Plate Count	CFUs/g	3,700	NA	NA	NA	210,000	1,100,000

TABLE 15
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

Parameter	Units	SB-203						
		Baseline			Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-203-BAS (10 - 15') 6/16/2005	SP-102D (SB-203-BAS) (10 - 15') 8/31/2005	FD061605 (SB-203-BAS) (10 - 15') 6/16/2005	SB-203-MT1 (10 - 15') 11/17/2005	SB-203-MT2 (10 - 15') 12/22/2005	SB-203-PT1 (10 - 15') 2/1/2006	SB-203-PT2 (10 - 15') 3/2/2006
Total Petroleum Hydrocarbons								
TPH DRO	ppm	14,000	NA	18,000	15,000	21,000	5,400	7,800
TPH GRO	ppm	1,200	NA	1,100	11,000	4,500	280	460
Miscellaneous Parameters								
TOC	ppm	160,000	NA	200,000	34,000	86,000	13,000	23,000
pH	S.U.	9.70	NA	9.32	9.61	9.75	5.97	12.15
Inorganics								
Total Br	ppm	0.029 U	NA	0.029 U	NA	NA	1.1 U	NA
Total Mn	ppm	406	NA	455	NA	NA	812	NA
Total Fe	ppm	18,000	NA	18,900	NA	NA	25,000	NA
Biological Parameters								
Total Plate Count	CFUs/g	NA	2,000	NA	NA	NA	66,000,000	1,900 J
Hydrocarbon Depleting Plate Count	CFUs/g	6,300	NA	18,000	NA	NA	1,500,000	3,000 U

Parameter	Units	SB-204					
		Baseline		Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-204-BAS (10 - 15') 6/14/2005	SP-104D (SB-204-BAS) (10 - 15') 8/30/2005	SB-204-MT1 (10 - 15') 11/17/2005	SB-204-MT2 (10 - 15') 12/21/2005	SB-204-PT1 (10 - 15') 2/2/2006	SB-204-PT2 (10 - 15') 3/2/2006
Total Petroleum Hydrocarbons							
TPH DRO	ppm	4,400	NA	160,000	15,000	7,900	4,100
TPH GRO	ppm	640	NA	10,000	1,700	450	96
Miscellaneous Parameters							
TOC	ppm	8,700	NA	130,000	170,000	78,000	11,000
pH	S.U.	7.70	NA	7.49	7.66	7.18	7.18
Inorganics							
Total Br	ppm	0.026 U	NA	NA	NA	1.1 U	NA
Total Mn	ppm	1,210	NA	NA	NA	959	NA
Total Fe	ppm	34,600	NA	NA	NA	29,200	NA
Biological Parameters							
Total Plate Count	CFUs/g	NA	30,000	NA	NA	3,000 U	1,100,000
Hydrocarbon Depleting Plate Count	CFUs/g	4,500	NA	NA	NA	3,000 U	430,000

TABLE 15
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK
PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS FOR MISCELLANEOUS PARAMETERS

Parameter	Units	SB-205					
		Baseline		Mid-Test #1	Mid-Test #2	Post-Test #1	Post-Test #2
		SB-205-BAS (10 - 15') 6/16/2005	SP-103D (SB-205-BAS) (10 - 15') 8/31/2005	SB-205-MT1 (10 - 15') 11/17/2005	SB-205-MT2 (10 - 15') 12/22/2005	SB-205-PT1 (10 - 15') 2/1/2006	SB-205-PT2 (10 - 15') 3/1/2006
Total Petroleum Hydrocarbons							
TPH DRO	ppm	20,000	NA	12,000	1,000	9,300	2,300
TPH GRO	ppm	4,700	NA	41,000	280	1,600	61
Miscellaneous Parameters							
TOC	ppm	64,000	NA	32,000	5,100	30,000	11,000
pH	S.U.	8.81	NA	7.90	7.60	6.67	7.65
Inorganics							
Total Br	ppm	0.028 U	NA	NA	NA	2.5	NA
Total Mn	ppm	829	NA	NA	NA	504	NA
Total Fe	ppm	19,200	NA	NA	NA	22,100	NA
Biological Parameters							
Total Plate Count	CFUs/g	NA	7,100	NA	NA	1,900,000	28,000
Hydrocarbon Depleting Plate Count	CFUs/g	12,000	NA	NA	NA	49,000,000	22,000

Parameter	Units	SB-206								
		Baseline		Mid-Test #1		Mid-Test #2		Post-Test #1		Post-Test #2
		SB-206-BAS (10 - 15') 6/21/2005	VP-103 (SB-206-BAS) (10 - 15') 9/1/2005	SB-206-MT1 (10 - 15') 11/17/2005	DUP-2-MT1 (SB-206-MT1) (10 - 15') 11/17/2005	SB-206-MT2 (10 - 15') 12/22/2005	DUP-2-MT2 (SB-206-MT2) (10 - 15') 12/22/2005	SB-206-PT1 (10 - 15') 2/2/2006	SB-DUP1-PT1 (SB-206-PT1) (10 - 15') 2/2/2006	SB-206-PT2 (10 - 15') 3/1/2006
Total Petroleum Hydrocarbons										
TPH DRO	ppm	9,300	NA	6,700	6,200	7,100	7,100	14,000	23,000	16,000
TPH GRO	ppm	1,500	NA	7,900	8,700	400	1,700	610	870	1,200
Miscellaneous Parameters										
TOC	ppm	26,000	NA	23,000	17,000	26,000	19,000	43,000 J	290,000 J	27,000
pH	S.U.	10.50	NA	7.50	6.50	8.74	7.51	9.79	10.03	7.66
Inorganics										
Total Br	ppm	0.028 U	NA	NA	NA	NA	NA	1.3 U	1.2 U	NA
Total Mn	ppm	581	NA	NA	NA	NA	NA	907	516	NA
Total Fe	ppm	24,800 J	NA	NA	NA	NA	NA	27,100	20,900	NA
Biological Parameters										
Total Plate Count	CFUs/g	NA	3,000 U	NA	NA	NA	NA	3,000 U	3,000 U	29,000
Hydrocarbon Depleting Plate Count	CFUs/g	3,000 U	NA	NA	NA	NA	NA	3,000 U	3,000 U	22,000

TABLE 15

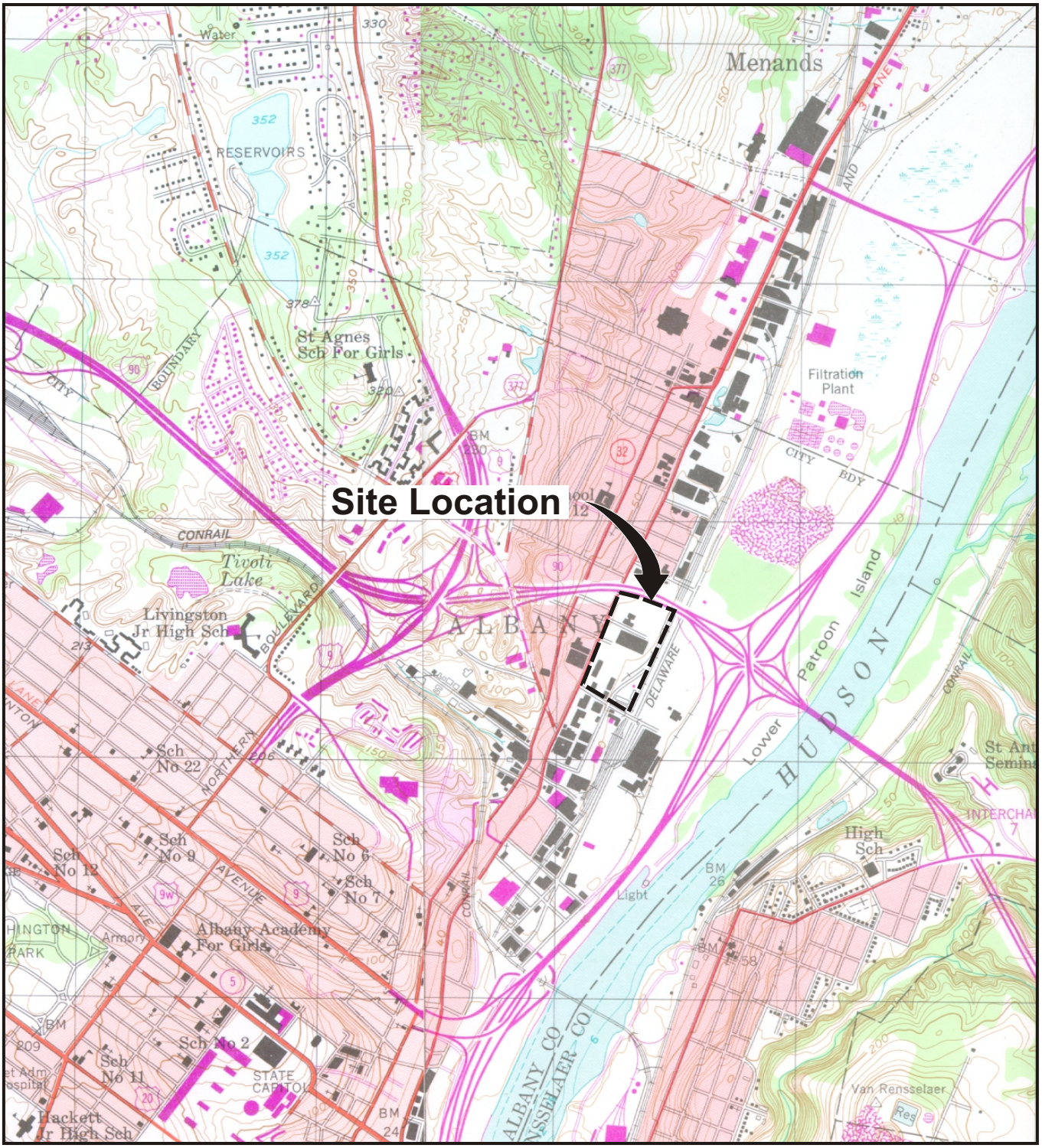
NATIONAL GRID
NORTH ALBANY SERVICE CENTER
ALBANY, NEW YORK

PILOT-SCALE TREATABILITY TESTING PROGRAM
SUBSURFACE SOIL ANALYTICAL RESULTS - MISCELLANEOUS PARAMETERS

Notes:

1. Subsurface soil samples collected by ARCADIS BBL.
2. Samples analyzed for the following consistuents were analyzed by Severn Trent Laboratories, Inc. (Shelton, New Jersey):
   - Total Plate Count using Method SM 9215.
   - Hydrocarbon Depleting Plate Count using Method SM 9215M.
   - pH - Using United States Department of Environmental Conservation (USEPA) SW-846 Method 9045.
   - TOC - Total organic carbon using the Lloyd Kahn Method.
   - Total Br - Total bromide using USEPA Method 300.1.
   - Total Fe - Total iron using Method USEPA SW-846 Method 6010.
   - Total Mn - Total manganese using Method USEPA SW-846 Method 6010.
   - TPH DRO/GRO - Total Petroleum Hydrocarbons Diesel Range Organics/Gas Range Organics using USEPA SW-846 Method 8015.
3. U - Compound was not detected at a concentration exceeding the laboratory detection limit. The listed value represents the laboratory detection limit.
4. J - Indicates an estimated value. The result is less than the specified quantitation limit, but greater than or equal to the method detection limit.
5. Samples results reported in:
   - ppm - parts per million or milligrams per kilogram (mg/kg)
   - S.U. - standard units
   - CFUs/g - colony forming units per gram
6. NA - Not analyzed.
7. Analytical results for Mid-Test #1 and Mid-Test #2 sampling events have not been validated.

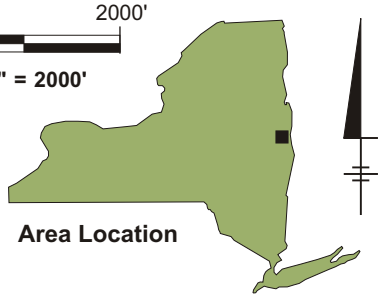
Figures



REFERENCE: Base Map USGS Quads., Albany, New York, 1980 and Troy South, New York, 1980.

2000' 0 2000'

Approximate Scale: 1" = 2000'



Area Location

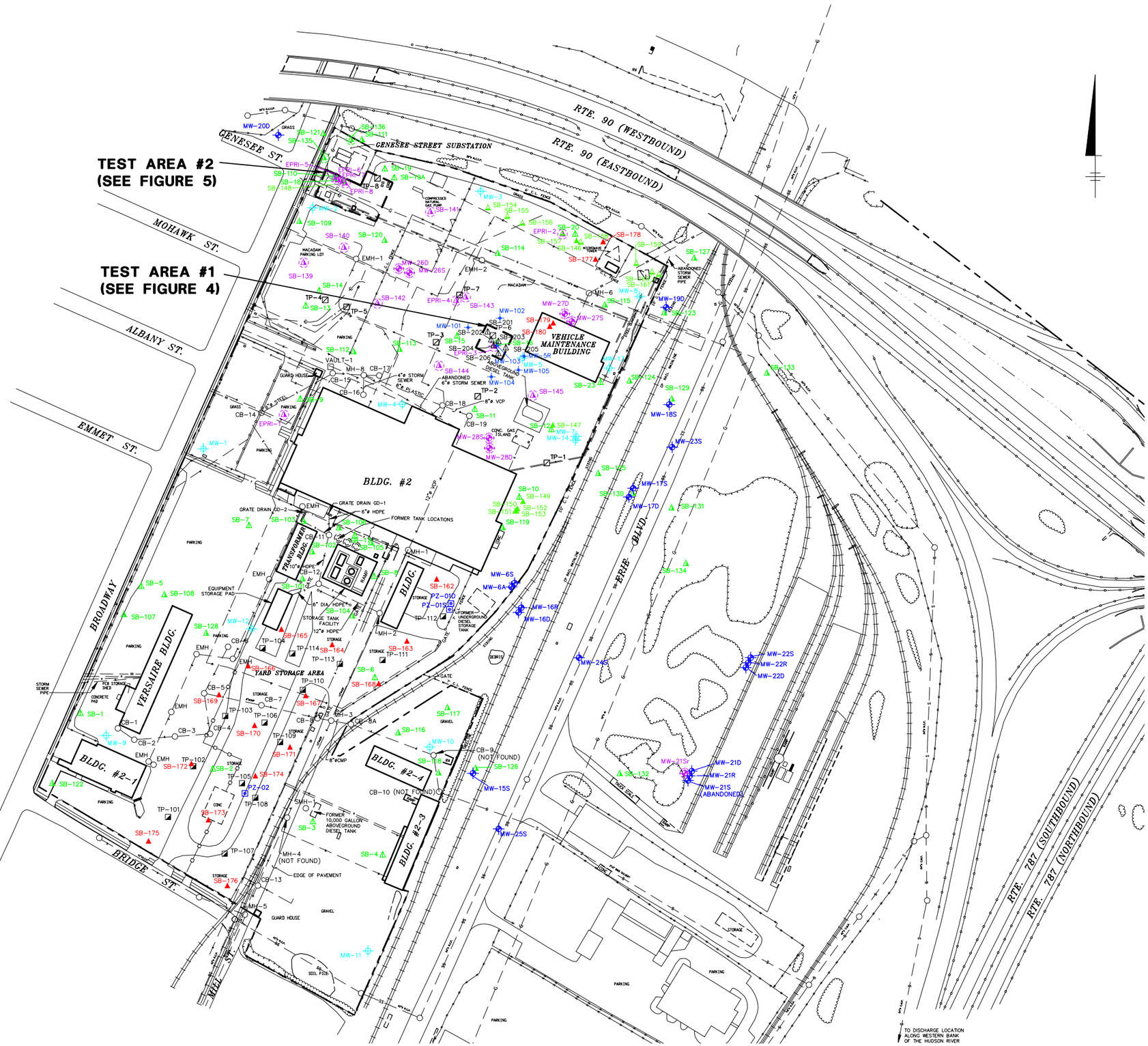
NATIONAL GRID
NORTH ALBANY SERVICE CENTER

SITE LOCATION MAP

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE 1

02/19/07 SYR-D85-DJH
36648018/36648n02.cdr



LEGEND:

- GUARD RAIL
- FENCE
- EXISTING RAILROAD
- APPROXIMATE PROPERTY LINE
- MW–105 PILOT–TEST MONITORING WELL LOCATION
- SB–205 PILOT–TEST BASELINE SOIL BORING LOCATION
- SB–147 BENCH–SCALE TREATABILITY STUDY SOIL BORING LOCATION
- SB–141 PRE–DESIGN INVESTIGATION SOIL BORING LOCATION
- MW–28S ADDITIONAL GROUNDWATER INVESTIGATION GROUNDWATER MONITORING WELL LOCATION
- MW–15S MGP/RCRA GROUNDWATER MONITORING WELL LOCATION
- PZ–01S MGP/RCRA PIEZOMETER
- SB–126 MGP/RCRA SOIL BORING LOCATION
- TP–105 MGP/RCRA TEST PIT LOCATION
- MW–11 PSA/IRM GROUNDWATER MONITORING WELL LOCATION
- SB–4 PSA/IRM SOIL BORING LOCATION
- TP–3 PSA/IRM TEST PIT LOCATION
- SB–156 HTS PROJECT SOIL BORING LOCATION
- SB–162 SUPPLEMENTAL INVESTIGATION SOIL BORING LOCATION
- CB–2 EXISTING CATCH BASIN
- MH–1 EXISTING STORM SEWER MANHOLE
- EMH–1 EXISTING ELECTRICAL MANHOLE
- TMH–1 EXISTING TELEPHONE MANHOLE
- GMH–1 EXISTING UTILITY MANHOLE
- STORM SEWER
- SANITARY SEWER
- TELEPHONE LINE
- ELECTRICAL LINE
- GAS LINE
- WATER LINE
- CABLE LINE

NOTES:

1. BASE MAP (INCLUDING BUILDING LOCATIONS AND PSA/IRM SAMPLING LOCATIONS) DEVELOPED FROM ELECTRONIC FILE OF NIAGARA MOHAWK POWER CORPORATION (NMPC) DRAWING NO. C–29736–C, DATED JULY 1994, ENTITLED NORTH ALBANY SERVICE CENTER HAZARDOUS WASTE MANAGEMENT PERMIT APPLICATION, TOPOGRAPHIC MAP – INDEX SHEET.
2. LOCATIONS OF UNDERGROUND UTILITIES (INCLUDING ON–SITE STORM SEWERS, SANITARY SEWERS, TELEPHONE LINES, ELECTRICAL LINES, GAS LINES, WATER LINES, AND CABLE) WERE DIGITIZED FROM NMPC DRAWING NO. D–29734–E, FILE INDEX NO. 20.3–A1.1–B2, DATED JUNE 27, 1994, ENTITLED NORTH ALBANY SERVICE CENTER SITE PLAN – PAVING (OUTSIDE FENCE). LOCATIONS OF NATURAL GAS MAINS ARE APPROXIMATED BASED ON FIELD OBSERVATIONS DURING UTILITY LOCATING ACTIVITIES. ACTUAL LOCATIONS OF UNDERGROUND GAS UTILITIES MUST BE DETERMINED PRIOR TO IMPLEMENTING SUBSURFACE WORK ACTIVITIES.
3. LOCATIONS OF MANHOLES AND CATCH BASINS WERE OBTAINED FROM A SURVEY CONDUCTED BY NMPC DURING JULY/AUGUST 1997.
4. LOCATIONS OF OFF–SITE STORM AND SANITARY SEWERS WERE DIGITIZED FROM CITY OF ALBANY DRAWINGS AND ARE APPROXIMATE.
5. LOCATIONS OF SOIL BORINGS SB–179 AND SB–180 WERE MEASURED IN THE FIELD AND ARE APPROXIMATE.

0 100' 200'
GRAPHIC SCALE

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
PILOT–SCALE TREATABILITY TESTING SUMMARY REPORT

SITE PLAN

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
2

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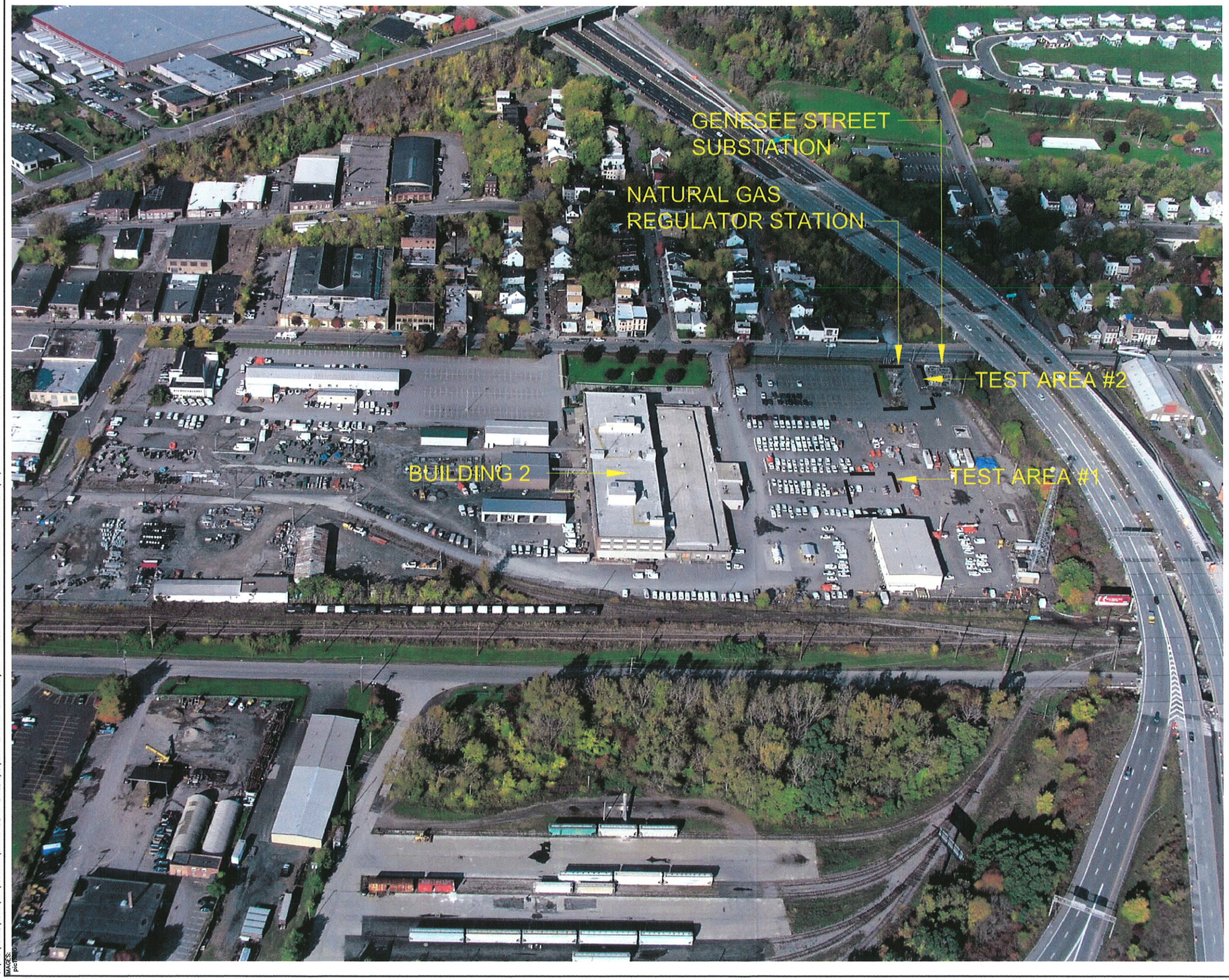


NOTE:

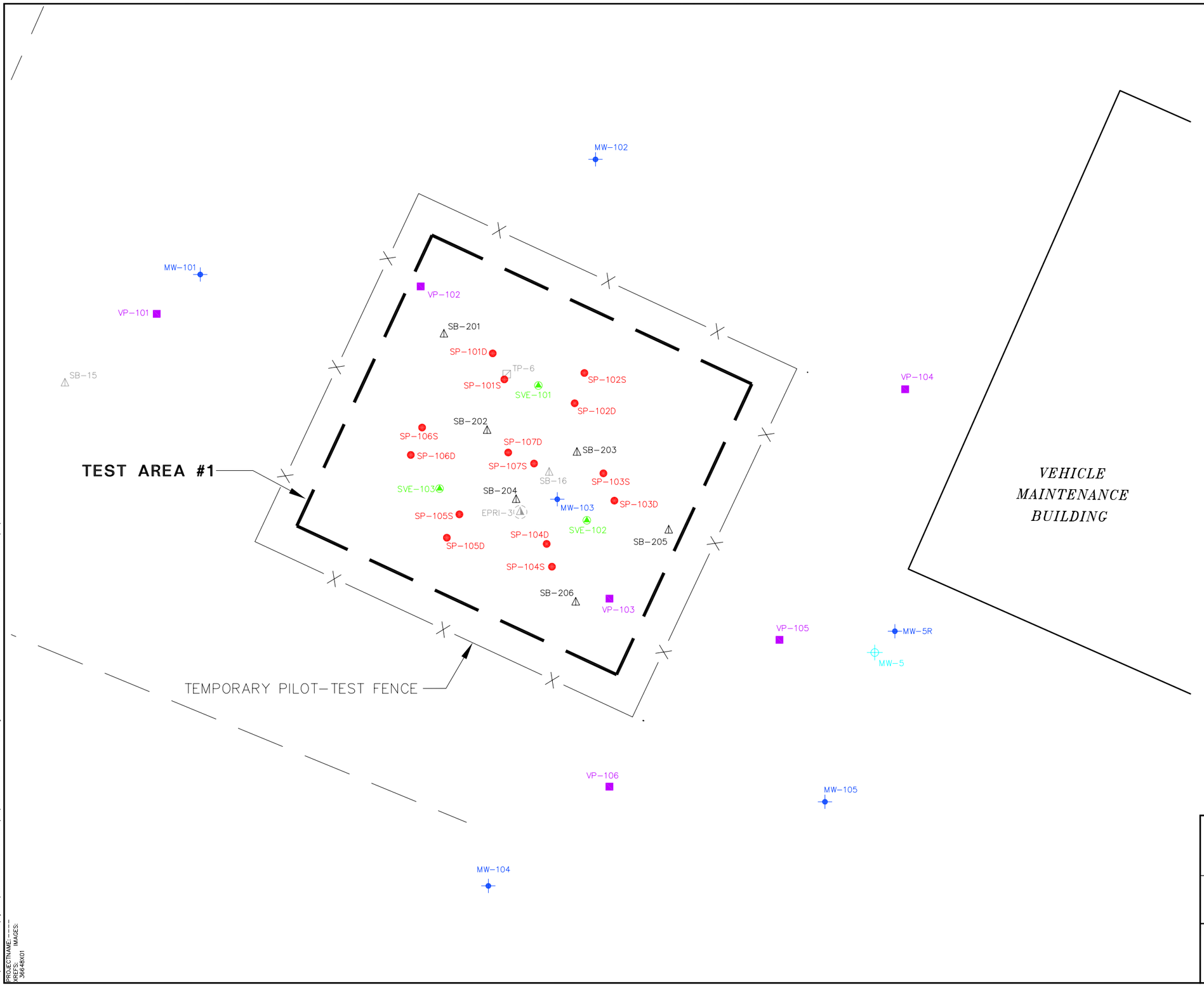
1. AERIAL PHOTOGRAPH FROM FLIGHT BY HUDSON VALLEY AERIAL PHOTOS, LLC ON OCT 23, 2004.

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
PILOT-SCALE TREATABILITY TESTING SUMMARY REPORT

AERIAL PHOTOGRAPH

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
3



LEGEND:

- FENCE
- EXISTING RAILROAD
- APPROXIMATE PROPERTY LINE
- MW-105 — PILOT-TEST MONITORING WELL LOCATION
- SP-107 — PILOT-TEST SPARGE POINT LOCATION
- SVE-103 — PILOT-TEST VAPOR EXTRACTION POINT LOCATION
- VP-102 — PILOT-TEST VAPOR MONITORING CLUSTER LOCATION
- SB-205 — PILOT-TEST BASELINE SOIL BORING LOCATION
- SB-141 — PRE-DESIGN INVESTIGATION SOIL BORING LOCATION
- MW-27S — ADDITIONAL GROUNDWATER INVESTIGATION GROUNDWATER MONITORING WELL LOCATION
- SB-126 — MGP/RCRA SOIL BORING LOCATION
- MW-11 — PSA/IRM GROUNDWATER MONITORING WELL LOCATION
- SB-4 — PSA/IRM SOIL BORING LOCATION
- TP-3 — PSA/IRM TEST PIT LOCATION
- EMH-1 — EXISTING ELECTRICAL MANHOLE
- TMH-1 — EXISTING TELEPHONE MANHOLE
- S — STORM SEWER
- SS — SANITARY SEWER
- T — TELEPHONE LINE
- E — ELECTRICAL LINE
- G — GAS LINE
- W — WATER LINE
- C — CABLE LINE
- GUARD RAIL

NOTES:

1. BASE MAP (INCLUDING BUILDING LOCATIONS AND PSA/IRM SAMPLING LOCATIONS) DEVELOPED FROM ELECTRONIC FILE OF NIAGARA MOHAWK POWER CORPORATION (NMPC) DRAWING NO. C-29736-C, DATED JULY 1994, ENTITLED NORTH ALBANY SERVICE CENTER HAZARDOUS WASTE MANAGEMENT PERMIT APPLICATION, TOPOGRAPHIC MAP – INDEX SHEET.

2. LOCATIONS OF UNDERGROUND UTILITIES (INCLUDING ON-SITE STORM SEWERS, SANITARY SEWERS, TELEPHONE LINES, ELECTRICAL LINES, GAS LINES, WATER LINES, AND CABLE) WERE DIGITIZED FROM NMPC DRAWING NO. D-29734-E, FILE INDEX NO. 20.3-A1.1-B2, DATED JUNE 27, 1994, ENTITLED NORTH ALBANY SERVICE CENTER SITE PLAN – PAVING (OUTSIDE FENCE). LOCATIONS OF NATURAL GAS MAINS ARE APPROXIMATED BASED ON FIELD OBSERVATIONS DURING UTILITY LOCATING ACTIVITIES. ACTUAL LOCATIONS OF UNDERGROUND GAS UTILITIES MUST BE DETERMINED PRIOR TO IMPLEMENTING SUBSURFACE WORK ACTIVITIES.

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4. LOCATIONS OF OFF-SITE STORM AND SANITARY SEWERS WERE DIGITIZED FROM CITY OF ALBANY DRAWINGS AND ARE APPROXIMATE.

5. LOCATIONS OF SPARGE POINTS, VAPOR MONITORING CLUSTERS, AND VAPOR EXTRACTION POINTS WERE MEASURED IN THE FIELD AND ARE APPROXIMATE.

0 15' 30'

GRAPHIC SCALE

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
PILOT-SCALE TREATABILITY TESTING SUMMARY REPORT

TEST AREA # 1 LAYOUT

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
4

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LEGEND:

- FENCE
- EXISTING RAILROAD
- APPROXIMATE PROPERTY LINE
- SP-201S — PILOT-TEST AIR SPARGE POINT
- SVE-201 — PILOT-TEST VAPOR EXTRACTION POINT
- VP-202 — PILOT-TEST VAPOR MONITORING CLUSTER
- VP-203 — PILOT-TEST VAPOR MONITORING POINT
- SB-141 — PRE-DESIGN INVESTIGATION SOIL BORING LOCATION
- MW-26d — ADDITIONAL GROUNDWATER INVESTIGATION GROUNDWATER MONITORING WELL LOCATION
- SB-110 — MGP/RCRA SOIL BORING LOCATION
- MW-11 — PSA/IRM GROUNDWATER MONITORING WELL LOCATION
- SB-4 — PSA/IRM SOIL BORING LOCATION
- TP-3 — PSA/IRM TEST PIT LOCATION
- EMH-1 — EXISTING ELECTRICAL MANHOLE
- TMH-1 — EXISTING TELEPHONE MANHOLE
- STORM SEWER
- SANITARY SEWER
- TELEPHONE LINE
- ELECTRICAL LINE
- GAS LINE
- WATER LINE
- CABLE LINE
- GUARD RAIL

NOTES:

1. BASE MAP (INCLUDING BUILDING LOCATIONS AND PSA/IRM SAMPLING LOCATIONS) DEVELOPED FROM ELECTRONIC FILE OF NIAGARA MOHAWK POWER CORPORATION (NMPC) DRAWING NO. C-29736-C, DATED JULY 1994, ENTITLED NORTH ALBANY SERVICE CENTER HAZARDOUS WASTE MANAGEMENT PERMIT APPLICATION, TOPOGRAPHIC MAP - INDEX SHEET.

2. LOCATIONS OF UNDERGROUND UTILITIES (INCLUDING ON-SITE STORM SEWERS, SANITARY SEWERS, TELEPHONE LINES, ELECTRICAL LINES, GAS LINES, WATER LINES, AND CABLE) WERE DIGITIZED FROM NMPC DRAWING NO. D-29734-E, FILE INDEX NO. 20.3-A1.1-B2, DATED JUNE 27, 1994, ENTITLED NORTH ALBANY SERVICE CENTER SITE PLAN - PAVING (OUTSIDE FENCE). LOCATIONS OF NATURAL GAS MAINS ARE APPROXIMATED BASED ON FIELD OBSERVATIONS DURING UTILITY LOCATING ACTIVITIES. ACTUAL LOCATIONS OF UNDERGROUND GAS UTILITIES MUST BE DETERMINED PRIOR TO IMPLEMENTING SUBSURFACE WORK ACTIVITIES.

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5. LOCATIONS OF SPARGE POINTS, VAPOR MONITORING CLUSTERS, AND VAPOR EXTRACTION POINTS WERE MEASURED IN THE FIELD AND ARE APPROXIMATE.

0 20' 40'
GRAPHIC SCALE

NATIONAL GRID
NORTH ALBANY SERVICE CENTER
PILOT-SCALE TREATABILITY TESTING SUMMARY REPORT

TEST AREA # 2 LAYOUT

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
5

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