

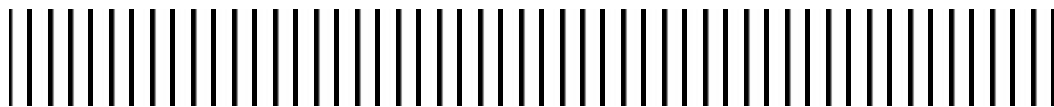
Albany Community Development Agency

City of Albany • 200 Henry Johnson Boulevard • Albany, NY 12210

Remedial Investigation/ Alternatives Analysis Report

**Henry Johnson Boulevard Properties
Albany, New York
NYSDEC ERP Project #E401049**

August 2009



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1. Introduction

The City of Albany, New York (City) received a grant under the 1996 Clean Water/Clean Air Bond Act Environmental Restoration Program (ERP) to conduct a Remedial Investigation/Alternatives Analysis (RI/AA) for the Henry Johnson Boulevard Properties (site) in Albany, New York. This RI/AA Report summarizes the results of Remedial Investigation site activities conducted with the following objectives:

- To provide an assessment of the nature and extent of the environmental conditions both on and off-site;
- To evaluate remedial options, which are protective of human health and the environment, and consider the municipality's "Contemplated Use" of the property; and
- To produce data for remedial decision-making which support the evaluation of remedial alternatives and enables the New York State Department of Environmental Conservation (NYSDEC) to prepare a Proposed Remedial Action Plan (PRAP) and Record of Decision (ROD) for the site.

Phase I and Phase II Environmental Site Assessments (ESAs) for the site, which were funded under the United States Environmental Protection Agency (USEPA) Brownfields Assessment Grants, were previously submitted to the Albany Community Development Agency (ACDA) in June 2003 (Malcolm Pirnie, 2003), and February 2005 (Malcolm Pirnie, 2005), respectively, for submission to the USEPA and NYSDEC (Phase II ESA only).

2. Site Description and Background

2.1. SITE LOCATION AND DESCRIPTION

The site includes 10 properties along Henry Johnson Boulevard (HJB) (historically Northern Boulevard), in the City of Albany, New York. Figure 2-1 shows the location of the site and Figure 2-2 identifies the properties included in the RI/AA. The assessment area extends for two blocks along the southeastern side of HJB, between Clinton Avenue to the south and Second Street to the north. One property fronts on Clinton Avenue; two properties front on Second Street; and six properties front on HJB. A common alley located between 146 HJB and 148 HJB is also included in the RI/AA.

At the time of the Phase II ESA, the site use was mixed and included active and inactive commercial and residential properties. The ground surface over the majority of the site was composed of sparse vegetation and asphalt paved areas and generally free of debris (such as glass, metal, or wood). Generally, buildings on the properties at the time of the Phase I and II ESAs were two or three stories. Very little ground surface was exposed at these properties. A concrete sidewalk was located between the front of the buildings and the adjacent street. The buildings extended laterally to their respective property lines. A small portion of ground surface was exposed at the rear of a majority of the properties which contained structures. The buildings were constructed of wood or brick and contained basements.

2.2. GEOLOGY/HYDROGEOLOGY

As bedrock was not encountered during the site Phase II ESA investigation, the Hudson-Mohawk Sheet of the Geologic Map of New York was reviewed to determine the underlying bedrock at the site (Fisher et al., 1970). Normanskill shale, with minor mudstone and sandstone is present beneath the site and a majority of the surrounding area.

The Hudson-Mohawk Sheet of the Surficial Geologic Map of New York (Caldwell et al., 1987) was used to identify characteristics of the surface geology at the site. Lacustrine sand deposits were identified in the area underlying the site. Based on the subsurface evaluation conducted during the Phase II ESA, overburden materials observed in the soil cores from the site were generally composed of fill material overlying medium to fine sand and silt. In most areas, silty clay was present beneath the fine sand and silt.

The Soil Survey of Albany County, New York, produced and distributed by the United States Department of Agriculture, Soil Conservation Service (USDA-SCS), identified soils at the site as urban lands with some areas of clayey and loamy udorthents complexes (USDA-SCS, 1992). Udorthents are generally brown silt loam from the surface to approximately five inches below ground surface and silty loam or silty clay with greater than 40 percent rock fragments to as deep as 60 inches. Since this complex is classified along with urban lands, which are identified as being greater than 85 percent covered by roads, parking lots, buildings and other generally impervious surfaces, variations and deviations resulting from human activity are likely. Additionally, urban lands are drained by man made improvements; therefore natural soil structure is likely disturbed by human activity.

Topography at the site varies from approximately 200 feet above mean sea level (amsl) at the northeastern end of the site to approximately 180 feet amsl at the southwestern end of the site. The depth to groundwater at the site during the site investigation ranged from 4 to 10 feet below ground surface (bgs) (Table 2-1). A potentiometric contour map is shown on Figure 2-3. As shown on Figure 2-3, the direction of groundwater flow is generally toward the south and southwest, which follows the topographic gradient of the site.

2.3. SITE HISTORY

Historical records for the site and surrounding areas indicate that it was developed prior to 1892. The properties have historically been residential or commercial.

The property that fronts on Clinton Avenue has apparently remained unchanged or a new building was built in the footprint of a previous building. The property at 124 HJB was historically a service station. The locations of buildings at 124, 126, 128, and 130 HJB appeared to be relatively consistent through 1995; however, no buildings were present on these properties at the time of the Phase II ESA investigation in 2004. The property at 132 HJB (formally consisting of properties 132, 134, 136A, and 136B HJB, respectively) were vacant at the time of the investigation. Historically, four separate commercial and residential buildings were on these properties, adjacent to HJB as late as 1908. By 1934 these buildings had been demolished and a single building was located in the center of the combined properties. This facility was identified as a service station. The service station building was listed on the property as late as 1995 but was not present at the time of the investigation.

Four buildings occupied the property at 138 HJB which formally consisted of properties 138, 140, 142, and 144 HJB, respectively. Based on Sanborn Maps, the location of

buildings on these properties was consistent until their demolition, which occurred between 1950 and 1989.

The building at 148 HJB was formerly used as a laundry and tailor shop, and potentially a dry cleaner. The interior of the building was inspected in March 2003 and no evidence of dry cleaning materials or machinery was observed.

The buildings located at 146 HJB and 216 Second Street were demolished after the field activities were completed for the Phase II ESA. The foundation areas of these buildings appear to have been returned to grade with fill material.

2.4. PREVIOUS INVESTIGATIONS

Phase I and II Environmental Site Assessments (ESAs) were conducted at the site as part of a USEPA Brownfields Assessment Demonstration Pilot Program grant. Based on field observations made during the Phase II site investigation and the analytical results for samples collected from the site, petroleum compounds were present in the subsurface soil and groundwater in the vicinity of the former vehicle maintenance and refueling facility at 132 HJB. Soil samples collected in this area contained several volatile organic compounds (VOCs) at concentrations greater than the corresponding NYSDEC Technical and Administrative Guidance Memorandum (TAGM) Cleanup Objectives. One groundwater sample contained methyl tert-butyl ether (MTBE), a common gasoline additive, at a concentration greater than the corresponding NYSDEC Glass GA Standard.

Based on field observations and analytical data, chlorinated solvents were present in the subsurface soil and groundwater in the vicinity of the former building foundation at 124 HJB, located in the southwest portion of the site. Soil and groundwater samples collected from this area contained several VOCs at concentrations greater than the corresponding NYSDEC Standards. Potential sources for these VOCs include degreasing operations and underground storage tanks (USTs).

Chromium, mercury, and lead were the Resource Conservation and Recovery Act (RCRA)-listed metals that were most frequently detected at elevated concentrations. Chromium concentrations were generally consistent across the site and likely represent site background conditions. Several soil samples contained mercury at concentrations that exceeded the NYSDEC TAGM Cleanup Objective. Lead was detected at concentrations greater than 500 micrograms per kilogram ($\mu\text{g}/\text{kg}$) in several soil samples collected during the site investigation. Groundwater in the vicinity of the former vehicle maintenance and refueling facility contained lead at a concentration greater than the NYSDEC Standard. Groundwater in the vicinity of the former building foundation at

124 HJB contained several metals at concentrations greater than the corresponding NYSDEC Class GA Standards.

3. Soil Removal Actions (SRAs)

3.1. BACKGROUND

Prior subsurface investigations at the site had identified a former heating oil UST at 216 Second Street with limited associated petroleum-impacted soil, and tetrachloroethene (PCE)-impacted soils at 124 Henry Johnson Boulevard. Soil borings advanced during the initial stages of the RI/AA provided additional information regarding the horizontal and vertical extent of the associated contaminants at each of these locations. In accordance with the ERP requirements, the City of Albany agreed to register all known petroleum and chemical storage tanks and vessels on the property. Additionally, the City agreed to remove and dispose of all hazardous substances within all containment vessels and to properly close the vessels within the investigation project schedule. As per NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation (DER-10), tank closures do not have to be performed as an Interim Remedial Measure (IRM), but may be conducted as a separate action. Therefore, the RI/AA involved the implementation of two Soil Removal Actions (SRAs) including removal of the heating oil UST and any petroleum-impacted soil in the immediate vicinity, as well as PCE-impacted soils.

3.2. SRAs

The SRAs were conducted in accordance with the NYSDEC Division of Spills and Response Memorandum, “Permanent Closure of Petroleum Storage Tanks”, as modified on December 3, 2003, and DER-10. A Community Air Monitoring Plan (CAMP), including real-time monitoring of VOCs as well as particulates at the downwind perimeter of the designated work area, was followed for all tank and soil removal and ground-intrusive activities. These data are included in Appendix A. Downwind measurements were continuously logged with repeated upwind measurements made for background evaluation using a MIE pDR-1000 Personal Data Ram for particulates, and a MiniRAE 2000 photoionization detector (PID) for VOCs. Action levels established in the CAMP were not exceeded during the SRAs. Representative photographs taken during the excavations are included in Appendix B.

Prior to the initiation of the SRAs, test pits were excavated at each of the SRA locations to collect samples for the proper waste disposal characterization analyses. Two test pits were excavated from a depth of approximately six feet below ground surface (bgs)

adjacent to the heating oil UST at the SRA-1 excavation area. Four test pits were excavated at 124 HJB (SRA-2 area) ranging in depth from approximately six to seven feet bgs. The depth of the test pits corresponded to level that the highest concentrations of contaminants were reported in soil boring samples previously collected from these areas. A composite sample was collected from the test pits for each SRA location. The samples were submitted by the excavation contractor (MC Environmental Services) to Phoenix Environmental Laboratories, Inc. for the required waste characterization analyses. Test pits were backfilled with the excavated materials pending the waste characterization results.

3.2.1. Tank Closure Activities (SRA-1)

Soil removed from the top of the UST was screened with a photo-ionization detector (PID) and, if the soil displayed no signs of contamination, it was staged away from the excavation to be used as backfill. The UST was uncovered and was found to not contain any liquid. The UST was tested for the presence of flammable vapors using a lower explosive limit/oxygen level meter, before being removed from the excavation using a backhoe. After the UST was removed from the excavation, the outside of the UST was visually inspected and cleaned. The UST was rendered unfit for further use by making a large opening in the end of the tank. Any remaining sludge or sediment (approximately five gallons) was removed and disposed of with the excavated soil. The tank was disposed of at a scrap metal salvage yard at the Port of Albany, Albany, New York.

Upon removal of the UST, the excavation was visually inspected for stained soil, which was present. The UST area was excavated with further side-wall screening using a PID until indications of petroleum were no longer present in the soil. The vertical extent of the excavation was generally defined by the water table depth at the time of the tank closure, which was approximately 8.5 feet below ground surface (bgs). However, the area immediately southeast of the tank was excavated to a depth of 11 feet bgs due to elevated PID readings. The horizontal extent of the excavation was defined by sidewall screening with a PID. Soil determined to be contaminated was removed from the excavation, then transported to the City of Albany Landfill for disposal in accordance with applicable federal, state, and local regulations. After the removal of the petroleum-impacted soil, the soil from the side-walls of the excavation was screened visually and with a PID. During the tank closure field activities, confirmation sampling was conducted to verify that the 6 NYCRR Part 375 Soil Cleanup Objectives were achieved. Soil samples were collected by the on-site geologist with the assistance of the contractor, in accordance with DER-10 and in consultation with the on-site NYSDEC representative.

Bottom and sidewall confirmation samples collected from the UST excavation were sent to a local New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-approved analytical laboratory and analyzed for Target

Compound List (TCL) VOCs and SVOCs by USEPA Method 8260 and 8270, respectively, under an expedited turn-around time. The locations of all confirmation samples collected during the SRA-1 and the final extent of the excavation are shown on Figure 3-1.

Upon receipt of the analytical results for confirmation samples, the excavation was backfilled with clean soil and backfill material, graded and compacted using a vibratory roller. Backfill material used during the excavation consisted of riverbank sand and gravel from the Callanan Industries facility in Ravena, New York. Analytical data for this material are included in Appendix C. None of the confirmation samples collected from the UST excavation area contained VOCs or SVOCs at concentrations greater than laboratory quantitation limits. The total amount of petroleum-impacted soil removed from the site during the Tank Closure activities was approximately 41 tons. Analytical data used for characterization of this material are included in Appendix C. Scale tickets from the landfill documenting disposal of the petroleum-impacted soil are provided in Appendix D.

3.2.2. PCE-Impacted Soil Removal Activities (SRA-2)

The horizontal extent of the SRA at 124 Henry Johnson Boulevard was based on the extent of soil containing PCE at concentrations greater than the 6 NYCRR Part 375 Protection of Groundwater Standard of 1.3 ppm, as delineated by soil borings, and shown on Figure 3-2. The approximately 21 foot by 30 foot removal area was excavated to a depth of approximately four feet bgs, with all soil transported to the City of Albany Landfill for disposal in accordance with applicable federal, state, and local regulations as they were removed from the excavation. The remains of concrete foundations removed from the excavation were transported to Palette Stone Corporation, Saratoga Springs, New York to be recycled. Soil samples were collected by the on-site geologist with the assistance of the contractor, in accordance with DER-10 and in consultation with the on-site NYSDEC representative. One composite confirmation sample was collected from each sidewall at a depth of approximately 3.5 feet bgs and sent to a local NYSDOH ELAP-approved analytical laboratory and analyzed for TCL VOCs by USEPA Method 8260 under an expedited turn-around time. Sheet piling was then installed around the perimeter of the excavation area to a depth of approximately 20 feet bgs to protect adjacent structures. Following the installation of the sheet piling, soil was removed to a depth of approximately 12 feet bgs, based on historical site groundwater levels and the maximum depth of PCE-impacted soil, as indicated in previous soil borings. A confirmation sample was collected from the bottom of the excavation and sent to a local NYSDOH ELAP-approved analytical laboratory and analyzed for TCL VOCs by USEPA Method 8260. The excavation was then backfilled with approximately two-feet of washed stone (approximately 2-inch diameter) to provide a highly permeable layer for further remedial measures, if needed. The remainder of the excavation was backfilled,

graded, and compacted with the same material used for the tank closure excavation. The locations of all confirmation samples collected during the SRA are shown on Figure 3-2.

None of the confirmation samples collected from the SRA excavation area contained VOCs at concentrations greater than Protection of Groundwater SCOs. The concentrations of PCE in sidewall confirmation samples SRA-2E (0.320 mg/kg), SRA-2S (0.133 mg/kg), and SRA-2W (0.003 mg/kg) contained PCE at concentrations less than the respective Protection of Groundwater SCO of 1.3 mg/kg. Sidewall sample SRA-2N did not contain any VOCs at concentrations greater than the laboratory quantitation limits. The confirmation sample collected from bottom of SRA-2 contained PCE, TCE, cis-1,2-DCE, and 1,1-DCE at concentrations of 1220, 78.7, 225, and 7 mg/kg, all of which are less than the corresponding Protection of Groundwater SCOs. The total amount of soil removed from 124 HJB during the soil removal activities was approximately 363 tons. In addition, approximately 20 tons of concrete was removed for recycling. Scale tickets from the landfill documenting disposal of the PCE-impacted soil and from the recycling facility showing acceptance of concrete are included in Appendix D.

4. Site Investigation

The scope of work for the RI/AA was designed to evaluate the magnitude and extent of VOCs, semi-volatile organic compounds (SVOCs), and metals in soil and groundwater, as well as VOCs in soil vapor and air, to evaluate the effectiveness of the excavation and tank removal, and to evaluate remedial alternatives for all affected media on and off-site. The base scope of work included new and replacement groundwater monitoring well installation, soil vapor monitoring point installation, surface and subsurface soil sampling, groundwater sampling, soil vapor sampling, and ambient air sampling. Based on initial data results, the NYSDEC recommended additional soil (SB-66 through SB-86), groundwater (MW-4R, MW-11R, MW-17 through MW-21), and soil vapor sampling points (SV-9R, SV-15, SV-16) to delineate the extent of subsurface contaminants. Additionally, the NYSDEC and NYSDOH recommended vapor intrusion sampling at two off-site properties, which is described in Section 5. A NYSDOH Environmental Laboratory Approval Program (ELAP) and NYSDEC Analytical Services Protocol (ASP)-approved analytical laboratory analyzed all samples collected during the investigation. ASP Category B data packages were produced for each sample. A Data Usability Summary Report (DUSR) was prepared by a third party data validator upon the receipt of specified analytical data to ensure that the quality of the data was sufficient to evaluate remedial alternatives.

4.1. PRE-INVESTIGATION ACTIVITIES

Street/Sidewalk Opening Permits were obtained from the City of Albany for monitoring well locations that were installed in City right-of-ways. These permits are included in Appendix E. Normal utility clearance activities, consisting of reviewing available site drawings and contacting Dig Safely New York, were also conducted prior to beginning the subsurface investigation.

4.2. BACKGROUND AND SURFACE SOIL SAMPLING

To evaluate background conditions and the potential for surface soil exposure based on previous surface soil data from the USEPA Phase II ESA, five on-site surface soil samples (SS-1, SS-3, SS-4, SS-8, and SS-9) and five off-site background surface soil samples (BG-SS-1 through BG-SS-5) were collected from a depth not exceeding two

inches below ground surface, excluding vegetative cover. Sampling and sample handling procedures were conducted in accordance with the Quality Assurance Project Plan (QAPP). All surface soil samples were analyzed for Target Analyte List (TAL) metals and Target Compound List (TCL) SVOCs and polychlorinated biphenyls (PCBs). Descriptions of the sampled soil and observations of the ground surface were recorded during sampling. The locations of the background surface soil samples were surveyed using a Global Positioning System (GPS) receiver, and are shown on Figure 4-1 and listed in Table 4-1. The locations of the on-site surface soil samples are shown in Figure 4-2.

4.3. SUBSURFACE SOIL SAMPLING

Subsurface soil samples were collected to address areas of concern identified during the Phase II Site Assessment (Malcolm Pirnie, 2005). Figure 4-2 identifies these locations. The placement and number of borings drilled at the site was determined in the field based on discussions with the on-site NYSDEC representative, utility providers, drilling subcontractors, and assessment of utility clearance mark outs. All subsurface soil boring and sample collection and handling activities were conducted in accordance with the QAPP.

Groundwater monitoring wells installed during the remedial investigation are summarized below:

1. Monitoring well MW-2R was installed to replace MW-2, which had been installed during the Phase II ESA and could not be located during the remedial investigation. This replacement monitoring well was installed adjacent to MW-2, near the former vehicle maintenance and refueling facility at 132 HJB.
2. Monitoring wells MW-10 and MW-11 were installed near the excavation area at 124 HJB. However, during SRA-2, monitoring well MW-11 and monitoring well MW-4 (installed during the Phase II ESA) were destroyed. Monitoring well MW-11R and MW-4R were installed to replace these wells. The soil and groundwater in this area contained elevated concentrations of chlorinated solvents during the Phase II ESA.
3. Seven new monitoring wells (MW-8, MW-9, and MW-12 through MW-15) were installed along the perimeter of the site to monitor off-site migration of VOCs, SVOCs, and metals from the site. Monitoring well MW-8 (located on 132 HJB) was apparently destroyed sometime between August 2007 and August 2008 during re-grading of an adjacent property (242 First Street) following the apparent demolition of the building on that property.
4. In consultation with the NYSDEC, one new monitoring well (MW-7) was installed at 138 HJB to better assess groundwater flow directions across the site.

5. Monitoring wells MW-A, MW-B, and MW-C were installed along the perimeter of the property at 138 HJB during a remedial investigation by another consultant (STV, Inc.). These wells are identified in the SVT, Inc. Phase II ESA (Appendix F) as MW-1, MW-3, and MW-2, respectively.
6. Monitoring well MW-6 was installed during the Phase II ESA; however, due to the demolition of the building at 216 Second Street, monitoring well MW-6 could not be located and was not sampled during the RI. Monitoring well MW-6R was installed at 216 Second Street following SRA-1. This well was sampled in July, 2007. A building located at 148 HJB was apparently demolished between August 2007 and August 2008. Monitoring well MW-6R was apparently destroyed during the demolition.
7. Monitoring well MW-16 was installed during the remedial investigation; however, this well was destroyed during the resurfacing of the vacant lot at 331 Clinton Avenue and was therefore only sampled once during the investigation in July 2006.
8. Based on analytical results from groundwater samples collected at MW-B, and in consultation with NYSDEC, groundwater monitoring wells MW-17, MW-18, and MW-19 were installed to provide additional information on groundwater quality in the vicinity of 138 HJB.

Each well was installed using a combination direct-push (i.e., Geoprobe®)\ hollow-stem auger drilling rig. Continuous soil cores (MacroCore®) were collected from ground surface to the water table for soil borings that were not completed as groundwater monitoring wells and to five feet below the water table for soil borings that were completed as groundwater monitoring wells. Upon collection, the core was screened for VOCs using a photoionization detector (PID), visually inspected for signs of contaminants (e.g., staining and/or sheens) and buried debris, and classified by the on-site field geologist. Soil boring logs from this investigation are presented in Appendix G.

A maximum of two soil samples from each boring were sent to a NYSDOH ELAP and NYSDEC ASP-approved analytical laboratory under chain-of-custody procedures for analysis of the following parameters:

- TCL + Tentatively Identified Compounds (TICs) VOCs by USEPA Method 8260B;
- TCL + TICs SVOCs by USEPA Method 8270C; and
- TAL metals by USEPA Methods 6010B and 7471.

The selection of soil samples for laboratory analysis was based on the following criteria. One soil sample was collected from the unsaturated interval containing the highest PID measurement and/or the greatest visual or olfactory evidence of any contaminants. The remaining soil sample was collected from the interval directly above the water table. If the two intervals were concurrent, then a composite soil sample was collected from both intervals. For all soil borings advanced at 124 HJB in the SRA-2 area, one soil sample was collected directly above the water table, while the remaining soil sample was collected from the bottom of the borehole. Subsurface soil sample collection, handling

activities, and quality assurance/quality control (QA/QC) sampling were conducted in accordance with the QAPP.

4.4. GROUNDWATER SAMPLING

Each monitoring well was constructed of two-inch inner diameter (I.D.) polyvinyl chloride (PVC) riser and screen, in accordance with the QAPP. The wells were constructed such that the well screen intersected the water table to allow for an evaluation of the presence or absence of Light Non-Aqueous Phase Liquids (LNAPLs). A clean, appropriately sized, filter pack was installed around the screened interval. The remainder of the well annulus was backfilled with bentonite and cement-bentonite grout to within two feet of the ground surface. Each well was completed at the surface with a steel flush-mounted cover and concrete pad. Upon completion, each well was developed in accordance with the QAPP to remove sediment from the well and filter sand pack.

Three rounds of groundwater samples (April, July, and October 2006) were collected from the monitoring wells using the USEPA Low-Flow Purge Sampling Protocol (USEPA, 1998), in accordance with the QAPP. Monitoring wells MW-7 through MW-16 were installed after the April 2006 sampling round, and were first sampled in July 2006. Monitoring wells MW-A, MW-B, and MW-C were installed in August 2006 by STV, Inc. performing a Phase II ESA, were sampled at that time by STV, Inc., and were added to the October 2006 RI/AA sampling round. Monitoring wells MW-17, MW-18, and MW-19 were installed in June 2007. In accordance with the letter to NYSDEC dated June 11, 2007, a limited groundwater sampling event was also conducted in July 2007. This sampling event was conducted following the completion of the SRAs and included groundwater sample collection from monitoring wells MW-4R, MW-6R, MW-11R, MW-17, MW-18, and MW-19.

A peristaltic pump was used to collect the groundwater samples. Prior to sampling, the water level and (if present) LNAPL thickness in each well was measured using an oil-water interface probe. Field parameters including pH, specific conductivity, temperature, turbidity, oxidation-reduction potential (ORP), and dissolved oxygen (DO) were measured during well purging using a flow-through cell system. Purged groundwater was visually assessed for the potential presence of LNAPL. Groundwater purge logs from each round of groundwater sampling events are presented in Appendix H. Groundwater samples were sent to a NYSDOH ELAP and NYSDEC ASP-approved laboratory under chain-of-custody procedures for analysis of the following parameters:

- TCL + TICs VOCs by USEPA Method 8260B;
- TCL + TICs SVOCs by USEPA Method 8270C;

- TAL metals by USEPA Methods 6010B and 7471; and
- Natural Attenuation Parameters (NAP) - carbon dioxide, methane, dissolved organic carbon (DOC), nitrate, nitrite, sulfate, ferrous iron, chloride, and alkalinity (2006 groundwater sampling events only).

If groundwater turbidity was greater than 50 Nephelometric Turbidity Units (NTUs) at the time of sampling, both filtered and unfiltered samples were collected and analyzed for TAL metals. In accordance with the QAPP, all monitoring wells were sampled during the July 2006 sampling round for geochemical parameters, including total dissolved solids (TDS), total hardness, total kjeldahl nitrogen (TKN), and total organic carbon (TOC), to evaluate remedial alternatives. All groundwater sample collection, handling activities, and QA/QC sampling were conducted in accordance with the QAPP.

Rising head hydraulic conductivity tests were performed at monitoring wells MW-2R, MW-10, MW-11, and MW-16 on August 15 and 16, 2006. These monitoring wells were chosen to characterize hydraulic conductivity within and down-gradient of the excavation area at 124 HJB and the former vehicle maintenance and refueling facility at 132 HJB. Water levels in all tested wells were allowed to fully recover prior to the initiation of hydraulic conductivity testing. Hydraulic conductivity testing was conducted in accordance with the QAPP.

4.5. AMBIENT AIR AND SOIL VAPOR SAMPLING

4.5.1. Ambient Air Sampling

Ambient air samples were collected over a 2-hour period using 6-liter Summa canisters in accordance with the QAPP. A typical summa canister sampling train is shown on Figure 4-3. Two ambient air samples (AA-1 and AA-2) were collected concurrently with the collection of soil vapor samples (described below). Ambient air sample AA-1 was collected at 124 HJB to monitor potential exposures resulting from chlorinated VOCs in soil and groundwater at that location and ambient air sample AA-2 was placed upwind on 132 HJB to establish background conditions for local ambient air quality. Ambient air samples were sent to a NYSDOH ELAP and NYSDOC ASP-approved laboratory under chain-of-custody procedures for analysis of VOCs by USEPA Method TO-15. All ambient air sampling and handling activities were conducted in accordance with the QAPP.

4.5.2. Soil Vapor Sampling

Each soil vapor monitoring point was constructed with a six-inch stainless steel screen and 0.25-inch diameter polyethylene sampling tubing, in accordance with the QAPP. The vapor points were constructed such that the screen was at least one foot above the water table and at least three feet below ground surface to allow for an evaluation of the presence or absence of vapor-phase contaminants. A clean, appropriately sized, filter pack was installed around the screen. The remainder of the annulus was backfilled with

bentonite to within two feet of the ground surface. Each vapor point was completed at the surface with a steel flush-mounted cover and concrete pad. A soil vapor monitoring point construction schematic is shown on Figure 4-4.

Soil vapor monitoring points SV-03 and SV-08 were installed adjacent to monitoring wells MW-15 and MW-16 (Figure 4-2). As mentioned in Section 4.3, the vacant lot at 331 Clinton Avenue was resurfaced and as a result, MW-16 and SV-08 were not located at the time of sampling. Many of the other soil vapor monitoring points that were not installed adjacent to monitoring wells (SV-01, SV-02, SV-04, SV-05, SV-07, and SV-09) were installed within or down-gradient of 124 HJB, where the highest concentrations of chlorinated VOCs were detected during the Phase II ESA. However, soil vapor monitoring point SV-9 was destroyed during the SRA-2 excavation activities and was subsequently replaced by SV-9R. Soil vapor points SV-10 and SV-11 were installed at 126 HJB. Soil vapor sampling point SV-10 is located along the northwest border of the property boundary, while soil vapor monitoring point SV-11 is located along the property boundary between 126 HJB and 333 Clinton Avenue. Soil vapor monitoring points (SV-12 through SV-14) were installed at 132 HJB or in the City's right-of-way on First Street, adjacent to that property. Soil vapor monitoring point SV-15 is located in the common alley between HJB 146 and HJB 148.

Soil vapor samples were collected using the same summa canister sampling train described in Section 4.5.1, with the exception that a sampling line is required to connect the soil vapor point to the summa canister. All soil vapor samples were sent to a NYSDOH ELAP and NYSDEC ASP-approved laboratory under chain-of-custody procedures for analysis of VOCs by USEPA Method TO-15. All soil vapor sampling, handling activities, and QA/QC sampling were conducted in accordance with the QAPP.

4.6. INVESTIGATION DERIVED WASTE

Investigation derived wastes were handled in accordance with the NYSDEC Proposed Decision TAGM Disposal of Contaminated Groundwater Generated During Site Investigations and the Final TAGM – Disposal of Drill Cuttings. Soil and/or groundwater were contained in U.N.-approved 55-gallon drums. The drums were properly labeled with their contents, and staged on-site until they could be properly disposed off-site. Soil cuttings and groundwater were disposed by West Central Environmental Corp. and MC Environmental Services, inc. as non-regulated non-hazardous waste based on the results of soil and groundwater samples collected from the site. Investigation derived waste disposal documentation is provided in Appendix I.

4.7. SURVEY

Upon completion of the field investigation activities, the location of each monitoring well was surveyed to the nearest 0.1-foot and horizontally referenced to the same datum used to create the site base map. Monitoring well measurement point elevations for top of casing and ground surface were surveyed to the nearest 0.01-foot vertically to allow for evaluation of local groundwater flow patterns. Additionally, the location of each soil boring and soil vapor monitoring point was surveyed to the nearest 0.1-foot.

With the exception of the sampling locations evaluated in 2007 (SB-66 through SB-83), surveying was completed by a licensed land surveyor. The 2007 sampling locations were surveyed by Malcolm Pirnie based on measurements from existing sampling locations. The top of casing elevations for groundwater monitoring wells MW-17, MW-18, MW-19, and MW-6R were measured to the nearest 0.01-foot vertically, referenced from groundwater monitoring well MW-7.

4.8. PRELIMINARY DATA EVALUATION AND IRM RECOMMENDATION

A continuous evaluation of the information and data obtained from the Site Investigation was performed in consultation with the NYSDEC. Based upon the results of the investigation, no Interim Remedial Measures (IRMs) were warranted at the site.

5. Off-Site Soil Vapor Intrusion Investigation

Based on review of the data collected during the RI, and at the request of the NYSDEC and NYSDOH, an evaluation of off-site soil vapor intrusion potential was conducted at 204 Second Street and 335 Clinton Avenue in August 2008.

5.1. 204 Second Street

Indoor air (IA-1), basement air (BA-1), and sub-slab air (SS-1) samples were collected from 204 Second Street concurrently with an ambient air sample (AA-1) placed upwind on the opposite side of 2nd Street to establish background conditions for local ambient air quality. Each air sample was collected over an 8-hour period using a 6-liter Summa canister accordance with the QAPP, and sent to a NYSDOH ELAP and NYSDEC ASP-approved laboratory under chain-of-custody procedures for analysis of VOCs by USEPA Method TO-15. All air sampling and handling activities were conducted in accordance with the QAPP.

5.2. 335 Clinton Avenue

Indoor air (IA-2) and basement air (BA-2) samples were collected from 335 Clinton Avenue. Each air sample was collected over an 8-hour period using a 6-liter Summa canister accordance with the QAPP, and sent to a NYSDOH ELAP and NYSDEC ASP-approved laboratory under chain-of-custody procedures for analysis of VOCs by USEPA Method TO-15. All air sampling and handling activities were conducted in accordance with the QAPP.

6. Data Validation

In accordance with the Work Plan, data validation was performed for the samples collected during the RI as well as the off-site soil vapor intrusion evaluation. As requested by NYSDEC, analytical results for soil, groundwater, soil vapor and ambient samples collected in 2007 (SRA and subsequent investigation sampling) did not require third-party data validation. The Data Validation Reports are included in Appendix J. Sample processing was generally conducted in compliance with the analytical protocol requirements and quality criteria. All data were classified as usable with some minor qualification, with the following exceptions:

- Several VOCs and SVOCs analyses were conducted outside of the required holding time. The corresponding sample results were qualified as estimated (“J”).
- Results for tentatively identified compounds (TICs) in the groundwater sample from HJB-MW-3 collected on 4/12/06 were rejected due to the presence of the corresponding TICs in the associated trip blank.
- Hexachlorocyclopentadiene and 2,4-dinitrophenol results in soil boring samples collected on 6/12 and 6/13/2007 were rejected due to recoveries less than 10%.
- Total and dissolved metals analyses for groundwater sample HJB-MW-4 collected on 4/12/06 were rejected because the data for these fractions may have been switched during laboratory analysis.
- Groundwater sample HJB-MW-4 collected on 7/28/2006 contained TICs which were also present in the associated field blank. The results for TICs in this sample were rejected.

Details of additional qualified data are discussed in Appendix J.

7. Nature and Extent of Contaminants

7.1. FIELD OBSERVATIONS

The property at 339 Clinton Avenue is the only property on the site with a structure. The building at 339 Clinton Avenue is a three story brick structure with a basement. The building at 148 Henry Johnson Boulevard (off-site) was demolished sometime during 2008 and leveled to grade. The ground surface at the rear of the building is covered with grass and deteriorated asphalt. The ground surface at 124, 126, and 130 HJB is covered with grass. The ground surface at 132, 138, and 150 HJB, as well as 214 and 216 Second Street, is covered with either gravel or gravely sand with limited grassy vegetation. Portions of the property at 132 HJB are also covered with deteriorated asphalt and concrete. The only trees present on the site are located at southern extent of 132 HJB.

As shown in the soil boring logs, overburden materials observed in soil cores generally consisted of fill material overlying cohesive brown and gray clay. Bedrock was not encountered during the site investigation.

Visual and olfactory evidence of petroleum related compounds was noted in several soil borings completed on-site. Soil samples from borings completed at 132 HJB contained PID readings up to 1,500 ppm (SB-33 (6-8)), which was the greatest PID reading reported during the investigation. Soil boring samples collected from 124 HJB, 138 HJB, and 150 HJB also contained PID readings indicating the possible presence of VOCs. The maximum PID reading from soil boring samples collected at each of these properties was 400 ppm (SB-55(7-8)), 103 ppm (SB-67(7-8)), and 97 ppm (SB-49(10-11)), respectfully. None of the soil boring samples collected from off-site soil boring locations (SB-62, SB-63, SB-64, and SB-65) contained any field evidence of petroleum-related compounds. With the exception of MW-4, which contained a slight sheen, non-aqueous phase liquid was not detected in any groundwater monitoring wells sampled during the investigation.

7.2. LABORATORY RESULTS

Laboratory results for samples collected during the RI are summarized in Tables 7-1 and 7-2 (surface soil samples), Tables 7-3, 7-4, and 7-5 (soil samples), Tables 7-6 and 7-7 (groundwater samples), and Table 7-8 (ambient air and soil vapor samples). The nature and extent of the soil contamination in the vicinity of SRA-1 and SRA-2 was presented in Section 3. A graphical depiction of the pre-SRA soil and surface soil analytical results is

provided on Figures 7-1 (VOCs and SVOCs) and Figure 7-2 (Metals and PCBs). These figures show detected analytes at each location and highlight those contaminants and their concentrations which exceed the Commercial Soil Cleanup Objectives (CSCOs) and/or Protection of Groundwater SCOs for the site. Locations without annotation boxes did not have detectable concentrations of the analytes. Figure 7-3 depicts the VOCs and SVOCs results of the groundwater samples collected from the monitoring wells during the RI; Figure 7-4 presents the metals results in groundwater. These figures show detected analytes at each monitoring well location, and highlight those contaminants and their concentrations which exceed the applicable NYSDEC Class GA Groundwater Standards. Locations without annotation did not have detectable concentrations of the analytes. Analytical laboratory reporting forms for samples collected during the investigation are provided in Appendix K.

7.2.1. Surface Soil

Tables 7-1 and 7-2 summarize the analytical results for soil samples collected during the site investigation. The 6 NYCRR Part 375 CSCOs are also listed in Tables 7-1 and 7-2 for comparison. The analytical results are also summarized on Figures 7-1 (SVOCs) and 7-2 (metals and PCBs).

Figure 7-2 shows that metals were present at concentrations greater than the applicable SCOs in surface soil samples from three of the assessment properties (124 HJB, 132 HJB, and 214 Second Street). Only one of the assessment properties (124 HJB) contained concentrations of PCBs in surface soil samples greater than the 6 NYCRR Part 375 CSCO or Protection of Groundwater SCO. As indicated below, none of the surface soil samples collected from the assessment properties contained concentrations of SVOCs greater than the applicable SCOs.

7.2.1.1. SVOCs

As shown in Table 7-1, none of the on-site surface soil samples and background samples collected during the site investigation contained SVOCs at concentrations greater than the corresponding 6 NYCRR Part 375 CSCOs.

7.2.1.2. Metals

As shown in Table 7-2, surface soil sample SS-8A contained lead at a concentration (1,100 milligrams per kilogram (mg/kg)) that exceeded the corresponding 6 NYCRR Part 375 CSCO of 1,000 mg/kg. Surface soil sample SS-8, which was collected from the same location during the USEPA Brownfields Assessment Pilot Program in July 2004, contained a lead concentration of 1,080 mg/kg. Surface soil samples SS-8 and SS-8A were collected at 214 Second Street, near the location of a former UST. Lead concentrations in all other on-site surface soil and background samples collected during the site investigation were less than the corresponding 6 NYCRR Part 375 CSCO.

7.2.1.3. PCBs

As shown in Table 7-2, the total concentration of PCBs in the surface soil sample collected from SS-1A (20 mg/kg) was greater than the corresponding 6 NYCRR Part 375 CSCO of 10 mg/kg. PCBs were not analyzed during the USEPA Brownfields Assessment Pilot Program (July 2004). Surface soil sample SS-1A was collected from a location that was within the excavation limits for the SRA conducted at 124 HJB. During the site investigation, PCBs were only detected at one other on-site surface soil location (SS-8A - 0.51 mg/kg) at a total concentration less than the corresponding NYCRR Part 375 CSCO.

7.2.2. Subsurface Soil

Tables 7-3, 7-4, and 7-5 summarize the analytical results for subsurface soil samples collected during the site investigation. The 6 NYCRR Part 375 CSCOs and Protection of Groundwater SCOs are also listed in Tables 7-3, 7-4, and 7-5 for comparison. The analytical results are also summarized on Figures 7-1 (VOCs and SVOCs), and 7-2 (metals).

Figure 7-1 shows that three of the 10 assessment properties (124, 132, and 138 HJB) contained concentrations of VOCs and/or SVOCs greater than the corresponding 6 NYCRR Part 375 Protection of Groundwater SCOs. As shown in Figure 6-2, subsurface soil samples from six of the assessment properties (124, 126, 132, and 150 HJB; 339 Clinton Ave; and 214 Second Street) and one off-site property north of HJB contained metals at a concentration greater than the applicable 6 NYCRR Protection of Groundwater SCOs. Only one assessment property (126 HJB) contained a metals concentration greater than the corresponding 6 NYCRR Part 375 CSCO.

7.2.2.1. VOCs

As shown in Table 7-3, none of the subsurface soil samples collected during the site investigation contained VOCs at concentrations greater than the corresponding 6 NYCRR Part 375 CSCOs. Table 7-3 shows that samples from four subsurface soil samples in the vicinity of 124 HJB (SB-55(7-8), SB-57(5.5-7.5), SB-59(6-7), and SB-60(6-8)) contained concentrations of VOCs greater than the respective Protection of Groundwater SCOs. However, as discussed in Section 3 and as shown on Figure 3-2, soil encompassing these borings was removed during the SRA-2 excavation activities. Three subsurface soil samples (SB-29(6-8), SB-31(6-8), and SB-33(6-8)) located at 132 HJB, and one subsurface soil sample (SB-68(6-7)) located at 138 HJB, also contained concentrations of VOCs greater than the Protection of Groundwater SCOs.

7.2.2.2. SVOCs

As shown in Table 7-4, none of the subsurface soil samples collected during the site investigation contained SVOCs at concentrations greater than the corresponding 6 NYCRR Part 375 CSCOs. Table 7-4 also shows that only one subsurface soil sample

(SB-32(6-8)) located in the vicinity of 132 HJB contained concentrations of SVOCs (chrysene (1.2 mg/kg)) greater than the Protection of Groundwater SCO (1 mg/kg for chrysene).

7.2.2.3. Metals

As shown in Table 7-5, subsurface soil sample SB-40 (2-4) contained arsenic at a concentration (21.7 mg/kg) that exceeded the corresponding 6 NYCRR Part 375 CSCO of 16 mg/kg. Soil sample SB-40 is located at 126 HJB, along the property boundary between 126 HJB and 335 Clinton Avenue. Arsenic concentrations in all other subsurface soil samples collected during the site investigation were less than the corresponding 6 NYCRR Part 375 CSCO. Table 7-5 shows that mercury was detected in eight subsurface soil samples at concentrations greater than the Protection of Groundwater SCO of 0.73 mg/kg. The maximum concentration of mercury in these samples was 2.1 mg/kg in the sample from SB-35 (10-12) which was collected at 132 HJB. Lead and chromium were detected in four subsurface soil samples at concentrations greater than the Protection of Groundwater SCOs of 450 mg/kg and 19 mg/kg, respectfully. The sample collected from SB-61(0-2) contained the maximum lead concentration (607 mg/kg) reported in subsurface soil samples collected during the RI. The chromium concentration in this sample is 20 mg/kg, which is slightly above the Protection of Groundwater SCO (19 mg/kg) for this element. The maximum chromium concentration (20.8) was reported in subsurface soil sample SB-57 (11-12), however the soil from this boring location was excavated during SRA-2. Selenium was reported in subsurface soil samples SB-42(5-7) and SB-61(0-2) at a concentration of 4.3 mg/kg which is slightly above the Protection of Groundwater SCO for selenium of 4 mg/kg.

7.2.3. Groundwater

Analytical results for groundwater samples collected during the site investigation are summarized in Tables 7-6 and 7-7 and are shown on Figures 7-3 (VOC and SVOCs), and 7-4 (metals). The applicable NYSDEC Class GA Standards for groundwater are also listed in Tables 7-6 and 7-7 for comparison.

Figure 7-3 shows that groundwater samples from four of the 10 assessment properties (124, 132, and 138 HJB and the common alley) and one off-site property between 138 HJB and the common alley (146 HJB) contained concentrations of VOCs greater than the applicable NYSDEC Class GA Standards. As indicated below, none of the groundwater samples contained SVOCs at a concentration greater than the applicable NYSDEC Class GA Standard. As shown on Figure 7-4, all of the groundwater samples analyzed for metals during the RI contained at least two elements at concentrations greater than the corresponding NYSDEC Class GA Standards.

7.2.3.1. VOCs

As shown in Table 7-6 and on Figure 7-3, groundwater samples collected from monitoring wells MW-1, MW-2R, MW-2R duplicate, MW-3, MW-4, MW-18, MW-19, and MW-B contained concentrations of at least one VOC that exceeded corresponding NYSDEC Class GA Standard. MTBE, a common gasoline additive, was detected at concentrations greater than the NYSDEC Class GA Standard (10 micrograms per liter ($\mu\text{g/L}$)) in groundwater samples collected from MW-1 and MW-2R during the site investigation. The MTBE concentration at MW-1 was similar between April and July 2006, but was three times greater in October 2006, while the MTBE concentration at MW-2R was consistent throughout the duration of the site investigation. These two monitoring wells are located at 132 HJB, near a former vehicle maintenance and refueling facility. The groundwater sample collected from MW-3 in April 2006 contained an isopropylbenzene concentration that was greater than the corresponding NYSDEC Class GA Standard of 5 $\mu\text{g/L}$. The isopropylbenzene concentrations at MW-3 decreased in the July and October 2006 samples from this well to less than the NYSDEC Class GA Standard.

Table 7-6 and Figure 7-3 show that groundwater samples collected from MW-B, MW-4, MW-18, and MW-19 contained cis-1,2-dichloroethene (cDCE) at concentrations greater than the corresponding NYSDEC Class GA Standard of 5 $\mu\text{g/L}$. Vinyl chloride (VC) was detected in samples collected from MW-B, MW-4, and MW-19 at concentrations greater than the applicable NYSDEC Class GA Standard of 2 $\mu\text{g/L}$. Groundwater samples from monitoring wells MW-4, MW-18, and MW-19 contained concentrations of tetrachloroethene (PCE), and trichloroethene (TCE) that exceeded the corresponding NYSDEC Class GA Standard of 5 $\mu\text{g/L}$. In addition the samples from MW-4 contained 1,1-dichloroethene (1,1-DCE) and the samples from MW-19 contained trans-1,2-dichloroethene (trans-1,2 DCE) at concentrations greater than the NYSEC Class GA Standard of 5 $\mu\text{g/L}$, respectfully.

The 1,1-DCE and VC concentrations at MW-4 remained consistent during each sampling event, while the cDCE, PCE, and TCE concentrations increased between the first and third rounds of groundwater sampling. Monitoring well MW-B was only sampled by Malcolm Pirnie during the October 2006 sampling round and monitoring wells MW-18 and MW-19 were only sampled during the July 2007 sampling event. Analytical data from groundwater samples collected from MW-A, MW-B, and MW-C in August 2006 by STV, Inc. were provided by the City and are shown on Figure 7-3. Methylene chloride was detected in samples from each of the three wells at concentrations exceeding the NYSDEC Class GA Standard of 5 $\mu\text{g/L}$. However, methylene chloride was detected in the associated trip blank for these samples, and may not represent groundwater conditions, supported by the fact that methylene chloride was not detected in subsequent samples from these wells.

7.2.3.2. SVOCs

As shown in Table 7-6, none of the groundwater samples collected during the site investigation contained SVOCs at concentrations greater than the corresponding NYSDEC Class GA Standards.

7.2.3.3. Metals

As shown in Table 7-7 and on Figure 7-4, sodium was detected at concentrations greater than the corresponding NYSDEC Class GA Standard (20,000 µg/L) in every groundwater sample collected during the site investigation, with the exception of the groundwater sample collected from MW-12 in October 2006. The range in sodium concentrations that exceeded the NYSDEC Class GA Standard was 31,500 µg/L at MW-11 in October 2006 to 2,120,000 µg/L at MW-13 in July 2006. However, these results (supported by elevated chloride results) are expected due to the prevalent use of de-icing agents. In general, there were no differences in concentration across the site as well as between the sampling rounds.

Table 7-7 and Figure 7-4 show that during the October 2006 sampling round, selenium was detected in every groundwater sample, with the exception of MW-13. Concentrations of selenium exceeded the corresponding NYSDEC Class GA Standard (10 µg/L) in groundwater samples collected from MW-7, MW-11, MW-12, MW-13, MW-15, MW-B, and MW-C. Selenium had not been detected in any of the monitoring wells prior to October 2006.

As shown in Table 7-7 and on Figure 7-4, metals were not detected at concentrations greater than corresponding NYSDEC Class GA Standards in any other groundwater samples collected during the site investigation, with the exception of the lead concentration (78.9 µg/L) at monitoring well MW-13 in July 2006 and the arsenic concentration (54.2 µg/L) at monitoring well MW-8 in October 2006, which were greater than the corresponding NYSDEC Class GA Standard of 25 µg/L.

7.2.3.4. Natural Attenuation Parameters

Natural attenuation refers to the metabolization and degradation of contaminants in the subsurface by naturally-occurring in-situ microbiological processes. Natural attenuation parameters were analyzed in the groundwater samples collected in April, July, and October, 2006 to aid in assessing the type of biological processes and the rate and extent of the contaminant degradation at the site.

PETROLEUM CONTAMINANTS

The two primary microbiological processes involved in the natural attenuation of petroleum constituents are aerobic and anaerobic metabolism. Natural attenuation by aerobic processes requires that sufficient oxygen be available for metabolic processes to occur. In an oxygen-limited environment, such as groundwater, aerobic metabolism

results in the depletion of oxygen, after which anaerobic processes may predominate. Anaerobic metabolism is evident by the use of alternative electron acceptors, such as nitrate, ferric iron (Iron(III)), and sulfate, if reducing conditions (Redox $< (+) 100$) are occurring. Evidence of these processes can be documented by comparing natural attenuation parameters in contaminated groundwater to those of non-contaminated groundwater (i.e., up-gradient of the site) (Wiedermeier, et al., 1995).

The driving force of petroleum compound degradation is the transfer of electrons from an electron donor (contaminants) to an electron acceptor (oxygen, nitrate, sulfate, etc.). The kinetics of aerobic utilization of oxygen and anoxic utilization of electron acceptors are very rapid. Consequently, due to the comparatively slow movement of groundwater, electron acceptors cannot be continuously supplied and frequently become depleted in an area of hydrocarbon-impacted groundwater. Portions of the impacted area can then revert to anaerobic processes with use of alternative electron acceptors, such as Iron(III) or sulfate. Since these anaerobic processes occur at kinetic rates slower than the kinetic rates of oxygen and nitrate utilization, the groundwater velocity is often adequate to continuously re-supply these electron acceptors. In such cases, anaerobic processes can be responsible for the major bioattenuation of petroleum components in groundwater.

The preferred order of electron acceptor use is: oxygen, nitrate, Iron(III), and sulfate. It is important to note that the geochemical/physical characteristics of the subsurface must be in the correct range for microbiological metabolism to occur. The major parameters used to estimate natural attenuation of petroleum compounds as they relate to the site are described below.

PH

In general, microbes which are capable of degrading petroleum hydrocarbons prefer pH values ranging from 6 to 8 standard units (s.u.) (Wiedermeier, et al., 1995). Measured pH values in the monitoring wells ranged from 6.56 to 7.53 s.u., indicating that the pH is in the correct range for microbiological degradation.

REDUCTION/OXIDATION POTENTIAL

The reduction/oxidation (redox) potential of groundwater is indicative of the relative tendency of the groundwater to accept or transfer electrons. The measured redox potentials in the monitoring wells ranged from (-)140 to (+)174 millivolts (mV), which is conducive for anaerobic biodegradation.

DISSOLVED OXYGEN

In general, the DO concentrations varied across the site during the July and October 2006 sampling rounds. During the April 2006 sampling round, the DO concentrations were similar (3.63 milligram per liter (mg/L) to 4.31 mg/L) at the three monitoring wells sampled, MW-1, MW-3, and MW-4. In July 2006, the DO concentrations measured at the site ranged from 2.23 mg/L at MW-13 to 14.71 mg/L at MW-1. The DO

concentration measured at MW-1 is anomalous and not possible for groundwater since at a temperature of 17.3°C, DO has a saturation of 9.147 mg/L. The highest DO concentrations in July 2006 were at monitoring wells MW-14 (8.94 mg/L) and MW-15 (8.8 mg/L), which are located in the City right-of-way on Clinton Avenue, down-gradient of the site. The concentrations in the groundwater samples collected from the remaining wells at the site were relatively similar. During the October 2006 sampling round, DO concentrations at half of the monitoring wells was 0.00 mg/L. These monitoring wells were located at 138 HJB, up-gradient of the former gas station; 132 HJB, location of the former gas station; and 126 HJB and City right-of-way on Clinton Avenue, down-gradient of the former gas station. The remaining DO concentrations ranged from 1.4 mg/L at MW-7 to 9.91 mg/L at MW-11.

Given that DO values in groundwater typically range from 8.0 to 9.0 mg/L, these data show that the groundwater up-gradient and within the site is depleted in oxygen before it encounters the petroleum-impacted area. Given the oxygen-depleted nature of the groundwater entering the site, aerobic biodegradation is not a significant-contributor to natural attenuation at the site.

NITRATE, SULFATE, AND IRON(III)

After dissolved oxygen has been depleted, nitrate, sulfate, and Iron(III) can be utilized as alternate electron receptors for the biodegradation of petroleum compounds through denitrification, sulfate reduction, and iron reduction, respectively. The depletion of nitrate and sulfate, coupled with the production of ferrous iron (Iron(II)) (from Iron(III)), typically indicates that these processes are active components of anaerobic degradation. Collectively, these data indicate that denitrification and iron reduction are occurring and are components of the intrinsic biodegradation processes.

CHLORINATED CONTAMINANTS

The primary microbiological process involved in the natural attenuation of chlorinated solvents is reductive dechlorination. The process of reductive dechlorination is dependent on the geochemical conditions in the subsurface and the availability of microorganisms that are responsible for degradation. Under anaerobic conditions, reductive dechlorination results in the removal of chlorine atoms from the chlorinated VOCs, such that PCE is dechlorinated to TCE, which is subsequently dechlorinated to form DCE, VC, and ultimately, ethene. For the natural attenuation of chlorinated solvents to occur, electron acceptors (chlorinated VOCs), electron donors (sulfate, nitrate, iron, and methane), an anaerobic and reducing environment (low DO concentrations and redox conditions), a carbon source, and specific microbes are needed. In instances where the geochemical conditions and availability of microorganisms are not ideal for reductive dechlorination, the complete degradation process may terminate after removal of only some of the chlorine atoms. Figure 6-5 shows the reductive dechlorination pathways for various chlorinated solvents, including those present at the site.

During reductive dechlorination, the chlorinated VOCs (CVOCs) act as the electron acceptor and are broken down by microbes to less chlorinated solvents. Through this degradation process, the PCE and TCE concentrations decrease, while the cDCE and VC concentrations initially increase. Over time, cDCE and VC may be degraded and concentrations decrease to less than baseline concentrations. The products of the complete reductive dechlorination of CVOCs include chloride, carbon dioxide, ethane, ethene, and are dependent on the chemical structure of the parent compound.

Ferric iron, nitrate, sulfate, and methane act as electron donors in the biodegradation process of CVOCs. Reductive dechlorination has been demonstrated under nitrate- and iron-reducing conditions, but the most rapid biodegradation rates, affecting the widest range of CVOCs occur under sulfate-reducing and methanogenic conditions (USEPA, 1998b). As the CVOCs are biodegraded, concentrations of nitrate, sulfate, and methane decrease as these electron donors are utilized, while the concentrations of Iron(II) increase. The major parameters used to estimate natural attenuation of chlorinated solvents as they relate to the site are described below.

REDUCTION/OXIDATION POTENTIAL

The measured redox potentials in the monitoring wells ranged from (-)140 to (+)174 mV. A reducing environment is essential for reductive dechlorination to occur. Monitoring wells MW-4, MW-4R, MW-10, and MW-11 which are located in or near the area that contained elevated concentrations of chlorinated solvents in groundwater, had measured redox potentials that ranged from (-)48 to (+)147 mV, indicating that the redox potential in this area is conducive to reductive dechlorination.

DISSOLVED OXYGEN

An anaerobic environment is essential for reductive dechlorination to occur. As discussed previously, the DO concentrations varied across the site during the July and October 2006 sampling rounds. During the July 2006 sampling round, all DO concentrations were greater than 2.0 mg/L. During the October 2006 sampling round, DO concentrations at half of the monitoring wells were 0.00 mg/L. These monitoring wells were located up-gradient of the subsurface chlorinated solvents on 124 HJB. The DO concentration in the groundwater samples collected from MW-4 was 4.09 mg/L in April 2006, but decreased to 1.57 mg/L in October 2006, indicating an anaerobic environment at the time of sampling.

DISSOLVED ORGANIC CARBON AND ALKALINITY

Dissolved organic carbon is used to indicate the amount of carbon in an environment that is available for microbial growth and use, while alkalinity is an indicator of overall microbial activity. It has been shown that increased biological activity can produce increases in alkalinity concentrations (USEPA, 1998b). DOC was not detected in the groundwater collected from any of the monitoring wells during the site investigation,

with the exception of MW-B (14 mg/L) and MW-C (18 mg/L) in October 2006. These two monitoring wells are located at 138 HJB, up-gradient of the chlorinated solvent area. Alkalinity concentrations in groundwater samples collected at the site ranged from 250 mg/L to 720 mg/L, indicating that biological is conducive across the entire site.

CHLORINATED VOLATILE ORGANIC COMPOUNDS

The only monitoring well that contained concentrations of CVOCs at concentrations greater than the corresponding NYSDEC Class GA Standards during the site investigation was MW-4. During the reductive dechlorination process, PCE and TCE are broken down to cDCE and VC and ultimately down to water and carbon dioxide by the removal of chlorine atoms. PCE, TCE, cDCE, and VC were all detected at various concentrations during the investigation. Based on the data, the presence of the breakdown products of PCE (TCE, cDCE, and VC) is an indication that microbes are present in the subsurface near MW-4 and to some extent, naturally breaking down the chlorinated VOCs in this area.

ETHENE

Ethene, which is a product of the complete degradation of PCE and TCE, was not detected in the groundwater of any of the samples collected during the site investigation.

NITRATE, SULFATE, IRON(III), AND METHANE

Nitrate, sulfate, Iron(III), and methane can be utilized as electron donors for the biodegradation of chlorinated solvents through denitrification, sulfate reduction, iron reduction, and methanogenesis, respectively. The depletion of nitrate and sulfate, coupled with the production of Iron(II) (from Iron(III)), typically indicates that these processes are active components of anaerobic degradation. As discussed previously, the area in which nitrate was depleted and Iron(II) was produced is up-gradient of the area with elevated chlorinated VOCs concentrations (124 HJB). Ferrous iron was not detected in the groundwater samples collected from monitoring wells in the vicinity of 124 HJB (MW-10 and MW-11), but nitrate and sulfate are present, which indicates that there are potential electron donors for use in the reductive dechlorination process. Methane was detected only in monitoring wells MW-2R, MW-A, MW-B, and MW-C, which are all up-gradient of 124 HJB.

7.2.4. Ambient Air and Soil Vapor

Analytical results for ambient air and soil vapor samples collected from the site are summarized in Table 7-8. As shown in Table 7-8, VOCs were detected in all of the ambient air and soil vapor samples. Analytical laboratory reporting forms for samples collected during the investigation are provided in Appendix K. Although most of the values are relatively low, the absence of NYSDEC or NYSDOH guidance for most of these compounds necessitates alternative guidance values. Soil vapor SCGs are therefore based upon comparison to the collected ambient air sample results. Additionally, the

concentrations of VOCs in the samples were compared to typical background levels of VOCs in outdoor and indoor air using the background levels provided in the NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in New York State” dated October 2006. The background levels are not SCGs and are used only to assist in data evaluation.

Two ambient air samples were collected during the soil vapor sampling effort. Both samples (AA-1 and AA-2) contained VOCs at similar concentrations to several of the soil vapor samples. These background samples were collected from the common alley between 146 and 148 HJB and 124 HJB, respectfully.

Helium tracer gas was analyzed at each soil vapor monitoring location to evaluate the integrity of each monitoring point using a hand-held helium detector. A helium concentration of three percent was detected during the tracer gas analysis of SV-05. Additional bentonite was placed around the surface seal at this monitoring location in an effort to improve the seal. However, a similar concentration of helium was detected in the subsequent tracer gas analysis. This was the only sampling location that helium was detected during the tracer gas analysis. Chloroform was detected in the sample from SV-05 at a concentration of $770 \mu\text{g}/\text{m}^3$, which is at least 10 times greater than any of the other chloroform sample results. The other VOC results from this sample were consistent with the concentrations of VOCs present in the remaining soil vapor samples.

The greatest concentrations of VOCs in soil gas were present in the immediate vicinity of 124 HJB. Soil vapor sample SV-9R (located within the SRA-2 excavation) and SV-10 (located up-gradient of SRA-2) contained PCE ($4,800 \mu\text{g}/\text{m}^3$ and $390 \mu\text{g}/\text{m}^3$, respectfully) and TCE ($24 \mu\text{g}/\text{m}^3$ and $2.1 \mu\text{g}/\text{m}^3$, respectfully) at concentrations that were significantly greater than the concentration of these compounds in the other soil vapor samples. The presence of volatile aromatic compounds in the soil gas indicates that the potential pathway for off-site soil vapor should be further investigated.

7.2.5. Off-Site Air and Soil Vapor

Analytical results for off-site air and soil vapor samples collected from 204 Second Street and 335 Clinton Avenue are summarized in Table 7-8. As shown in Table 7-8, VOCs were detected in all of the ambient air and soil vapor samples. Analytical laboratory reporting forms for samples collected during the investigation are provided in Appendix K. Although most of the values are relatively low, the absence of NYSDEC or NYSDOH guidance for most of these compounds necessitates alternative guidance values. Soil vapor SCGs are therefore based upon comparison to the collected ambient air sample results. Additionally, the concentrations of VOCs in the samples were compared to typical background levels of VOCs in outdoor and indoor air using the background levels provided in the NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in New York State” dated October 2006. The background levels are not SCGs and are used only to assist in data evaluation.

7.2.5.1. 204 Second Street

One ambient air sample was collected during the off-site soil vapor intrusion sampling effort. Sample AA-1 contained VOCs at similar concentrations to the indoor, basement, and sub-slab air samples, with the exception of acetone and ethanol, which were generally detected at lower concentrations than the building samples.

Helium tracer gas was analyzed at the sub-slab sampling location to evaluate the integrity of the sampling point using a hand-held helium detector. No helium was detected during the tracer gas analysis of SS-1. Acetone and ethanol were detected in the IA-1 sample at concentrations of 280 and 260 $\mu\text{g}/\text{m}^3$, respectively, which are two and one order of magnitude, respectively, greater than the other air samples collected at this location. Isopropanol was detected in the building samples at concentrations between 5.8 and 8.9 $\mu\text{g}/\text{m}^3$, one order of magnitude higher than the ambient air sample. The other VOC results from the samples in this building were consistent with each other and the ambient air sample.

7.2.5.2. 335 Clinton Avenue

One indoor air and one basement sample were collected during the off-site soil vapor intrusion sampling effort from this building. VOC concentrations in these two samples were generally consistent with the ambient air sample (AA-1) collected concurrently, with the exception of ethanol in BA-2 which was detected at a concentration of 140 $\mu\text{g}/\text{m}^3$, compared to 7.7 $\mu\text{g}/\text{m}^3$ in the ambient air sample. Additionally, hexane and methylene chloride were detected in IA-2 at concentrations of 11 $\mu\text{g}/\text{m}^3$ and 12 $\mu\text{g}/\text{m}^3$, respectively, compared to 0.99 $\mu\text{g}/\text{m}^3$ and 0.53 $\mu\text{g}/\text{m}^3$ in the ambient air sample, respectively.

7.3. HYDRAULIC CONDUCTIVITY TESTING RESULTS

Results of hydraulic conductivity testing are summarized in Table 7-9. Calculated hydraulic conductivity values range from 0.09 to 0.33 feet per day (ft/day), which are consistent with the clay and silty to fine sands in which the wells are screened (Fetter, 1994).

8. Remedial Investigation Summary

8.1. Soil Removal Actions

Two properties on the site were previously identified as containing a heating oil UST (216 2nd Street) and PCE-impacted soil (124 HJB). Subsurface investigations were performed during the RI to evaluate the extent of the contaminants at these locations. Based on the evaluations, SRAs were conducted at each of these properties.

Approximately 41 tons of petroleum-impacted soil and the associated UST were removed during SRA-1. The total amount of PCE-impacted soil removed during SRA-2 was approximately 363 tons. Based on the results of SRA-1 and SRA-2, field observations made during the site investigation, and the analytical results for samples collected on- and off-site, the main sources of contamination at the site have been removed.

8.2. Remedial Investigation

None of the soil samples collected from the site contained concentrations of VOCs or SVOCs greater than the 6NYCRR Part 375 CSCOs. Lead was detected in one surface soil sample and arsenic was detected in only one subsurface soil sample at concentrations above the applicable 6NYCRR Part 375 SCOs. Although PCBs were detected in one surface soil sample at a concentration greater than the 6NYCRR Part 375 SCOs, the sample was collected from a location that was within the subsequent SRA-2 excavation limits.

Several groundwater samples contained concentrations of VOCs greater than NYSDEC Class GA Standards. The samples collected from the groundwater monitoring wells in the SRA-2 excavation (MW-4/MW-4R) contained the greatest concentration of VOCs. However, the VOC concentrations in these samples decreased by an order of magnitude in the groundwater sampling event following the completion of SRA-2. Groundwater samples collected from 132 HJB (MW-1 and MW-2R) contained MTBE at concentrations greater than the NYSDEC Class GA Standard. The groundwater sample from MW-3 contained isopropylbenzene at a concentration that exceeded the NYSDEC Class GA Standard during the April 2006 sampling event. The concentrations of this compound in subsequent samples from this location (July and October 2006) were less than the NYSDEC Class GA Standard. Chlorinated VOCs were detected in the samples from MW-B (a groundwater monitoring well located at 146 HJB). The presence of these compounds in this off-site well prompted further investigations at 138 HJB and the

common alley between 146 and 148 HJB. Groundwater samples collected from boundary groundwater monitoring wells (MW-18 and MW-19) installed during the additional investigation contained concentrations of chlorinated VOCs at concentrations greater than the applicable NYSDEC Class GA Standards.

All of the groundwater samples analyzed for metals (some monitoring locations did not contain a sufficient sample volume to analyze for metals) contained concentrations of metals greater than the NYSDEC Class GA Standards. Metals exceedances were reported in on- and off-site wells sampled during the RI. Iron, magnesium, and manganese were among the most common groundwater metals exceedances and are likely due to naturally occurring soil constituents. Sodium exceeded the NYSDEC Class GA Standard in all of the groundwater samples collected during the RI. The prevalence of this element, coupled with the presence of chloride detections in all of the groundwater samples, is likely due to deicing agents. Selenium was also detected in several groundwater monitoring wells at concentrations greater than the applicable NYSDEC Class GA Standard.

All of the soil vapor and ambient air samples collected during the RI contained VOCs. Chlorinated VOCs were detected in soil vapor samples collected within and immediately up-gradient of the SRA-2 excavation area at concentrations that were significantly greater than other soil vapor or ambient air samples collected during the RI. While the NYSDOH does not regulate these compounds in soil vapor, they are evaluated in conjunction with the concentrations of chemicals of concern found in other environmental media related to the site. The residual chlorinated VOCs and petroleum-related contaminants remaining at the site could result in vapor intrusion off-site.

8.3. Off-Site Soil Vapor Intrusion Evaluation

Analytical results for off-site air and soil vapor samples collected from 204 Second Street and 335 Clinton Avenue show relatively low concentrations of several VOCs that were generally consistent with ambient air and background levels. Based on review of these data, there does not appear to be a vapor intrusion risk at these locations.

8.4. Conceptual Site Model

With the contaminant source removal during the SRAs, and the remedial investigation activities (excluding the full-scale soil vapor intrusion investigation) completed, the current Conceptual Site Model is as follows:

The site consists of 10 properties that extend for two blocks along the southeastern side of HJB, a major thoroughfare for the City of Albany. The properties are located between Clinton Avenue to the south and Second Street to the north. One property fronts on Clinton Avenue and contains the only structure (a vacant three story “ordinary

construction” brick building) present on the site; two properties front on Second Street; and six properties front on HJB. A common alley is located between 146 HJB and 148 HJB. The site is located in a mixed commercial and residential area. The closest residences are located directly across HJB. The area is served by public water.

Historical uses of the property at 124 HJB resulted in the release of chlorinated VOCs into soil and groundwater. The affected soil (with concentrations greater than 6NYCRR Part 375 Protection of Groundwater SCOs) was removed during SRA-2. The property at 132 HJB formerly contained a service station. Leaking USTs were previously removed from this location by the NYSDEC; however, petroleum-related compounds persist in groundwater at concentrations above NYSDEC Class GA Standards. Chlorinated VOCs in soil and groundwater at 138 HJB, 146 HJB, and the common alley to the north of these properties indicate that a past release occurred in this area or off-site in an upgradient location. A deteriorated fuel oil UST leaked at 216 Second Street and released petroleum-related compounds in the immediate vicinity of the tank. The UST and petroleum-impacted soils were removed during SRA-1.

The surface soils in the undisturbed areas across the site generally consist of sand and silt. Sand and gravel fill is present where the former structures were removed and where the SRAs were completed. The vacant lots at 132 and 138 HJB have recently been used as a contractor staging area for infrastructure repairs performed along HJB. Both properties contain remnants of asphalt piles, sand and gravel backfill, and limited concrete debris apparently associated with the repairs. A surface soil sample collected from 124 HJB contained a total PCBs concentration greater than the applicable 6NYCRR Part 375 SCO, however the soil from this sampling location was removed during SRA-2. One surface soil sample collected from 214 Second Street contained lead at a concentration greater than the corresponding 6NYCRR Part 375 SCO.

The site subsurface consists of primarily of urban fill, underlain by cohesive brown and gray clay and approximately 350 cubic yards (yd³) of clean material used to backfill the SRA-1 and SRA-2 excavation areas. The SRA-1 backfill area is approximately 184 square feet (ft²), with a backfill depth that ranged from 8.5-feet to 11-feet bgs at the south east extent of the excavation. The SRA-2 backfill area is approximately 630 ft² with an average depth of two-feet of two-inch stone at the base and approximately eight-feet of sand and gravel. Subsurface soil samples collected from the site did not contain any VOCs or SVOCs at concentrations greater than the 6NYCRR Part 375 SCOs. In consultation with NYSDEC, soil samples from the 124 HJB area were evaluated using 6NYCRR Part 375 Protection of Groundwater SCOs. Subsequent to the SRA-2 excavation activities, none of the soil samples collected in the vicinity of the SRA-2 area contained concentrations of VOCs or SVOCs greater than the 6NYCRR Part 375 Protection of Groundwater SCOs. Arsenic was the only metal that exceeded the NYSDEC 6NYCRR Part 375 CSCOs in the subsurface soil samples collected at the site.

The sample was collected at 126 HJB near northern border of the property located at 335 Clinton Avenue.

Groundwater VOC exceedances are generally found in three areas of the site. Groundwater samples from monitoring well MW-4 and replacement well MW-4R (located at 124 HJB within the SRA-2 excavation area) contained CVOCs at concentrations greater than the applicable NYSDEC Class GA Standards. Based on the sampling event that was conducted following the SRA-2 activities, the concentrations of CVOCs have decreased by an order of magnitude at this monitoring location. Groundwater samples from MW-1 and MW-2R (located at 132 HJB) contain concentrations of MTBE greater than the corresponding NYSDEC Class GA Standard. Isopropylbenzene was present in groundwater samples collected from MW-3 (also located at 132 HJB) in April 2006 at a concentration greater than the respective NYSDEC Class GA Standard. This compound was not detected in the two subsequent rounds of groundwater samples (July and October, 2006) collected from this well. Groundwater samples from MW-18 and MW-19 contained concentrations of CVOCs greater than the applicable NYSDEC Class GA Standards. The sample from MW-B (an off-site well located between the aforementioned wells) also contained CVOCs greater than the applicable NYSDEC Class GA Standards. These three wells are centrally located between First and Second Street on 138 HJB (MW-18), 146 HJB (MW-B), and the common alley (MW-19). None of the groundwater samples contained SVOCs at concentrations greater than the applicable NYSDEC Class GA Standards.

Metals were detected at all of the groundwater sampling locations evaluated during the RI at concentrations greater than the applicable NYSDEC Class GA Standards. Iron, magnesium, manganese, and sodium exceedances were reported in nearly all of the groundwater samples collected from on- and off-site monitoring wells. Selenium and/or thallium were detected in several on- and off-site groundwater samples at concentrations greater than the corresponding NYSDEC Class GA Standards. Arsenic, lead, and nickel were reported in either the July or October, 2006 samples from monitoring wells MW-8, MW13, and MW-4, respectfully, at concentrations greater than the respective NYSDEC Class GA Standards.

The direction of groundwater flow across the site is generally south toward the Hudson River. The average depth to water measured in the monitoring well network is approximately eight feet bgs. Based on calculated hydraulic conductivity testing (Bouwer and Rice, 1976 and Bouwer, 1989) conducted on monitoring wells, the subsurface soil permeability across the site ranges from 0.09 to 0.33 ft/day. However, the presence of urban fill and buried utility corridors, which are prevalent at the site, could provide preferential pathways that may affect shallow groundwater flow and provide preferential soil vapor intrusion pathways.

The presence of volatile compounds in soil vapor samples indicates that volatilization of some of the remaining petroleum hydrocarbons and chlorinated compounds in the groundwater and soils is occurring. Volatilization through the soils, where biodegradation can occur, or to the ground surface with subsequent breakdown of petroleum-related VOCs, is contributing to the natural attenuation at the site. However, the volatilization from the groundwater and/or soil into the soil vapor may also be an exposure pathway for off-site soil vapor contaminant migration. Analytical results for off-site air and soil vapor samples collected from 204 Second Street and 335 Clinton Avenue indicate that this risk is not present at these locations. Biodegradation of the petroleum hydrocarbons and CVOCs may be reducing contamination levels in the groundwater. The limited data from up-gradient, on-site, and down-gradient sampling locations indicates that anaerobic reactions involving nitrates, ferric iron, sulfates, and methanogenesis are most likely occurring.

9. Exposure/Risk Assessment

In accordance with the ERP guidance a qualitative exposure assessment was performed using the data collected during the remedial investigation. The qualitative exposure assessment consists of characterizing the exposure setting, identifying potential exposure pathways, and evaluating contaminant fate and transport. An exposure pathway describes the means by which an individual may be exposed to contaminants originating from the site. An exposure pathway has five elements: (1) a contaminant source; (2) contaminant release and transport mechanism; (3) a point of exposure; (4) a route of exposure; and (5) a receptor population.

9.1. EXPOSURE PATHWAYS

9.1.1. Soil

On-site surface soils characterized during the site investigation contained concentrations of PCBs and lead at concentrations greater than the applicable 6NYCRR Part 375 CSCOs. Soil was removed from the immediate vicinity of the sample (SS-1A) that contained PCBs during SRA-2. The sample from 214 Second Street (SS-8A) contained PCBs at a concentration less than the corresponding 6NYCRR Part 375 CSCO. Lead exceedances were confirmed in the surface soil sample collected from 214 Second Street, however, surface soil results from the adjacent property (216 Second Street) did not contain any SVOCs, PCBs, or metals greater than the applicable 6NYCRR Part 375 SCOs. Since this was the only surface soil sampling location with lead exceedances, the potential for pedestrians to encounter lead in surface soils through casual contact is minimal. Surface soil samples did not contain any SVOCs at concentrations greater than the 6 NYCRR Part 375 CSCOs.

Off-site subsurface soil, as characterized during the site investigation, did not contain elevated concentrations of VOCs, SVOCs, or metals, and therefore the off-site subsurface soil exposure pathway is eliminated from further evaluation. Subsurface soil with concentrations of VOCs greater than the 6NYCRR Part 375 Protection of Groundwater SCOs was removed during the SRA-2 excavation activities. Confirmation samples collected during the SRA-1 and SRA-2 activities did not contain VOCs or SVOCs at concentrations greater than the 6NYCRR Part 375 Protection of Groundwater or CSCOs. Currently, none of the subsurface soil samples from the site contain concentrations of VOCs or SVOCs greater than 6NYCRR Part 375 SCOs. However, subsurface soil samples from 132 HJB and 138 HJB contain VOCs and/or SVOCs at concentration greater than the 6NYCRR Part 375 Protection of Groundwater SCOs. One subsurface soil sample collected from 126 HJB (SB-40) contained an arsenic concentration greater

than the respective 6NYCRR Part 375 CSCOs. Although none of the other subsurface soil samples contained metals exceedances greater than the 6NYCRR Part 375 CSCOs, several of the on-site assessment properties (339 Clinton Avenue, 126 HJB, 132 HJB, 214 Second Street, and 216 Second Street) and one off-site sampling location (SB-64) contained metals concentrations greater than the applicable 6NYCRR Part 375 Protection of Groundwater SCOs. Subsurface soil samples that contained VOCs, SVOCs, or metals exceedances were collected from sample intervals that ranged from a depth of 2-feet to 15-feet bgs. Therefore, a causal exposure route or point does not exist. However, potential future ground-intrusive activities could create an exposure route.

9.1.2. Groundwater

Groundwater in the vicinity of 124 HJB, 132 HJB and in the central area between First and Second Streets contain several VOCs at concentrations greater than the NYSDEC Class GA Standards. Although the source for the contaminants at 124 and 132 HJB are known, the source of the chlorinated compounds between First and Second Street has not been identified and are potentially off-site. The petroleum and CVOC-impacted groundwater presently has no exposure point or route, as there are no homes or businesses down-gradient of the site which utilize groundwater within the affected area. However, as with subsurface soil, contact with petroleum and CVOC-impacted groundwater could be possible by potential future ground-intrusive activities.

9.1.3. Soil Vapor

On-site soil vapor containing chlorinated compounds has been identified in the vicinity of the SRA-2 area. The concentrations of CVOCs in the samples from this area were significantly greater than other samples collected from the site. Petroleum and CVOC-impacted soil remaining at the site contains concentrations of VOCs less than the respective 6NYCRR Part 375 CSCOs, but greater than the 6NYCRR Part 375 Protection of Groundwater SCOs. Therefore, these soils, coupled with VOCs present in groundwater, have the potential to cause soil vapor contamination. Since the contemplated use of the vacant properties at the site is currently unknown, and several buildings and sensitive receptors are located adjacent to the site, the soil vapor exposure pathways on-and off-site may require further evaluation. However, the properties at 204 Second Street and 335 Clinton Avenue show relatively low concentrations of several VOCs that were generally consistent with ambient air and background levels. Based on review of these data, there does not appear to be a vapor intrusion risk at these locations.

10. Remedial Action Objectives and Evaluation Criteria

The remedial goal for the Henry Johnson Boulevard Properties will be the restoration of the site to pre-release conditions, to the extent feasible, given the contemplated use for each of the properties. At this time, the end use of each of these properties is unknown, but the site will remain mixed, comprised of commercial and residential properties. Accordingly, the remedial action objectives (RAOs) discussed in this section were developed based upon the end-use of this site.

10.1. Remedial Action Objectives

The results of the remedial investigation indicate that exposure to subsurface soil, groundwater, and soil vapor containing petroleum and CVOC constituents is the potential exposure pathway for the Henry Johnson Boulevard Properties. Since the contemplated use of the vacant properties at the site is currently unknown, and several buildings and sensitive receptors are located adjacent to the site, the soil vapor potential will continue to be evaluated. The RAOs for the site are:

10.1.1. Soil

- Prevent direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from soil.
- Prevent migration of contaminants which would result in further groundwater contamination.

10.1.2. Groundwater

- Prevent contact with or inhalation of volatiles from contaminated groundwater.
- Restore the groundwater aquifer to pre-release conditions, to the extent practical.
- Remove the source of groundwater contamination.

Generally, these RAOs may be achieved by minimizing the:

- Migratory potential of the contaminants;
- Potential for human exposure to in-situ contaminated media; and
- Magnitude and extent of contamination in the affected media.

10.2. Evaluation Criteria

In accordance with DER-10, the remedial measure alternatives developed in this Alternatives Analysis will be screened based on an evaluation of the following criteria:

- Overall Protection of Human Health and the Environment;
- Compliance with Standards, Criteria, and Guidance (SCGs);
- Long-term Effectiveness and Permanence;
- Reduction of Toxicity, Mobility, and Volume;
- Short-term Effectiveness;
- Implementability;
- Cost;
- Community Acceptance.

10.2.1. Overall Protection of Human Health and the Environment

This criterion serves as a final check to assess whether each alternative meets the requirements that are protective of human health and the environment. The overall assessment of protection is based on a composite of factors assessed under other evaluation criteria; especially long-term effectiveness and performance, short-term effectiveness; and compliance with SCGs. The evaluation focuses on how a specific alternative achieves protection over time and how site risks are reduced. The analysis includes how each source of contamination is to be eliminated, reduce, or controlled for each alternative.

10.2.2. Compliance with SCGs

This evaluation criterion determines how each alternative complies with 6 NYCRR Part 375 Commercial Soil Cleanup Objectives, 6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objectives, NYSDEC Class GA Standards, and the guidelines set forth in the NYSDOH October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

10.2.3. Long-term Effectiveness and Permanence

This evaluation criterion addresses the results of a remedial action in terms of its permanence and quantity/nature of waste or residual remaining at the site after response objectives have been met. The primary focus of this evaluation is the extent and effectiveness of the controls that may be required to manage the waste or residual remaining at the site and operating system necessary for the remedy to remain effective. The factors being evaluated include the permanence of the remedial alternative, magnitude of the remaining risk, adequacy of controls used to manage residual waste, and reliability of controls used to manage residual waste.

10.2.4. Reduction of Toxicity, Mobility, and Volume

This evaluation criterion assesses the remedial alternative's use of the technologies that permanently and significantly reduce toxicity, mobility, or volume of the hazardous wastes as their principal element. The NYSDEC's policy is to give preference to alternatives that eliminate any significant threats at the site through destruction of toxic contaminants, reduction of the total mass of toxic contaminants, irreversible reduction in the contaminants mobility, or reduction of the total volume of contaminated media. This evaluation includes: the amount of the hazardous materials that would be destroyed or treated, the degree of expected reduction in toxicity, mobility, or volume measured as a percentage, the degree in which the treatment would be irreversible, and the type and quantity of treatment residuals that would remain following treatment.

10.2.5. Short-term Effectiveness

This evaluation criterion assesses the effects of the alternative during the construction and implementation phase. Alternatives are evaluated with respect to the effects on human health and the environment during implementation of the remedial action. The aspects evaluated include: protection of the community during remedial actions, environmental impacts as a results of remedial actions, time until the remedial response objectives are achieved, and protection of workers during the remedial action.

10.2.6. Implementability

This criterion addresses the technical and administrative feasibility of implementing an alternative and the availability of various services and materials required during its implementation. The evaluation includes: feasibility of construction and operation; the reliability of the technology; the ease of undertaking additional remedial action; monitoring considerations; activities needed to coordinate with other offices or agencies; availability of adequate off-site treatment, storage, and disposal services; availability of equipment; and the availability of services and materials.

10.2.7. Cost

Cost estimates are prepared and evaluated for each alternative. The cost estimates include capital costs, operation and maintenance (O&M) costs, and future capital costs. A cost sensitivity analysis is performed which includes the following factors: the effective life of the remedial action, the O&M costs, the duration of the cleanup, the volume of contaminated material, other design parameters, and the discount rate. Cost estimates developed at the detailed analysis of alternatives phase of a feasibility study generally have an exposed accuracy range of -30 to +50 percent (USEPA, 2000).

10.2.8. Community Acceptance

Following submission of this report and the generation of the Proposed Remedial Action Plan (PRAP) by the NYSDEC, a summary of the proposed remedial action will be sent to the project's contact list, which will include the date, time, and location of the public

meeting, and announcement of the 45-day period for submission of written comments from the public. A Responsiveness Summary will be prepared to address public comments on the PRAP. After the submission of Responsiveness Summary, a final remedy will be selected and publicized. If the final remedy differs significantly from the proposed remedy, public notices will include descriptions of the differences and the reason for the changes.

11. Identification and Screening of Technologies

In the remaining sections of this report, the site will be broken down into four individual areas based on geographic location and primary contaminant(s) of concern in each area. Remedial technologies will be considered and recommended for each of the four areas listed below (Figure 11-1).

- Area 1 – 214 and 216 Second Street
- Area 2 – 138 HJB and the common alley
- Area 3 – 130 and 132 HJB
- Area 4 – 124 and 126 HJB and 339 Clinton Avenue

11.1. Identification and Screening of General Response Actions and Technology Process Options

In this section, medium-specific General Response Actions (GRAs) are identified and potentially applicable technology types and process options for each GRA are evaluated based on the evaluation criteria discussed in Section 9. In general, the GRAs which are applicable to the affected media at the Henry Johnson Boulevard Properties include the no further action response, extraction/ex-situ technologies, and in-situ treatment technologies.

11.1.1. Soil

GRAs for soil are limited to areas of remaining petroleum- and chlorinated VOC-impacted soil in Areas 2 and 3. At least one soil sample collected from Area 2 contained a chlorinated VOC concentration greater than the corresponding 6NYCRR Part 375 Protection of Groundwater SCOs during the June 2006 sampling event. As mentioned in Section 7, chlorinated VOCs were present in the soil and groundwater at 138 HJB (Area 2), 146 HJB, and the common alley (Area 2) to the north of these properties indicating that an unknown release occurred in this area or off-site in an up-gradient location. Soil samples collected in the northern corner of the 132 HJB property (Area 3) contained concentrations of petroleum-related compounds that exceeded the 6NYCRR Part 375 Protection of Groundwater SCOs during the June 2006 sampling event. The NYSDEC removed leaking USTs associated with the former service station at this property.

11.1.1.1. No Further Action

The “no further action” GRA, by definition, involves no further institutional controls, environmental monitoring, or remedial action, and therefore, includes no technological

barriers. This GRA defines the minimum steps that would be taken at the site in the absence of any type of action directed at the existing contamination. Engineering controls do not directly affect the contaminated media, but do reduce the probability of incidental or unintentional contact with site contaminants. Engineering controls in the form of concrete and/or asphalt paving and clean topsoil may be used in portions of the site, which will minimize the potential for incidental contact with site contaminants. The no further action GRA will, therefore, be retained for alternatives development. For Area 1, given the completed SRA with confirmation sampling indicating complete source removal and having a limited exposure route from surface soil containing lead, No Further Action is recommended for Area 1.

11.1.1.2. Extraction/Ex-Situ Technologies

Extraction technologies would involve soil vapor extraction or thermal treatment, which can then be coupled with various methods to capture and dispose or destroy the released contaminants. Ex-situ technologies would involve the excavation of contamination from soil with subsequent treatment or disposal.

Excavation

Excavation is a useful remedial option when the location of the source of contamination is known or if there is a well delineated contaminated area. The source of the contamination in Area 2 has not been identified and only one soil boring sample from this area contained concentration greater than the 6NYCRR Part 375 Protection of Groundwater SCOs. The former locations of the USTs that were removed by the NYSDEC in Area 3 are known, as well the soil concentrations greater than the 6NYCRR Part 375 Protection of Groundwater SCOs. However, the extent of this soil in the vicinity of the former USTs appears to be limited and discontinuous. Therefore, soil excavation is not considered to be an appropriate remedial alternative for Areas 2 and 3 and will not be retained for alternative development.

Soil Vapor Extraction

Soil vapor extraction (SVE) techniques are utilized to remove VOCs from soil in the unsaturated zone. The vapor extraction process involves passing air through the soil, thereby volatilizing the contaminants from the unsaturated soil to the air. The air is then collected through a well network and treated through granular activated carbon or thermal oxidation to remove the contaminants prior to discharge. Advantages of SVE include relatively fast treatment times, on the order of six months to two years, and minimal disturbance to the site. Disadvantages include lower effectiveness in low permeability soils, the need for surface treatment and discharge of extracted air. Soil vapor extraction is considered potentially applicable to Areas 2, 3, and 4 and will be retained for alternatives development.

Bioventing

Bioventing uses technology similar to SVE to provide oxygen to indigenous subsurface aerobic microorganisms that degrade VOCs. However, unlike SVE, the goal is only to provide sufficient oxygen to sustain biological activity, and not to use the air for removal of VOC mass, therefore a lower air flow rate is utilized. Additionally, nutrients may be added to enhance the native microbial activity if needed. Advantages of bioventing include minimal disturbance to surface activities and no requirements for off-gas treatment. Disadvantages include loss of effectiveness in low permeability soils, difficulty in achieving low cleanup standards, and potential permitting requirements. Bioventing is considered to be potentially feasible for source treatment at Area 2 and Area 3 and is retained for alternatives development.

Thermal Treatment

Thermal treatment removes contaminants by introducing heat to the subsurface, thereby increasing the volatility and mobility of the VOCs in the soil. The liberated VOCs are collected at the surface through a SVE well network and are subsequently treated through granular activated carbon or thermal oxidation. The most common thermal remediation technologies are steam-enhanced extraction, electrical resistance heating (ERH), and thermal conduction heating (TCH). The advantages of thermal remediation are the preferential treatment of areas of lower permeability since these areas conduct heat more effectively, and relatively fast treatment times, typically less than a year. Disadvantages of thermal treatment include the need for surface collection and treatment for liberated VOCs, as with SVE, not being cost-effective when remediating low levels of VOCs (Area 2 and Area 3), and the potential damage to the buried utilities that are in the contaminated soil in the utility right-of-way (Area 3). Based on the above disadvantages, thermal treatment will not be considered further as a remedial option for the Henry Johnson Boulevard Properties site.

11.1.1.3. In-Situ Treatment Technologies

In-situ treatment uses physical or biological processes to remove or degrade contaminants in place. In-situ treatment of contaminated soil would be accomplished through in-situ chemical oxidation (ISCO) or bioventing.

In-Situ Chemical Oxidation

ISCO would involve the injection of chemical oxidants and associated reagents into the subsurface to generate free radicals and directly oxidize petroleum constituents and chlorinated solvents (i.e., PCE and TCE) into innocuous end products, such as carbon dioxide, water, and inorganic compounds. Injection points may be either permanently installed wells or temporary injection points installed using direct-push methods. The advantages of ISCO include relatively short remediation times, limited operations and maintenance (O&M) costs, and little to no disruption to surface activities. Disadvantages of ISCO include the necessity to inject large volumes of liquids or gas, difficulty when

injecting into low permeability formations, and health and safety issue associated with the handling and injection of oxidants and reagents. Fenton's reagent (hydrogen peroxide), potassium and sodium permanganate, and sodium persulfate would be applicable to the site, and would involve several injections over time at multiple locations accompanied by confirmation sampling. A general summary of each of these oxidants is presented below.

■ **Fenton's Reagent (Hydrogen Peroxide)**

Hydrogen peroxide-based in-situ chemical oxidation is driven by the formation of a hydroxyl free radical in the presence of a metal catalyst. The hydroxyl free radical is a powerful oxidizer of organic compounds, thus many organic compounds in the subsurface that contact the chemical oxidant are readily degraded to innocuous compounds (e.g., water and carbon dioxide). Any residual hydrogen peroxide remaining after the reaction decomposes to water and oxygen. The highly soluble ferrous iron salt transition metal catalyst added to the subsurface during injection of the oxidant mixture, is precipitated out of solution after conversion to the slightly soluble ferric iron salt.

The hydrogen peroxide concentration used in the injection fluid is based on contaminant concentrations, subsurface characteristics, and treatment volume. Compared to other oxidants, Fenton's reagent has a relatively short life once injected into the subsurface. Therefore, a larger number of Fenton's reagent injections would be required to sustain the oxidant in the subsurface compared to injections of other oxidants. Fenton's reagent is capable of removing petroleum constituents from the zone immediately surrounding the injection location, but may not treat the contamination mass in the relatively low permeability matrix where most of the contaminants likely reside. Fenton's reagent will be further considered for source treatment at Area 3 and as a result is retained for alternatives development.

■ **Sodium and Potassium Permanganate**

Permanganate is an oxidizing agent with a unique affinity for oxidizing organic compounds with carbon-carbon double bonds (e.g., PCE and TCE), aldehyde groups, or hydroxyl groups (alcohols). There are two forms of permanganate that are used for ISCO, potassium permanganate (KMNO₄) and sodium permanganate (NaMNO₄). Potassium permanganate is available as a dry crystalline material, while sodium permanganate is a liquid. Permanganate turns bright purple when dissolved in water; this purple color is an indicator of unreacted chemical. Reacted permanganate is black or brown, indicating the presence of a manganese dioxide (MnO₂) byproduct.

Sodium permanganate has a much higher solubility in water than potassium permanganate, allowing it to be used for ISCO at higher concentrations. Since it is supplied in liquid form, the use of sodium permanganate commonly requires no on-site mixing. Chemical oxidation using permanganate will be further considered for source treatment at Areas 2 and 4 and as a result is retained for alternatives development.

■ **Sodium Persulfate**

Sodium persulfate is a strong oxidant that derives its oxidizing potential through the persulfate anion ($\text{S}_2\text{O}_8^{2-}$). The persulfate ion is capable of oxidizing a wide range of contaminants, including chlorinated ethenes, BTEX, phenols, MTBE, and low molecular weight PAHs. However, when catalyzed in the presence of heat (thermal catalyzation) or transition metals ions (i.e., ferrous iron), the persulfate ion is converted to the sulfate free radical ($\text{SO}_4^{2-\bullet}$), which is second only to Fenton's reagent in oxidizing potential. Additionally, persulfate persists longer in the subsurface than Fenton's reagent and has a lower soil oxidant demand. Chemical oxidation using persulfate at Area 2 and Area 3 will be retained for alternatives development.

11.1.2. Groundwater

GRAs for groundwater are limited to areas exceeding the NYSDEC Class GA Standards, in Area 2, 3, and generally in Area 4 where SRA 2 was conducted at 124 Henry Johnson Boulevard.

11.1.2.1. No Further Action

The no further action GRA, as described in section 10.2.1 will be retained for alternatives development.

11.1.2.2. Extraction/Ex-Situ Technologies

Extraction of contaminated groundwater would be accomplished by altering the existing hydraulic gradients through pumping. The groundwater extraction options are coupled with various treatment technologies to remove the contamination from the water prior to discharge. Extraction options include vertical well groundwater extraction and treatment methods, groundwater and vapor extraction (i.e., dual-phase extraction), and air sparging/vapor extraction.

Groundwater Extraction and Treatment

This technology includes the installation of at least one vertical groundwater recovery well equipped with a pump in or down-gradient from the area of contaminated groundwater, and a surface treatment technology prior to discharge. The number of wells is a function of the possible pumping rate and aquifer characteristics. The capture zone of the wells should, at a minimum, encompass the area of contaminated groundwater or the most contaminated portion of the aquifer. Due to the need for surface collection, treatment, and subsequent discharge of potentially large quantities of pumped groundwater, vertical well pump and treat technology is not considered to be cost effective or feasible for such a small treatment area. Therefore, this technology is not retained for alternatives development in Areas 2 or 4.

Groundwater and Vapor Extraction

This technology couples SVE with groundwater extraction, through either separate wells or in the same well (dual-phase extraction). In these applications, the water table is lowered by groundwater extraction, thereby increasing the unsaturated area available for treatment by SVE. The groundwater and vapors that are removed are treated at the surface prior to discharge. Groundwater and vapor extraction was considered potentially applicable and was retained for alternatives development. Due to the same disadvantages mentioned for groundwater extraction, dual-phase extraction technology is not considered to be potentially feasible and is not retained for alternatives development in Area 4.

Air Sparging/Vapor Extraction

Air sparging involves pressurized injection of air below the water table to volatilize dissolved phase and saturated absorbed phase contaminants into the vapor phase. The contaminants are removed by applying a vacuum to the unsaturated zone with vapor extraction wells. The soil vapor phase is then treated on the surface to capture and dispose and/or destroy the contaminants. Advantages of AS/SVE include readily available equipment, short treatment times, and minimal site disturbance. Disadvantages include decreased effectiveness in lower permeability soils and the potential for migration of vapors into nearby basements or other confined spaces. Because of the small treatment area that would allow for adequate vapor capture, and the absence of continuously occupied adjacent buildings, AS/SVE is considered to be potentially feasible and is retained for alternatives development for Area 4.

11.1.2.3. In-Situ Treatment Technologies

In-situ treatment uses physical or biological processes to remove or degrade contaminants in place. In-situ treatment of contaminated groundwater would be accomplished through monitored natural attenuation (MNA), in-situ chemical oxidation (ISCO), or enhanced bioremediation.

Monitored Natural Attenuation

MNA would involve long-term monitoring of the groundwater in the affected area to document the reduction in the concentrations of chlorinated VOCs in the groundwater resulting from the source removal and the ongoing intrinsic natural attenuation processes. Although data from the RI have documented that groundwater concentrations of chlorinated VOCs have decreased since the SRA 2 source removal, these concentrations remain several orders of magnitude above SCGs. Therefore, the use of MNA would not likely achieve SCGs in a reasonable amount of time, and is not carried forward for alternatives development in Area 4.

In-Situ Chemical Oxidation

ISCO would involve the injection of chemical oxidants and associated reagents into the subsurface to destroy the petroleum constituents. Permanganate and activated persulfate would be the most applicable to the site, and would involve several injections over time

at multiple locations accompanied by groundwater monitoring. Injection points may be either permanently installed wells or temporary injection points installed using direct-push methods. The advantages and disadvantages of ISCO are summarized in Section 10.2.3. A pilot test, involving the installation of additional monitoring wells or Geoprobe points, would be necessary to determine the radius of influence of the chemical oxidant before full-scale treatment could begin. Chemical oxidation using permanganate or activated persulfate are considered to be potentially feasible for treatment of Areas 2 and 4 and are retained for alternatives development.

Enhanced Bioremediation

Enhanced Bioremediation would involve the injection of a controlled release, electron donor material, that when hydrated is specifically designed to produce a controlled release of lactic acid for fermentation by subsurface microbes that in turn generates hydrogen. Hydrogen is the key ingredient in the anaerobic contaminant degrading process known as reductive dechlorination. Reductive dechlorination is the mechanism by which chlorinated compounds are biodegraded into less harmful constituents such as ethene and ethane. For the chlorinated VOC-impacted groundwater present in Area 4, Hydrogen Release Compound (HRC®), a patented food-grade formulation of a viscous glycerol tripoly lactate, is a common amendment. Similar to other in-situ technologies, treatment of low permeability formations using HRC may not be effective. However, due to long residence time, a single application is often sufficient. A pilot test, involving the installation of additional monitoring wells or Geoprobe points, would be necessary to determine the radius of influence of the HRC before full-scale treatment could begin. Enhanced bioremediation using HRC is considered to be potentially feasible for treatment of Area 4 and is retained for alternatives development.

11.2. Technology Screening

In this section, the potentially applicable remedial technologies for the site developed in more detail. Each remedial technology is assessed separately to identify those that are technically feasible to implement and can meet the site RAOs in the long- or short-term. The technologies are then assembled into Remedial Alternatives (RAs).

11.2.1. No Further Action

A No Further Action alternative defines the minimum steps that would be taken at each Area of the Henry Johnson Boulevard Properties in the absence of remedial actions.

11.2.2. Excavation

Excavation can be implemented using readily available technologies. Although there is adequate space for staging of excavated soil and equipment, the extent of soil in Areas 2 and 3 is relatively small and appears to be discontinuous. Therefore, the use of excavation for Areas 2 and 3 is not considered to be applicable for the site.

11.2.3. Soil Vapor Extraction

SVE can be implemented using readily available technologies. Because SVE is generally more successful when applied to the lighter (more volatile) compounds which are the constituents found at in Areas 2 and 3, SVE could be effective in meeting the RAOs. However, the use of SVE would require the installation of extraction wells and associated piping at the site, as well as the placement of surface structures to house the treatment system components. The affected areas of soil in Areas 2 and 3 are extremely limited in extent, suggesting that SVE would not be cost-effective, and is not considered applicable to Areas 2 and 3.

11.2.4. Air Sparging/Soil Vapor Extraction

AS/SVE can be implemented using readily available technologies. AS/SVE involves pressurized injection of air below the water table to volatilize dissolved phase and saturated absorbed phase contaminants into the vapor phase, with subsequent vapor extraction. Because the affected area is relatively small, AS/SVE could be effective in meeting the RAOs. The use of AS/SVE would require the installation of sparging and extraction wells and associated piping at the site, as well as the placement of surface structures to house the treatment system components. Although limited in extent, the impacted groundwater in Area 4 contains chlorinated VOCs at concentrations one to three orders of magnitude above SCGs. Additionally, the gravel material added to the bottom of the SRA 2 excavation would greatly increase the soil permeability, increasing the effectiveness of AS/SVE. Lastly, given the beneficial vapor/dissolved phase portioning of the compounds of concern, AS/SVE is considered to be potentially applicable to Area 4 of the site.

11.2.5. ISCO Using Fenton's Reagent

ISCO using Fenton's reagent involves the generation of free radicals in the subsurface to directly oxidize the petroleum contamination with hydrogen peroxide. To achieve the desired contaminant reductions in a reasonable time frame, a metal catalyst is required, most commonly iron. ISCO with Fenton's reagent is a relatively fast process, taking only days or weeks, converting the contaminants to innocuous compounds. Because the affected area is relatively small and shallow, ISCO with Fenton's could be effective in meeting the RAOs. In addition to direct oxidation, the increased oxygen in the subsurface may also stimulate aerobic biodegradation. Because of the speed of the reaction, the use of Fenton's reagent does not result in a relatively large radius of influence, necessitating numerous injection points. The relatively high iron concentrations in site soil samples may also scavenge the injected hydrogen peroxide. Due to the potential need for multiple injections due to potentially small radius of influence, small residence time, and the relatively low concentrations of contaminants, the use of Fenton's reagent is not considered to be potentially applicable to Area 3.

11.2.6. ISCO Using Permanganate

Permanganate is an oxidizing agent with a unique affinity for oxidizing organic compounds with carbon-carbon double bonds (e.g., PCE and TCE). Sodium permanganate has a much higher solubility in water than potassium permanganate, allowing it to be used for ISCO at higher concentrations. Because the affected area is relatively small and shallow, ISCO with permanganate could be effective in meeting the RAOs. Additionally, permanganate could be delivered through permanent injection wells or direct-push methods. The affected area of soil in Area 2 is small and isolated, with relatively low concentrations of contaminants, while the area of affected groundwater is fairly large, suggesting that ISCO with permanganate could be cost-effective for source area treatment of Area 2, and is considered to be potentially applicable. Although limited in extent, the impacted groundwater in Area 4 contains chlorinated VOCs at concentrations one to three orders of magnitude above SCGs, with clean granular backfill from SRA2 above the water table, suggesting that ISCO with permanganate could be effective, and is therefore considered to be potentially applicable to Areas 2 and 4.

11.2.7. ISCO Using Persulfate

The use of ISCO using activated persulfate, like Fenton's reagent, involves the generation of free radicals in the subsurface to directly oxidize the petroleum contamination, in this case with a liquid mixture of sodium persulfate salts, catalysts, and water. ISCO with activated persulfate has many of the same advantages and drawbacks as ISCO with Fenton's reagent, including fast reaction times, and relatively small radius of influence, however persulfate can persist longer in the subsurface, therefore potentially reducing the number of injection points and number of injections required for treatment. Due to the potential need for multiple injections due to potentially small radius of influence, small residence time, and the relatively low concentrations of contaminants, the use of activated persulfate is not considered to be potentially applicable to Areas 2, 3, and 4.

11.2.8. Bioventing

Bioventing can be implemented using readily available technologies. Bioventing involves the delivery of oxygen to native subsurface aerobic microorganisms to enhance their rate of contaminant degradation, similar to SVE, however at a much lower flow rate as not to directly volatilize the contaminants. At a low enough flow rate, vapor extraction and subsequent off-gas treatment would not be necessary. Because this technology relies exclusively on the native microbial population to degrade the contaminants, remediation times can be significantly longer than other technologies, on the order of years. The affected area of soil in Area 2 is extremely limited in extent, suggesting that, like SVE, bioventing would not be cost-effective, and is not considered applicable to Area 2. The affected area of soil in Area 3 is also relatively limited in extent and shallow in depth, and although contaminant concentrations are relatively low, bioventing would not likely meet SCGs in a reasonable amount of time, or be cost-effective; therefore the use of bioventing

is not considered potentially applicable for Area 3. This technology is not considered further.

11.2.9. Enhanced Bioremediation

Natural attenuation processes that occur in the subsurface at the site could be accelerated through the introduction of supplemental hydrogen into the groundwater via the use of a hydrogen releasing compound. The introduction of HRC into the subsurface can be implemented using readily available technologies and could be accomplished by direct injection through drilled boreholes. The formulation may be heated if necessary to decrease viscosity prior to pressure injection into the subsurface. Upon hydration, the HRC particles reside in the soil matrix and produce a controlled release of hydrogen for as much as a year. HRC is most frequently used to address dissolved phase contamination and/or saturated soils, where most of the contamination in Area 4 resides. A pilot test, involving Geoprobe points, would be necessary to determine the radius of influence of the HRC before full-scale treatment could begin. Enhanced bioremediation using HRC is considered potentially applicable to Area 4.

11.3. Remedial Alternatives

Table 11-1 provides a summary of the remedial technologies evaluated for each of the alternatives analysis areas. Based upon the site characteristics, the GRAs, and technology screening presented above, the following remedial alternatives were considered to be potentially applicable for source area soil and groundwater treatment at the site:

11.3.1. Area 2

Alternative 1:	No Further Action
Alternative 2:	Monitored Natural Attenuation
Alternative 3:	In-Situ Chemical Oxidation using Sodium Permanganate

11.3.2. Area 3

Alternative 1:	No Further Action
Alternative 2:	Monitored Natural Attenuation

11.3.3. Area 4

Alternative 1:	No Further Action
Alternative 2:	Monitored Natural Attenuation
Alternative 3:	In-Situ Chemical Oxidation using Sodium Permanganate
Alternative 4:	Air Sparging/Soil Vapor Extraction

Alternative 5: Enhanced Bioremediation using HRC

12. Remedial Alternatives Analysis - Area 2

This section presents an analysis of the potential remedial alternatives for remediation of Area 2 of the Henry Johnson Boulevard Properties in accordance with the criteria described in Section 9.2.

12.1. Remedial Alternatives Evaluation

12.1.1. Alternative 1: No Further Action

12.1.1.1. Description

The no further action alternative will serve as the baseline representing the minimum steps to be taken for remediation of the area.

12.1.1.2. Overall protection of public health and the environment

The No Further Action alternative would not be protective of public health and the environment. Although the contaminants are present at depth, groundwater impacted by chlorinated VOCs would be left at the site and would provide a potential source for soil vapor intrusion. The surrounding community is supplied with public drinking water, therefore, potential future exposure to contaminated groundwater would be to construction/excavation activities at the site or the adjacent utility right-of-way. This exposure pathway could be mitigated through the use of appropriate health and safety protocols during any such work.

12.1.1.3. Compliance with SCGs

The No Further Action alternative may meet the SCGs over the long term.

12.1.1.4. Long-Term Effectiveness and Permanence

The No Further Action alternative may be effective in the long-term since the source of the impacted soil would not be immediately removed, but would rather rely on natural attenuation processes.

12.1.1.5. Reduction of Toxicity, Mobility, or Volume with Treatment

The No Further Action alternative would not reduce the toxicity or mobility of the contaminants, but may reduce the contaminant mass in the soil over the long-term through intrinsic natural attenuation processes.

12.1.1.6. Short-Term Effectiveness

Community Protection

The No Further Action alternative would be protective of the community during the short-term since the contaminants in the soil are not widespread and are present at depth however, the potential for soil vapor intrusion must be considered for adjacent properties.

Worker Protection

Implementation of this alternative would be undertaken using standard procedures for worker protection including the establishment of a health and safety plan which would the appropriate protective measures which should be undertaken during any subsurface activities in the affected area.

Environmental Impacts

Implementation of this alternative would benefit the environment through the eventual treatment of the remaining contaminants in the subsurface by natural attenuation processes.

Time Required to Implement

The No Further Action alternative would not require any time to implement.

12.1.1.7. Implementability

The No Further Action alternative can be easily implemented.

12.1.1.8. Cost

The No Further Action Alternative would not require any additional costs to implement.

12.1.2. Alternative 2: Monitored Natural Attenuation

12.1.2.1. Description

Alternative 2 would include all of the elements of the No Further Action alternative, plus the periodic monitoring of the existing on- and off-site groundwater monitoring wells and soil vapor monitoring point to evaluate the degree to which the concentrations of the contaminants in the subsurface are reduced through intrinsic natural attenuation processes. Based on the fact that contamination would remain at the site, a Site Management Plan (SMP) would be required that would provide specific requirements for site development and use including annual site inspections. Institutional controls would be implemented in the form of an environmental easement and groundwater/soil

restrictions and notification procedures for future owners and/or developers/workers of the restricted use of the property.

12.1.2.2. Overall protection of public health and the environment

Alternative 2 may be protective of public health and the environment. Although the contaminants are present at depth, groundwater impacted by chlorinated VOCs would be left at the site and would provide a potential source for soil vapor intrusion. However, continued monitoring would provide a means to evaluate contaminant reduction over time. The surrounding community is supplied with public drinking water, therefore, potential future exposure to contaminated groundwater would be to construction/excavation activities at the site or the adjacent utility right-of-way. This exposure pathway could be mitigated through the use of appropriate health and safety protocols during any such work.

12.1.2.3. Compliance with SCGs

Alternative 2 may meet the SCGs over the long term through natural attenuative processes.

12.1.2.4. Long-Term Effectiveness and Permanence

Although there would be no source removal, the contaminants are not present at high concentrations and Alternative 2 would likely be effective in the long-term through natural attenuation processes.

12.1.2.5. Reduction of Toxicity, Mobility, or Volume with Treatment

Alternative 2 would not reduce the toxicity or mobility of the contaminants, but may reduce the contaminant mass in the soil over the long-term through intrinsic natural attenuation processes.

12.1.2.6. Short-Term Effectiveness

Community Protection

Alternative 2 would be protective of the community during the short-term since the contaminants in the soil are not widespread and are present at depth however, the potential for soil vapor intrusion must be considered for adjacent properties.

Worker Protection

Implementation of this alternative would be undertaken using standard procedures for worker protection including the establishment of a health and safety plan which would the appropriate protective measures which should be undertaken during any subsurface activities in the affected area.

Environmental Impacts

Implementation of this alternative would benefit the environment through the eventual treatment of the remaining contaminants in the subsurface by natural attenuation processes.

Time Required to Implement

Alternative 2 could be implemented immediately and is likely to take less than five years to complete since the source of the contaminants is small and not highly concentrated.

12.1.2.7. Implementability

Alternative 2 could be easily implemented using readily available technologies.

12.1.2.8. Cost

The capital, O&M and Present worth costs for Alternative 2 are presented in Table 12-1. A five year monitoring period was chosen for this alternative to verify steady state conditions.

- **Capital Costs:** There are no capital costs to construct and implement Alternative 2 since the monitoring wells necessary to monitor the groundwater were installed as part of the RI.
- **O&M Costs:** The probable annual operations, monitoring and maintenance cost for Alternative 2 is \$25,000.
- **Present Worth Cost:** Over a five year monitoring period, the probable net present worth for this alternative is approximately \$108,600. This was calculated using a 5% annual discount rate.

12.1.3. Alternative 3: In-Situ Chemical Oxidation using Sodium Permanganate

12.1.3.1. Description

Alternative 3 consists of the following items.

- A pilot test to determine chemical oxidant radius of influence and treatability;
- Injection of chemical oxidant through Geoprobe® boreholes;
- Post-injection soil sampling;

- Groundwater monitoring; and
- A SMP and Institutional Controls as outlined in Alternative 2.

12.1.3.2. Overall protection of public health and the environment

Alternative 3 would likely be more protective of human health and the environment than No Further Action (Alternative 1) and MNA (Alternative 2) alternatives since the use of sodium permanganate would result in the treatment of the remaining contaminants in the subsurface, thereby eliminating the potential utility worker exposure pathway.

12.1.3.3. Compliance with SCGs

Alternative 3 would meet the SCGs in a relatively short period by treating the remainder of the contaminants in the subsurface.

12.1.3.4. Long-Term Effectiveness and Permanence

The use of sodium permanganate would treat the remaining contaminants in the subsurface and would, therefore, be effective over the long-term.

12.1.3.5. Reduction of Toxicity, Mobility, or Volume with Treatment

Alternative 3 would reduce the toxicity of the petroleum compounds by oxidizing them to non-toxic end products. This alternative would have no effect on the mobility of the contaminants, but would be expected to greatly reduce the contaminant mass in the soil and groundwater.

12.1.3.6. Short-Term Effectiveness

Community Protection

Alternative 3 would be protective of the community during the short-term since the use of sodium permanganate would result in the immediate treatment of the contaminants in the subsurface. Temporary fencing would be installed during treatment activities to prevent accidental community exposure to the chemical oxidants during the injection process.

Worker Protection

Utility workers would be protected under Alternative 3 since the use of sodium permanganate would result in the treatment of the remaining contaminants in the subsurface.

Environmental Impacts

Implementation of this alternative would benefit the environment through the treatment of the remaining contaminants in the subsurface.

Time Required to Implement

The time required to implement this alternative is approximately one to two years.

12.1.3.7. Implementability

Performing chemical injections and routine soil sampling as well as groundwater monitoring activities are actions that can be readily implemented at the site.

12.1.3.8. Cost

The capital, O&M and Present worth costs for Alternative 3 are presented in Table 12-2. A three year monitoring period was chosen for this alternative to verify steady state conditions.

- **Capital Costs:** The probable capital cost to construct and implement Alternative 3 is \$124,800.
- **O&M Costs:** The probable annual operations, monitoring and maintenance cost for Alternative 3 is \$25,000.
- **Present Worth Cost:** Over a three year monitoring period, the probable net present worth for this alternative is approximately \$218,000. This was calculated using a 5% annual discount rate.

13. Remedial Alternatives Analysis - Area 3

This section presents an analysis of the potential remedial alternatives for remediation of Area 3 of the Henry Johnson Boulevard Properties in accordance with the criteria described in Section 9.2.

13.1. Remedial Alternatives Evaluation

13.1.1. Alternative 1: No Further Action

13.1.1.1. Description

The no further action alternative will serve as the baseline representing the minimum steps to be taken for remediation of the area.

13.1.1.2. Overall protection of public health and the environment

The No Further Action alternative would be protective of public health and the environment because, although soil impacted by petroleum compounds and metals would be left at the site, contaminants in the soil are present at depth and at very low concentrations. Additionally, the surrounding community is supplied with public drinking water and the only anticipated potential future exposure to contaminated soil would be to construction/excavation activities at the site. This exposure pathway could be mitigated through the use of appropriate health and safety protocols during any such work.

13.1.1.3. Compliance with SCGs

The No Further Action alternative may meet the SCGs over the long term.

13.1.1.4. Long-Term Effectiveness and Permanence

The No Further Action alternative may be effective in the long-term since the source of the petroleum impacted soil would not be immediately removed, but would rather rely on natural attenuation processes.

13.1.1.5. Reduction of Toxicity, Mobility, or Volume with Treatment

The No Further Action alternative would not reduce the toxicity or mobility of the contaminants, but may reduce the contaminant mass in the soil over the long-term through intrinsic natural attenuation processes.

13.1.1.6. Short-Term Effectiveness

Community Protection

The No Further Action alternative would be protective of the community during the short-term since the contaminants in the soil are present at depth and there are, therefore, no likely incidental exposure routes for the community.

Worker Protection

Implementation of this alternative would be undertaken using standard procedures for worker protection including the establishment of a health and safety plan which would the appropriate protective measures which should be undertaken during any subsurface activities in the affected area.

Environmental Impacts

Implementation of this alternative would benefit the environment through the eventual treatment of the remaining contaminants in the subsurface by natural attenuation processes.

Time Required to Implement

The No Further Action alternative would not require any time to implement.

13.1.1.7. Implementability

The No Further Action alternative can be easily implemented.

13.1.1.8. Cost

The No Further Action Alternative would not require any additional costs to implement.

13.1.2. Alternative 2: Monitored Natural Attenuation

13.1.2.1. Description

Alternative 2 would include all of the elements of the No Further Action alternative, plus the periodic monitoring of the existing on- and off-site groundwater monitoring wells and soil vapor monitoring point to evaluate the degree to which the concentrations of the contaminants in the subsurface are reduced through intrinsic natural attenuation processes. Based on the fact that contamination will remain at the site, a Site Management Plan (SMP) will be required that would provide specific requirements for site development and use including annual site inspections. Institutional controls would be implemented in the form of an environmental easement and groundwater/soil

restrictions and notification procedures for future owners and/or developers/workers of the restricted use of the property.

13.1.2.2. Overall protection of public health and the environment

Alternative 2 would be protective of public health and the environment because, although soil impacted by petroleum compounds would be left at the site, contaminants in the soil are present at depth and at very low concentrations. Additionally, the surrounding community is supplied with public drinking water and the only anticipated potential future exposure to contaminated soil would be to construction/excavation activities at the site. This exposure pathway could be mitigated through the use of appropriate health and safety protocols during any such work.

13.1.2.3. Compliance with SCGs

Alternative 2 may meet the SCGs over the long term.

13.1.2.4. Long-Term Effectiveness and Permanence

Although there would be no source removal, the contaminants are not present at high concentrations and Alternative 2 may be effective in the long-term through natural attenuation processes.

13.1.2.5. Reduction of Toxicity, Mobility, or Volume with Treatment

Alternative 2 would not reduce the toxicity or mobility of the contaminants, but may reduce the contaminant mass in the soil over the long-term through intrinsic natural attenuation processes.

13.1.2.6. Short-Term Effectiveness

Community Protection

Alternative 2 would be protective of the community during the short-term since the contaminants in the soil are present at depth and there are, therefore, no likely incidental exposure routes for the community.

Worker Protection

Implementation of this alternative would be undertaken using standard procedures for worker protection including the establishment of a health and safety plan which would include the appropriate protective measures which should be undertaken during any subsurface activities in the affected area.

Environmental Impacts

Implementation of this alternative would benefit the environment by reducing the concentrations of subsurface contaminants by natural attenuation processes.

Time Required to Implement

Alternative 2 could be implemented immediately and is likely to take a minimum of five years to complete since source removal was completed over a decade ago and concentrations, although relatively low, are still greater than the SCGs.

13.1.2.7. Implementability

Alternative 2 could be easily implemented using readily available technologies.

13.1.2.8. Cost

The capital, O&M and Present worth costs for Alternative 2 are presented in Table 13-1. A five year monitoring period was chosen for this alternative to verify steady state conditions.

- **Capital Costs:** There are no capital costs to construct and implement Alternative 2 since the monitoring wells necessary to monitor the groundwater were installed as part of the RI.
- **O&M Costs:** The probable annual operations, monitoring and maintenance cost for Alternative 2 is \$23,000.
- **Present Worth Cost:** Over a five year monitoring period, the probable net present worth for this alternative is approximately \$100,000. This was calculated using a 5% annual discount rate.

14. Remedial Alternatives Analysis - Area 4

This section presents an analysis of the potential remedial alternatives for remediation of Area 4 of the Henry Johnson Boulevard Properties in accordance with the criteria described in Section 9.2.

14.1. Remedial Alternatives Evaluation

14.1.1. Alternative 1: No Further Action

14.1.1.1. Description

The no further action alternative will serve as the baseline representing the minimum steps to be taken for remediation of the area.

14.1.1.2. Overall protection of public health and the environment

The No Further Action alternative would not be protective of public health and the environment. Although the contaminants are present at depth, groundwater impacted by chlorinated VOCs would be left at the site and would provide a potential source for soil vapor intrusion. The surrounding community is supplied with public drinking water, therefore, potential future exposure to contaminated groundwater would be to construction/excavation activities at the site or the adjacent utility right-of-way. This exposure pathway could be mitigated through the use of appropriate health and safety protocols during any such work.

14.1.1.3. Compliance with SCGs

The No Further Action alternative would not meet the SCGs over the long term.

14.1.1.4. Long-Term Effectiveness and Permanence

The No Further Action alternative would not be effective in the long-term since natural attenuation processes are not likely to provide a significant level of contaminant reduction.

14.1.1.5. Reduction of Toxicity, Mobility, or Volume with Treatment

The No Further Action alternative would not reduce the toxicity or mobility of the contaminants, but may reduce the contaminant mass in the groundwater over the long-term through intrinsic natural attenuation processes.

14.1.1.6. Short-Term Effectiveness

Community Protection

The No Further Action alternative would be protective of the community during the short-term since the contaminants in the groundwater are present at depth, however, the potential for soil vapor intrusion must be considered for adjacent properties.

Worker Protection

Implementation of this alternative would be undertaken using standard procedures for worker protection including the establishment of a health and safety plan which would the appropriate protective measures which should be undertaken during any subsurface activities in the affected area.

Environmental Impacts

Implementation of this alternative would benefit the environment through the eventual reduction of contaminants in the subsurface by natural attenuation processes.

Time Required to Implement

The No Further Action alternative would not require any time to implement.

14.1.1.7. Implementability

The No Further Action alternative can be easily implemented.

14.1.1.8. Cost

The No Further Action Alternative would not require any additional costs to implement.

14.1.2. Alternative 2: Monitored Natural Attenuation

14.1.2.1. Description

Alternative 2 would include all of the elements of the No Further Action alternative, plus the periodic monitoring of the existing on- and off-site groundwater monitoring wells and soil vapor monitoring point to evaluate the degree to which the concentrations of the contaminants in the subsurface are reduced through intrinsic natural attenuation processes. Based on the fact that contamination will remain at the site, a Site Management Plan (SMP) will be required that would provide specific requirements for site development and use including annual site inspections. Institutional controls would be implemented in the form of an environmental easement and groundwater/soil restrictions and notification procedures for future owners and/or developers/workers of the restricted use of the property.

14.1.2.2. Overall protection of public health and the environment

The No Further Action alternative would not be protective of public health and the environment. Although the contaminants are present at depth, groundwater impacted by chlorinated VOCs would be left at the site and would provide a potential source for soil vapor intrusion. The surrounding community is supplied with public drinking water therefore, potential future exposure to contaminated groundwater would be to construction/excavation activities at the site or the adjacent utility right-of-way. This exposure pathway could be mitigated through the use of appropriate health and safety protocols during any such work. .

14.1.2.3. Compliance with SCGs

Alternative 2 would not meet the SCGs over the long term.

14.1.2.4. Long-Term Effectiveness and Permanence

Alternative 2 would not be effective in the long-term since natural attenuation processes are not likely to provide a significant level of contaminant reduction.

14.1.2.5. Reduction of Toxicity, Mobility, or Volume with Treatment

Alternative 2 would not reduce the toxicity or mobility of the contaminants, but may reduce the contaminant mass in the groundwater over the long-term through intrinsic natural attenuation processes.

14.1.2.6. Short-Term Effectiveness

Community Protection

Alternative 2 would be protective of the community during the short-term since the contaminants in the groundwater are present at depth, however, the potential for soil vapor intrusion must be considered for adjacent properties.

Worker Protection

Implementation of this alternative would be undertaken using standard procedures for worker protection including the establishment of a health and safety plan which would the appropriate protective measures which should be undertaken during any subsurface activities in the affected area.

Environmental Impacts

Implementation of this alternative could benefit the environment through the eventual reduction of contaminants in the subsurface by natural attenuation processes.

Time Required to Implement

Alternative 2 could be implemented immediately and is likely to take at least five years to complete since the concentration of CVOCs is relatively high.

14.1.2.7. Implementability

Alternative 2 could be easily implemented using readily available technologies.

14.1.2.8. Cost

The capital, O&M and Present worth costs for Alternative 2 are presented in Table 14-1. A five year monitoring period was chosen for this alternative to verify steady state conditions.

- **Capital Costs:** There are no capital costs to construct and implement Alternative 2 since the monitoring wells necessary to monitor the groundwater were installed as part of the RI.
- **O&M Costs:** The probable annual operations, monitoring and maintenance cost for Alternative 2 is \$23,000.
- **Present Worth Cost:** Over a five year monitoring period, the probable net present worth for this alternative is approximately \$100,000. This was calculated using a 5% annual discount rate.

14.1.3. Alternative 3: In-Situ Chemical Oxidation using Sodium Permanganate

14.1.3.1. Description

Alternative 3 consists of the following items.

- A pilot test, including installation of an injection well, to determine chemical oxidant radius of influence and treatability;
- Injection of chemical oxidant through injection well;
- Pre- and Post-injection groundwater sampling;
- Groundwater monitoring; and
- A SMP and Institutional Controls as outlined in Alternative 2.

14.1.3.2. Overall protection of public health and the environment

Alternative 3 would likely be more protective of human health and the environment than the No Further Action alternative since the use of sodium permanganate would result in the treatment of contaminants in the subsurface, thereby reducing the potential for soil vapor intrusion and utility worker exposure pathways.

14.1.3.3. Compliance with SCGs

Alternative 3 would meet the SCGs in a relatively short period by treating the contaminants in the subsurface.

14.1.3.4. Long-Term Effectiveness and Permanence

The use of sodium permanganate would treat the contaminants in the subsurface and would, therefore, be effective over the long-term.

14.1.3.5. Reduction of Toxicity, Mobility, or Volume with Treatment

Alternative 3 would reduce the toxicity of the CVOCs by oxidizing them to non-toxic end products. This alternative would have no effect on the mobility of the contaminants, but would be expected to greatly reduce the contaminant mass in the groundwater.

14.1.3.6. Short-Term Effectiveness

Community Protection

Alternative 3 would be protective of the community during the short-term since the use of sodium permanganate would result in the immediate treatment of contaminants in the subsurface. Temporary barriers would be installed during treatment activities to prevent accidental community exposure to the chemical oxidants during the injection process.

Worker Protection

Utility workers would be protected under Alternative 3 since the use of sodium permanganate would result in the treatment of contaminants in the subsurface.

Environmental Impacts

Implementation of this alternative would benefit the environment through the treatment of contaminants in the subsurface.

Time Required to Implement

The time required to implement this alternative is approximately two years.

14.1.3.7. Implementability

Performing chemical injections and routine groundwater sampling and monitoring activities are actions that can be readily implemented at the site.

14.1.3.8. Cost

The capital, O&M and Present worth costs for Alternative 3 are presented in Table 14-2. A three year monitoring period was chosen for this alternative to verify steady state conditions.

- **Capital Costs:** The probable capital cost to construct and implement Alternative 3 is \$148,400
- **O&M Costs:** The probable annual operations, monitoring and maintenance cost for Alternative 3 is \$23,000.
- **Present Worth Cost:** Over a three year monitoring period, the probable net present worth for this alternative is approximately \$234,000. This was calculated using a 5% annual discount rate.

14.1.4. Alternative 4: Air Sparging/Soil Vapor Extraction

14.1.4.1. Description

Alternative 4 consists of the following items.

- A pilot test to determine SVE radius of influence, and optimization with air sparging;
- Installation of AS and SVE wells;
- Installation of treatment building and piping;
- System operation; and
- A SMP and Institutional Controls as outlined in Alternative 2.

14.1.4.2. Overall protection of public health and the environment

Alternative 4 would likely be more protective of human health and the environment than the No Further Action alternative since the use of AS/SVE would result in the treatment/removal of contaminants in the subsurface, thereby reducing the potential for soil vapor intrusion and utility worker exposure pathways.

14.1.4.3. Compliance with SCGs

Alternative 4 would meet the SCGs in a relatively short period by treating the contaminants in the subsurface.

14.1.4.4. Long-Term Effectiveness and Permanence

The use of AS/SVE would treat contaminants in the subsurface and would, therefore, be effective over the long-term.

14.1.4.5. Reduction of Toxicity, Mobility, or Volume with Treatment

This alternative would have no effect on the toxicity but AS would have an impact on the mobility of the contaminants. SVE, however, would provide a positive control for contaminant mobility. Alternative 4 would be expected to greatly reduce the contaminant mass in the groundwater.

14.1.4.6. Short-Term Effectiveness

Community Protection

Alternative 4 would be protective of the community during the short-term since the use of AS/SVE would result in the immediate treatment of the contaminants in the subsurface. In addition, SVE would significantly reduce the potential for on and off-site soil vapor intrusion exposures.

Worker Protection

Utility workers would be protected under this alternative since the use of AS/SVE would result in the reduction of contaminants in the subsurface.

Environmental Impacts

Implementation of this alternative would benefit the environment through the treatment of contaminants in the subsurface.

Time Required to Implement

The time required to implement this alternative is approximately one year.

14.1.4.7. Implementability

Performing remedial system installation and operation as well as routine groundwater sampling and monitoring activities are actions that can be readily implemented at the site.

14.1.4.8. Cost

The capital, O&M and Present worth costs for Alternative 4 are presented in Table 14-3. A three year monitoring period was chosen for this alternative to verify steady state conditions.

- **Capital Costs:** The probable capital cost to construct and implement Alternative 4 is \$322,100.
- **O&M Costs:** The probable annual operations, monitoring and maintenance cost for Alternative 4 is \$66,000.
- **Present Worth Cost:** Over a three year monitoring period, the probable net present worth for this alternative is approximately \$568,000. This was calculated using a 5% annual discount rate.

14.1.5. Alternative 5: Enhanced Bioremediation using HRC

14.1.5.1. Description

Alternative 5 consists of the following items.

- A pilot test, with installation of an injection well, to determine HRC radius of influence and treatability;
- Installation of injection well;
- Injection of HRC through injection well;
- Groundwater monitoring; and
- A SMP and Institutional Controls as outlined in Alternative 2.

14.1.5.2. Overall protection of public health and the environment

Alternative 5 would likely be more protective of human health and the environment than the No Further Action alternative since the use of HRC would result in the treatment of contaminants in the subsurface, thereby reducing the potential for soil vapor intrusion and potential utility worker exposure pathways.

14.1.5.3. Compliance with SCGs

Alternative 5 would meet the SCGs in a relatively short period by treating the contaminants in the subsurface.

14.1.5.4. Long-Term Effectiveness and Permanence

The use of HRC would treat the contaminants in the subsurface and would, therefore, be effective over the long-term.

14.1.5.5. Reduction of Toxicity, Mobility, or Volume with Treatment

Alternative 5 would reduce the toxicity of the CVOCs by facilitating reductive dechlorination to produce non-toxic end products. This alternative would have no effect on the mobility of the contaminants, but would be expected to greatly reduce the contaminant mass in the groundwater.

14.1.5.6. Short-Term Effectiveness

Community Protection

Alternative 5 would be protective of the community during the short-term since the use of HRC would result in the immediate treatment of the contaminants in the subsurface.

Worker Protection

Utility workers would be protected under Alternative 5 since the use of sodium permanganate would result in the treatment of the remaining contaminants in the subsurface.

Environmental Impacts

Implementation of this alternative would benefit the environment through the treatment of the remaining contaminants in the subsurface.

Time Required to Implement

The time required to implement this alternative is approximately one year.

14.1.5.7. Implementability

Performing injections and routine groundwater sampling and monitoring activities are actions that can be readily implemented at the site.

14.1.5.8. Cost

The capital, O&M and Present worth costs for Alternative 5 are presented in Table 14-4. A three year monitoring period was chosen for this alternative to verify steady state conditions.

- **Capital Costs:** The probable capital cost to construct and implement Alternative 5 is \$113,900.

- **O&M Costs:** The probable annual operations, monitoring and maintenance cost for Alternative 5 is \$20,000.
- **Present Worth Cost:** Over a three year monitoring period, the probable net present worth for this alternative is approximately \$188,000. This was calculated using a 5% annual discount rate.

15. Comparative Analysis

15.1. Overview

The RAOs for the Henry Johnson Boulevard Properties are concerned with the prevention of contact with contaminated soil and groundwater and the remediation of the affected media to pre-release conditions or the CSCOs and NYSDEC Class GA Standards for soil and groundwater, respectively. The alternatives presented for each area of the site provide varying levels of remedial actions.

15.1.1. Area 2

Alternative 1, the No Further Action alternative defines the minimum steps to be taken for remediation of the site. This alternative alone, will likely meet the RAOs over the long-term. All the remaining alternatives include the components of the No Further Action alternative. Alternative 2, MNA, is similar to the No Further Action alternative, but would include groundwater monitoring to document reductions in the concentrations of CVOCs in the groundwater over time. Alternative 3, ISCO using sodium permanganate, would likely meet the RAOs over the short-term.

15.1.2. Area 3

Alternative 1, the No Further Action alternative defines the minimum steps to be taken for remediation of the site. This alternative alone, will likely meet the RAOs over the long-term. Alternative 2, MNA, is similar to the No Further Action alternative, but would include groundwater monitoring to document reductions in the concentrations of petroleum compounds in the groundwater over time.

15.1.3. Area 4

Alternative 1, the No Further Action alternative defines the minimum steps to be taken for remediation of the site. This alternative alone, will not likely meet the RAOs over the long-term. All the remaining alternatives include the components of the No Further Action alternative. Alternative 2, MNA, is similar to the No Further Action alternative, but would include groundwater monitoring to document reductions in the concentrations of CVOCs in the groundwater over time. Alternative 3, ISCO using sodium permanganate, would likely meet the RAOs over the short-term. Alternative 4, Air Sparging/Soil Vapor Extraction, would likely meet the RAOs over the short-term. Alternative 5, Enhanced Bioremediation using HRC, would likely meet the RAOs over the short-term. However Enhanced Biodegradation depends on specific biological processes for complete contaminant degradation where as ISCO relies on the chemical

oxidant for contaminant reduction. Therefore, more contaminant removal is expected from ISCO compared to Enhanced Biodegradation.

15.2. Overall Protection of Public Health and the Environment

15.2.1. Area 2

Alternative 1 may be protective of human health and the environment however, the potential for soil vapor intrusion exists. Additional routes of exposure are limited to utility workers only. However, this exposure can be controlled through the implementation of health and safety protocols for work in the area.

Alternative 2 provides a similar level of protection to Alternative 1 except the exposure pathways would be monitored over time.

Alternative 3 would be protective of human health and the environment as the potential routes of exposure are limited to utility workers only. This exposure can be controlled through the implementation of health and safety protocols for work in the area.

15.2.2. Area 3

All of the alternatives would be protective of human health and the environment as the potential routes of exposure are limited to utility workers only. This exposure can be controlled through the implementation of health and safety protocols for work in the area.

15.2.3. Area 4

Alternative 1 would not be protective of human health and the environment as the potential for soil vapor intrusion exists. Additional routes of exposure are limited to utility workers only. However, this exposure can be controlled through the implementation of health and safety protocols for work in the area.

Alternative 2 provides a similar level of protection to Alternative 1 except the exposure pathways would be monitored over time.

Alternatives 3, 4, and 5 would be protective of human health since each method would result in the treatment of contaminants in the subsurface, thereby reducing the potential for soil vapor intrusion and utility worker exposure pathways.

15.3. Compliance with SCGs

15.3.1. Area 2

Alternatives 1 and 2 may meet the SCGs.

Alternative 3 is capable of meeting the SCGs.

15.3.2. Area 3

Alternatives 1 and 2 may meet the SCGs.

15.3.3. Area 4

Alternatives 1 and 2 are not likely to meet the SCGs.

Alternatives 3, 4, and 5 are capable of meeting SCGs.

15.4. Long-Term Effectiveness and Permanence

15.4.1. Area 2

All of the alternatives would be effective in the long-term.

15.4.2. Area 3

All of the alternatives would be effective in the long-term.

15.4.3. Area 4

Alternatives 3, 4, and 5 would be effective in the long-term.

15.5. Reduction of Toxicity, Mobility, or Volume with Treatment

15.5.1. Area 2

All of the alternatives will reduce the contaminant mass and have little effect on the mobility of contaminants, but have varying effects in the reduction of toxicity. The ranking of each of the alternatives, in order of reduction of toxicity (from greatest to least) is shown below.

1. Alternative 3 – ISCO using Sodium Permanganate
2. Alternatives 1, 2, – No Further Action and MNA.

15.5.2. Area 3

Each of the alternatives will reduce the contaminant mass, and have little effect on the mobility or toxicity of contaminants.

15.5.3. Area 4

All of the alternatives will reduce the contaminant mass, and (with the exception of SVE) have little effect on the mobility of contaminants, but have varying effects in the reduction of toxicity. The ranking of each of the alternatives, in order of reduction of toxicity (from greatest to least) is shown below.

1. Alternatives 3 and 5 – ISCO using Sodium Permanganate and Enhanced Bioremediation using HRC.
2. Alternatives 1, 2, and 4 – No Further Action, MNA, and Air Sparging/Soil Vapor Extraction.

15.6. Short-Term Effectiveness

15.6.1. Area 2

The ranking of each of the alternatives, in order of short-term effectiveness (from greatest to least) is shown below.

1. Alternative 4 – ISCO using Sodium Permanganate.
2. Alternatives 1 and 2 – No Further Action, MNA.

15.6.2. Area 3

The ranking of each of the alternatives, in order of short-term effectiveness (from greatest to least) is shown below.

1. Alternative 1 – No Further Action.
2. Alternatives 2 – MNA.

15.6.3. Area 4

The ranking of each of the alternatives, in order of short-term effectiveness (from greatest to least) is shown below.

1. Alternatives 3, 4, and 5 – ISCO using Sodium Permanganate, Air Sparging/Soil Vapor Extraction, and Enhanced Bioremediation using HRC.
2. Alternatives 1 and 2 – No Further Action, MNA.

15.7. Implementability

15.7.1. Area 2

Each of the alternatives could be readily implemented using locally available resources.

15.7.2. Area 3

Each of the alternatives could be readily implemented using locally available resources.

15.7.3. Area 4

Each of the alternatives could be readily implemented using locally available resources.

15.8. Cost

15.8.1. Area 2

A comparison of the costs for each alternative is provided in Table 15-1. The ranking of each of the alternatives, in order of the cost (from lowest to highest) required to meet the RAOs is shown below.

1. Alternative 1 – No Further Action
2. Alternative 2 - MNA
3. Alternative 3 – ISCO using Sodium Permanganate

15.8.2. Area 3

A comparison of the costs for each alternative is provided in Table 15-1. The ranking of each of the alternatives, in order of the cost (from lowest to highest) required to meet the RAOs is shown below.

1. Alternative 1 – No Further Action
2. Alternative 2 - MNA.

15.8.3. Area 4

A comparison of the costs for each alternative is provided in Table 15-1. The ranking of each of the alternatives, in order of the cost (from lowest to highest) required to meet the RAOs is shown below.

1. Alternative 1 – No Further Action
2. Alternative 2 - MNA

3. Alternative 5 – Enhanced Bioremediation using HRC
4. Alternative 3 – ISCO using Sodium Permanganate
5. Alternative 4 – Air Sparging/Soil Vapor Extraction

15.9. Recommendations

15.9.1. Area 2

As discussed above, all of the alternatives are capable of meeting the RAOs in the long-term. Because the area of impacted groundwater is much larger than the area of impacted soil, and because of the risk of vapor intrusion into any future structures, it is recommended that Alternative 3 – ISCO using Sodium Permanganate, be selected as the remedy for this area of the site. Implementation of Alternative 3 will address both soil and groundwater contamination in the short-term, allow for documentation of the anticipated reductions in the concentrations of CVOC compounds in the groundwater over time, and will provide the data necessary for eventual site closure and beneficial reuse of this area of the site.

15.9.2. Area 3

As discussed above, all of the alternatives are capable of meeting the RAOs in the long-term. Because the concentrations of petroleum compounds in the soil are very low, well below the CSCOs, and concentrations of petroleum compounds in the groundwater are within the range that natural attenuation would be expected to be effective in a reasonable amount of time, it is recommended that Alternative 2 – Monitored Natural Attenuation, be selected as the remedy for the site. Implementation of Alternative 2 will allow for documentation of the anticipated reductions in the concentrations of petroleum compounds in the groundwater over time and will provide the data necessary for eventual site closure.

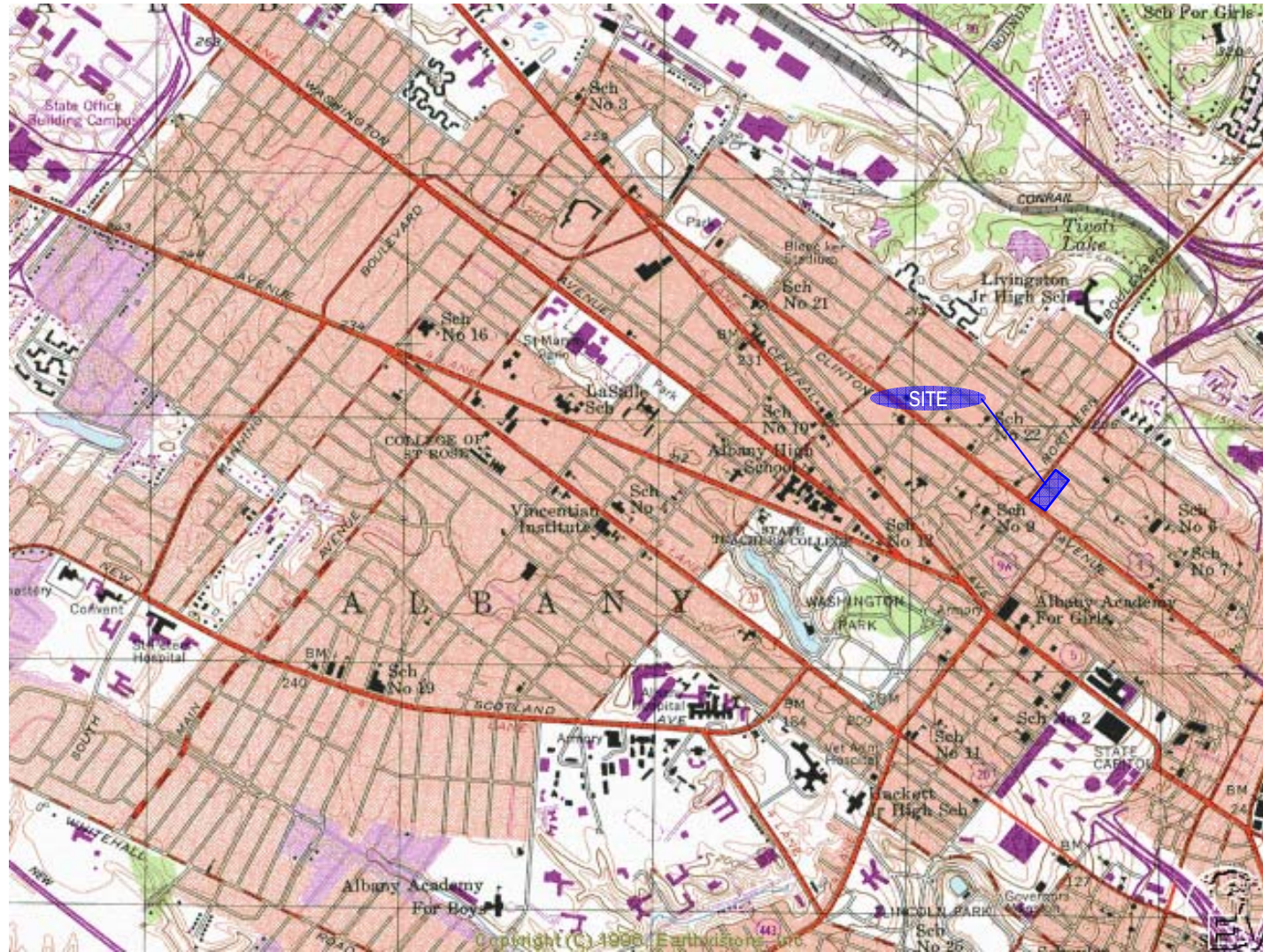
15.9.3. Area 4

As discussed above, Alternatives 3, 4, and 5 are capable of meeting the RAOs in the long-term. Alternatives 3 (ISCO), 4 (AS/SVE), and 5 (HRC) would likely be capable of meeting RAOs in a similar amount of time. Alternatives 3 (ISCO) and 5 (HRC) are comparable in cost, while Alternative 4 (AS/SVE) is significantly more in cost and therefore not likely to be cost-effective. Because the concentrations of CVOCs in the area of impacted groundwater are relatively large and therefore pose a risk for vapor intrusion into any future structures or existing adjacent structures, it is recommended that Alternative 3 – ISCO using Sodium Permanganate, be selected as the remedy for this area of the site. Implementation of Alternative 3 will address groundwater contamination in the short-term, allow for documentation of the anticipated reductions in the

concentrations of CVOC compounds in the groundwater over time, and will provide the data necessary for eventual site closure and beneficial reuse of this area of the site.

16. References

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SOURCE: 7.5 MINUTE TOPOGRAPHIC MAP
ALBANY QUADRANGE, NEW YORK
UNITED STATES GEOLOGIC SURVEY 1980.



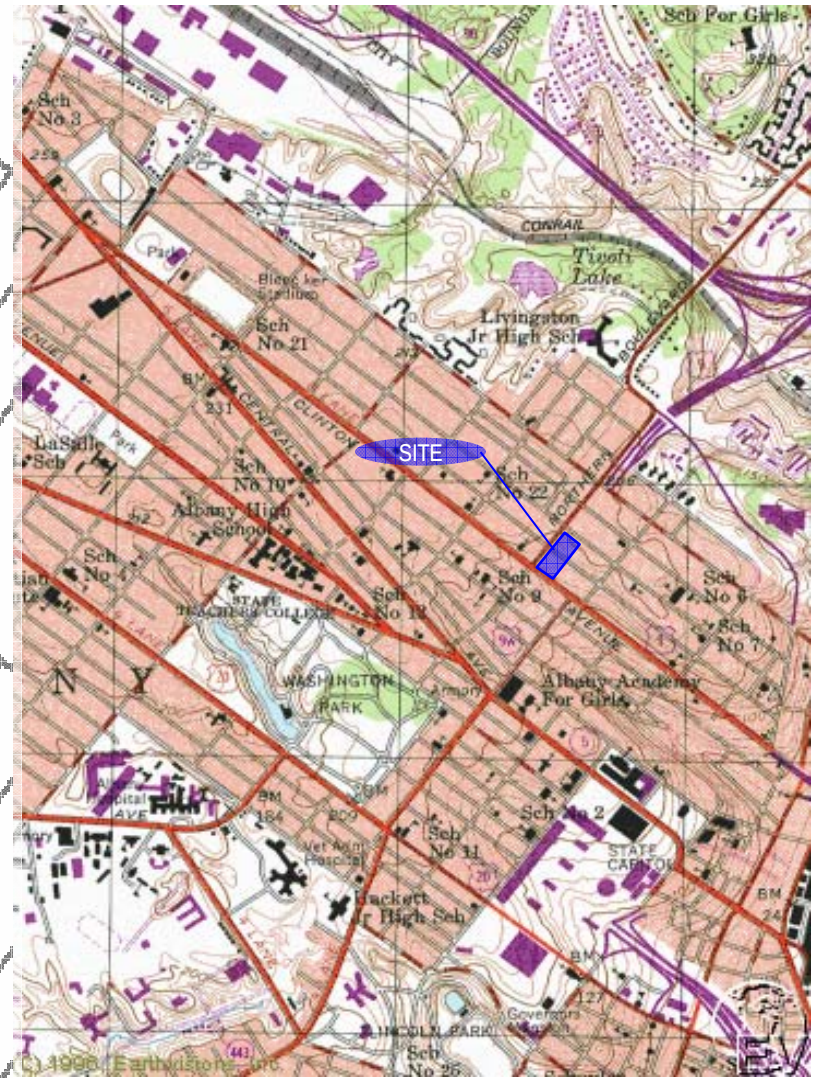
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**HENRY JOHNSON BOULEVARD PROPERTIES
ALBANY, NEW YORK**

SITE LOCATION

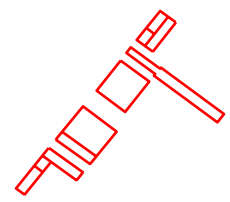
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FIGURE 2-1



LEGEND

Henry Johnson Boulevard Properties



XREFS: I:\ACAD\PROJ\4279\XREF\4279009-BASEMAP.dwg IMAGES: K:\Symbols2000\Pirnie Standard\Gen\MPI Title Blocks\MPLOGOBK_NoBleed.jpg
User: Lewandowski Spec: PIRNIE STANDARD File: I:\ACAD\PROJ\4279\009\HENRY JOHNSON ERP\Remedial Investigation\FIGURE3-1.DWG Scale: 1:1 Date: 02/05/2008 Time

HJB-SRA-1S	5/30/07	South sidewalk ~8.5' bgs
Analyses		
TCL VOCs		ND
TCL SVOCs		ND

HJB-SRA-1W	5/29/07	West sidewalk ~8.5' bgs
Analyses		
TCL VOCs		ND
TCL SVOCs		ND

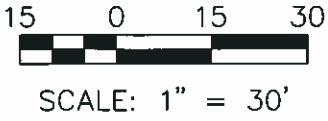
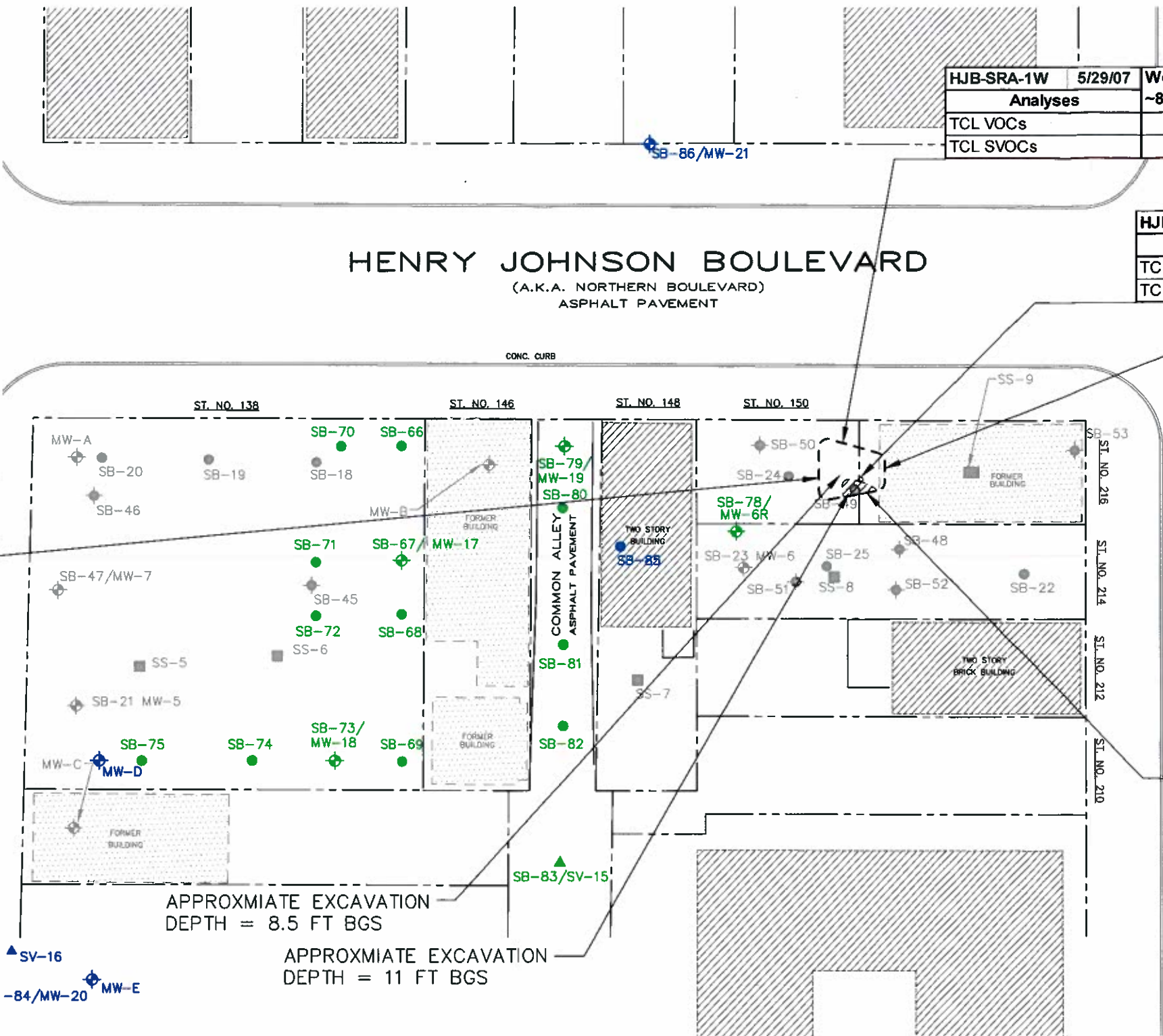
HJB-SRA-1B	5/29/07	Bottom sample ~8.5' bgs
Analyses		
TCL VOCs		ND
TCL SVOCs		ND

HJB-SRA-1N	5/29/07	East sidewalk ~8.5' bgs
Analyses		
TCL VOCs		ND
TCL SVOCs		ND

HJB-SRA-1E	5/29/07	East sidewalk ~8.5' bgs
Analyses		
TCL VOCs		ND
TCL SVOCs		ND

LEGEND	
■ SS-2	SURFACE SOIL SAMPLE
● SB-6	SOIL BORING
◆ SB-15/MW-3	MONITORING WELL
---	PROPERTY LINE
- - - -	APPROXIMATE LIMITS OF SOIL REMOVAL AREA
◆ SB-32	DIRECT-PUSH SOIL BORING- 2006
◆ SB-54/MW-11	HSA SOIL BORING/MONITORING WELL- 2006
⊕ SB-11	INDOOR AIR/SOIL VAPOR MONITORING POINT
▲ SB-11	SOIL VAPOR MONITORING POINT- 2006
● SB-70	SOIL BORING- 2007
◆ SB-73/MW-18	SOIL BORING/MONITORING WELL- 2007
▲ SV-11	SOIL VAPOR MONITORING POINT- 2007

MATCH LINE SEE FIGURE 3-2



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REVISIONS			
NO.	BY	DATE	REMARKS

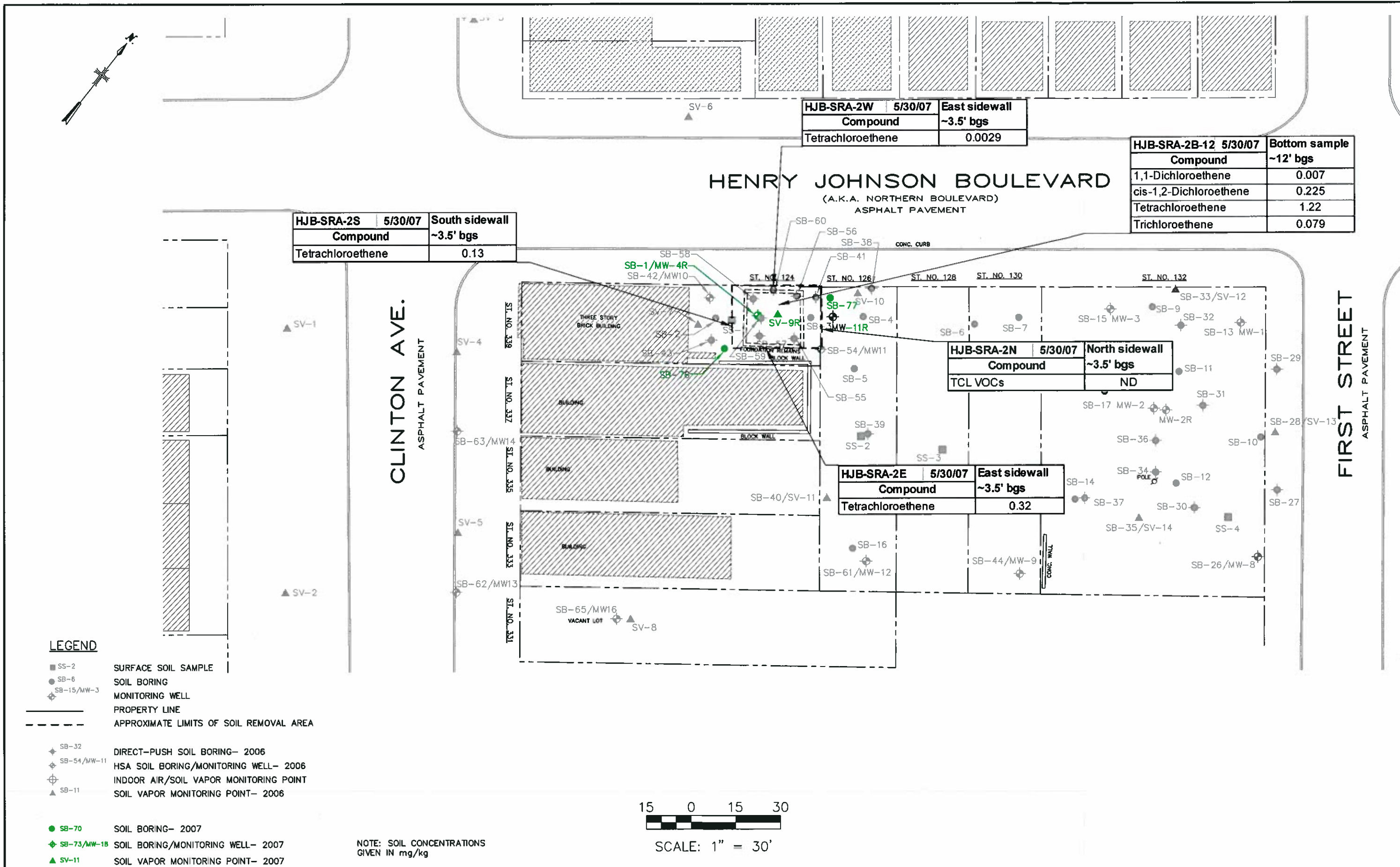
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CKD.

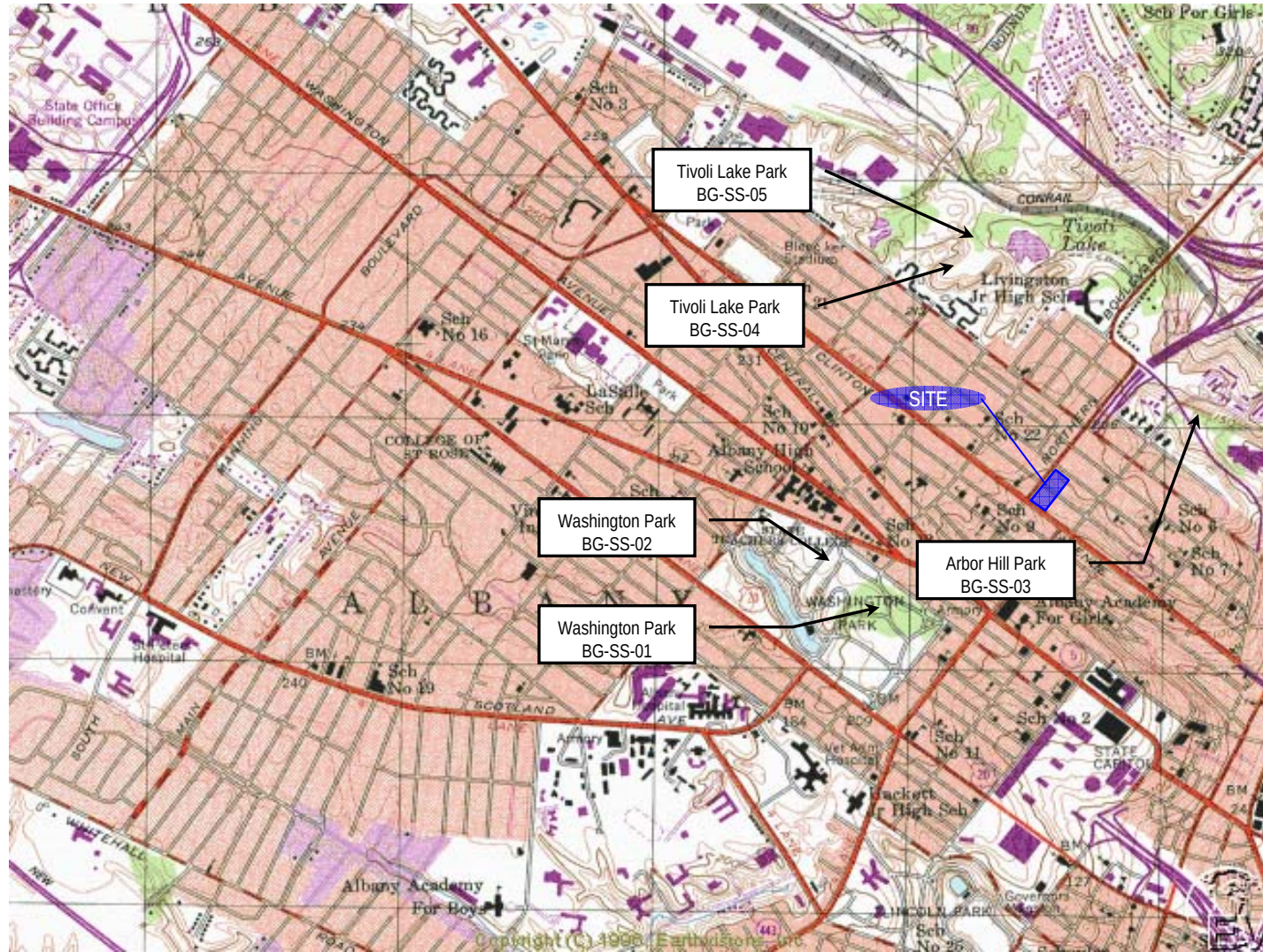
CITY OF ALBANY
ALBANY, NEW YORK
HENRY JOHNSON BOULEVARD ERP

SRA-1 EXCAVATION LIMITS AND
CONFIRMATION SAMPLE RESULTS

SCALE: AS SHOWN

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FIGURE 3-1
CAD REF. NO. 4279009





SOURCE: 7.5 MINUTE TOPOGRAPHIC MAP
ALBANY QUADRANGLE, NEW YORK
UNITED STATES GEOLOGIC SURVEY 1980.



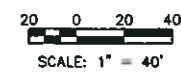
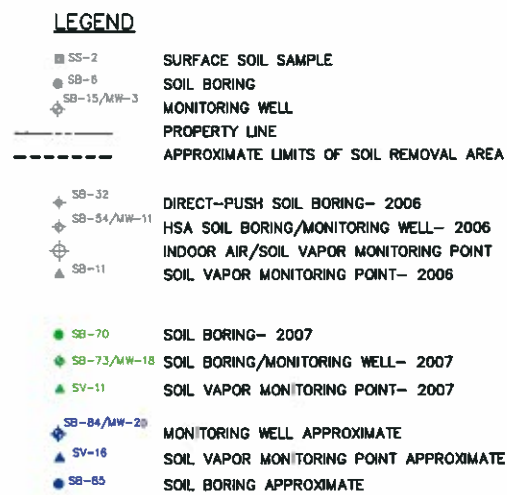
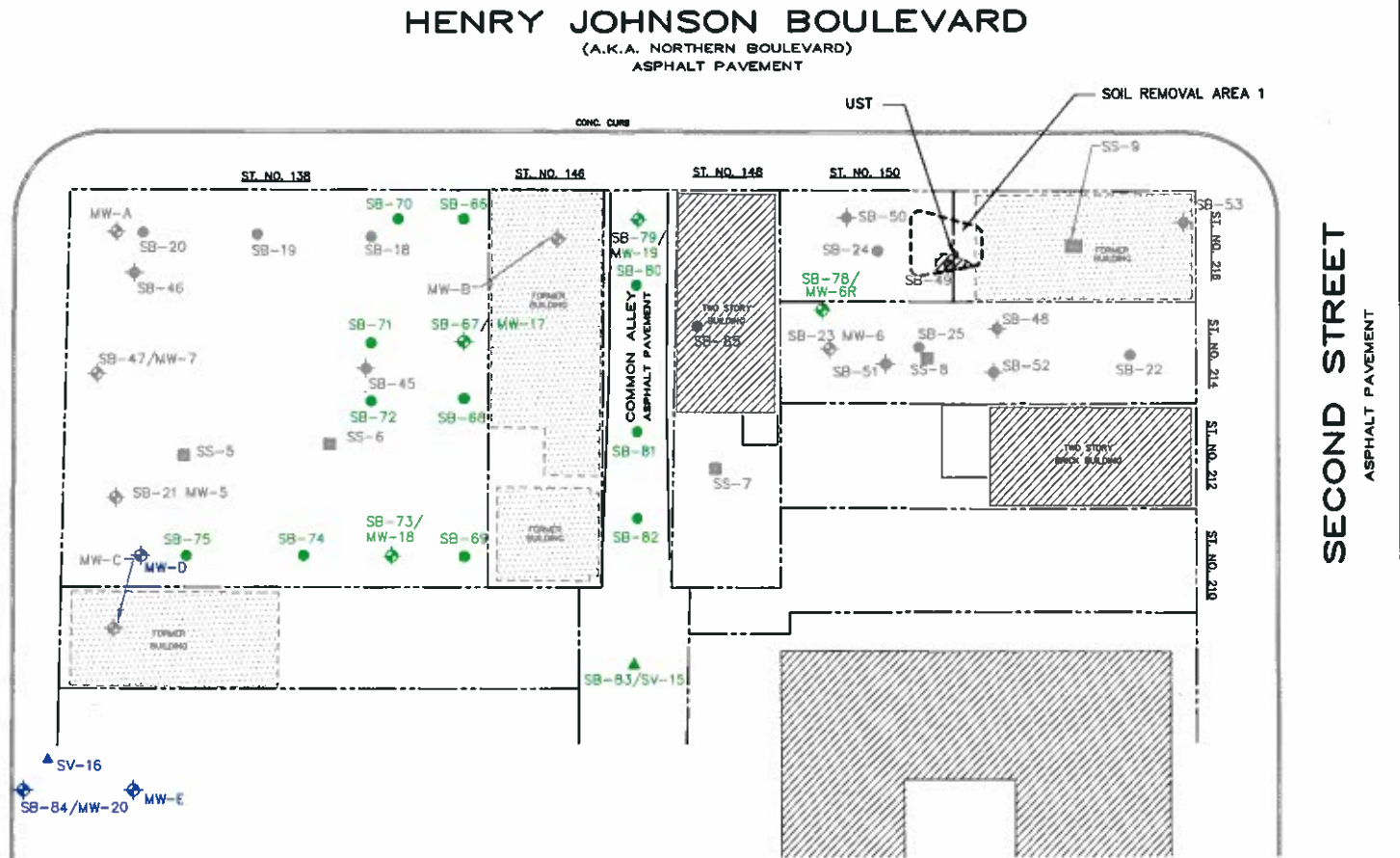
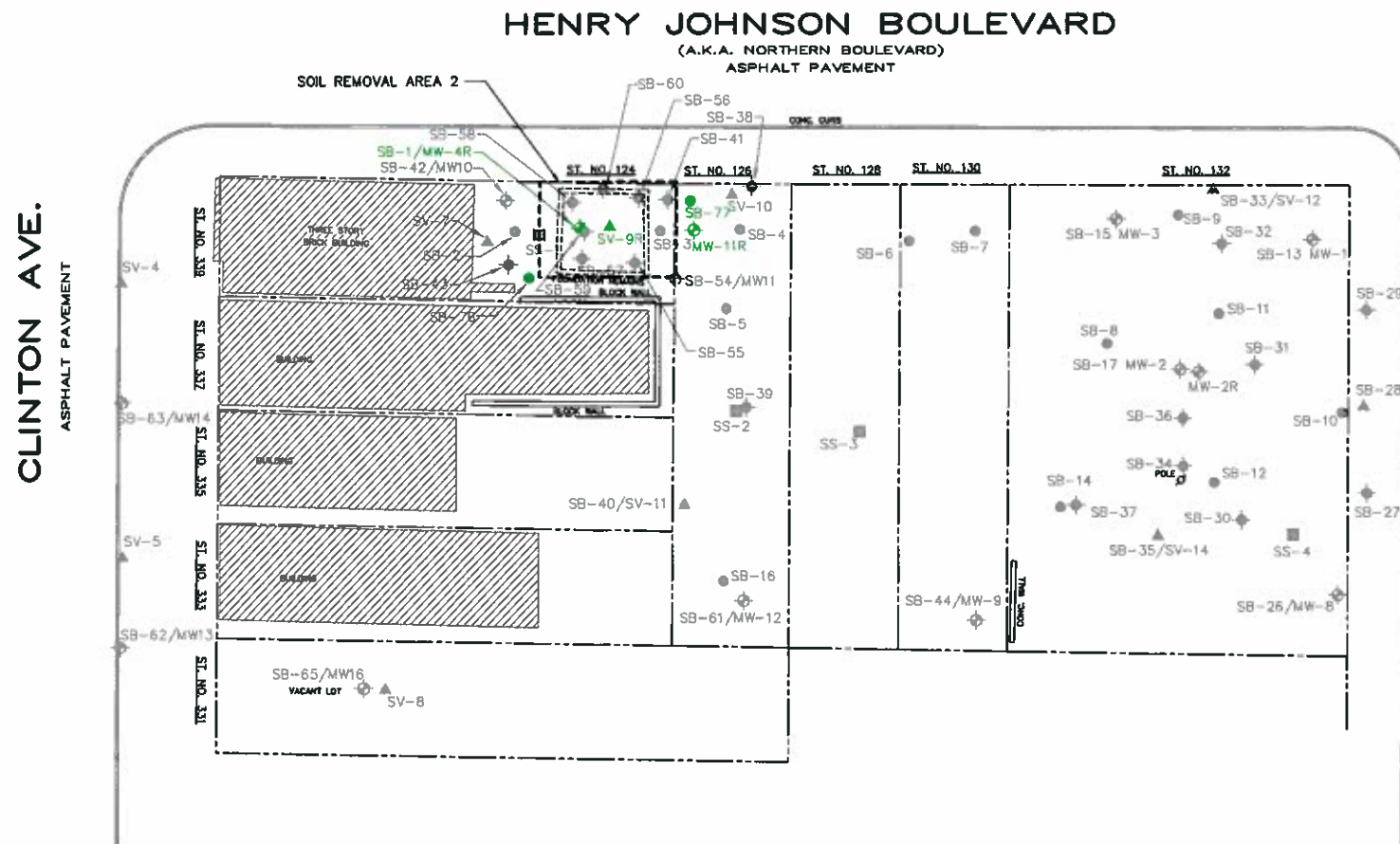
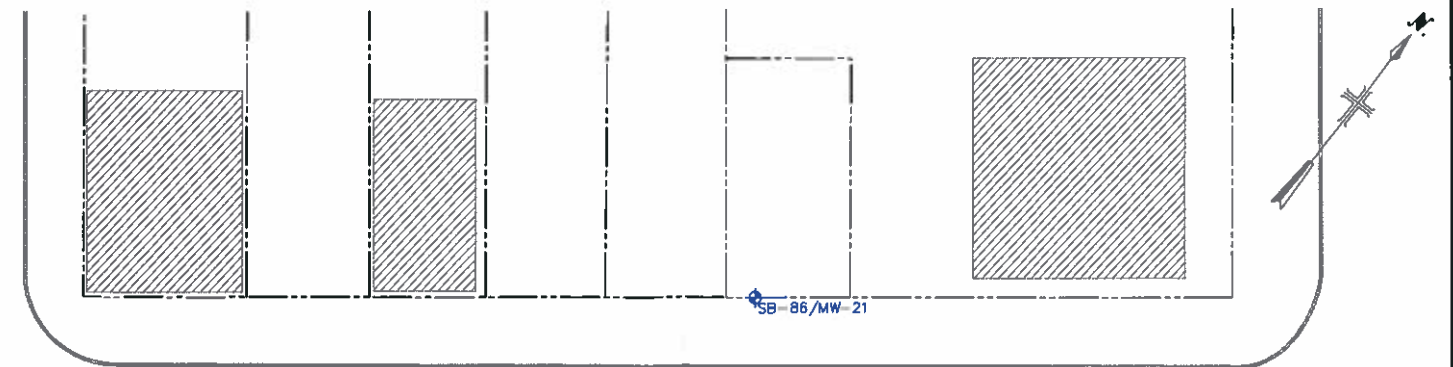
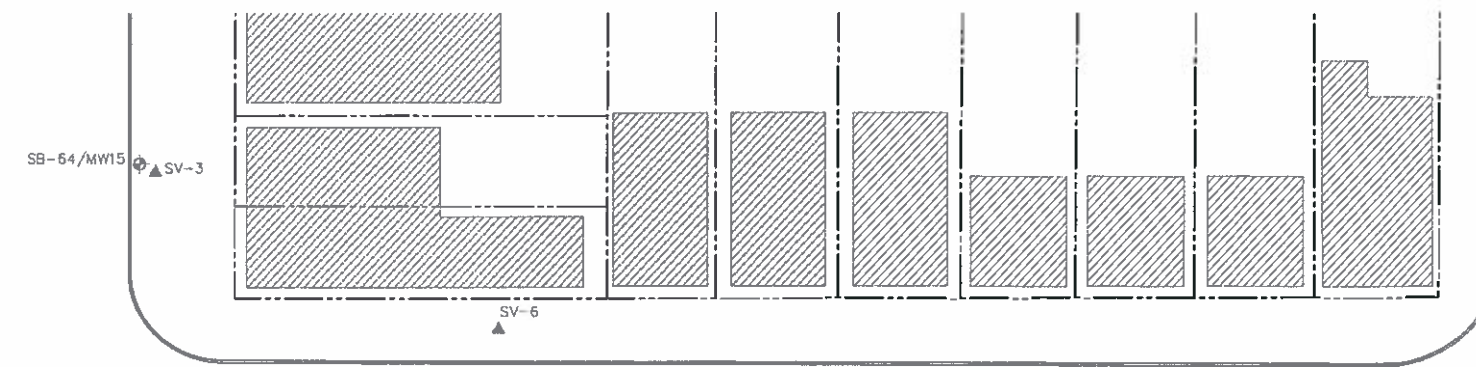
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**HENRY JOHNSON BOULEVARD PROPERTIES
ALBANY, NEW YORK**

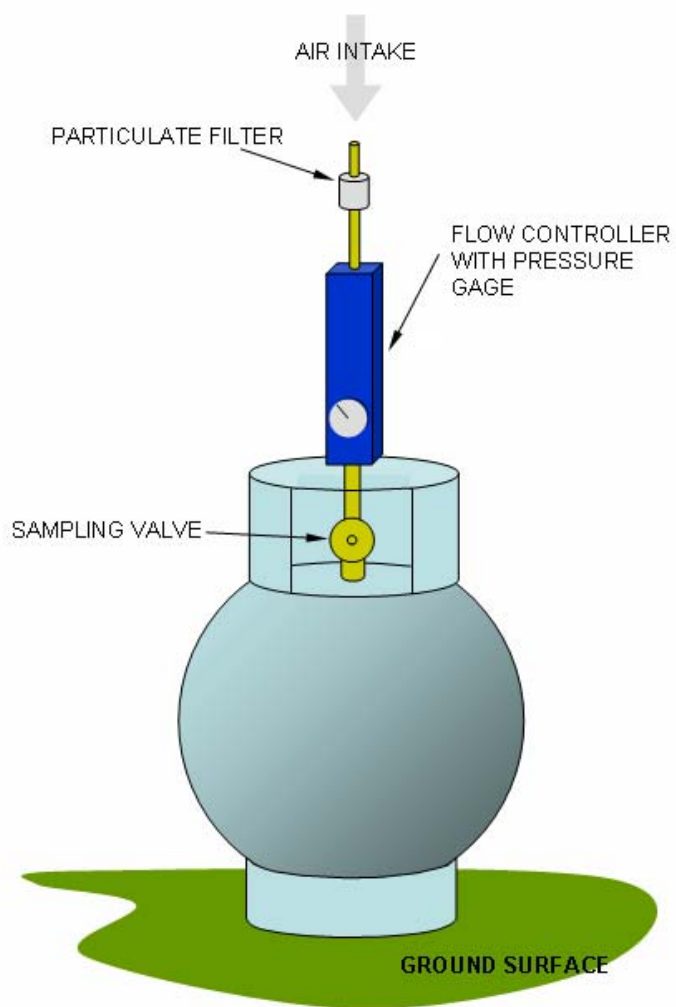
**BACKGROUND SURFACE SOIL SAMPLING
LOCATIONS**

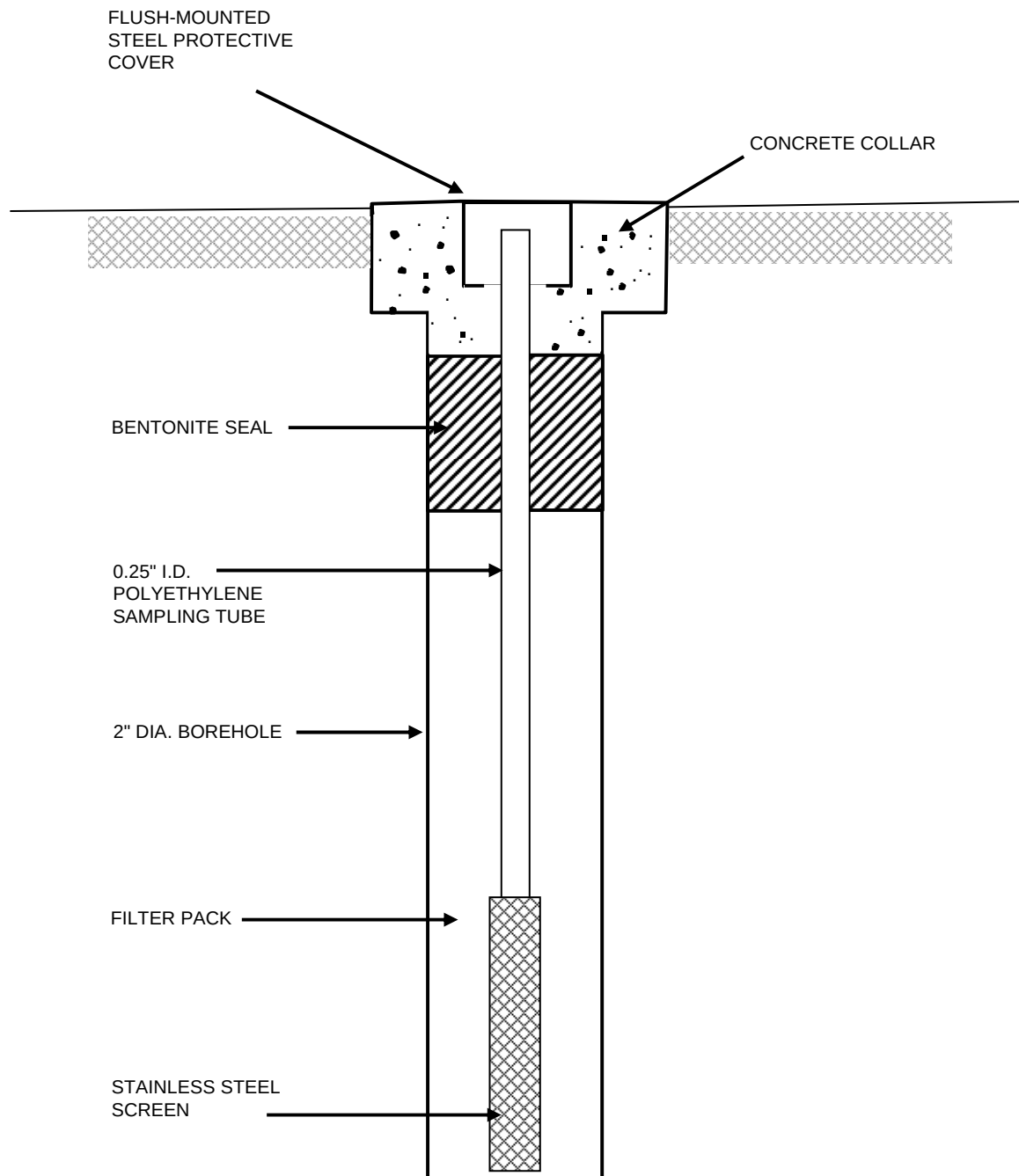
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FIGURE 4-1

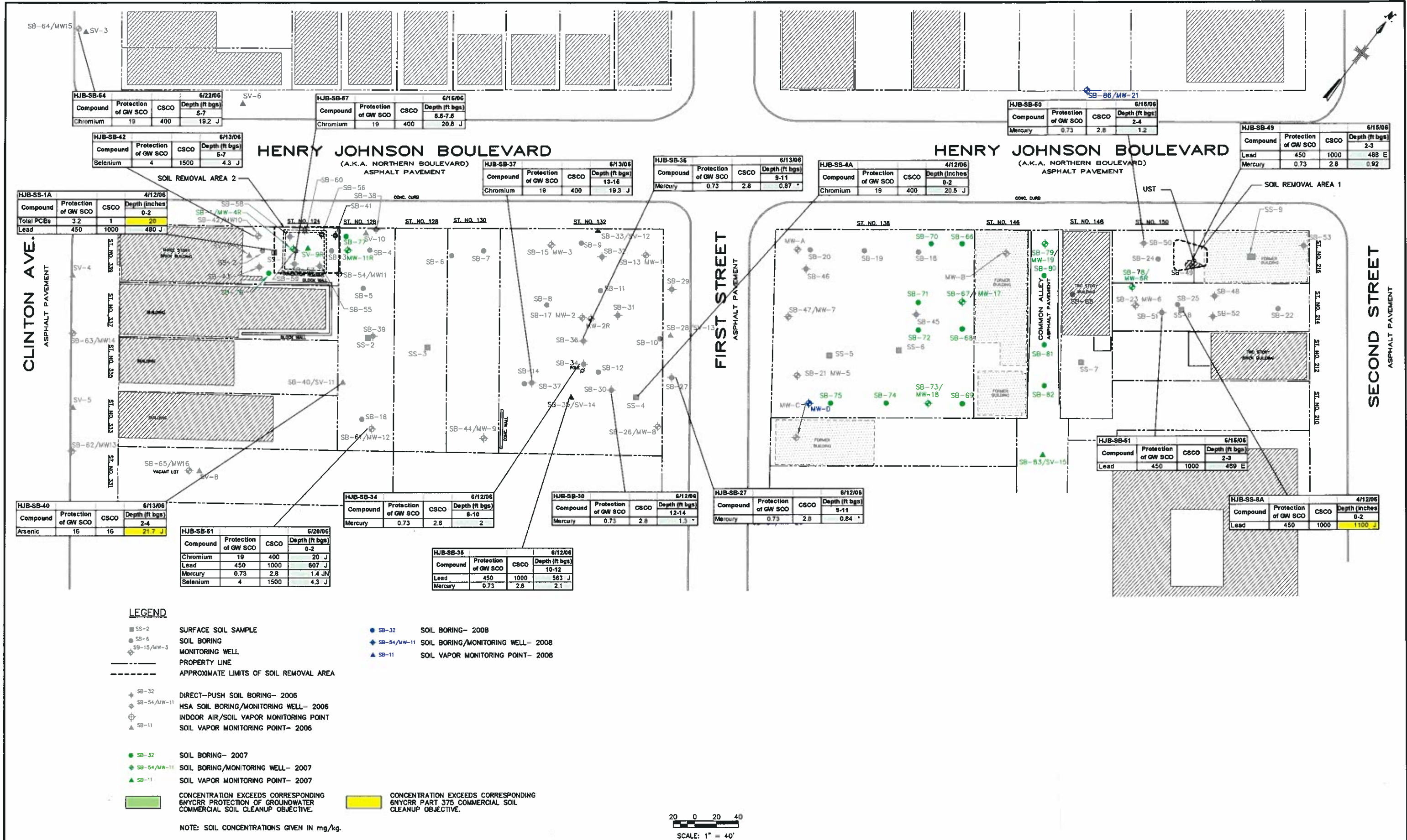


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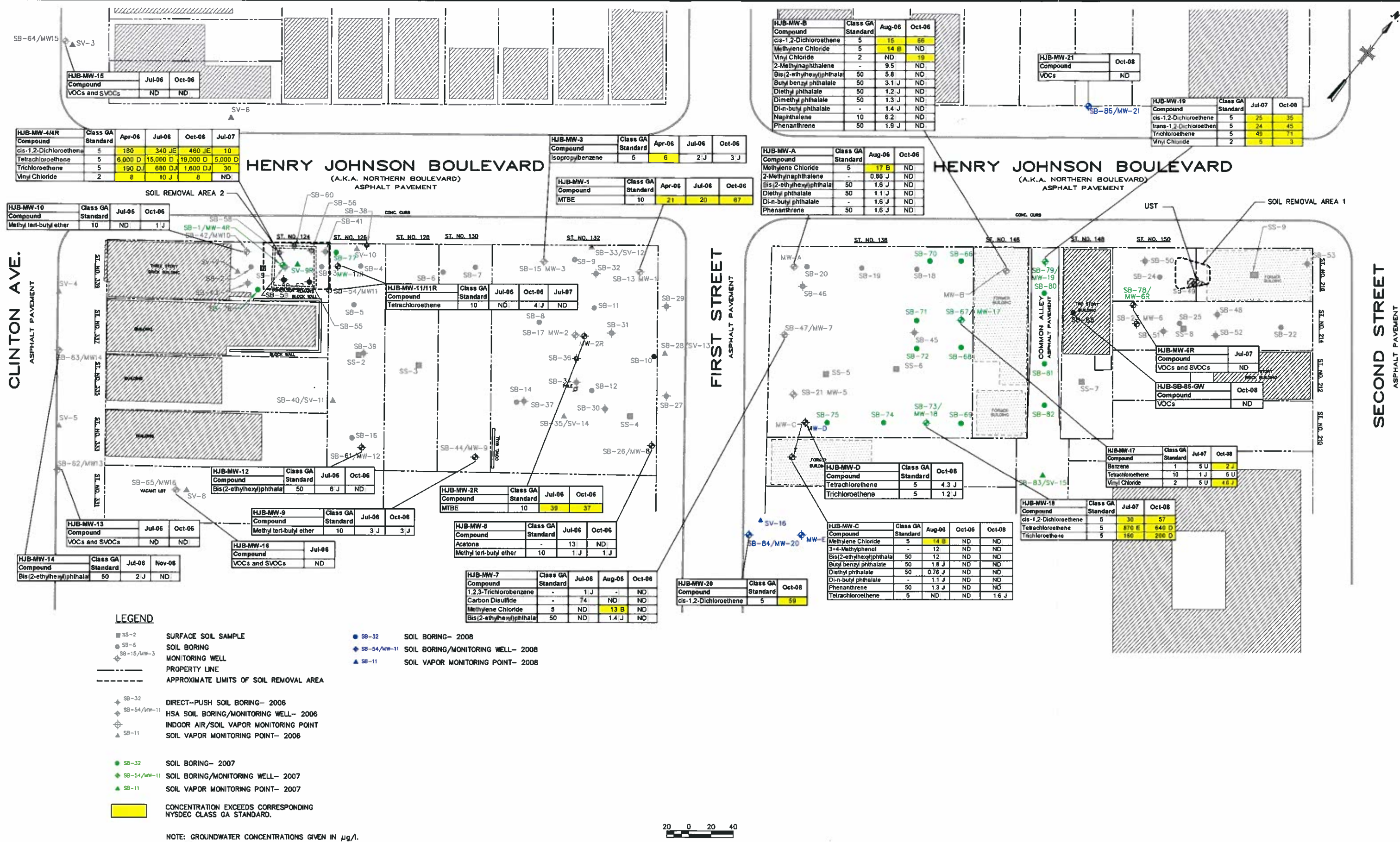
User: Leonardowski, Site: PRIME STANDARD, File: \ACAD\PROJ\4279\009\HENRY JOHNSON ERP\Remedial Investigation\FIGURE7-2.DWG, Scale: 1"=40', Date: 01/13/2009, Time: 15:08, Layout: Layout1, XREFS: \ACAD\PROJ\4279\009\HENRY JOHNSON ERP\Remedial Investigation\FIGURE7-2.DWG, Images: K:\Symbols\2000\Prime Standard\Gen\Map1 Title Blocks\VP1000BK_Natiled.dwg



CLINTON AVE.
ASPHALT PAVEMENT

FIRST STREET
ASPHALT PAVEMENT

SECOND STREET
ASPHALT PAVEMENT



CITY OF ALBANY
ALBANY, NEW YORK
HENRY JOHNSON BOULEVARD ERP

NATURE AND EXTENT OF GROUNDWATER
CONTAMINATION-VOC & SVOC ANALYTICAL DATA

SCALE: 1"=40'

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FIGURE 7-3
CAD REF. NO. 4279009



TABLE 2-1
SUMMARY OF GROUNDWATER ELEVATIONS
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Well	Measuring Point Elevation	4/11/2006		4/12/2006		7/26/2006		8/15/2006		10/30/2006		8/22/2007		10/15/2008	
		DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)
MW-1	187.55	7.59	179.96	7.46	180.09	7.04	180.51	7.29	180.26	8.52	179.03	8.43	179.12	8.28	179.27
MW-2R	187.05	-	-	-	-	8.5	178.55	8.82	178.23	9.78	177.27	9.66	177.39	X	-
MW-3	186.17	8.39	177.78	8.28	177.89	8.41	177.76	8.02	178.15	8.68	177.49	10.22	175.95	X	-
MW-4	181.51	4.75	176.76	4.89	176.62	5.01	176.50	5.52	175.99	4.8	176.71	-	-	-	-
MW-4R		-	-	-	-	-	-	-	-	-	-	6.54	-	4.73	-
MW-6R	195.52	-	-	-	-	-	-	-	-	-	-	7.71	187.81	X	-
MW-7	188.62	-	-	-	-	5.23	183.39	6.37	182.25	4.06	184.56	6.58	182.04	NM	-
MW-8	186.22	-	-	-	-	8.89	177.33	8.92	177.30	8.77	177.45	9.37	176.85	X	-
MW-9	179.7	-	-	-	-	7.07	172.63	8.06	171.64	10.13	169.57	10.10	169.60	9.32	170.38
MW-10	181.24	-	-	-	-	7.63	173.61	8.17	173.07	5.70	175.54	6.44	174.80	5.25	175.99
MW-11	181.56	-	-	-	-	6.53	175.03	7.72	173.84	5.00	176.56	-	-	-	-
MW-11R		-	-	-	-	-	-	-	-	-	-	7.22	-	6.77	-
MW-12	177.82	-	-	-	-	7.03	170.79	8.42	169.40	7.61	170.21	8.31	169.51	7.31	170.51
MW-13	172.44	-	-	-	-	9.02	163.42	9.60	162.84	8.68	163.76	9.13	163.31	8.87	163.57
MW-14	174.82	-	-	-	-	9.46	165.36	9.61	165.21	9.34	165.48	9.61	165.21	9.51	165.31
MW-15	180.98	-	-	-	-	9.25	171.73	9.35	171.63	8.98	172.00	9.23	171.75	9.19	171.79
MW-16	173.35	-	-	-	-	7.41	165.94	9.18	164.17	X	-	X	-	X	-
MW-17	191.57	-	-	-	-	-	-	-	-	-	-	6.05	185.52	5.40	186.17
MW-18	189.82	-	-	-	-	-	-	-	-	-	-	6.62	183.20	5.28	184.54

**TABLE 2-1
SUMMARY OF GROUNDWATER ELEVATIONS
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK**

Well	Measuring Point Elevation	4/11/2006		4/12/2006		7/26/2006		8/15/2006		10/30/2006		8/22/2007		10/15/2008	
		DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)
MW-19	194.52	-	-	-	-	-	-	-	-	-	-	7.30	187.22	6.35	188.17
MW-20	185.89	-	-	-	-	-	-	-	-	-	-	-	-	5.41	180.48
MW-21	195.98	-	-	-	-	-	-	-	-	-	-	-	-	7.15	188.83
MW-A	189.88	-	-	-	-	-	-	-	-	5.71	184.17	6.00	183.88	5.67	184.21
MW-B	192.6	-	-	-	-	-	-	-	-	5.99	186.61	7.40	185.20	NM	-
MW-C	187.12	-	-	-	-	-	-	-	-	6.35	180.77	6.85	180.27	6.25	180.87
MW-D	188.17	-	-	-	-	-	-	-	-	-	-	-	-	4.74	183.43
MW-E	185.79	-	-	-	-	-	-	-	-	-	-	-	-	5.79	180.00

Notes:

MW-2R, MW-4R , MW-6R, and MW-11R replacements wells for MW-2, MW-4 , MW-6, and MW-11

X - Could not locate

TABLE 4-1
SUMMARY OF BACKGROUND SURFACE SOIL SAMPLES
HENRY JOHNSON BOULEVARD PROPERTIES
ALBANY, NEW YORK

Sample ID	Sample Location	Northing	Easting	Soil Description	Notes
BG-SS-01	Washington Park	0600942	4723449	Brown Silt & fine Sand, dry	Near monument for James H. Armsby
BG-SS-02	Washington Park	0600718	4723618	Brown Silt & fine Sand, dry	Near University at Albany Downtown Campus
BG-SS-03	Arbor Hill Park	060224	4724199	Dark Brown Silt & Sand w/ some clay, damp, slightly cohesive	Near basketball courts by tree line
BG-SS-04	Tivoli Lakes Park	0601367	4724715	Dark Brown Silt & fine to medium Sand moist, slightly cohesive	Near Livingston Ave. Community Garden
BG-SS-05	Tivoli Lakes Park	0601349	4724918	Dark Brown Silt & fine Sand w/ some clay, moist, cohesive	West side of lake

TABLE 7-1
SUMMARY OF DETECTED SVOCs IN SURFACE SOIL
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Protection of GW Soil Cleanup Objective mg/kg	HJ-SS-1 7/13/2004 SOIL mg/kg	HJB-SS-1A 4/12/2006 SOIL mg/kg	HJB-SS-X SS-1A Duplicate 4/12/2006 SOIL mg/kg	HJ-SS-2 7/14/2004 SOIL mg/kg
SVOCs						
4-Nitroaniline			0.65 U	0.87 UJ	4.2 U	0.29 U
4-Nitrophenol			0.81 U	0.87 UJ	4.2 U	0.36 U
Acenaphthene	500	98	0.18 U	0.43 UJ	2.1 U	0.082 U
Acenaphthylene	500	107	0.25 U	0.43 UJ	2.1 U	0.11 U
Anthracene	500	1000	0.2 U	0.056 J	2.1 U	0.089 U
Benzaldehyde			0.82 U	NA	NA	0.36 U
Benzo(a)anthracene	5.6	1	0.13 U	0.22 J	0.22 J	0.39 J
Benzo(a)pyrene	1	22	0.14 U	0.19 J	0.3 J	0.53 J
Benzo(b)fluoranthene	5.6	1.7	0.44 U	0.23 J	0.39 J	0.65 J
Benzo(g,h,i)perylene	500	1000	0.36 U	0.16 J	2.1 U	0.38 J
Benzo(k)fluoranthene	56	1.7	0.28 U	0.1 J	2.1 U	0.52 J
bis(2-Ethylhexyl)phthalate			1 J	0.67 J	2.3	0.086 U
Butylbenzylphthalate			0.28 U	0.056 J	2.1 U	0.12 U
Chrysene	56	1	0.26 U	0.21 J	0.27 J	0.56 J
Di-n-butylphthalate			0.11 U	0.074 J	2.1 U	0.05 U
Fluoranthene	500	1000	0.12 U	0.44 J	0.46 J	0.42 J
Indeno(1,2,3-cd)pyrene	5.6	8.2	0.2 U	0.12 J	2.1 U	0.09 U
Phenanthrene	500	1000	0.19 U	0.26 J	0.28 J	0.083 U
Pyrene	500	1000	0.15 U	0.42 J	0.4 J	0.43 J
Total Confident Conc. SVOC			1	NA	NA	3.88
Total TICs			U	NA	NA	10.59

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

 - Samples from USEPA Brownfields Assessment Pilot Program.

B - The analyte was found in the method blank as well as the sample.

U - The compound was not detected at the indicated concentration.

J - The concentration given is an estimated value.

NA - Not Analyzed.

TABLE 7-1
SUMMARY OF DETECTED SVOCs IN SURFACE SOIL
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Protection of GW Soil Cleanup Objective mg/kg	HJ-SS-3 7/14/2004 SOIL mg/kg	HJB-SS-3A 4/12/2006 SOIL mg/kg	HJ-SS-4 7/14/2004 SOIL mg/kg	HJB-SS-4A 4/12/2006 SOIL mg/kg
SVOCs						
4-Nitroaniline			0.07 U	0.86 U	0.055 U	0.89 U
4-Nitrophenol			0.088 U	0.86 U	0.068 U	0.89 U
Acenaphthene	500	98	0.02 U	0.42 U	0.015 U	0.44 U
Acenaphthylene	500	107	0.027 U	0.42 U	0.021 U	0.44 U
Anthracene	500	1000	0.021 U	0.42 U	0.017 U	0.44 U
Benzaldehyde			2.5	NA	0.068 U	NA
Benzo(a)anthracene	5.6	1	0.38 J	0.17 J	0.13 J	0.16 J
Benzo(a)pyrene	1	22	0.54 J	0.23 J	0.12 J	0.2 J
Benzo(b)fluoranthene	5.6	1.7	0.73 J	0.35 J	0.15 J	0.34 J
Benzo(g,h,i)perylene	500	1000	0.27 J	0.2 J	0.03 U	0.2 J
Benzo(k)fluoranthene	56	1.7	0.47 J	0.13 J	0.19 J	0.11 J
bis(2-Ethylhexyl)phthalate			0.19 J	0.16 J	0.49 J	0.93
Butylbenzylphthalate			0.03 U	0.42 U	0.023 U	0.48 J
Chrysene	56	1	0.56 J	0.2 J	0.17 J	0.22 J
Di-n-butylphthalate			0.12 J	0.42 U	0.073 J	0.13 J
Fluoranthene	500	1000	0.5 J	0.27 J	0.25 J	0.35 J
Indeno(1,2,3-cd)pyrene	5.6	8.2	0.21 J	0.17 J	0.017 U	0.14 J
Phenanthrene	500	1000	0.14 J	0.084 J	0.091 J	0.14 J
Pyrene	500	1000	0.48 J	0.2 J	0.24 J	0.28 J
Total Confident Conc. SVOC			7.09	NA	1.904	NA
Total TICs			13.07	NA	39.69	NA

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

 - Samples from USEPA Brownfields Assessment Pilot Program.

B - The analyte was found in the method blank as well as the sample.

U - The compound was not detected at the indicated concentration.

J - The concentration given is an estimated value.

NA - Not Analyzed.

TABLE 7-1
SUMMARY OF DETECTED SVOCs IN SURFACE SOIL
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Protection of GW Soil Cleanup Objective mg/kg	HJ-SS-05 7/16/2004 SOIL mg/kg	HJ-SS-06 7/16/2004 SOIL mg/kg	HJ-SS-07 7/16/2004 SOIL mg/kg	HJ-SS-08 7/16/2004 SOIL mg/kg
SVOCs						
4-Nitroaniline			0.031 U	0.036 U	0.031 U	0.35 U
4-Nitrophenol			0.039 U	0.045 U	0.039 U	0.43 U
Acenaphthene	500	98	0.0089 U	0.01 U	0.0088 U	0.098 U
Acenaphthylene	500	107	0.012 U	0.014 U	0.012 U	0.13 U
Anthracene	500	1000	0.0096 U	0.011 U	0.0095 U	0.11 U
Benzaldehyde			0.039 U	0.045 U	0.039 U	0.43 U
Benzo(a)anthracene	5.6	1	0.0061 U	0.0069 U	0.055 J	0.067 U
Benzo(a)pyrene	1	22	0.0069 U	0.0079 U	0.06 J	0.076 U
Benzo(b)fluoranthene	5.6	1.7	0.021 U	0.024 U	0.07 J	0.24 U
Benzo(g,h,i)perylene	500	1000	0.017 U	0.02 U	0.048 J	0.19 U
Benzo(k)fluoranthene	56	1.7	0.014 U	0.016 U	0.052 J	0.15 U
bis(2-Ethylhexyl)phthalate			0.099 J	0.1 J	0.072 J	0.1 U
Butylbenzylphthalate			0.013 U	0.015 U	0.013 U	7.2
Chrysene	56	1	0.013 U	0.054 J	0.074 J	0.14 U
Di-n-butylphthalate			0.0053 U	0.0061 U	0.0053 U	0.059 U
Fluoranthene	500	1000	0.059 J	0.084 J	0.13 J	0.062 U
Indeno(1,2,3-cd)pyrene	5.6	8.2	0.0097 U	0.011 U	0.045 J	0.11 U
Phenanthrene	500	1000	0.009 U	0.11 J	0.044 J	0.099 U
Pyrene	500	1000	0.052 J	0.11 J	0.12 J	0.079 U
Total Confident Conc. SVOC			0.21	0.458	0.77	7.2
Total TICs			7.9	8.77	10.2	7.7

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

 - Samples from USEPA Brownfields Assessment Pilot Program.

B - The analyte was found in the method blank as well as the sample.

U - The compound was not detected at the indicated concentration.

J - The concentration given is an estimated value.

NA - Not Analyzed.

TABLE 7-1
SUMMARY OF DETECTED SVOCs IN SURFACE SOIL
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Protection of GW Soil Cleanup Objective mg/kg	HJB-SS-8A 4/12/2006 SOIL mg/kg	HJB-SS-09 4/12/2006 SOIL mg/kg	BG-SS-01 4/13/2006 SOIL mg/kg	BG-SS-02 4/13/2006 SOIL mg/kg
SVOCs						
4-Nitroaniline			0.78 U	0.7 J	0.2 U	0.2 U
4-Nitrophenol			0.78 U	0.7 J	0.2 U	0.2 U
Acenaphthene	500	98	0.39 U	0.34 J	0.2 U	0.2 U
Acenaphthylene	500	107	0.39 U	0.34 J	0.2 U	0.2 U
Anthracene	500	1000	0.055 J	0.34 J	0.2 U	0.2 U
Benzaldehyde			NA	NA	0.2 U	0.2 U
Benzo(a)anthracene	5.6	1	0.2 J	0.34 UJ	0.051 J	0.092 J
Benzo(a)pyrene	1	22	0.26 J	0.34 UJ	0.2 U	0.07 J
Benzo(b)fluoranthene	5.6	1.7	0.35 J	0.34 UJ	0.2 U	0.2 U
Benzo(g,h,i)perylene	500	1000	0.29 J	0.34 UJ	0.2 U	0.2 U
Benzo(k)fluoranthene	56	1.7	0.13 J	0.34 UJ	0.2 U	0.2 U
bis(2-Ethylhexyl)phthalate			0.41	0.12 J	0.062 JB	0.046 JB
Butylbenzylphthalate			0.86	0.34 UJ	0.2 U	0.2 U
Chrysene	56	1	0.34 J	0.34 UJ	0.047 J	0.057 J
Di-n-butylphthalate			0.09 J	0.34 UJ	0.2 U	0.2 U
Fluoranthene	500	1000	0.37 J	0.047 J	0.23	0.27
Indeno(1,2,3-cd)pyrene	5.6	8.2	0.14 J	0.34 UJ	0.2 U	0.2 U
Phenanthrene	500	1000	0.17 J	0.34 UJ	0.17 J	0.19 J
Pyrene	500	1000	0.4	0.037 J	0.078 J	0.12 J
Total Confident Conc. SVOC			NA	NA	NA	NA
Total TICs			NA	NA	12.74 J	4.62 J

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

 - Samples from USEPA Brownfields Assessment Pilot Program.

B - The analyte was found in the method blank as well as the sample.

U - The compound was not detected at the indicated concentration.

J - The concentration given is an estimated value.

NA - Not Analyzed.

TABLE 7-1
SUMMARY OF DETECTED SVOCs IN SURFACE SOIL
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Protection of GW Soil Cleanup Objective mg/kg	BG-SS-03 4/13/2006 SOIL mg/kg	BG-SS-04 4/13/2006 SOIL mg/kg	BG-SS-05 4/13/2006 SOIL mg/kg
SVOCs					
4-Nitroaniline			0.21 U	0.23 U	0.26 U
4-Nitrophenol			0.21 U	0.23 U	0.26 U
Acenaphthene	500	98	0.21 U	0.23 U	0.26 U
Acenaphthylene	500	107	0.21 U	0.23 U	0.26 U
Anthracene	500	1000	0.21 U	0.23 U	0.26 U
Benzaldehyde			0.21 U	0.23 U	0.26 U
Benzo(a)anthracene	5.6	1	0.21 U	0.27	0.076 J
Benzo(a)pyrene	1	22	0.21 U	0.31	0.26 U
Benzo(b)fluoranthene	5.6	1.7	0.21 U	0.23 U	0.26 U
Benzo(g,h,i)perylene	500	1000	0.21 U	0.23 U	0.26 U
Benzo(k)fluoranthene	56	1.7	0.21 U	0.23 U	0.26 U
bis(2-Ethylhexyl)phthalate			0.068 JB	0.07 JB	0.06 JB
Butylbenzylphthalate			0.21 U	0.23 U	0.26 U
Chrysene	56	1	0.21 U	0.12 J	0.064 J
Di-n-butylphthalate			0.21 U	0.23 U	0.26 U
Fluoranthene	500	1000	0.23	0.31	0.31
Indeno(1,2,3-cd)pyrene	5.6	8.2	0.21 U	0.23 U	0.26 U
Phenanthrene	500	1000	0.18 J	0.19 J	0.23 J
Pyrene	500	1000	0.055 J	0.19 J	0.13 J
Total Confident Conc. SVOC			NA	NA	NA
Total TICs			12.81 J	22.39 J	17.48 J

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

 - Samples from USEPA Brownfields Assessment Pilot Program.

B - The analyte was found in the method blank as well as the sample.

U - The compound was not detected at the indicated concentration.

J - The concentration given is an estimated value.

NA - Not Analyzed.

TABLE 7-2
SUMMARY OF SURFACE SOIL SAMPLING RESULTS (METALS AND PCBs)
HENRY JOHNSON BOULEVARD ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Protection of GW Soil Cleanup Objective mg/kg	HJ-SS-1 7/13/2004 SOIL mg/kg	HJB-SS-1A 4/12/2006 SOIL mg/kg	HJB-SS-X SS-1A Duplicate 4/12/2006 SOIL mg/kg	HJ-SS-2 7/14/2004 SOIL mg/kg	HJ-SS-3 07/14/04 SOIL mg/kg	HJB-SS-3A 4/12/2006 SOIL mg/kg	HJ-SS-4 7/14/2004 SOIL mg/kg
METALS (Total)									
Aluminum	-	-	NA	7,300 J	7,130 J	NA	NA	5,180 J	NA
Antimony	-	-	NA	0.31 JBN	0.31 JBN	NA	NA	0.28 JBN	NA
Arsenic	16	16	3.84	3.1	3.4	4.42	6.39	2.5	5.94
Barium	400	820	302	177 J	170 J	76.2	156	57.8 J	123
Beryllium	590	47	NA	0.38 J	0.39 J	NA	NA	0.3 J	NA
Cadmium	9.3	7.5	1.99	0.0037 U	0.0048 U	0.659	1	0.0037 U	0.959
Calcium	-	-	NA	13300 J	13,200 J	NA	NA	15,200 J	NA
Chromium	400	19	17	15.8 J	15.2 J	13.3	16.2	9.6 J	20.3
Cobalt	-	-	NA	6.4 J	6.6 J	NA	NA	5.5 J	NA
Copper	270	1,720	NA	32.9	34.4	NA	NA	25.1	NA
Iron	-	-	NA	17,000 J	17,300 J	NA	NA	13,000 J	NA
Lead	1,000	450	808	480 J	283 J	131	384	82.9 J	421
Magnesium	-	-	NA	5,860 J	6,040 J	NA	NA	5,000 J	NA
Manganese	10,000	2,000	NA	376 J	388 J	NA	NA	304 J	NA
Mercury	2.8	0.73	0.24	0.2	0.15	0.09	0.35	0.067	0.16
Nickel	310	130	NA	15.9 J	16.2 J	NA	NA	12.8 J	NA
Potassium	-	-	NA	845 J	805 J	NA	NA	754 J	NA
Selenium	1,500	4	1.36	0.045 U	0.059 U	0.821 J	1.49	0.045 U	1.13
Silver	1,500	8	0.747 J	0.013 U	0.017 U	0.556 J	0.539 J	0.013 U	0.905 J
Sodium	-	-	NA	82.2	75	NA	NA	63.5	NA
Thallium	-	-	NA	1.3	1.3	NA	NA	1	NA
Vanadium	-	-	NA	16.1 J	15.9 J	NA	NA	10.6 J	NA
Zinc	10,000	2,480	NA	336 J	333 J	NA	NA	108 J	NA
PCBs									
Aroclor-1254			NA	13	11	NA	NA	0.43 U	NA
Aroclor-1260			NA	7	0.42	NA	NA	0.43 U	NA
Total PCBs	1	3.2	NA	20	11.4	NA	NA	U	NA

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.

- Samples from USEPA Brownfields Assessment

U - The compound was not detected at the indicated concentration.

J - The concentration given is an approximate value.

NA - Not Analyzed.

B - Compound detected below the reporting limit.

B1 - Compound detected in the associated method blank.

MHA - MS/MSD calculation not usable due to high levels of compound in the sample.

N - Matrix spike recovery outside of control limit.

TABLE 7-2
SUMMARY OF SURFACE SOIL SAMPLING RESULTS (METALS AND PCBs)
HENRY JOHNSON BOULEVARD ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Protection of GW Soil Cleanup Objective mg/kg	HJB-SS-4A 4/12/2006 SOIL mg/kg	HJ-SS-05 7/16/2004 SOIL mg/kg	HJ-SS-06 7/16/2004 SOIL mg/kg	HJ-SS-07 7/16/2004 SOIL mg/kg	HJ-SS-08 7/16/2004 SOIL mg/kg	HJB-SS-8A 4/12/2006 SOIL mg/kg	HJB-SS-09 4/12/2006 SOIL mg/kg
METALS (Total)									
Aluminum	-	-	7,460 J	NA	NA	NA	NA	6,870 J	5,840 J
Antimony	-	-	1.4 JN	NA	NA	NA	NA	4.7 JN	0.45 JBN
Arsenic	16	16	3.9	6.3	7.14	2.9	9.76	4.3	3.4
Barium	400	820	131 J	62.3	70.3	48.6	332	247 J	28.4 J
Beryllium	590	47	0.54 J	NA	NA	NA	NA	0.37 J	0.32 J
Cadmium	9.3	7.5	0.61	0.43 J	0.376 J	0.228 J	3.33	1.3	0.0035 U
Calcium	-	-	29,300 J	NA	NA	NA	NA	13,100 J	34,800 J
Chromium	400	19	20.5 J	14.6	15.1	7.09	23.1	12 J	8.2 J
Cobalt	-	-	5.5 J	NA	NA	NA	NA	6.2 J	5.6 J
Copper	270	1,720	47.7	NA	NA	NA	NA	28.8	17.2
Iron	-	-	17,600 J	NA	NA	NA	NA	16,300 J	19,200 J
Lead	1,000	450	382 J	26.9	34.8	80.5	1,080	1,100 J	13.8 J
Magnesium	-	-	5,710 J	NA	NA	NA	NA	4,960 J	7,000 J
Manganese	10,000	2,000	437 J	NA	NA	NA	NA	352 J	353 J
Mercury	2.8	0.73	0.29	0.03	0.04	0.19	0.96	0.54	0.038
Nickel	310	130	20 J	NA	NA	NA	NA	15.9 J	13.4 J
Potassium	-	-	1,120 J	NA	NA	NA	NA	1020 J	535 J
Selenium	1,500	4	0.052 U	0.382 U	0.429 U	0.372 U	1.31 J	0.051 U	0.043 U
Silver	1,500	8	0.015 U	1.54	0.304 J	0.259 J	1.03 J	0.014 U	0.012 U
Sodium	-	-	216	NA	NA	NA	NA	452	121
Thallium	-	-	0.88	NA	NA	NA	NA	1.1	0.38 BN
Vanadium	-	-	19.9 J	NA	NA	NA	NA	17.1 J	10.5 J
Zinc	10,000	2,480	261 J	NA	NA	NA	NA	578 J	40.3 J
PCBs									
Aroclor-1254			0.44 U	NA	NA	NA	NA	0.39 U	0.034 U
Aroclor-1260			0.44 U	NA	NA	NA	NA	0.43	0.034 U
Total PCBs	1	3.2	U	NA	NA	NA	NA	0.51	U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.

- Samples from USEPA Brownfields Assessment

U - The compound was not detected at the indicated concentration.

J - The concentration given is an approximate value.

NA - Not Analyzed.

B - Compound detected below the reporting limit.

B1 - Compound detected in the associated method blank.

MHA - MS/MSD calculation not usable due to high levels of compound in the sample.

N - Matrix spike recovery outside of control limit.

TABLE 7-2
SUMMARY OF SURFACE SOIL SAMPLING RESULTS (METALS AND PCBs)
HENRY JOHNSON BOULEVARD ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Protection of GW Soil Cleanup Objective mg/kg	BG-SS-01 4/13/2006 SOIL mg/kg	BG-SS-02 4/13/2006 SOIL mg/kg	BG-SS-03 4/13/2006 SOIL mg/kg	BG-SS-04 4/13/2006 SOIL mg/kg	BG-SS-05 4/13/2006 SOIL mg/kg
METALS (Total)							
Aluminum	-	-	10,900 MHA	10,500	14,700	6,040	9,120
Antimony	-	-	2.39 U M2	2.4 U	2.28 U	2.63 U	2.55 U
Arsenic	16	16	5.8	5.21	5.49	2.96	5.83
Barium	400	820	63	56.6	99.6	60.8	71.9
Beryllium	590	47	0.559	0.505	0.814	0.394 U	0.512
Cadmium	9.3	7.5	0.359 U	0.361 U	0.342 U	0.394 U	0.383 U
Calcium	-	-	2,120	1,280	12,100	22,200	15,800
Chromium	400	19	14.2	12.4	19	11.4	13.7
Cobalt	-	-	7.5	6.01 U	10.8	6.57 U	8.5
Copper	270	1,720	24.8	14.6	27.2	29.5	26.1
Iron	-	-	19,200 B1 MHA	16,100 B1	26,400 B1	13,500 B1	19,700 B1
Lead	1,000	450	62	44.6	32.3	50.9	35.7
Magnesium	-	-	2,790	2,010	7,140	5,370	6,620
Manganese	10,000	2,000	1.8 U MHA	294	519	373	512
Mercury	2.8	0.73	0.144	0.139	0.135	0.0922	0.111
Nickel	310	130	16.7	12.8	24.8	13.7	20
Potassium	-	-	1,220	686	3,000	1,620	2,060
Selenium	1,500	4	2.39 U	2.4 U	2.28 U	2.63 U	2.55 U
Silver	1,500	8	0.6 U	0.6 U	0.57 U	0.66 U	0.64 U
Sodium	-	-	180 U	180 U	206	197 U	192 U
Thallium	-	-	2.39 U	2.4 U	2.28 U	2.63 U	2.55 U
Vanadium	-	-	28.4	28.2	31	15.1	26.8
Zinc	10,000	2,480	60.6	46.9	77	90.1	79.7
PCBs							
Aroclor-1254			0.039 U	0.041 U	0.042 U	0.046 U	0.051 U
Aroclor-1260			0.039 U	0.041 U	0.042 U	0.046 U	0.051 U
Total PCBs	1	3.2	U	U	U	U	U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.

- Samples from USEPA Brownfields Assessment

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
NA - Not Analyzed.
B - Compound detected below the reporting limit.
B1 - Compound detected in the associated method blank.
MHA - MS/MSD calculation not usable due to high levels of compound in the sample.
N - Matrix spike recovery outside of control limit.

TABLE 7-3
SUMMARY OF DETECTED VOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-26 6-8 6/12/2006 SOIL mg/kg	HJB-SB-27 9-11 6/12/2006 SOIL mg/kg	HJB-SB-28 6-8 6/12/2006 SOIL mg/kg	HJB-SB-29 6-8 6/12/2006 SOIL mg/kg	HJB-SB-30 12-14 6/12/2006 SOIL mg/kg	HJB-SB-31 6-8 6/12/2006 SOIL mg/kg	HJB-SB-32 2-4 6/12/2006 SOIL mg/kg	HJB-SB-32 6-8 6/12/2006 SOIL mg/kg	HJB-SB-33 6-8 6/12/2006 SOIL mg/kg	HJB-SB-34 8-10 6/12/2006 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
1,2,3-Trichlorobenzene			0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
1,2,4-Trimethylbenzene	3.6	190	0.007 U	0.006 U	0.006 U	2.5 DJ	0.003 J	4.6 DJ	0.011	0.005 U	8.1 DJ	0.002 J
1,3,5-Trimethylbenzene	8.4	190	0.007 U	0.006 U	0.006 U	1.4 DJ	0.006 U	1.3 DJ	0.008	0.005 U	2.5 DJ	0.006 U
2-Butanone (MEK)	0.12	500	0.007 U	0.006 U	0.007	0.062 UJ	0.006 U	0.054 J	0.005 U	0.005 U	0.067 UJ	0.006 U
2-Chlorotoluene			0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
2-Hexanone			0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
4-Chlorotoluene			0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
4-Isopropyltoluene			0.007 U	0.006 U	0.006 U	0.7 J	0.006 U	0.017 J	0.005 U	0.005 U	1.4 DJ	0.006 U
4-Methyl-2-pentanone			0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
Acetone	0.05	500	0.007 U	0.006 U	0.031 J	0.22 J	0.016 J	0.14 J	0.005 U	0.005 U	0.44 J	0.022 J
Benzene	0.06	44	0.007 U	0.006 U	0.008	0.72 J	0.006 U	0.048 J	0.005 U	0.005 U	0.067 UJ	0.006 U
Carbon Disulfide			0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
Chloroform	0.37	350	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
Chloromethane			0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
cis-1,2-Dichloroethene	0.25	500	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
Ethylbenzene	1	390	0.007 U	0.006 U	0.006 U	0.19 J	0.006 U	0.39 DJ	0.005 U	0.005 U	1.1 DJ	0.006 U
Isopropylbenzene			0.007 U	0.006 U	0.006 U	0.23 DJ	0.006 U	0.1 DJ	0.005 U	0.005 U	1 DJ	0.006 U
m,p-Xylene			0.007 UJ	0.006 U	0.006 U	0.94 J	0.006 U	1.6 DJ	0.005 U	0.005 U	3.4 DJ	0.006 U
Methyl tert-butyl ether	0.93	500	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
Methylene Chloride	0.05	500	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.28 DJ	0.006 U
Naphthalene	12	500	0.007 U	0.006 J	0.006 U	0.18 DJ	0.006 U	0.37 DJ	0.010 U	0.003 J	7 UJ	0.006 U
n-Butylbenzene			0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	2.9 DJ	0.006 U
n-Propylbenzene	3.9	500	0.007 U	0.006 U	0.006 U	0.36 DJ	0.006 U	0.49 DJ	0.005 U	0.005 U	1.6 DJ	0.006 U
o-Xylene			0.007 UJ	0.006 U	0.006 U	0.074 J	0.006 U	0.54 DJ	0.005 U	0.005 U	2.1 DJ	0.006 U
sec-Butylbenzene	11	500	0.007 U	0.006 U	0.006 U	0.42 DJ	0.006 U	0.035 J	0.005 U	0.005 U	1.8 DJ	0.006 U
Tetrachloroethene	1.3	150	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
Toluene	0.7	500	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.14 J	0.005 U	0.005 U	0.53 DJ	0.006 U
trans-1,2-Dichloroethene		500	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
Trichloroethene	0.47	200	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
Vinyl Chloride	0.02	13	0.007 U	0.006 U	0.006 U	0.062 UJ	0.006 U	0.006 UJ	0.005 U	0.005 U	0.067 UJ	0.006 U
Xylene (Total)	1.6	500	0.007 U	0.006 U	0.006 U	1 J	0.006 U	2.2 DJ	0.005 U	0.005 U	5.5 DJ	0.006 U

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-3
SUMMARY OF DETECTED VOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-35 10-12 6/12/2006 SOIL mg/kg	HJB-SB-36 9-11 6/13/2006 SOIL mg/kg	HJB-SB-37 6-8 6/13/2006 SOIL mg/kg	HJB-SB-37 13-15 6/13/2006 SOIL mg/kg	HJB-SB-38 7-8 6/13/2006 SOIL mg/kg	HJB-SB-39 3-4 6/13/2006 SOIL mg/kg	HJB-SB-40 2-4 6/13/2006 SOIL mg/kg	HJB-SB-41 6-7 6/13/2006 SOIL mg/kg	HJB-SB-41 13-14 6/13/2006 SOIL mg/kg	HJB-SB-42 5-7 6/13/2006 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
1,2,3-Trichlorobenzene			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
1,2,4-Trimethylbenzene	3.6	190	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
1,3,5-Trimethylbenzene	8.4	190	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
2-Butanone (MEK)	0.12	500	0.007 U	0.007	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
2-Chlorotoluene			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
2-Hexanone			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
4-Chlorotoluene			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
4-Isopropyltoluene			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
4-Methyl-2-pentanone			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Acetone	0.05	500	0.007 U	0.032 J	0.006 U	0.016 J	0.007 U	0.006 U	0.006 U	0.007 U	0.011 J	0.006 U
Benzene	0.06	44	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Carbon Disulfide			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Chloroform	0.37	350	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Chloromethane			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
cis-1,2-Dichloroethene	0.25	500	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Ethylbenzene	1	390	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Isopropylbenzene			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
m,p-Xylene			0.007 U	0.006 UJ	0.006 UJ	0.006 UJ	0.007 UJ	0.006 UJ	0.006 U	0.007 UJ	0.006 UJ	0.006 UJ
Methyl tert-butyl ether	0.93	500	0.007 U	0.021	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Methylene Chloride	0.05	500	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Naphthalene	12	500	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
n-Butylbenzene			0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
n-Propylbenzene	3.9	500	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
o-Xylene			0.007 U	0.006 UJ	0.006 UJ	0.006 UJ	0.007 UJ	0.006 UJ	0.006 U	0.007 UJ	0.006 UJ	0.006 UJ
sec-Butylbenzene	11	500	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Tetrachloroethene	1.3	150	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007	0.006 U	0.006 U
Toluene	0.7	500	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
trans-1,2-Dichloroethene		500	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Trichloroethene	0.47	200	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Vinyl Chloride	0.02	13	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U
Xylene (Total)	1.6	500	0.007 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-3
SUMMARY OF DETECTED VOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-42 10-12 6/13/2006 SOIL mg/kg	HJB-SB-43 5-7 6/13/2006 SOIL mg/kg	HJB-SB-43 10-12 6/13/2006 SOIL mg/kg	HJB-SB-44 8-10 6/14/2006 SOIL mg/kg	HJB-SB-45 7-9 6/15/2006 SOIL mg/kg	HJB-SB-46 11-12 6/15/2006 SOIL mg/kg	HJB-SB-47 6-7 6/15/2006 SOIL mg/kg	HJB-SB-48 2-3 6/15/2006 SOIL mg/kg	HJB-SB-48 11-12 6/15/2006 SOIL mg/kg	HJB-SB-49 2-3 6/15/2006 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
1,2,3-Trichlorobenzene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
1,2,4-Trimethylbenzene	3.6	190	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
1,3,5-Trimethylbenzene	8.4	190	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
2-Butanone (MEK)	0.12	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
2-Chlorotoluene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
2-Hexanone			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
4-Chlorotoluene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
4-Isopropyltoluene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
4-Methyl-2-pentanone			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Acetone	0.05	500	0.013 J	0.006 U	0.009 J	0.006 U	0.021	0.006 U	0.031	0.006 UJ	0.006 U	0.011
Benzene	0.06	44	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Carbon Disulfide			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Chloroform	0.37	350	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Chloromethane			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
cis-1,2-Dichloroethene	0.25	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Ethylbenzene	1	390	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Isopropylbenzene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
m,p-Xylene			0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Methyl tert-butyl ether	0.93	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Methylene Chloride	0.05	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.004 J	0.006 U	0.006 U
Naphthalene	12	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
n-Butylbenzene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
n-Propylbenzene	3.9	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
o-Xylene			0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
sec-Butylbenzene	11	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.003 J	0.021	0.006 UJ	0.006 U	0.006 U
Tetrachloroethene	1.3	150	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.009 J	0.006 U	0.006 U
Toluene	0.7	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
trans-1,2-Dichloroethene		500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Trichloroethene	0.47	200	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Vinyl Chloride	0.02	13	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Xylene (Total)	1.6	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-3
SUMMARY OF DETECTED VOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-49 10-11 6/15/2006 SOIL mg/kg	HJB-SB-50 2-4 6/15/2006 SOIL mg/kg	HJB-SB-50 6-8 6/15/2006 SOIL mg/kg	HJB-SB-51 2-3 6/15/2006 SOIL mg/kg	HJB-SBX 2-3 SB-51 Duplicate 6/15/2006 SOIL mg/kg	HJB-SB-51 5-7 6/15/2006 SOIL mg/kg	HJB-SB-52 3-4 6/15/2006 SOIL mg/kg	HJB-SB-52 6-8 6/15/2006 SOIL mg/kg	HJB-SB-53 6-8 6/15/2006 SOIL mg/kg	HJB-SB-54 5-6 6/15/2006 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
1,2,3-Trichlorobenzene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
1,2,4-Trimethylbenzene	3.6	190	0.006 J	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
1,3,5-Trimethylbenzene	8.4	190	0.006 J	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
2-Butanone (MEK)	0.12	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
2-Chlorotoluene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
2-Hexanone			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
4-Chlorotoluene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
4-Isopropyltoluene			0.003 J	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
4-Methyl-2-pentanone			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Acetone	0.05	500	0.036	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Benzene	0.06	44	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Carbon Disulfide			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Chloroform	0.37	350	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Chloromethane			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
cis-1,2-Dichloroethene	0.25	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007
Ethylbenzene	1	390	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Isopropylbenzene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
m,p-Xylene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Methyl tert-butyl ether	0.93	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Methylene Chloride	0.05	500	0.006 U	0.006 U	0.06 U	0.006 U	0.004 J	0.004 J	0.005 J	0.004 J	0.004 J	0.005 J
Naphthalene	12	500	0.009 B	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
n-Butylbenzene			0.007	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
n-Propylbenzene	3.9	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
o-Xylene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
sec-Butylbenzene	11	500	0.005 J	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Tetrachloroethene	1.3	150	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.12
Toluene	0.7	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
trans-1,2-Dichloroethene		500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Trichloroethene	0.47	200	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Vinyl Chloride	0.02	13	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Xylene (Total)	1.6	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-3
SUMMARY OF DETECTED VOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-54 11-12 6/15/2006 SOIL mg/kg	HJB-SB-55 7-8 6/15/2006 SOIL mg/kg	HJB-SB-55 15-16 6/15/2006 SOIL mg/kg	HJB-SB-56 7-8 6/15/2006 SOIL mg/kg	HJB-SB-56 11-12 6/15/2006 SOIL mg/kg	HJB-SB-57 5.5-7.5 6/16/2006 SOIL mg/kg	HJB-SB-57 11-12 6/16/2006 SOIL mg/kg	HJB-SB-58 7-8 6/16/2006 SOIL mg/kg	HJB-SB-58 11-12 6/16/2006 SOIL mg/kg	HJB-SB-59 6-7 6/16/2006 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.006 U	0.003 J	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.013 J
1,2,3-Trichlorobenzene			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
1,2,4-Trimethylbenzene	3.6	190	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
1,3,5-Trimethylbenzene	8.4	190	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
2-Butanone (MEK)	0.12	500	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
2-Chlorotoluene			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
2-Hexanone			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
4-Chlorotoluene			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
4-Isopropyltoluene			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
4-Methyl-2-pentanone			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
Acetone	0.05	500	0.006 J	0.022	0.012	0.016	0.006 UJ	0.008 UJ	0.019 J	0.02 J	0.007 UJ	0.018 J
Benzene	0.06	44	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
Carbon Disulfide			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.004 J
Chloroform	0.37	350	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.004 J
Chloromethane			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
cis-1,2-Dichloroethene	0.25	500	0.006 U	0.077	0.007 U	0.007 U	0.006 UJ	0.073 J	0.007 UJ	0.012 J	0.007 UJ	0.24 J
Ethylbenzene	1	390	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
Isopropylbenzene			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
m,p-Xylene			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
Methyl tert-butyl ether	0.93	500	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
Methylene Chloride	0.05	500	0.004 J	0.005 J	0.007 U	0.004 J	0.003 J	0.005 J	0.007 UJ	0.004 J	0.007 UJ	0.006 UJ
Naphthalene	12	500	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.004 J	0.006 UJ
n-Butylbenzene			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
n-Propylbenzene	3.9	500	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
o-Xylene			0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
sec-Butylbenzene	11	500	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
Tetrachloroethene	1.3	150	0.006 U	58 D	0.007 U	0.028	0.015 J	19 DJ	0.007 UJ	0.097 J	0.007 UJ	8.9 J
Toluene	0.7	500	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ
trans-1,2-Dichloroethene		500	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.003 J
Trichloroethene	0.47	200	0.006 U	4.8 D	0.007 U	0.007 U	0.006 UJ	0.32 J	0.007 UJ	0.003 J	0.007 UJ	2.1 J
Vinyl Chloride	0.02	13	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.005 J
Xylene (Total)	1.6	500	0.006 U	0.007 U	0.007 U	0.007 U	0.006 UJ	0.008 UJ	0.007 UJ	0.006 UJ	0.007 UJ	0.006 UJ

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-3
SUMMARY OF DETECTED VOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-59 11-12 6/16/2006 SOIL mg/kg	HJB-SB-60 6-8 6/16/2006 SOIL mg/kg	HJB-SB-60 11-12 6/16/2006 SOIL mg/kg	HJB-SB-61 0-2 6/20/2006 SOIL mg/kg	HJB-SB-61 9-11 6/20/2006 SOIL mg/kg	HJB-SB-62 5-7 6/21/2006 SOIL mg/kg	HJB-SB-63 6-8 6/21/2006 SOIL mg/kg	HJB-SB-64 5-7 6/22/2006 SOIL mg/kg	HJB-SB-65 5-7 7/12/2006 SOIL mg/kg	HJB-SB-65 10-12 7/12/2006 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.006 UJ	0.017 J	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
1,2,3-Trichlorobenzene			0.006 UJ	1.2 DJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
1,2,4-Trimethylbenzene	3.6	190	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
1,3,5-Trimethylbenzene	8.4	190	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
2-Butanone (MEK)	0.12	500	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
2-Chlorotoluene			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
2-Hexanone			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
4-Chlorotoluene			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
4-Isopropyltoluene			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
4-Methyl-2-pentanone			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Acetone	0.05	500	0.022 J	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.009 J
Benzene	0.06	44	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 U	0.006 U
Carbon Disulfide			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Chloroform	0.37	350	0.003 J	0.005 J	0.007 UJ	0.006 UJ	0.006 UJ	0.002 J	0.006 UJ	0.006 U	0.006 U	0.006 U
Chloromethane			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
cis-1,2-Dichloroethene	0.25	500	0.006 UJ	0.025 J	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Ethylbenzene	1	390	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Isopropylbenzene			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
m,p-Xylene			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Methyl tert-butyl ether	0.93	500	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Methylene Chloride	0.05	500	0.039 J	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Naphthalene	12	500	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.003 JB	0.006 U	0.006 U	0.006 U
n-Butylbenzene			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
n-Propylbenzene	3.9	500	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
o-Xylene			0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
sec-Butylbenzene	11	500	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Tetrachloroethene	1.3	150	0.003 J	21 DJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Toluene	0.7	500	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
trans-1,2-Dichloroethene		500	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Trichloroethene	0.47	200	0.006 UJ	0.2 J	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Vinyl Chloride	0.02	13	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U
Xylene (Total)	1.6	500	0.006 UJ	0.007 UJ	0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 UJ	0.006 U	0.006 U	0.006 U

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-3
SUMMARY OF DETECTED VOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-66 7-8 6/18/2007 SOIL mg/kg	HJB-SB-67 7-8 6/18/2007 SOIL mg/kg	HJB-SB-68 6-7 6/18/2007 SOIL mg/kg	HJB-SB-69 6.5-7.5 6/18/2007 SOIL mg/kg	HJB-SB-70 9.5-10.5 6/18/2007 SOIL mg/kg	HJB-SB-71 13.5-14.5 6/18/2007 SOIL mg/kg	HJB-SB-72 7-8 6/18/2007 SOIL mg/kg	HJB-SB-73 6-7 6/18/2007 SOIL mg/kg	HJB-SB-74 6-7 6/18/2007 SOIL mg/kg	HJB-SB-75 6-7 6/18/2007 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
1,2,3-Trichlorobenzene			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
1,2,4-Trimethylbenzene	3.6	190	0.009	0.056	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
1,3,5-Trimethylbenzene	8.4	190	0.003 J	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
2-Butanone (MEK)	0.12	500	0.006 U	0.006 U	0.4 U	0.006 U	0.094	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
2-Chlorotoluene			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
2-Hexanone			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
4-Chlorotoluene			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
4-Isopropyltoluene			0.015	0.005 J	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
4-Methyl-2-pentanone			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Acetone	0.05	500	0.014	0.006 U	0.4 U	0.006 U	0.031	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Benzene	0.06	44	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Carbon Disulfide			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Chloroform	0.37	350	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Chloromethane			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
cis-1,2-Dichloroethene	0.25	500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.005 J	0.053	0.002 J	0.006 U
Ethylbenzene	1	390	0.006 U	0.006	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Isopropylbenzene			0.019	0.004 J	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
m,p-Xylene			0.006 U	0.004 J	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Methyl tert-butyl ether	0.93	500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Methylene Chloride	0.05	500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Naphthalene	12	500	0.019 B	0.065	0.41 DB	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
n-Butylbenzene			0.084	0.01	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
n-Propylbenzene	3.9	500	0.012	0.007	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
o-Xylene			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
sec-Butylbenzene	11	500	0.11	0.006	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Tetrachloroethene	1.3	150	0.006 U	0.006 U	5.7 D	0.006 U	0.006 U	0.006 U	0.006 U	0.031	0.011	0.006 U
Toluene	0.7	500	0.001 J	0.006 U	0.4 U	0.012	0.006 U	0.006 U	0.012	0.002 J	0.007	0.003 J
trans-1,2-Dichloroethene		500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Trichloroethene	0.47	200	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.011	0.003 J	0.006 U
Vinyl Chloride	0.02	13	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.025	0.006 U	0.006 U	0.006 U
Xylene (Total)	1.6	500	0.006 U	0.004 J	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-3
SUMMARY OF DETECTED VOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-76 6-7 6/18/2007 SOIL mg/kg	HJB-SB-77 6-7 6/18/2007 SOIL mg/kg	HJB-SB-78 6-8 6/18/2007 SOIL mg/kg	HJB-SB-79 4-6 6/18/2007 SOIL mg/kg	HJB-SB-80 8-10 6/18/2007 SOIL mg/kg	HJB-SB-81 12-14 6/18/2007 SOIL mg/kg	HJB-SB-82 4-6 6/18/2007 SOIL mg/kg	HJB-SB-83 4-5 6/18/2007 SOIL mg/kg	HJB-SB-84 7-8 10/3/2008 SOIL mg/kg	HJB-SB-85 10-11 10/3/2008 SOIL mg/kg	HJB-SB-8 7.5-8.5 10/3/2008 SOIL mg/kg
VOCs													
1,1-Dichloroethene	0.33	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
1,2,3-Trichlorobenzene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
1,2,4-Trimethylbenzene	3.6	190	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0022 J	0.0065
1,3,5-Trimethylbenzene	8.4	190	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0025 J	0.0065
2-Butanone (MEK)	0.12	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0062	0.0065
2-Chlorotoluene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
2-Hexanone			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
4-Chlorotoluene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
4-Isopropyltoluene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0013 J	0.0065
4-Methyl-2-pentanone			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Acetone	0.05	500	0.006 U	0.006 U	0.006 U	0.007 U	0.028	0.035	0.006 U	0.009	0.01	0.09	0.025
Benzene	0.06	44	0.006 U	0.006 U	0.006 U	0.007 U	0.004 J	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Carbon Disulfide			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Chloroform	0.37	350	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Chloromethane			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
cis-1,2-Dichloroethene	0.25	500	0.006 U	0.001 J	0.006 U	0.007 U	0.007 U	0.013 J	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Ethylbenzene	1	390	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Isopropylbenzene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
m,p-Xylene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Methyl tert-butyl ether	0.93	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Methylene Chloride	0.05	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0033 BJ	0.073 B	0.028
Naphthalene	12	500	0.006 U	0.002 J	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0025 J	0.0065
n-Butylbenzene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
n-Propylbenzene	3.9	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0021 BJ	0.0065
o-Xylene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
sec-Butylbenzene	11	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0018 J	0.0065
Tetrachloroethene	1.3	150	0.006 U	0.005 J	0.006 U	0.003 J	0.007 U	0.52	0.031	0.007 U	0.0053 U	0.0059	0.0065
Toluene	0.7	500	0.006 U	0.006 U	0.002 J	0.003 J	0.019	0.009 J	0.003 J	0.003 J	0.0029 J	0.0034 J	0.0039
trans-1,2-Dichloroethene		500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.034	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Trichloroethene	0.47	200	0.006 U	0.006 U	0.006 U	0.002 J	0.007 U	0.032	0.006 U	0.007 U	0.0043 J	0.005 J	0.0057
Vinyl Chloride	0.02	13	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Xylene (Total)	1.6	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-3
SUMMARY OF DETECTED VOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	6
VOCs			
1,1-Dichloroethene	0.33	500	U
1,2,3-Trichlorobenzene			U
1,2,4-Trimethylbenzene	3.6	190	U
1,3,5-Trimethylbenzene	8.4	190	U
2-Butanone (MEK)	0.12	500	U
2-Chlorotoluene			U
2-Hexanone			U
4-Chlorotoluene			U
4-Isopropyltoluene			U
4-Methyl-2-pentanone			U
Acetone	0.05	500	
Benzene	0.06	44	U
Carbon Disulfide			U
Chloroform	0.37	350	U
Chloromethane			U
cis-1,2-Dichloroethene	0.25	500	U
Ethylbenzene	1	390	U
Isopropylbenzene			U
m,p-Xylene			U
Methyl tert-butyl ether	0.93	500	U
Methylene Chloride	0.05	500	B
Naphthalene	12	500	U
n-Butylbenzene			U
n-Propylbenzene	3.9	500	U
o-Xylene			U
sec-Butylbenzene	11	500	U
Tetrachloroethene	1.3	150	U
Toluene	0.7	500	J
trans-1,2-Dichloroethene		500	U
Trichloroethene	0.47	200	J
Vinyl Chloride	0.02	13	U
Xylene (Total)	1.6	500	U

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-4
SUMMARY OF DETECTED SVOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-26 6-8 6/12/2006 SOIL mg/kg	HJB-SB-27 9-11 6/12/2006 SOIL mg/kg	HJB-SB-28 6-8 6/12/2006 SOIL mg/kg	HJB-SB-29 6-8 6/12/2006 SOIL mg/kg	HJB-SB-30 12-14 6/12/2006 SOIL mg/kg	HJB-SB-31 6-8 6/12/2006 SOIL mg/kg	HJB-SB-32 2-4 6/12/2006 SOIL mg/kg	HJB-SB-32 6-8 6/12/2006 SOIL mg/kg	HJB-SB-33 6-8 6/12/2006 SOIL mg/kg	HJB-SB-34 8-10 6/12/2006 SOIL mg/kg
SVOCs												
2,4-Dinitrophenol			0.92 R	0.83 R	0.85 R	0.82 R	0.8 R	0.81 R	0.69 R	0.74 R	0.88 R	0.84 R
2-Methylnaphthalene			0.45 UJ	0.41 UJ	0.42 UJ	0.28 J	0.39 UJ	0.15 J	0.34 UJ	0.36 UJ	0.076 J	0.41 UJ
Acenaphthene	98	500	0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.043 J	0.4 UJ	0.34 UJ	0.037 J	0.3 J	0.41 UJ
Acenaphthylene		500	0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.12 J	0.44 UJ	0.41 UJ
Anthracene	1,000	500	0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.067 J	0.4 UJ	0.34 UJ	0.52 J	0.35 J	0.41 UJ
Benzo(a)anthracene	1	5.6	0.45 UJ	0.054 J	0.42 UJ	0.089 J	0.18 J	0.4 UJ	0.34 UJ	1.3 J	0.65 J	0.41 UJ
Benzo(a)pyrene	22	1	0.45 UJ	0.047 J	0.42 UJ	0.086 J	0.15 J	0.4 UJ	0.34 UJ	0.98 J	0.54 J	0.41 UJ
Benzo(b)fluoranthene	1.7	5.6	0.45 UJ	0.053 J	0.42 UJ	0.12 J	0.16 J	0.4 UJ	0.34 UJ	1.4 J	0.64 J	0.41 UJ
Benzo(g,h,i)perylene	1,000	500	0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.24 J	0.19 J	0.41 UJ
Benzo(k)fluoranthene	1.7	56	0.45 UJ	0.038 J	0.42 UJ	0.05 J	0.11 J	0.4 UJ	0.34 UJ	0.64 J	0.3 J	0.41 UJ
bis(2-Ethylhexyl)phthalate			0.1 J	0.14 J	0.26 J	0.14 J	0.12 J	0.21 J	0.15 J	0.13 J	0.08 J	0.11 J
Butylbenzylphthalate			0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.36 UJ	0.44 UJ	0.41 UJ
Carbazole			0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.36 UJ	0.21 J	0.41 UJ
Chrysene	1	56	0.45 UJ	0.063 J	0.42 UJ	0.11 J	0.17 J	0.4 UJ	0.34 UJ	1.2 J	0.71 J	0.41 UJ
Dibenzo(a,h)anthracene	1,000	0.56	0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.084 J	0.046 J	0.41 UJ
Dibenzofuran			0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.042 J	0.14 J	0.41 UJ
Diethylphthalate			0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.36 UJ	0.44 UJ	0.41 UJ
Di-n-butylphthalate			0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.36 UJ	0.44 UJ	0.41 UJ
Di-n-octylphthalate			0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.36 R	0.44 UJ	0.41 UJ
Fluoranthene	1,000	500	0.45 UJ	0.12 J	0.42 UJ	0.17 J	0.37 J	0.068 J	0.34 UJ	2.7 J	1.9 J	0.066 J
Fluorene	386	500	0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.11 J	0.21 J	0.41 UJ
Hexachlorocyclopentadiene			0.45 R	0.41 R	0.42 R	0.4 R	0.39 R	0.4 R	0.34 R	0.36 R	0.44 R	0.41 R
Hexachloroethane			0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.36 UJ	0.44 UJ	0.41 UJ
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.041 J	0.4 UJ	0.34 UJ	0.3 J	0.18 J	0.41 UJ
Isophorone			0.45 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.39 UJ	0.4 UJ	0.34 UJ	0.36 UJ	0.44 UJ	0.41 UJ
Naphthalene	12	500	0.45 UJ	0.41 UJ	0.07 J	0.52 J	0.39 UJ	0.19 J	0.34 UJ	0.36 UJ	0.075 J	0.41 UJ
Phenanthrene	1,000	500	0.45 UJ	0.1 J	0.42 UJ	0.094 J	0.21 J	0.049 J	0.34 UJ	1.7 J	1.9 J	0.049 J
Pyrene	1,000	500	0.45 UJ	0.097 J	0.42 UJ	0.15 J	0.29 J	0.055 J	0.34 UJ	3.5 J	1.7 J	0.06 J

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-4
SUMMARY OF DETECTED SVOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-35 10-12 6/12/2006 SOIL mg/kg	HJB-SB-36 9-11 6/13/2006 SOIL mg/kg	HJB-SB-37 6-8 6/13/2006 SOIL mg/kg	HJB-SB-37 13-15 6/13/2006 SOIL mg/kg	HJB-SB-38 7-8 6/13/2006 SOIL mg/kg	HJB-SB-39 3-4 6/13/2006 SOIL mg/kg	HJB-SB-40 2-4 6/13/2006 SOIL mg/kg	HJB-SB-41 6-7 6/13/2006 SOIL mg/kg	HJB-SB-41 13-14 6/13/2006 SOIL mg/kg
SVOCs											
2,4-Dinitrophenol			0.9 R	0.87 R	0.8 R	0.86 R	0.9 R	0.87 R	0.84 R	0.92 R	0.87 R
2-Methylnaphthalene			0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Acenaphthene	98	500	0.44 UJ	0.43 UJ	0.043 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Acenaphthylene		500	0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Anthracene	1,000	500	0.44 UJ	0.43 UJ	0.092 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Benzo(a)anthracene	1	5.6	0.44 UJ	0.43 UJ	0.29 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Benzo(a)pyrene	22	1	0.44 UJ	0.43 UJ	0.27 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Benzo(b)fluoranthene	1.7	5.6	0.44 UJ	0.43 UJ	0.34 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Benzo(g,h,i)perylene	1,000	500	0.44 UJ	0.43 UJ	0.13 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Benzo(k)fluoranthene	1.7	56	0.44 UJ	0.43 UJ	0.16 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
bis(2-Ethylhexyl)phthalate			0.12 J	0.15 J	0.13 J	0.094 J	0.21 J	0.11 J	0.22 J	0.17 J	0.095 J
Butylbenzylphthalate			0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Carbazole			0.44 UJ	0.43 UJ	0.061 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Chrysene	1	56	0.44 UJ	0.43 UJ	0.31 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Dibenzo(a,h)anthracene	1,000	0.56	0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Dibenzofuran			0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Diethylphthalate			0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Di-n-butylphthalate			0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Di-n-octylphthalate			0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Fluoranthene	1,000	500	0.046 J	0.43 UJ	0.57 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Fluorene	386	500	0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Hexachlorocyclopentadiene			0.44 R	0.43 R	0.39 R	0.42 R	0.44 R	0.43 R	0.41 R	0.45 R	0.43 R
Hexachloroethane			0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.44 UJ	0.43 UJ	0.12 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Isophorone			0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Naphthalene	12	500	0.44 UJ	0.43 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Phenanthrene	1,000	500	0.44 UJ	0.43 UJ	0.43 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ
Pyrene	1,000	500	0.44 UJ	0.43 UJ	0.53 J	0.42 UJ	0.44 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.43 UJ

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-4
SUMMARY OF DETECTED SVOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-42 5-7 6/13/2006 SOIL mg/kg	HJB-SB-42 10-12 6/13/2006 SOIL mg/kg	HJB-SB-43 5-7 6/13/2006 SOIL mg/kg	HJB-SB-43 10-12 6/13/2006 SOIL mg/kg	HJB-SB-44 8-10 6/14/2006 SOIL mg/kg	HJB-SB-45 7-9 6/15/2006 SOIL mg/kg	HJB-SB-46 11-12 6/15/2006 SOIL mg/kg	HJB-SB-47 6-7 6/15/2006 SOIL mg/kg	HJB-SB-48 2-3 6/15/2006 SOIL mg/kg	HJB-SB-48 11-12 6/15/2006 SOIL mg/kg
SVOCs												
2,4-Dinitrophenol			0.88 R	0.91 R	0.87 R	0.87 R	0.82 UJ	0.82 UJ	0.82 UJ	0.85 UJ	0.82 UJ	0.8 UJ
2-Methylnaphthalene			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.11 J	0.42 UJ	0.4 UJ	0.4 UJ
Acenaphthene	98	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Acenaphthylene		500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Anthracene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Benzo(a)anthracene	1	5.6	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.13 J	0.4 UJ
Benzo(a)pyrene	22	1	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.12 J	0.4 UJ
Benzo(b)fluoranthene	1.7	5.6	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.13 J	0.4 UJ
Benzo(g,h,i)perylene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Benzo(k)fluoranthene	1.7	56	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.06 J	0.4 UJ
bis(2-Ethylhexyl)phthalate			0.14 J	0.17 J	0.12 J	0.12 J	3.4 J	1.6 J	0.097 J	0.097 J	0.15 JB	0.041 J
Butylbenzylphthalate			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Carbazole			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Chrysene	1	56	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.12 J	0.4 UJ
Dibenzo(a,h)anthracene	1,000	0.56	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Dibenzofuran			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Diethylphthalate			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Di-n-butylphthalate			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Di-n-octylphthalate			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Fluoranthene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.16 J	0.4 UJ
Fluorene	386	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.043 J	0.42 UJ	0.4 UJ	0.4 UJ
Hexachlorocyclopentadiene			0.43 R	0.45 R	0.43 R	0.43 R	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Hexachloroethane			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.048 J	0.4 UJ
Isophorone			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Naphthalene	12	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Phenanthrene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.11 J	0.42 UJ	0.4 UJ	0.4 UJ
Pyrene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.16 J	0.4 UJ

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-4
SUMMARY OF DETECTED SVOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-49 2-3 6/15/2006 SOIL mg/kg	HJB-SB-49 10-11 6/15/2006 SOIL mg/kg	HJB-SB-50 2-4 6/15/2006 SOIL mg/kg	HJB-SB-50 6-8 6/15/2006 SOIL mg/kg	HJB-SB-51 2-3 6/15/2006 SOIL mg/kg	HJB-SBX 2-3 SB-51 Duplicate 6/15/2006 SOIL mg/kg	HJB-SB-51 5-7 6/15/2006 SOIL mg/kg	HJB-SB-52 3-4 6/15/2006 SOIL mg/kg	HJB-SB-52 6-8 6/15/2006 SOIL mg/kg	HJB-SB-53 6-8 6/15/2006 SOIL mg/kg
SVOCs												
2,4-Dinitrophenol			0.75 UJ	0.8 UJ	0.79 UJ	0.8 R	0.81 UJ	0.82 UJ	0.81 UJ	0.92 UJ	0.78 UJ	0.81 UJ
2-Methylnaphthalene			0.37 UJ	0.52 J	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Acenaphthene	98	500	0.37 UJ	0.47 J	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Acenaphthylene		500	0.086 J	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Anthracene	1,000	500	0.085 J	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Benzo(a)anthracene	1	5.6	0.47 J	0.091 J	0.051 J	0.4 UJ	0.12 J	0.088 J	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Benzo(a)pyrene	22	1	0.51 J	0.053 J	0.065 J	0.4 UJ	0.13 J	0.1 J	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Benzo(b)fluoranthene	1.7	5.6	0.68 J	0.076 J	0.099 J	0.4 UJ	0.18 J	0.14 J	0.4 UJ	0.052 J	0.39 UJ	0.4 UJ
Benzo(g,h,i)perylene	1,000	500	0.2 J	0.39 UJ	0.39 UJ	0.4 UJ	0.089 J	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Benzo(k)fluoranthene	1.7	56	0.29 J	0.39 UJ	0.39 UJ	0.4 UJ	0.078 J	0.082 J	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
bis(2-Ethylhexyl)phthalate			0.057 J	0.064 J	1.2 J	0.45 J	3.4 J	2.2 J	0.053 J	1.4 J	0.25 J	0.84 J
Butylbenzylphthalate			0.37 UJ	0.39 UJ	0.059 J	0.4 UJ	1.3 J	0.37 J	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Carbazole			0.051 J	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Chrysene	1	56	0.58 J	0.099 J	0.073 J	0.4 UJ	0.17 J	0.11 J	0.4 UJ	0.046 J	0.39 UJ	0.4 UJ
Dibenzo(a,h)anthracene	1,000	0.56	0.05 J	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Dibenzofuran			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Diethylphthalate			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Di-n-butylphthalate			0.37 UJ	0.39 UJ	0.059 J	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Di-n-octylphthalate			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Fluoranthene	1,000	500	0.91 J	0.25 J	0.089 J	0.4 UJ	0.18 J	0.15 J	0.4 UJ	0.064 J	0.057 J	0.4 UJ
Fluorene	386	500	0.37 UJ	0.76 J	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Hexachlorocyclopentadiene			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Hexachloroethane			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.2 J	0.39 UJ	0.39 UJ	0.4 UJ	0.055 J	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Isophorone			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Naphthalene	12	500	0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Phenanthrene	1,000	500	0.37 J	2.5 J	0.048 J	0.4 UJ	0.09 J	0.065 J	0.4 UJ	0.45 UJ	0.04 J	0.4 UJ
Pyrene	1,000	500	1 J	0.31 J	0.097 J	0.4 UJ	0.26 J	0.19 J	0.4 UJ	0.063 J	0.049 J	0.4 UJ

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-4
SUMMARY OF DETECTED SVOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-54 5-6 6/15/2006 SOIL mg/kg	HJB-SB-54 11-12 6/15/2006 SOIL mg/kg	HJB-SB-55 7-8 6/15/2006 SOIL mg/kg	HJB-SB-55 15-16 6/15/2006 SOIL mg/kg	HJB-SB-56 7-8 6/15/2006 SOIL mg/kg	HJB-SB-56 11-12 6/15/2006 SOIL mg/kg	HJB-SB-57 5.5-7.5 6/16/2006 SOIL mg/kg	HJB-SB-57 11-12 6/16/2006 SOIL mg/kg	HJB-SB-58 7-8 6/16/2006 SOIL mg/kg	HJB-SB-58 11-12 6/16/2006 SOIL mg/kg
SVOCs												
2,4-Dinitrophenol			0.87 UJ	0.88 UJ	0.94 UJ	0.9 UJ	NA	0.88 UJ	1 UJ	0.92 UJ	0.81 UJ	0.89 UJ
2-Methylnaphthalene			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Acenaphthene	98	500	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Acenaphthylene		500	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Anthracene	1,000	500	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Benzo(a)anthracene	1	5.6	0.43 UJ	0.43 UJ	0.049 J	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.07 J	0.44 UJ
Benzo(a)pyrene	22	1	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.067 J	0.44 UJ
Benzo(b)fluoranthene	1.7	5.6	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.086 J	0.44 UJ
Benzo(g,h,i)perylene	1,000	500	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Benzo(k)fluoranthene	1.7	56	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
bis(2-Ethylhexyl)phthalate			0.058 J	1.6 J	14 JD	35 JD	NA	0.25 JB	0.16 JB	0.14 JB	0.1 JB	0.12 JB
Butylbenzylphthalate			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Carbazole			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Chrysene	1	56	0.43 UJ	0.43 UJ	0.059 J	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.1 J	0.44 UJ
Dibenzo(a,h)anthracene	1,000	0.56	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Dibenzofuran			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Diethylphthalate			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Di-n-butylphthalate			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Di-n-octylphthalate			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Fluoranthene	1,000	500	0.43 UJ	0.43 UJ	0.11 J	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.17 J	0.44 UJ
Fluorene	386	500	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Hexachlorocyclopentadiene			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Hexachloroethane			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Isophorone			0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Naphthalene	12	500	0.43 UJ	0.43 UJ	0.46 UJ	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.4 UJ	0.44 UJ
Phenanthrene	1,000	500	0.43 UJ	0.43 UJ	0.12 J	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.14 J	0.44 UJ
Pyrene	1,000	500	0.43 UJ	0.43 UJ	0.12 J	0.44 UJ	NA	0.43 UJ	0.5 UJ	0.45 UJ	0.16 J	0.44 UJ

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

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HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-59 6-7 6/16/2006 SOIL mg/kg	HJB-SB-59 11-12 6/16/2006 SOIL mg/kg	HJB-SB-60 6-8 6/16/2006 SOIL mg/kg	HJB-SB-60 11-12 6/16/2006 SOIL mg/kg	HJB-SB-61 0-2 6/20/2006 SOIL mg/kg	HJB-SB-61 9-11 6/20/2006 SOIL mg/kg	HJB-SB-62 5-7 6/21/2006 SOIL mg/kg	HJB-SB-63 6-8 6/21/2006 SOIL mg/kg	HJB-SB-64 5-7 6/22/2006 SOIL mg/kg	HJB-SB-65 5-7 7/12/2006 SOIL mg/kg
SVOCs												
2,4-Dinitrophenol			0.82 UJ	0.84 UJ	0.9 UJ	0.89 UJ	0.85 UJ	0.85 UJ	0.8 UJ	0.83 UJ	0.87 UJ	0.84 UJ
2-Methylnaphthalene			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Acenaphthene	98	500	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Acenaphthylene		500	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Anthracene	1,000	500	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Benzo(a)anthracene	1	5.6	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.16 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Benzo(a)pyrene	22	1	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.16 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Benzo(b)fluoranthene	1.7	5.6	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.2 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Benzo(g,h,i)perylene	1,000	500	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.076 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Benzo(k)fluoranthene	1.7	56	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.11 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
bis(2-Ethylhexyl)phthalate			0.26 JB	0.15 JB	0.12 JB	0.31 JB	0.75 JB	0.29 JB	0.18 JB	0.2 JB	0.053 J	0.094 J
Butylbenzylphthalate			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Carbazole			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Chrysene	1	56	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.17 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Dibenzo(a,h)anthracene	1,000	0.56	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Dibenzofuran			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Diethylphthalate			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.049 J	0.44 J	0.12 J	0.1 J	0.43 UJ	0.41 UJ
Di-n-butylphthalate			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Di-n-octylphthalate			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Fluoranthene	1,000	500	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.23 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Fluorene	386	500	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Hexachlorocyclopentadiene			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Hexachloroethane			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.079 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Isophorone			0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Naphthalene	12	500	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.42 UJ	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Phenanthrene	1,000	500	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.061 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ
Pyrene	1,000	500	0.41 UJ	0.41 UJ	0.44 UJ	0.44 UJ	0.22 J	0.42 UJ	0.39 UJ	0.41 UJ	0.43 UJ	0.41 UJ

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-4
SUMMARY OF DETECTED SVOCs IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-65 10-12 7/12/2006 SOIL mg/kg	HJB-SB-78 6-8 6/18/2007 SOIL mg/kg
SVOCs				
2,4-Dinitrophenol			0.87 UJ	0.82 U
2-Methylnaphthalene			0.43 UJ	0.41 U
Acenaphthene	98	500	0.43 UJ	0.41 U
Acenaphthylene		500	0.43 UJ	0.41 U
Anthracene	1,000	500	0.43 UJ	0.41 U
Benzo(a)anthracene	1	5.6	0.43 UJ	0.41 U
Benzo(a)pyrene	22	1	0.43 UJ	0.41 U
Benzo(b)fluoranthene	1.7	5.6	0.43 UJ	0.41 U
Benzo(g,h,i)perylene	1,000	500	0.43 UJ	0.41 U
Benzo(k)fluoranthene	1.7	56	0.43 UJ	0.41 U
bis(2-Ethylhexyl)phthalate			0.096 J	0.33 JB
Butylbenzylphthalate			0.43 UJ	0.41 U
Carbazole			0.43 UJ	0.41 U
Chrysene	1	56	0.43 UJ	0.41 U
Dibenzo(a,h)anthracene	1,000	0.56	0.43 UJ	0.41 U
Dibenzofuran			0.43 UJ	0.41 U
Diethylphthalate			0.43 UJ	0.41 U
Di-n-butylphthalate			0.43 UJ	0.41 U
Di-n-octylphthalate			0.43 UJ	0.41 U
Fluoranthene	1,000	500	0.43 UJ	0.41 U
Fluorene	386	500	0.43 UJ	0.41 U
Hexachlorocyclopentadiene			0.43 UJ	0.41 U
Hexachloroethane			0.43 UJ	0.41 U
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.43 UJ	0.41 U
Isophorone			0.43 UJ	0.41 U
Naphthalene	12	500	0.43 UJ	0.41 U
Phenanthrene	1,000	500	0.43 UJ	0.41 U
Pyrene	1,000	500	0.43 UJ	0.41 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit.

E - Concentration exceeded the calibration range.

B - The analyte was found in the method blank as well as the sample.

D - Concentration was obtained from a diluted analysis.

R - Sample results rejected

NA - Not Analyzed.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-26 6-8 6/12/2006 SOIL mg/kg	HJB-SB-27 9-11 6/12/2006 SOIL mg/kg	HJB-SB-28 6-8 6/12/2006 SOIL mg/kg	HJB-SB-29 6-8 6/12/2006 SOIL mg/kg	HJB-SB-30 12-14 6/12/2006 SOIL mg/kg	HJB-SB-31 6-8 6/12/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	6,660	10,000	10,300	11,600	7,400	14,800
Antimony	-	-	1.1 UJ	0.98 UJ	0.83 UJ	0.69 UJ	0.79 UJ	0.88 UJ
Arsenic	16	16	6.7 J	6 J	4.4 J	6.7 J	5.6 J	6.7 J
Barium	820	400	119 J	70.9 J	63.9 J	103 J	53 J	94.2 J
Beryllium	47	590	0.64 J	0.64 J	0.6 J	0.73 J	0.4 J	0.9 J
Cadmium	8	9	0.078 JB	0.1 JB	0.13 JB	0.14 JB	0.083 JB	0.23 JB
Calcium	-	-	4,680 J	32,900 J	42,800 J	23,200 J	17,200 J	5,420 J
Chromium	19	400	8.6 J	12.5 J	12.6 J	12.7 J	9.8 J	17.2 J
Cobalt	-	-	8.2 J	8 J	7.9 J	8.3 J	5 J	11.8 J
Copper	1,720	270	30.6	19.7	19.1	19.1	14.1	23
Iron	-	-	5,460 J	20,200 J	22,900 J	19,300 J	24,000 J	32,400 J
Lead	450	1,000	119 J	72.3 J	20.5 J	36.9 J	88.7 J	56.2 J
Magnesium	-	-	455 J	7320 J	9,970 J	5,830 J	3,790 J	4,540 J
Manganese	2,000	10,000	87.2 J	357 J	478 J	294 J	289 J	778 J
Mercury	0.73	3	0.63 *	0.84 *	0.11 *	0.16 *	1.3 *	0.16 *
Nickel	130	310	16.6 JN	16.9 JN	17.4 JN	18.1 JN	12 JN	24.4 JN
Potassium	-	-	683	1,460	1,540	1,600	1,040	2,010
Selenium	4	1,500	1 JB	2.6 J	2.2 J	2.3 J	2.2 J	2.7 J
Silver	8.3	1,500	0.088 B	0.03 B	1.2 U	1 U	0.027 B	1.3 U
Sodium	-	-	367	748	750	666	649	322
Thallium	-	-	0.65 B	1.1	1.7	0.91	0.72 B	2.5
Vanadium	-	-	23 J	21.2 J	19.4 J	23.2 J	13.8 J	27.6 J
Zinc	2,480	10,000	66 JN	59.1 JN	50.3 JN	53.6 JN	44.5 JN	67.7 JN

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

* - Relative Percent Difference (RPD) for duplicate analysis
is outside the control limit.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-32 2-4 6/12/2006 SOIL mg/kg	HJB-SB-32 6-8 6/12/2006 SOIL mg/kg	HJB-SB-33 6-8 6/12/2006 SOIL mg/kg	HJB-SB-34 8-10 6/12/2006 SOIL mg/kg	HJB-SB-35 10-12 6/12/2006 SOIL mg/kg	HJB-SB-36 9-11 6/13/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	6,080	10,200	15,900	7,000	5,410	15,200
Antimony	-	-	0.91 UJ	0.64 UJ	1 UJ	0.68 UJ	1.2 JB	0.93 UJ
Arsenic	16	16	3 J	4.9 J	6 J	4.8 J	13.3 J	9.7 J
Barium	820	400	32.3 J	47.2 J	120 J	65.7 J	84.4 J	144 J
Beryllium	47	590	0.33 J	0.48 J	1 J	0.43 J	0.52 J	0.93 J
Cadmium	8	9	0.077 JB	0.68 J	0.13 JB	0.073 JB	0.063 JB	0.1 JB
Calcium	-	-	25,300 J	32,500 J	12,100 J	11,700 J	4,080 J	7,900 J
Chromium	19	400	7.9 J	13.8 J	16.1 J	9 J	10.2 J	17.4 J
Cobalt	-	-	5.4 J	7.7 J	10.1 J	5.9 J	8.8 J	11.2 J
Copper	1,720	270	14.1	27.3	23.3	15.6	28.7	35
Iron	-	-	13,200 J	26,000 J	28,400 J	13,400 J	14,400 J	28,700 J
Lead	450	1,000	6.5 J	27.4 J	44.4 J	165 J	563 J	176 J
Magnesium	-	-	4,910 J	8,560 J	6,010 J	3,600 J	1,100 J	4,200 J
Manganese	2,000	10,000	271 J	554 J	432 J	226 J	272 J	649 J
Mercury	0.73	3	0.013 B*	0.2 *	0.4	2	2.1	0.87 *
Nickel	130	310	12.2 JN	19.7 JN	22.2 J	11.8 J	14.8 J	23.7 JN
Potassium	-	-	701	916	2,210	896	719	1,900
Selenium	4	1,500	1.7 J	2.5 J	3 J	2 J	3.4 J	3 J
Silver	8.3	1,500	1.4 U	0.95 U	1.5 U	0.039 B	0.24 B	1.4 U
Sodium	-	-	85.3	148	706	490	486	377
Thallium	-	-	0.67 B	1.8	1.3	0.69	0.79 B	2.2
Vanadium	-	-	10.2 J	17.4 J	29.1 J	15.4 J	28.9 J	28.7 J
Zinc	2,480	10,000	38.7 JN	145 JN	78.3 J	52.5 J	117 J	97.3 JN

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

* - Relative Percent Difference (RPD) for duplicate analysis
is outside the control limit.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-37 6-8 6/13/2006 SOIL mg/kg	HJB-SB-37 13-15 6/13/2006 SOIL mg/kg	HJB-SB-38 7-8 6/13/2006 SOIL mg/kg	HJB-SB-39 3-4 6/13/2006 SOIL mg/kg	HJB-SB-40 2-4 6/13/2006 SOIL mg/kg	HJB-SB-41 6-7 6/13/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	9,040	15,600	17,000	13,100	8,030	16,000
Antimony	-	-	1.1 UJ	1 UJ	0.99 UJ	0.99 UJ	0.22 JBN	0.93 UJ
Arsenic	16	16	6.8 J	7.6 J	5 J	4.7 J	21.7 J	5.5 J
Barium	820	400	85 J	97 J	117 J	78 J	55.1 J	118 J
Beryllium	47	590	0.51 J	0.92 J	1.1 J	0.83 J	0.48 J	0.99 J
Cadmium	8	9	0.077 JB	0.12 JB	0.16 JB	0.11 JB	0.12 JB	0.23 JB
Calcium	-	-	7,340 J	14,500 J	39,400 J	45,000 J	53,800 J	40,300 J
Chromium	19	400	12 J	19.3 J	17.9 J	15.4 J	10.1 J	16.7 J
Cobalt	-	-	6.5 J	11 J	11.8 J	9.2 J	6.1 J	11.6 J
Copper	1,720	270	31.5	25.4	24.1	22.1	15.8	21.7
Iron	-	-	14,700 J	46,700 J	34,700 J	28,900 J	27,600 J	32,000 J
Lead	450	1,000	242 J	10.7 J	10.7 J	8.7 J	6.1 J	9.5 J
Magnesium	-	-	3,700 J	6,810 J	11,500 J	11,200 J	10,400 J	13,400 J
Manganese	2,000	10,000	320 J	499 J	566 J	505 J	403 J	533 J
Mercury	0.73	3	0.64 *	0.05 *	0.016 B*	0.026 B*	0.022 B*	0.029 B*
Nickel	130	310	13.9 JN	26.1 JN	24.8 JN	21 JN	12.4 JN	23.6 JN
Potassium	-	-	1,010	2,110	2,980	2,290	1,330	2,870
Selenium	4	1,500	2 J	3 J	2.3 J	3.1 J	2.2 J	2.5 J
Silver	8.3	1,500	0.12 B	1.6 U	1.5 U	1.5 U	1.1 U	1.4 U
Sodium	-	-	104	268	629	207	174	759
Thallium	-	-	1.1	1.3	2	1.5	1.1	1.4
Vanadium	-	-	18 J	28.9 J	28.4 J	24.7 J	17.5 J	26.2 J
Zinc	2,480	10,000	90.8 JN	65.5 JN	72.9 JN	58 JN	35.3 JN	65.3 JN

Notes

Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

* - Relative Percent Difference (RPD) for duplicate analysis
is outside the control limit.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-41 13-14 6/13/2006 SOIL mg/kg	HJB-SB-42 5-7 6/13/2006 SOIL mg/kg	HJB-SB-42 10-12 6/13/2006 SOIL mg/kg	HJB-SB-43 5-7 6/13/2006 SOIL mg/kg	HJB-SB-43 10-12 6/13/2006 SOIL mg/kg	HJB-SB-44 8-10 6/14/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	13,200	14,000	10,600	9,230	13,500	7,810 E
Antimony	-	-	1.1 UJ	0.9 UJ	1.1 UJ	0.68 UJ	1.1 UJ	0.79 U
Arsenic	16	16	5.3 J	6.3 J	5.3 J	5.9 J	6.8 J	5.1 E
Barium	820	400	82.9 J	104 J	65.8 J	51.3 J	82.6 E	50.2 E
Beryllium	47	590	0.8 J	0.89 J	0.65 J	0.52 J	0.8 J	0.5 E
Cadmium	8	9	0.089 JB	0.22 JB	0.051 JB	0.16 JB	0.11 JB	0.16 B
Calcium	-	-	25,400 J	45,500 J	27,600 J	56,500 J	39,100 J	40,400
Chromium	19	400	14.6 J	15.3 J	12.6 J	11.2 J	15.6 J	10 E
Cobalt	-	-	9 J	11 J	7.8 J	7.5 J	10.1 J	6.7 E
Copper	1,720	270	16.4	21	14.1	17.4	20.3	15.4
Iron	-	-	27,000 J	30,800 J	23,300 J	25,000 J	28,200 J	19,800
Lead	450	1,000	7 J	9.5 J	5.9 J	6.7 J	8.2 J	7.7 E
Magnesium	-	-	9,060 J	11,800 J	9,700 J	13,800 J	11,900 J	8,430 E
Manganese	2,000	10,000	432 J	536 J	426 J	526 J	542 J	459 E
Mercury	0.73	3	0.025 B*	0.034 B*	0.027 B*	0.028 B*	0.024 B*	0.021 B
Nickel	130	310	19.1 JN	22.2 JN	16.5 JN	15.9 JN	21.4 JN	13.9 E
Potassium	-	-	2,170	2,400	1,740	1,460	2,210	1,070 *
Selenium	4	1,500	2.6 J	4.3 J	2.1 J	2.5 J	3.1 J	2.6 E
Silver	8.3	1,500	1.6 U	1.4 U	1.7 U	1 U	1.7 U	1.2 U
Sodium	-	-	288	401	233	331	287	156
Thallium	-	-	1.2	1.5	1.3	1.7	1.7	1.4
Vanadium	-	-	22 J	24.3 J	19 J	17.1 J	23.5 J	16.9 E
Zinc	2,480	10,000	52.9 JN	61.9 JN	43.9 JN	38.9 JN	57.2 JN	41.1 E

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

* - Relative Percent Difference (RPD) for duplicate analysis
is outside the control limit.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-45 7-9 6/15/2006 SOIL mg/kg	HJB-SB-46 11-12 6/15/2006 SOIL mg/kg	HJB-SB-47 6-7 6/15/2006 SOIL mg/kg	HJB-SB-48 2-3 6/15/2006 SOIL mg/kg	HJB-SB-48 11-12 6/15/2006 SOIL mg/kg	HJB-SB-49 2-3 6/15/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	9,710 E	11,400 E	12,600 E	12,100	9,460 E	6,400 E
Antimony	-	-	0.8 U	0.64 BN	0.83 U	0.18 BN	0.7 U	0.066 BN
Arsenic	16	16	6 E	5.6 E	4.6 E	9.7	5.5 E	6.5 E
Barium	820	400	61.8 E	101 E	78.3 E	105 E	53.2 E	92.7 E
Beryllium	47	590	0.59 E	0.65 E	0.85 E	0.8 E	0.56 E	0.45 E
Cadmium	8	9	0.21 B	0.37	0.17 B	0.36 E	0.21 B	0.22
Calcium	-	-	51,900	18,800	7,590	13,100 E	49,600	5,460
Chromium	19	400	11.8 E	15.8 E	14.4 E	16.4 E	11.8 E	9.7 E
Cobalt	-	-	7.6 E	8.8 E	8.8 E	9.3 E	6.8 E	5.4 E
Copper	1,720	270	18.4	21.3	19.3	29.6	17.2	25.5
Iron	-	-	24,900	23,800	25,000	25,300 E	22,400	13,100
Lead	450	1,000	9.1 E	62.3 E	20.6 E	321 E	6.9 E	488 E
Magnesium	-	-	12,200 E	5,160 E	5,010 E	5,050 E	11,000 E	2,210 E
Manganese	2,000	10,000	471 E	653 E	331 E	486 E	500 E	388 E
Mercury	0.73	3	0.063	0.12	0.12	0.45	0.022 B	0.92
Nickel	130	310	16.6 E	18.1 E	21 E	20.1 E	15.9 E	11.7 E
Potassium	-	-	1,520 *	1,040 *	1,560 *	1,590	1,360 *	775 *
Selenium	4	1,500	3.9 E	3.1 E	2.7 E	4 E	3.3 E	1.9 E
Silver	8.3	1,500	1.2 U	1.2 U	1.2 U	0.053 B	1.1 U	0.16 B
Sodium	-	-	170	137	271	125	149	117
Thallium	-	-	1.3	2.1	0.78 B	1.3	1.3	1.4
Vanadium	-	-	18.6 E	19.9 E	21.7 E	24.5 E	18.5 E	16.6 E
Zinc	2,480	10,000	43.5 E	88.3 E	58.4 E	98.1 E	40.6 E	129 E

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

* - Relative Percent Difference (RPD) for duplicate analysis
is outside the control limit.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-49 10-11 6/15/2006 SOIL mg/kg	HJB-SB-50 2-4 6/15/2006 SOIL mg/kg	HJB-SB-50 6-8 6/15/2006 SOIL mg/kg	HJB-SB-51 2-3 6/15/2006 SOIL mg/kg	HJB-SBX 2-3 SB-51 Duplicate 6/15/2006 SOIL mg/kg	HJB-SB-51 5-7 6/15/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	8,330 E	9,310 E	14,900 E	11,600 E	11,100 E	9,440 E
Antimony	-	-	0.72 U	0.12 BN	0.73 U	0.093 BN	0.18 BN	0.77 U
Arsenic	16	16	3.5 E	7.9 E	5.9 E	7.2 E	6.8 E	3.5 E
Barium	820	400	51.2 E	331 E	45.9 E	181 E	169 E	52.1 E
Beryllium	47	590	0.51 E	0.56 E	0.9 E	0.73 E	0.69 E	0.55 E
Cadmium	8	9	0.13 B	0.35	0.21 B	0.85	0.99	0.1 B
Calcium	-	-	28,200	22,100	2,570	8,590	9,870	4,730
Chromium	19	400	9.1 E	14.1 E	15.5 E	16.8 E	17.3 E	11 E
Cobalt	-	-	5.5 E	7.5 E	9.9 E	9.2 E	8.8 E	7.7 E
Copper	1,720	270	13	40.8	21.1	37.9	35.8	13.5
Iron	-	-	16,900	22,100	30,500	26,100	23,600	18,200
Lead	450	1,000	7.1 E	291 E	14.8 E	489 E	451 E	23.3 E
Magnesium	-	-	5,110 E	5,110 E	4,330 E	4,000 E	3,980 E	3,320 E
Manganese	2,000	10,000	354 E	412 E	306 E	535 E	535 E	279 E
Mercury	0.73	3	0.015 B	1.2	0.096	0.33	0.53	0.055
Nickel	130	310	12.3 E	19.8 E	22.5 E	21.2 E	20.7 E	14.5 E
Potassium	-	-	1,060 *	1,230 *	1,930 *	1,500 *	1,450 *	1030 *
Selenium	4	1,500	2.2 E	3.4 E	2.7 E	2.8 E	2.8 E	2.4 E
Silver	8.3	1,500	1.1 U	0.093 B	1.1 U	0.18 B	0.072 B	1.2 U
Sodium	-	-	131	120	70.8	95.6	104	68.1
Thallium	-	-	1.1	1.2	0.51 B	1.6	1.8	0.69 B
Vanadium	-	-	15.7 E	18.9 E	25.2 E	24 E	25.2 E	17.3 E
Zinc	2,480	10,000	33.8 E	214 E	58.1 E	254 E	237 E	45 E

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

* - Relative Percent Difference (RPD) for duplicate analysis
is outside the control limit.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-52 3-4 6/15/2006 SOIL mg/kg	HJB-SB-52 6-8 6/15/2006 SOIL mg/kg	HJB-SB-53 6-8 6/15/2006 SOIL mg/kg	HJB-SB-54 5-6 6/15/2006 SOIL mg/kg	HJB-SB-54 11-12 6/15/2006 SOIL mg/kg	HJB-SB-55 7-8 6/15/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	10,200 E	8,690 E	8,860 E	6,390 E	13,900 E	13,000 E
Antimony	-	-	0.87 U	0.72 U	0.7 U	0.79 U	0.84 U	0.84 U
Arsenic	16	16	6.2 E	4.4 E	4 E	7.9 E	6.8 E	5.7 E
Barium	820	400	165 E	59.7 E	62.4 E	50.9 E	81.2 E	84.4 E
Beryllium	47	590	1.2 E	0.54 E	0.56 E	0.37 E	0.91 E	0.8 E
Cadmium	8	9	0.56	0.094 B	0.17 B	0.16 B	0.24 B	0.38
Calcium	-	-	35,500	5,210	32,600	47,500	39,500	44,400
Chromium	19	400	13.8 E	10.1 E	10.2 E	8.5 E	16.2 E	14.5 E
Cobalt	-	-	8 E	6.8 E	6.8 E	5.5 E	11.3 E	10 E
Copper	1,720	270	34.9	14.9	14.8	18.8	21.8	19.7
Iron	-	-	23,900	17,300	20,100	18,100	30,100	28,200
Lead	450	1,000	288 E	47.3 E	6.6 E	5.4 E	9.2 E	11.1 E
Magnesium	-	-	7,280 E	3,090 E	8,560 E	14,100 E	11,000 E	11,500 E
Manganese	2,000	10,000	409 E	222 E	410 E	487 E	548 E	679 E
Mercury	0.73	3	0.63	0.23	0.018 B	0.013 B	0.021 B	0.018 B
Nickel	130	310	17.6 E	13.9 E	14.4 E	11.8 E	24.1 E	20.6 E
Potassium	-	-	1,520 *	968 *	1,410 *	1,040 *	2,160 *	2,230 *
Selenium	4	1,500	3.3 E	2.1 E	2.9 E	2.6 E	2.6 E	4.3 E
Silver	8.3	1,500	0.026 B	1.1 U	1.1 U	1.2 U	1.3 U	1.3 U
Sodium	-	-	169	89.1	337	150	264	1100
Thallium	-	-	1.1	0.66 B	1.3	1.6	1.5	2.5
Vanadium	-	-	21.3 E	17.2 E	16.5 E	14.1 E	23.9 E	21.8 E
Zinc	2,480	10,000	158 E	47.8 E	40.5 E	32 E	63.6 E	56 E

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

* - Relative Percent Difference (RPD) for duplicate analysis
is outside the control limit.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-55 15-16 6/15/2006 SOIL mg/kg	HJB-SB-56 11-12 6/15/2006 SOIL mg/kg	HJB-SB-57 5.5-7.5 6/16/2006 SOIL mg/kg	HJB-SB-57 11-12 6/15/2006 SOIL mg/kg	HJB-SB-58 7-8 6/16/2006 SOIL mg/kg	HJB-SB-58 11-12 6/16/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	12,100 E	13,000	21,300	14,900	8,260	9,470
Antimony	-	-	0.89 U	0.8 UJ	0.94 UJ	0.11 JBN	0.72 UJ	0.8 UJ
Arsenic	16	16	5.9 E	5.7	6.5	5.9	5	6
Barium	820	400	70.1 E	66.3 J	122 J	91.6 J	251 J	64.7 J
Beryllium	47	590	0.71 E	0.69 J	1.4 J	0.9 J	0.42 J	0.57 J
Cadmium	8	9	0.24 B	0.22 JBE	0.41 J	0.24 JBE	0.29 J	0.23 JBE
Calcium	-	-	36,000	36,400 J	38,500 J	36,200 J	52,700 J	51,800 J
Chromium	19	400	14.5 E	15.2 J	20.8 J	16.8 J	10.6 J	12.1 J
Cobalt	-	-	10 E	10.4 J	15 J	11.2 J	5.7 J	8.6 J
Copper	1,720	270	19.5	19.3	25.9	20.5	21.1	21.2
Iron	-	-	28,100	27,700 J	48,200 J	30,600 J	18,100 J	24,500 J
Lead	450	1,000	7.4 E	6.2 J	13.3 J	7.8 J	53.9 J	8 J
Magnesium	-	-	12,100 E	12,500 J	12,000 J	12,800 J	6,270 J	11,500 J
Manganese	2,000	10,000	513 E	584 J	600 J	559 J	385 J	541 J
Mercury	0.73	3	0.015 B	0.019 B	0.017 B	0.012 B	0.058	0.02 B
Nickel	130	310	22.2 E	23.1 J	28.6 J	24.1 J	13.1 J	18 J
Potassium	-	-	1,990 *	2,030	3,980	2,480	889	1,390
Selenium	4	1,500	3.2 E	3.2 J	3.4 J	2.9 J	2.7 J	2.9 J
Silver	8.3	1,500	1.3 U	1.2 U	1.4 U	1.4 U	0.09 B	1.2 U
Sodium	-	-	199	224	1,960	333	636	275
Thallium	-	-	1.4	2 J	1.6 J	1.7 J	1.2 J	1.6 J
Vanadium	-	-	19.2 E	19.9 J	32.9 J	24 J	15 J	18.9 J
Zinc	2,480	10,000	49.8 E	48.7 J	89.2 J	58.8 J	179 J	45.1 J

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

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Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

* - Relative Percent Difference (RPD) for duplicate analysis
is outside the control limit.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-59 6-7 6/16/2006 SOIL mg/kg	HJB-SB-59 11-12 6/16/2006 SOIL mg/kg	HJB-SB-60 6-8 6/16/2006 SOIL mg/kg	HJB-SB-60 11-12 6/16/2006 SOIL mg/kg	HJB-SB-61 0-2 6/20/2006 SOIL mg/kg	HJB-SB-61 9-11 6/20/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	8,760	13,000	11,900	13,100	9,880 J	15,300 J
Antimony	-	-	0.75 UJ	0.77 UJ	0.78 UJ	0.76 UJ	0.65 JBN	0.91 UJ
Arsenic	16	16	3.6	6.2	5.4	5.9	11.4 J	6.2 J
Barium	820	400	35.6 J	66.2 J	79 J	81.3 J	399 J	93.8 J
Beryllium	47	590	0.47 J	0.72 J	0.73 J	0.88 J	0.68 J	0.96 J
Cadmium	8	9	0.099 JBE	0.29 J	0.19 JBE	0.28 J	1.2 J	0.18 JB
Calcium	-	-	4930 J	36,900 J	30,500 J	37,200 J	11,000	3,390
Chromium	19	400	9.4 J	15.3 J	13.1 J	14.8 J	20 J	17.7 J
Cobalt	-	-	6.1 J	10.4 J	8.6 J	10 J	7.4 J	11 J
Copper	1,720	270	15.8	20.1	18.7	18.9	85.6	22.9
Iron	-	-	18,900 J	28,000 J	24,700 J	28,000 J	27,300	32,900
Lead	450	1,000	7.5 J	6.9 J	8.4 J	7.7 J	607 J	10.1 J
Magnesium	-	-	3440 J	11,500 J	9,790 J	10,600 J	3,850 J	4,720 J
Manganese	2,000	10,000	376 J	578 J	485 J	539 J	421 J	608 J
Mercury	0.73	3	0.015 B	0.014 B	0.022 B	0.015 B	1.4 JN	0.023 JB
Nickel	130	310	12.8 J	22.9 J	17.6 J	21.1 J	17.9 J	25 J
Potassium	-	-	712	1,940	1,780	2,050	1,450	1,890
Selenium	4	1,500	2.2 J	3.5 J	2.9 J	3.2 J	4.3 J	3.5 J
Silver	8.3	1,500	1.1 U	1.2 U	1.2 U	1.1 U	0.67 B	1.4 U
Sodium	-	-	631	388	2010	460	126	111
Thallium	-	-	1.1 J	1.6 J	1.4 J	1.1 J	1.1 J	1.9 J
Vanadium	-	-	14.4 J	20.8 J	19.9 J	22.9 J	25.6 J	27.8 J
Zinc	2,480	10,000	46.8 J	50.9 J	52.9 J	57.4 J	423 J	62.7 J

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

* - Relative Percent Difference (RPD) for duplicate analysis
is outside the control limit.

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-62 5-7 6/21/2006 SOIL mg/kg	HJB-SB-63 6-8 6/21/2006 SOIL mg/kg	HJB-SB-64 5-7 6/22/2006 SOIL mg/kg	HJB-SB-65 5-7 7/12/2006 SOIL mg/kg	HJB-SB-65 10-12 7/12/2006 SOIL mg/kg
METALS (Total)							
Aluminum	-	-	10,300 J	14,700 J	18,100 J	8,060 J	8,950 J
Antimony	-	-	0.84 UJ	0.88 UJ	0.97 UJ	0.86 J	0.76 J
Arsenic	16	16	3.6 J	4.1 J	7.1 J	8.6 JN	4.3 JN
Barium	820	400	60.7 J	99.1 J	131 J	42 JN	48.8 JN
Beryllium	47	590	0.62 J	0.86 J	1.2 J	0.46 JN	0.5 JN
Cadmium	8	9	0.19 JB	0.26 J	0.36 J	0.25 UJ	0.23 UJ
Calcium	-	-	30,500	17,500	26,800	31,000	25,100
Chromium	19	400	11.5 J	15.5 J	19.2 J	10.2 JN	10.8 JN
Cobalt	-	-	7.3 J	11.1 J	12.6 J	7.6 JN	6.8 JN
Copper	1,720	270	14.5	18	22.5	18.5	13.3
Iron	-	-	19,700	26,000	34,000	17,200	15,900
Lead	450	1,000	8.3 J	9.5 J	12.2 J	7.1 JN	4.7 JN
Magnesium	-	-	7,950 J	6,620 J	10,700 J	10,600 J	11,100 J
Manganese	2,000	10,000	501 J	1,030 J	508 J	554 J	425 J
Mercury	0.73	3	0.01 JB	0.027 JB	0.024 JB	0.013 B	0.012 B
Nickel	130	310	15.3 J	21.8 J	26.6 J	15.7 JN	14.8 JN
Potassium	-	-	1,440	1,630	3,030	1170	1,500
Selenium	4	1,500	2.8 J	3 J	2.8 J	1.3 UJ	1.1 UJ
Silver	8.3	1,500	1.3 U	1.4 U	1.4 U	1.3 U	1.1 U
Sodium	-	-	1090	618	1520	151	146
Thallium	-	-	1.7 J	3.9 J	1.4 J	1.5 JN	1.2 JN
Vanadium	-	-	19 J	23.9 J	28.2 J	16.1 JN	15.2 JN
Zinc	2,480	10,000	43.8 J	57 J	75.6 J	40.4 JN	35.4 JN

Notes

 - Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.

 - Concentration exceeds corresponding 6 NYCRR Part 375
Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.

N - Matrix spike recovery falls outside the control limit.

E - Estimated concentration due to the presence of interferences.

B - Compound detected below the reporting limit.

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is outside the control limit.

TABLE 7-6
SUMMARY OF DETECTED VOCs AND SVOCS IN GROUNDWATER
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	HJB-MW-1 4/12/2006 WATER ug/L	HJB-MW-1 7/27/2006 WATER ug/L	HJB-MW-1 10/30/2006 WATER ug/L	HJB-MW-2R 7/26/2006 WATER ug/L	HJB-MW-X MW-2R Duplicate 7/26/2006 WATER ug/L	HJB-MW-2R 10/31/2006 WATER ug/L	HJB-MW-3 4/12/2006 WATER ug/L	HJB-MW-3 7/27/2006 WATER ug/L	HJB-MW-3 10/30/2006 WATER ug/L	HJB-MW-4 4/12/2006 WATER ug/L	HJB-MW-4 7/28/2006 WATER ug/L
VOCs												
1,1,1,2-Tetrachloroethane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 J	1 J
1,1-Dichloroethane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
1,1-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5	7 J
1,2,3-Trichlorobenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
1,2,4-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U	5 UJ
1,3,5-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	1 J	5 U	5 U	5 U	5 UJ
4-Isopropyltoluene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Acetone		5 U	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7	5 UJ
Benzene	1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Carbon Disulfide		5 U	5 U	5 U	4 J	15	5 U	5 U	5 U	5 U	5 U	5 UJ
Chloroethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 J
Chloroform	7	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
cis-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	180	340 JE
Ethylbenzene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Isopropylbenzene	5	5 U	5 U	5 U	5 U	5 U	5 U	6	2 J	3 J	5 U	5 UJ
Methyl tert-butyl ether	10	21	20	67	39	44	37	5 U	5 U	5 U	5 U	5 UJ
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Naphthalene		5 U	5 U	5 U	5 U	5 U	5 U	1 J	5 U	5 U	5 U	5 UJ
n-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
n-Propylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
o-Xylene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
sec-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	4 J	1 J	2 J	5 U	5 UJ
tert-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	1 J	1 J	5 U	5 U	5 UJ
Tetrachloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6,000 D	15,000 D
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 J
Trichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	190 DJ	680 DJ
Vinyl Chloride	2	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8	10 J
Xylene (Total)		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Total TICS		NA	NA	U	NA	NA	U	NA	NA	95 J/NJ	NA	NA
SVOCs												
2-Methylnaphthalene		10 U	15 U	10 U	10 U	10 U	10 U	10 U	14 U	10 U	10 U	12 U
bis(2-Ethylhexyl)phthalate	50	10 U	2 J	10 U	10 U	10 U	10 U	10 U	14 U	10 U	10 U	12 U
Diethylphthalate	50	10 U	15 U	10 U	10 U	10 U	10 U	10 U	14 U	10 U	10 U	12 U
Total TICS				U			5 J			U		

Notes
 - Concentration exceeds NYSDEC Class GA Standard
TICS - Tentatively Identified Compounds
U - The compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or is estimated
E - Concentration exceeded the calibration range.
N - Positively identified TICS.
B - The analyte was found in the method blank as well as sample.
D - Concentration was obtained from a diluted analysis.
NA - Not Analyzed.

TABLE 7-6
SUMMARY OF DETECTED VOCs AND SVOCS IN GROUNDWATER
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	HJB-MW-4 10/31/2006 WATER ug/L	HJB-MW-4R 7/5/2007 WATER ug/L	HJB-MW-6R 7/5/2007 WATER ug/L	HJB-MW-7 7/26/2006 WATER ug/L	HJB-MW-7 10/31/2006 WATER ug/L	HJB-MW-X MW-7 Duplicate 10/31/2006 WATER ug/L	HJB-MW-8 7/27/2006 WATER ug/L	HJB-MW-8 10/31/2006 WATER ug/L	HJB-MW-9 7/26/2006 WATER ug/L	HJB-MW-9 10/30/2006 WATER ug/L	HJB-MW-10 7/27/2006 WATER ug/L
VOCs												
1,1,1,2-Tetrachloroethane		1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5	6	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene		5 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Isopropyltoluene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone		8	5 U	5 U	5 U	5 U	5 U	13	5 U	5 U	5 U	5 U
Benzene	1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide		5 U	5 U	5 U	74	5 U	5 U	5 U	5 U	5 U	5 U	17
Chloroethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	7	1 J	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5	460 JE	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	10	5 U	5 U	5 U	5 U	5 U	5 U	1 J	1 J	3 J	3 J	5 U
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene		5 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Propylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
tert-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5	19,000 D	5,000 D	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5	1,600 DJ	30	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl Chloride	2	8	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylene (Total)		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Total TICS		U			NA	U	U	NA	U	NA	U	U
SVOCs												
2-Methylnaphthalene		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	12 U
bis(2-Ethylhexyl)phthalate	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 J	10 U	2 J	12 U
Diethylphthalate	50	10 U	10 U	3 J	10 U	10 U	10 U	10 U	10 U	1 J	10 U	12 U
Total TICS		U				U	U		41 J/NJ		U	

Notes
 - Concentration exceeds NYSDEC Class GA Standard
TICS - Tentatively Identified Compounds
U - The compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or is estimated
E - Concentration exceeded the calibration range.
N - Positively identified TICS.
B - The analyte was found in the method blank as well as sample.
D - Concentration was obtained from a diluted analysis.
NA - Not Analyzed.

TABLE 7-6
SUMMARY OF DETECTED VOCs AND SVOCS IN GROUNDWATER
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	HJB-MW-10 10/30/2006 WATER ug/L	HJB-MW-11 7/27/2006 WATER ug/L	HJB-MW-11 10/30/2006 WATER ug/L	HJB-MW-11R 7/5/2007 WATER ug/L	HJB-MW-12 7/27/2006 WATER ug/L	HJB-MW-12 10/30/2006 WATER ug/L	HJB-MW-13 7/28/2006 WATER ug/L	HJB-MW-13 10/31/2006 WATER ug/L	HJB-MW-14 7/28/2006 WATER ug/L	HJB-MW-14 11/1/2006 WATER ug/L	HJB-MW-15 7/28/2006 WATER ug/L
VOCs												
1,1,1,2-Tetrachloroethane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Isopropyltoluene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U	5 U	5 U	5 U	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	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	10	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Propylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
tert-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	4 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl Chloride	2	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylene (Total)		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Total TICS		U	NA	U		NA	U	NA	U	NA	U	NA
SVOCs												
2-Methylnaphthalene		12 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	50	12 U	10 U	10 U	10 U	6 J	10 U	10 U	10 U	2 J	10 U	10 U
Diethylphthalate	50	12 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U	10 U
Total TICS		6 J		U			U		U		U	

Notes
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U - The compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or is estimated
E - Concentration exceeded the calibration range.
N - Positively identified TICS.
B - The analyte was found in the method blank as well as sample.
D - Concentration was obtained from a diluted analysis.
NA - Not Analyzed.

TABLE 7-6
SUMMARY OF DETECTED VOCs AND SVOCS IN GROUNDWATER
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	HJB-MW-15 10/31/2006 WATER ug/L	HJB-MW-16 7/27/2006 WATER ug/L	HJB-MW-17 7/5/2007 WATER ug/L	HJB-MW-17 10/13/2008 WATER ug/L	HJB-MW-18 7/5/2007 WATER ug/L	HJB-MW-18 10/13/2008 WATER ug/L	HJB-MW-19 7/5/2007 WATER ug/L	HJB-MW-19 10/13/2008 WATER ug/L	HJB-MW-20 10/13/2008 WATER ug/L	HJB-MW-21 10/13/2008 WATER ug/L	HJB-MW-A 10/31/2006 WATER ug/L
VOCs												
1,1,1,2-Tetrachloroethane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane		5 U	5 U	5 U	5 U	5 U	1.2 J	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Isopropyltoluene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	1	5 U	5 U	5 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	30	57	25	35	59	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U	2.2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5	5 U	5 U	5 U	2.8 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Butylbenzene		5 U	5 U	5 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Propylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene		5 U	5 U	5 U	3.3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
tert-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	1 J	5 U	870 E	640 D	3 J	1.3 J	1.1 J	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	1.1 J	24	45	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U	5 U	160	200 D	49	71	4.5 J	5 U	5 U
Vinyl Chloride	2	5 U	5 U	5 U	4.6 J	5 U	1.3 J	5	3 J	5 U	5 U	5 U
Xylene (Total)		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Total TICS		U	NA							U	U	U
SVOCs												
2-Methylnaphthalene		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	10 U
bis(2-Ethylhexyl)phthalate	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	10 U
Diethylphthalate	50	10 U	10 U	10 U	10 U	10 U	10 U	6 J	6 J	NA	NA	10 U
Total TICS		U										U

Notes
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J - Compound detected below the reporting limit or is estimated
E - Concentration exceeded the calibration range.
N - Positively identified TICS.
B - The analyte was found in the method blank as well as sample.
D - Concentration was obtained from a diluted analysis.
NA - Not Analyzed.

TABLE 7-6
SUMMARY OF DETECTED VOCs AND SVOCS IN GROUNDWATER
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	HJB-MW-B 10/31/2006 WATER ug/L	HJB-MW-C 10/31/2006 WATER ug/L	HJB-MW-C 10/13/2008 WATER ug/L	HJB-MW-D 10/13/2008 WATER ug/L	HJB-SB-85-GW 10/3/2008 WATER ug/L
VOCs						
1,1,1,2-Tetrachloroethane		5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane		5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene		5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene		17 B	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene		6	5 U	5 U	5 U	5 U
4-Isopropyltoluene		2 J	5 U	5 U	5 U	5 U
Acetone		5 U	5 U	5 U	5 U	5 U
Benzene	1	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide		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
cis-1,2-Dichloroethene	5	66	5 U	5 U	5 U	5 U
Ethylbenzene	5	5	5 U	5 U	5 U	5 U
Isopropylbenzene	5	3 J	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	10	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U
Naphthalene		21 B	5 U	5 U	5 U	5 U
n-Butylbenzene		5 U	5 U	5 U	5 U	5 U
n-Propylbenzene		3 J	5 U	5 U	5 U	5 U
o-Xylene		5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene		2 J	5 U	5 U	5 U	5 U
tert-Butylbenzene		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	1.6 J	4.3 J	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U	1.2 J	5 U
Vinyl Chloride	2	19	5 U	5 U	5 U	5 U
Xylene (Total)		5 U	5 U	5 U	5 U	5 U
Total TICS		203 J/NJ	U	U	U	U
SVOCS						
2-Methylnaphthalene		12	10 U	NA	NA	NA
bis(2-Ethylhexyl)phthalate	50	10 U	10 U	NA	NA	NA
Diethylphthalate	50	10 U	10 U	NA	NA	NA
Total TICS		92 NJ	U			

Notes
 - Concentration exceeds NYSDEC Class GA Standard
TICS - Tentatively Identified Compounds
U - The compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or is estimated
E - Concentration exceeded the calibration range.
N - Positively identified TICS.
B - The analyte was found in the method blank as well as sample.
D - Concentration was obtained from a diluted analysis.
NA - Not Analyzed.

TABLE 7-7
SUMMARY OF GROUNDWATER SAMPLING RESULTS (METALS AND NAP)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Units	NYSDEC Class GA ug/L	HJB-MW-2R 7/26/2006 ug/L	HJB-MW-X MW-2R Duplicate 7/26/2006 ug/L	HJB-MW-2R 10/31/2006 ug/L	HJB-MW-4 4/12/2006 ug/L	HJB-MW-4** 4/12/2006 ug/L	HJB-MW-4R 7/5/2007 ug/L	HJB-MW-6R 7/5/2007 ug/L	HJB-MW-7 7/26/2006 ug/L	HJB-MW-7 10/31/2006 ug/L	HJB-MW-X MW-7 Duplicate 10/31/2006 ug/L	HJB-MW-8 7/27/2006 ug/L	HJB-MW-8 10/31/2006 ug/L
METALS (Total)													
Aluminum	-	170 B	122 B	61.5 B	8,750 R	97.5 R	111 B	60.5 B	14 U	31.9 B	27.6 B	79.3 B	70.8 B
Antimony	-	1.2 U	1.2 U	1.2 U	1.2 R	3.0 R	7.6 B	13.1 B	1.2 U	2.3 B	3.7 B	1.2 U	1.2 U
Arsenic	25	2.7 B	1.6 U	5.6 B	16.2 R	2.5 R	1.6 U	1.6 U	2.2 B	1.6 U	2.7 B	10.3 B	54.2
Barium	1,000	381	374	425	194 R	131 R	356	71.6 B	108 B	128 B	128 B	763	773
Beryllium	3*	0.15 U	0.15 U	0.15 U	0.52 R	0.15 R	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Cadmium	5	0.22 B	0.13 B	0.1 U	0.10 R	0.10 R	0.10 U	0.10 U	0.26 B	0.92 B	0.92 B	0.13 B	0.1 U
Calcium	-	156,000	157,000	172,000	159,000 R	146,000 R	172,000	275,000	176,000	153,000	151,000	214,000	222,000
Chromium	50	1.5 B	0.59 B	0.38 U	1,030 R	5.2 R	0.38 U	0.38 U	0.93 B	0.38 U	0.38 U	0.53 B	0.38 U
Cobalt	-	0.97 B	0.98 B	2.9 B	8.1 R	2.6 R	1.7 B	3.5 B	0.31 B	0.15 U	0.15 U	1.9 B	7.4 B
Copper	200	6.3 U	6.3 U	6.3 U	125 R	17.1 R	6.3 U	8.8 B	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U
Iron	300	882	1,420	14,400 E	16,500 R	204 R	919	1,610	159 B	156 BE	157 BE	4,150	28,500 E
Lead	25	0.46 U	0.46 U	0.46 U	24.6 R	1.4 R	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Magnesium	35,000*	59,500	61,500	65,800	22,400 R	18,800 R	47,100	68,700	68,400	54,900	55,300	71,100	69,800
Manganese	300	421	408	420	543 R	173 R	41 B	2,570	917	90.9	91.2	592	1,100
Nickel	100	1.4 B	1 B	3 B	241 R	155 R	5.9 B	9.6 B	1.2 B	0.59 U	0.59 U	3.6 B	7.1 B
Potassium	-	10,600	10,900	10,600	15,000 R	13,500 R	4,060	8,210	11,200	6,680	6,750	26,900	24,200
Selenium	10	0.98 U	0.98 U	11.9 B	0.98 R	3.8 R	5.8 B	0.98 U	0.98 U	12.7 B	15.2 B	0.98 U	7.9 B
Silver	50	1.1 B	0.91 U	0.91 U	5.4 R	1.8 R	13.6 B	23.3 B	1.2 B	0.91 U	0.91 U	1.1 B	1.4 B
Sodium	20,000	217,000	238,000	319,000 E	1,540,000 R	1,580,000 R	160,000	68,600	109,000	46,200 E	47,200 E	614,000	870,000 E
Thallium	0.5*	1.2 U	1.2 U	1.2 U	2.1 R	2.5 R	1.2 U	1.2 U	2.2 B	1.2 U	1.2 U	1.2 U	1.2 U
Vanadium	-	0.47 U	0.47 U	0.47 U	26.5 R	2.2 R	0.48 B	0.9 B	0.54 B	1 B	1.1 B	0.6 B	0.47 U
Zinc	2,000*	20.1 B	11.8 B	10.7 B	83.6 R	26.5 R	18 B	21.8 B	15.4 B	54.2	49.9 B	16.7 B	9.5 B
NATURAL ATTENUATION PARAMETERS (mg/L)													
Alkalinity	-	630	610	700	NA	NA	NA	NA	530	590	590	720	560
Chloride	-	380 NJ	390 NJ	510	NA	NA	NA	NA	140 NJ	32	34	1100 NJ	280
Dissolved Organic Carbon	-	10 U	10 U	10 U	NA	NA	NA	NA	10 U	10 U	10 U	11	10 U
Ethane (ug/L)	-	26 U	27 U	26 U	NA	NA	NA	NA	26 U	27 U	27 U	26 U	26 U
Ethene (ug/L)	-	35 U	36 U	35 U	NA	NA	NA	NA	35 U	36 U	36 U	35 U	35 U
Ferrous Iron	-	1 NJ	1 NJ	16	NA	NA	NA	NA	1 NJ	1 U	1 U	17 NJ	31
Free Carbon Dioxide	-	160	130	130	NA	NA	NA	NA	160	85	85	290	140
Methane (ug/L)	-	710	790	8500 D	NA	NA	NA	NA	14 U	14 U	14 U	1400 D	7200 D
Nitrate	-	0.13 U	0.13 U	0.18	NA	NA	NA	NA	0.13 U	0.25	0.26	0.13 U	0.13 U
Nitrite	-	0.13 NJ	0.13 NJ	0.13 U	NA	NA	NA	NA	0.13 NJ	0.13 U	0.13 U	0.13 NJ	2.6 UD
pH (S.U.)	-	6.9	7	7	NA	NA	NA	NA	6.8	7.1	7.1	6.7	6.9
Sulfate	-	34	25	5 U	NA	NA	NA	NA	210	83	83	5 U	5 U
GEOCHEMICAL PARAMETERS (mg/L)													
Total Dissolved Solids	-	1400	1400	NA	NA	NA	NA	NA	1100	NA	NA	3000	NA
Total Hardness	-	640	650	NA	NA	NA	NA	NA	720	NA	NA	830	NA
Total Kjeldahl Nitrogen	-	4.9	5.4	NA	NA	NA	NA	NA	1.5	NA	NA	17	NA
Total Organic Carbon	-	10 U	10 U	NA	NA	NA	NA	NA	10 U	NA	NA	10	NA

Notes
* Guidance Value used where no standard exists.
** Dissolved Metals
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound not detected at the indicated concentration.
R - Results rejected by data validator.
D - Concentration was obtained from a diluted analysis.
E - Estimated concentration due to the presence of interferences.
B - Compound detected below the reporting limit.
NA - Not Analyzed.

TABLE 7-7
SUMMARY OF GROUNDWATER SAMPLING RESULTS (METALS AND NAP)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Units	NYSDEC Class GA ug/L	HJB-MW-9 7/26/2006 ug/L	HJB-MW-9 10/30/2006 ug/L	HJB-MW-10 7/27/2006 ug/L	HJB-MW-10 10/30/2006 ug/L	HJB-MW-11 7/27/2006 ug/L	HJB-MW-11 10/30/2006 ug/L	HJB-MW-11R 7/5/2007 ug/L	HJB-MW-12 7/27/2006 ug/L	HJB-MW-12 10/30/2006 ug/L	HJB-MW-13 7/28/2006 ug/L	HJB-MW-13 10/31/2006 ug/L	HJB-MW-14 11/1/2006 ug/L	HJB-MW-15 7/28/2006 ug/L
METALS (Total)														
Aluminum	-	230	239	14 U	14 U	14 U	62.2 B	887	2940	2220	14 U	14 U	827	792
Antimony	-	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 B	11.5 B	1.2 U	1.2 U	5.4 B	1.2 U	1.2 U	1.3 B
Arsenic	25	4.2 B	1.6 U	4.3 B	1.6 U	3.2 B	1.6 U	1.8 B	2 B	1.6 U	4.2 B	5.6 B	1.6 U	3.3 B
Barium	1,000	74.7 B	93.3 B	99.7 B	83.3 B	75.5 B	109 B	107 B	172 B	117 B	438	517	219	147 B
Beryllium	3*	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Cadmium	5	0.77 B	1.2 B	0.16 B	0.1 U	0.10 U	0.2 B	0.10 U	0.21 B	0.10 U	0.70 B	0.1 U	0.1 U	0.59 B
Calcium	-	250,000	242,000	220,000	246,000	166,000	120,000	207,000	139,000	138,000	355,000	368,000	190,000	146,000
Chromium	50	1.3 B	0.38 U	0.55 B	0.38 U	0.38 U	2.3 B	1.5 B	3.5 B	1.9 B	0.53 B	0.38 U	2.9 B	1.6 B
Cobalt	-	0.26 B	0.38 B	0.26 B	0.15 U	0.43 B	0.19 B	3.1 B	1.5 B	0.99 B	0.91 B	0.35 B	0.49 B	0.44 B
Copper	200	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	12.2 B	7.6 B	6.3 U	6.3 U	6.3 U	8.9 B	6.3 U
Iron	300	295	250	57.9 B	19 U	353	82.2 B	2,050	3,670	2,010	139 B	25.3 BE	972	1,050
Lead	25	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	1.5 B	2.4 B	17.4	8.2 B	78.9	0.46 U	2.5 B	1.9 B
Magnesium	35,000*	50,600	50,600	71,500	67,200	62,600	27,600	277,000	34,200	29,200	82,600	82,400	31,800	35,500
Manganese	300	377	1,950	245	22.5 B	216	12.2 B	70.7	999	535	1,970	2,090	17.1 B	1,010
Nickel	100	1.3 B	1.3 B	0.88 B	0.59 U	0.59 U	2.9 B	8.7 B	3.2 B	1.4 B	1.9 B	1.1 B	1.6 B	1.5 B
Potassium	-	4,500	2,540	6,790	12,500	11,800	12,700	21,200	3,890	2,280	15,200	4,350	2,520	2,500
Selenium	10	0.98 U	2.1 B	0.98 U	4.5 B	0.98 U	12.2 B	14.7 B	0.98 U	12.3 B	0.98 U	0.98 U	10.9 B	0.98 U
Silver	50	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	16.1 B	0.91 B	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Sodium	20,000	80,900	68,400	249,000	604,000	94,800	31,500	145,000	33,700	19,700	2,120,000	1,980,000 E	1,300,000 E	33,500
Thallium	0.5*	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	4.7 B	1.2 U	1.2 U	1.7 B
Vanadium	-	0.47 U	0.85 B	0.47 U	0.67 B	0.47 U	1.1 B	3.5 B	5.1 B	3.8 B	0.47 U	0.6 B	1.9 B	1.5 B
Zinc	2,000*	14.7 B	14.6 B	15.2 B	10.3 B	15.8 B	42.5 B	19.6 B	33 B	18.2 B	19.4 B	7 B	24.7 B	34.3 B
NATURAL ATTENUATION PARAMETERS (mg/L)														
Alkalinity	-	570	590	250	390	290	380	NA	390	380	470	500	400	NA
Chloride	-	92 NJ	200	570 NJ	800	190 NJ	50	NA	79	60	1200	3800	1800 NJ	NA
Dissolved Organic Carbon	-	10 U	10 U	10 U	10 U	10 U	10 U	NA	10 U	10 U	NA	10 U	10 U	NA
Ethane (ug/L)	-	26 U	27 U	26 U	26 U	27 U	26 U	NA	26 U	26 U	27 U	27 U	26 U	NA
Ethene (ug/L)	-	35 U	36 U	35 U	35 U	36 U	36 U	NA	35 U	35 U	36 U	36 U	35 U	NA
Ferrous Iron	-	1 NJ	1 UJ	1 NJ	1 UJ	1 NJ	1 UJ	NA	1 U	1 UJ	1 NJ	1 U	1 NJ	NA
Free Carbon Dioxide	-	230	190	46	73	58	51	NA	130	85	92	120	58	NA
Methane (ug/L)	-	14 U	14 U	14 U	14 U	14 U	14 U	NA	14 U	14 U	14 U	14 U	14 U	NA
Nitrate	-	0.13 U	0.13 U	0.13 U	0.51	0.24	1.4	NA	0.37	0.8	0.74	0.33	2.9	NA
Nitrite	-	0.13 NJ	0.13 U	0.13 NJ	0.13 U	0.13 NJ	0.13 U	NA	0.13 U	0.13 U	0.13 NJ	0.13 U	1.3 UD	NA
pH (S.U.)	-	6.7	6.8	7	7	7	7.2	NA	6.8	7	7	6.8	7.1	NA
Sulfate	-	250	260	260	200	280	74	NA	47	90	110	130	80	NA
GEOCHEMICAL PARAMETERS (mg/L)														
Total Dissolved Solids	-	1200	NA	1900	NA	1100	NA	NA	680	NA	6200	NA	NA	NA
Total Hardness	-	830	NA	840	NA	670	NA	NA	490	NA	1200	NA	NA	NA
Total Kjeldahl Nitrogen	-	0.53	NA	0.92	NA	0.84	NA	NA	0.74	NA	0.51	NA	NA	NA
Total Organic Carbon	-	10 U	NA	10 U	NA	10 U	NA	NA	10 U	NA	10 U	NA	NA	NA

Notes
* Guidance Value used where no standard exists.
** Dissolved Metals
[red box] - Concentration exceeds NYSDEC Class GA Standard
U - Compound not detected at the indicated concentration.
R - Results rejected by data validator.
D - Concentration was obtained from a diluted analysis.
E - Estimated concentration due to the presence of interferences.
B - Compound detected below the reporting limit.
NA - Not Analyzed.

TABLE 7-7
SUMMARY OF GROUNDWATER SAMPLING RESULTS (METALS AND NAP)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Duplicate Sampling Date Units	NYSDEC Class GA ug/L	HJB-MW-15 10/31/2006 ug/L	HJB-MW-16 7/27/2006 ug/L	HJB-MW-17 7/5/2007 ug/L	HJB-MW-18 7/5/2007 ug/L	HJB-MW-19 7/5/2007 ug/L	HJB-MW-A 10/31/2006 ug/L	HJB-MW-B 10/31/2006 ug/L	HJB-MW-C 10/31/2006 ug/L
METALS (Total)									
Aluminum	-	40.6 B	17 B	73.6 B	42.1 B	30.2 B	18.1 B	139 B	49.9 B
Antimony	-	1.2 U	1.2 U	8.5 B	6.7 B	9.3 B	2.2 B	2.4 B	2.1 B
Arsenic	25	1.8 B	1.7 B	1.6 U	1.6 U	1.6 U	11.5 B	12.9 B	4.2 B
Barium	1,000	108 B	69.7 B	356	109 B	499	248	112 B	110 B
Beryllium	3*	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Cadmium	5	0.1 U	0.16 B	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Calcium	-	50,100	97,900	171,000	180,000	209,000	201,000	161,000	149,000
Chromium	50	0.82 B	4.1 B	0.38 U	0.38 U	0.38 U	0.38 U	1.3 B	2.6 B
Cobalt	-	0.2 B	0.15 U	1.9 B	2.4 B	2.5 B	2.3 B	1.9 B	1.4 B
Copper	200	6.3 U	6.3 U	6.3 U	6.3 U	6.7 B	6.3 U	6.3 U	6.3 U
Iron	300	35.5 BE	77.5 B	833	1,100	935	6,390 E	11,200 E	3,680 E
Lead	25	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Magnesium	35,000*	11,900	58,300	55,500	31,200	54,300	72,900	41,400	48,300
Manganese	300	7.8 B	44.3 B	1,440	1,560	2,130	1,120	2,760	1,190
Nickel	100	0.87 B	2.7 B	6 B	6.8 B	6.8 B	3.3 B	2.8 B	1.9 B
Potassium	-	4,880	5,010	4,520	11,600	5,050	5,570	3,200	14,200
Selenium	10	10.7 B	0.98 U	8.1 B	4.2 B	1.9 B	7.4 B	11.1 B	10.8 B
Silver	50	0.91 U	0.91 U	14.2 B	14.7 B	18 B	1.2 B	1.4 B	0.91 U
Sodium	20,000	655000 E	58,200	93,100	48,600	677,000	359,000 E	392,000 E	104,000 E
Thallium	0.5*	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vanadium	-	0.96 B	0.47 U	0.92 B	0.91 B	0.49 B	0.48 B	1.7 B	2 B
Zinc	2,000*	13.7 B	15.4 B	16.6 B	15.2 B	17.8 B	13.2 B	16 B	443
NATURAL ATTENUATION PARAMETERS (mg/L)									
Alkalinity	-	360	260	NA	NA	NA	460	440	380
Chloride	-	740	77 NJ	NA	NA	NA	790	620	200
Dissolved Organic Carbon	-	10 U	10 U	NA	NA	NA	10 U	14	18
Ethane (ug/L)	-	26 U	26 U	NA	NA	NA	26 U	26 U	26 U
Ethene (ug/L)	-	35 U	35 U	NA	NA	NA	36 U	35 U	35 U
Ferrous Iron	-	1 U	1 NJ	NA	NA	NA	8	4.8	2.5
Free Carbon Dioxide	-	21	31	NA	NA	NA	100	120	71
Methane (ug/L)	-	14 U	14 U	NA	NA	NA	2300 D	1500 D	120
Nitrate	-	2.6	0.13 U	NA	NA	NA	0.13 U	0.13 U	0.13 U
Nitrite	-	0.13 U	0.13 NJ	NA	NA	NA	0.13 U	0.13 U	0.13 U
pH (S.U.)	-	7.5	7.2	NA	NA	NA	7	6.9	7
Sulfate	-	120	140	NA	NA	NA	100	100	150
GEOCHEMICAL PARAMETERS (mg/L)									
Total Dissolved Solids	-	NA	780	NA	NA	NA	NA	NA	NA
Total Hardness	-	NA	480	NA	NA	NA	NA	NA	NA
Total Kjeldahl Nitrogen	-	NA	0.57	NA	NA	NA	NA	NA	NA
Total Organic Carbon	-	NA	10 U	NA	NA	NA	NA	NA	NA

Notes
* Guidance Value used where no standard exists.
** Dissolved Metals
[red box] - Concentration exceeds NYSDEC Class GA Standard
U - Compound not detected at the indicated concentration.
R - Results rejected by data validator.
D - Concentration was obtained from a diluted analysis.
E - Estimated concentration due to the presence of interferences.
B - Compound detected below the reporting limit.
NA - Not Analyzed.

TABLE 7-8
SUMMARY OF DETECTED VOCs IN AIR AND SOIL VAPOR
HENRY JOHNSON BOULEVARD PROPERTIES ERP
ALBANY, NEW YORK

	NYSDOH VOC Levels in Fuel Oil Heated Home in NYS, 1997-2003						EPA DRAFT SHALLOW SOIL GAS VAPOR INTRUSION GUIDANCE ⁽³⁾ ug/m ³	NYSDOH SUB-SLAB FINAL GUIDANCE ⁽⁴⁾ ug/m ³	AA-1 Ambient Air 8/22/2007 ug/m ³	AA-1 Ambient Air 10/14/2008 ug/m3	AA-2 Ambient Air 8/22/2007 ug/m ³	SV-04 Soil Gas 8/22/2007 ug/m ³	SV-05 Soil Gas 8/22/2007 ug/m ³	SV-07 Soil Gas 8/22/2007 ug/m ³
Sample ID	Indoor Air			Outdoor Air										
Sample Type	Min-Max	Background	Upper	Min-Max	Background	Upper								
Date	Range	Range ⁽¹⁾	Fence ⁽²⁾	Range	Range ⁽¹⁾	Fence ⁽²⁾								
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3								
VOCs														
Acetone	<0.25-690	9.9-52	115	<0.25-200	3.4-14	30	3500		19.	11	19.	40.	26.	21.
Benzene	<0.25-460	1.1-5.9	13	<0.25-17	0.6-2.2	4.8	312		0.41	0.99	1.6	0.32	<0.32	1.5
2-Butanone (MEK)	<0.25-180	1.4-7.3	16	<0.25-210	0.8-2.6	5.3			2.8	1.9	2.3	8.0	6.1	3.2
Carbon Disulfide							7000		<0.08	<.012	<0.08	2.0	0.19	0.22
Carbon Tetrachloride							160		0.50	0.48	0.47	0.50	<0.31	0.44
Chloroform	<0.25-25	<0.25-0.5	1.2	<0.25-1.3	<0.25	0.5	110		0.22	<0.17	<0.12	12.	770	<0.24
Chloromethane	<0.25-260	<0.25-1.8	4.2	<0.25-13	<0.25-1.8	4.3			0.95	0.97	0.89	<0.10	<0.10	0.89
Cyclohexane	<0.25-510	<0.25-2.6	6.3	<0.25-170	<0.25-0.4	0.9			<0.35	0.4	<0.35	<0.69	<0.69	<0.69
1,4-Dichlorobenzene	<0.25-770	<0.25-0.5	1.2	<0.25-7.1	<0.25	0.5	8000		0.33	0.27	<0.31	<0.61	<0.61	<0.61
Dichlorodifluoromethane	<0.25-300	<0.25-4.1	10	<0.25-38	<0.25-4.2	10	200		2.6	1.2	2.6	3.1	4.5	2.6
1,1-Dichloroethane							5000		<0.10	<0.14	<0.10	<0.20	<0.20	<0.20
cis-1,2-Dichloroethylene							350		<0.10	<0.14	<0.10	<0.20	<0.20	<0.20
Ethanol	<0.25-16,000	27-540	1,300	<0.25-930	3.3-16	34			6.9	6.5	12.	0.85	37.	22.
Ethyl Acetate							32000		0.59	0.29	0.52	<0.73	<0.73	<0.73
Ethylbenzene	<0.25-340	0.4-2.8	6.4	<0.25-21	<0.25-0.5	1	2200		0.30	0.52	0.80	0.56	<0.22	0.91
4-Ethyl Toluene									0.15	<0.18	0.32	0.84	<0.25	0.34
n-Heptane	<0.25-670	1.0-7.6	18	<0.25-89	<0.25-1.9	4.5			0.27	0.63	0.53	<0.41	<0.41	0.49
Hexane	<0.25-950	0.6-5.9	14	<0.25-67	<0.25-1	2.2	2000		2.2	1	1.3	<0.71	<0.71	1.3
2-Hexanone									1.1	0.56	0.72	<0.82	1.4	0.86
Isopropanol									1.7	1.1	1.1	0.64	0.91	1.2
Methylene Chloride	<0.25-2,100	0.3-6.6	16	<0.25-23	<0.25-0.7	1.6	5200	60	5.4	1.1	1.0	0.73	0.80	0.73
4-Methyl-2-Pentanone (MIBK)									<0.41	0.22	<0.41	<0.82	<0.82	<0.82
Propene									0.89	<0.07	2.0	<0.35	0.67	2.0
Styrene	<0.25-50	<0.25-0.6	1.4	<0.25-3.6	<0.25	0.5	10000		0.15	<0.15	0.23	0.30	<0.21	0.38
Tetrachloroethylene	<0.25-51	<0.25-1.1	2.5	<0.25-20	<0.25-0.3	0.7	810	100	0.27	<0.24	<0.17	8.5	10.	0.54
Tetrahydrofuran									<0.15	<0.11	<0.15	<0.30	<0.30	<0.30
Toluene	<0.25-510	3.5-25	57	<0.25-640	0.60-2.4	5.1			2.2	2.9	5.1	2.0	1.2	5.5
1,2,4-Trichlorobenzene	<0.25-37	<0.25	0.5	<0.25-21	<0.25	0.4			0.37	<0.26	<0.19	0.52	<0.37	<0.37
1,1,1-Trichloroethane	<0.25-110	<0.25-1.1	2.5	<0.25-8.4	<0.25-0.3	0.6	22000		<0.14	<0.19	<0.14	3.7	5.1	<0.27
Trichloroethylene	<0.25-25	<0.25	0.5	<0.25-1.3	<0.25	0.4	22	5	<0.14	<0.19	<0.14	<0.27	0.86	<0.27
Trichlorofluoromethane	<0.25-190	1.1-5.4	12	<0.25-20	<0.25-2.2	5.1	7000		2.0	0.94	1.3	2.5	2.3	1.3
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.25-7.4	<0.25-1.1	2.5	<0.25-11	<0.25-1.1	2.5	300000		0.61	0.41	0.54	0.61	0.61	0.46
1,2,4-Trimethylbenzene	<0.25-260	0.7-4.3	9.8	<0.25-50	<0.25-0.8	1.9	60		0.32	0.54	1.1	2.7	0.29	1.2
1,3,5-Trimethylbenzene	<0.25-97	0.3-1.7	3.9	<0.25-2.5	<0.25-0.3	0.7	60		<0.13	<0.18	0.32	1.1	<0.25	0.39
Vinyl Acetate							2000		1.5	<0.13	1.8	0.99	4.7	2.6
Vinyl Chloride	<0.25-1	<0.25	0.4	<0.25-4.8	<0.25	0.4	280		<0.07	<0.10	<0.07	<0.13	<0.13	<0.13
m/p-Xylene	<0.25-550	0.50-4.6	11	<0.25-20	<0.25-0.5	1	70000		0.85	1.5	2.6	1.3	<0.43	2.7
o-Xylene	<0.25-310	0.4-3.1	7.1	<0.25-10	<0.25-0.6	1.2	70000		0.30	0.54	1.00	1.1	<0.22	1.00

Notes:
1 - Background Range = 25th to 75th percentiles
2 - Upper Fence = 1.5 times the interquartile range (difference between 25th and 75th percentiles) above the 75th percentile.
3 - EPA Target shallow soil gas concentration corresponds to target indoor air concentration where soil gas to indoor air attenuation factor = 0.1
4 - Concentrations based on NYSDOH air guidelines

Concentration greater than NYSDOH Upper Fence value for VOC Levels in fuel oil heated homes.
Concentration greater than NYSDOH Upper Fence values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.
Concentration greater than NYSDOH Upper Fence and Sub-slab Final Guidance values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.

TABLE 7-8
SUMMARY OF DETECTED VOCs IN AIR AND SOIL VAPOR
HENRY JOHNSON BOULEVARD PROPERTIES ERP
ALBANY, NEW YORK

	NYSDOH VOC Levels in Fuel Oil Heated Home in NYS, 1997-2003														
Sample ID	Indoor Air			Outdoor Air			EPA DRAFT SHALLOW SOIL GAS VAPOR INTRUSION GUIDANCE ⁽³⁾ ug/m ³	NYSDOH SUB-SLAB FINAL GUIDANCE ⁽⁴⁾ ug/m ³	SV-09R Soil Gas 8/22/2007 ug/m ³	SV-10 Soil Gas 8/22/2007 ug/m ³	SV-11 Soil Gas 8/22/2007 ug/m ³	SV-12 Soil Gas 8/22/2007 ug/m ³	SV-13 Soil Gas 8/22/2007 ug/m ³	SV-14 Soil Gas 8/22/2007 ug/m ³	
Sample Type	Min-Max Range	Background Range ⁽¹⁾ ug/m3	Upper Fence ⁽²⁾ ug/m3	Min-Max Range	Background Range ⁽¹⁾ ug/m3	Upper Fence ⁽²⁾ ug/m3									
Date															
Units															
VOCs	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3									
Acetone	<0.25-690	9.9-52	115	<0.25-200	3.4-14	30	3500		16.	3.7	19.	20.	3.8	31.	
Benzene	<0.25-460	1.1-5.9	13	<0.25-17	0.6-2.2	4.8	312		<0.64	<1.6	<0.32	<0.32	<0.32	<0.32	
2-Butanone (MEK)	<0.25-180	1.4-7.3	16	<0.25-210	0.8-2.6	5.3			3.7	<3.0	4.4	4.2	0.62	8.6	
Carbon Disulfide							7000		13.	1.4	0.34	0.28	0.37	<0.16	
Carbon Tetrachloride							160		<0.62	<1.6	<0.31	<0.31	<0.31	<0.31	
Chloroform	<0.25-25	<0.25-0.5	1.2	<0.25-1.3	<0.25	0.5	110		23.	6.3	1.1	5.5	<0.24	<0.24	
Chloromethane	<0.25-260	<0.25-1.8	4.2	<0.25-13	<0.25-1.8	4.3			<0.20	<0.50	<0.10	<0.10	0.39	<0.10	
Cyclohexane	<0.25-510	<0.25-2.6	6.3	<0.25-170	<0.25-0.4	0.9			<1.4	<3.5	<0.69	<0.69	<0.69	<0.69	
1,4-Dichlorobenzene	<0.25-770	<0.25-0.5	1.2	<0.25-7.1	<0.25	0.5	8000		<1.3	<3.1	<0.61	<0.61	<0.61	<0.61	
Dichlorodifluoromethane	<0.25-300	<0.25-4.1	10	<0.25-38	<0.25-4.2	10	200		4.1	12.	2.3	2.4	2.0	1.7	
1,1-Dichloroethane							5000		<0.40	<1.0	<0.20	<0.20	<0.20	<0.20	
cis-1,2-Dichloroethylene							350		1.4	<1.0	<0.20	<0.20	<0.20	<0.20	
Ethanol	<0.25-16,000	27-540	1,300	<0.25-930	3.3-16	34			3.6	<0.45	130	6.9	1.5	7.5	
Ethyl Acetate							32000		<1.5	<3.7	<0.73	<0.73	<0.73	<0.73	
Ethylbenzene	<0.25-340	0.4-2.8	6.4	<0.25-21	<0.25-0.5	1	2200		0.52	<1.1	<0.22	<0.22	<0.22	<0.22	
4-Ethyl Toluene									<0.50	<1.3	<0.25	<0.25	<0.25	<0.25	
n-Heptane	<0.25-670	1.0-7.6	18	<0.25-89	<0.25-1.9	4.5			<0.82	<2.1	<0.41	<0.41	<0.41	<0.41	
Hexane	<0.25-950	0.6-5.9	14	<0.25-67	<0.25-1	2.2	2000		<1.5	<3.6	<0.71	<0.71	<0.71	<0.71	
2-Hexanone									<1.7	<4.1	1.4	1.3	<0.82	5.0	
Isopropanol									0.88	<1.3	1.7	0.71	0.44	1.1	
Methylene Chloride	<0.25-2,100	0.3-6.6	16	<0.25-23	<0.25-0.7	1.6	5200	60	1.3	<1.8	0.56	0.56	0.52	0.87	
4-Methyl-2-Pentanone (MIBK)									<1.7	<4.1	<0.82	<0.82	<0.82	1.1	
Propene									1.5	<1.8	0.65	0.59	<0.35	0.29	
Styrene	<0.25-50	<0.25-0.6	1.4	<0.25-3.6	<0.25	0.5	10000		0.51	<1.1	<0.21	<0.21	<0.21	<0.21	
Tetrachloroethylene	<0.25-51	<0.25-1.1	2.5	<0.25-20	<0.25-0.3	0.7	810	100	4800	390	<0.34	0.88	17.	<0.34	
Tetrahydrofuran									<0.59	<1.5	<0.30	<0.30	<0.30	<0.30	
Toluene	<0.25-510	3.5-25	57	<0.25-640	0.60-2.4	5.1			2.0	<1.9	0.49	1.1	1.1	1.2	
1,2,4-Trichlorobenzene	<0.25-37	<0.25	0.5	<0.25-21	<0.25	0.4			0.74	<1.9	0.37	<0.37	<0.37	<0.37	
1,1,1-Trichloroethane	<0.25-110	<0.25-1.1	2.5	<0.25-8.4	<0.25-0.3	0.6	22000		0.65	<1.4	1.4	<0.27	1.6	<0.27	
Trichloroethylene	<0.25-25	<0.25	0.5	<0.25-1.3	<0.25	0.4	22	5	24.	2.1	<0.27	<0.27	<0.27	<0.27	
Trichlorofluoromethane	<0.25-190	1.1-5.4	12	<0.25-20	<0.25-2.2	5.1	7000		43.	1000	2.0	1.7	1.2	1.2	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.25-7.4	<0.25-1.1	2.5	<0.25-11	<0.25-1.1	2.5	300000		0.92	<1.9	0.46	0.54	0.61	0.61	
1,2,4-Trimethylbenzene	<0.25-260	0.7-4.3	9.8	<0.25-50	<0.25-0.8	1.9	60		0.79	<1.3	<0.25	<0.25	<0.25	0.79	
1,3,5-Trimethylbenzene	<0.25-97	0.3-1.7	3.9	<0.25-2.5	<0.25-0.3	0.7	60		<0.50	<1.3	<0.25	<0.25	<0.25	0.29	
Vinyl Acetate							2000		0.85	<3.6	1.6	1.8	1.4	3.8	
Vinyl Chloride	<0.25-1	<0.25	0.4	<0.25-4.8	<0.25	0.4	280		<0.26	<0.65	<0.13	<0.13	<0.13	<0.13	
m/p-Xylene	<0.25-550	0.50-4.6	11	<0.25-20	<0.25-0.5	1	70000		1.7	<2.2	<0.43	<0.43	<0.43	<0.43	
o-Xylene	<0.25-310	0.4-3.1	7.1	<0.25-10	<0.25-0.6	1.2	70000		0.52	<1.1	<0.22	<0.22	<0.22	<0.22	

Notes:
1 - Background Range = 25th to 75th percentiles
2 - Upper Fence = 1.5 times the interquartile range (difference between 25th and 75th percentiles) above the 75th percentile.
3 - EPA Target shallow soil gas concentration corresponds to target indoor air concentration where soil gas to indoor air attenuation factor = 0.1
4 - Concentrations based on NYSDOH air guidelines

Concentration greater than NYSDOH Upper Fence value for VOC Levels in fuel oil heated homes.
Concentration greater than NYSDOH Upper Fence values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.
Concentration greater than NYSDOH Upper Fence and Sub-slab Final Guidance values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.

TABLE 7-8
SUMMARY OF DETECTED VOCs IN AIR AND SOIL VAPOR
HENRY JOHNSON BOULEVARD PROPERTIES ERP
ALBANY, NEW YORK

	NYSDOH VOC Levels in Fuel Oil Heated Home in NYS, 1997-2003						EPA DRAFT SHALLOW SOIL GAS VAPOR INTRUSION GUIDANCE ⁽³⁾ ug/m ³	NYSDOH SUB-SLAB FINAL GUIDANCE ⁽⁴⁾ ug/m ³	SV-15 Soil Gas 8/22/2007 ug/m ³	SV-16 Soil Gas 10/14/2008 ug/m ³	AA-1 Ambient Air 8/7/2008 ug/m ³	IA-1 Indoor Air 8/7/2008 ug/m ³	X-1 (IA-1 Dup) 8/7/2008 ug/m ³	BA-1 Basement Air 8/7/2008 ug/m ³
Sample ID	Indoor Air			Outdoor Air										
Sample Type	Min-Max Range	Background Range ⁽¹⁾	Upper Fence ⁽²⁾	Min-Max Range	Background Range ⁽¹⁾	Upper Fence ⁽²⁾								
Date														
Units														
VOCs														
Acetone	<0.25-690	9.9-52	115	<0.25-200	3.4-14	30	3500		11.	3.5	10	280	270	49
Benzene	<0.25-460	1.1-5.9	13	<0.25-17	0.6-2.2	4.8	312		<1.6	4	0.47	0.58	0.57	0.68
2-Butanone (MEK)	<0.25-180	1.4-7.3	16	<0.25-210	0.8-2.6	5.3			<3.0	0.6	1.7	4.9	3.7	3.7
Carbon Disulfide							7000		0.93	0.88	<0.12	<0.12	<0.12	<0.12
Carbon Tetrachloride							160		<1.6	<0.62	0.51	0.56	0.56	0.56
Chloroform	<0.25-25	<0.25-0.5	1.2	<0.25-1.3	<0.25	0.5	110		2.9	5.3	<0.17	3.6	3.5	1.3
Chloromethane	<0.25-260	<0.25-1.8	4.2	<0.25-13	<0.25-1.8	4.3			<0.50	<0.20	0.95	1.2	1.3	0.99
Cyclohexane	<0.25-510	<0.25-2.6	6.3	<0.25-170	<0.25-0.4	0.9			<3.5	<0.34	<0.12	<0.12	<0.12	<0.12
1,4-Dichlorobenzene	<0.25-770	<0.25-0.5	1.2	<0.25-7.1	<0.25	0.5	8000		<3.1	<0.60	<0.21	0.76	0.73	0.38
Dichlorodifluoromethane	<0.25-300	<0.25-4.1	10	<0.25-38	<0.25-4.2	10	200		13.	3.8	3.1	3	3.1	3.2
1,1-Dichloroethane							5000		<1.0	2.2	<0.14	<0.14	<0.14	<0.14
cis-1,2-Dichloroethylene							350		<1.0	<0.40	<0.14	<0.14	<0.14	<0.14
Ethanol	<0.25-16,000	27-540	1,300	<0.25-930	3.3-16	34			10.	1.2	7.7	260	260	160
Ethyl Acetate							32000		<3.7	<0.73	<0.26	2.7	3.2	<0.26
Ethylbenzene	<0.25-340	0.4-2.8	6.4	<0.25-21	<0.25-0.5	1	2200		<1.1	<0.44	0.32	0.95	0.94	1.1
4-Ethyl Toluene									<1.3	<0.50	<0.18	0.23	0.24	0.22
n-Heptane	<0.25-670	1.0-7.6	18	<0.25-89	<0.25-1.9	4.5			<2.1	<0.40	0.39	0.75	0.72	0.77
Hexane	<0.25-950	0.6-5.9	14	<0.25-67	<0.25-1	2.2	2000		<3.6	<0.36	0.99	1.8	1.8	2.3
2-Hexanone									<4.1	<0.40	<0.14	0.88	0.34	0.34
Isopropanol									2.3	0.63	0.9	8.9	7.9	6.7
Methylene Chloride	<0.25-2,100	0.3-6.6	16	<0.25-23	<0.25-0.7	1.6	5200	60	6.4	0.63	0.53	0.88	0.89	0.91
4-Methyl-2-Pentanone (MIBK)									<4.1	<0.40	<0.14	0.4	0.31	0.26
Propene									<1.8	<0.10	<0.13	<0.13	<0.13	<0.13
Styrene	<0.25-50	<0.25-0.6	1.4	<0.25-3.6	<0.25	0.5	10000		<1.1	0.64	<0.15	1.5	1.4	2
Tetrachloroethylene	<0.25-51	<0.25-1.1	2.5	<0.25-20	<0.25-0.3	0.7	810	100	79.	3.1	<0.24	<0.24	<0.24	<0.24
Tetrahydrofuran									<1.5	<0.30	<0.11	0.31	<0.11	0.2
Toluene	<0.25-510	3.5-25	57	<0.25-640	0.60-2.4	5.1			<1.9	1.9	2.3	4.6	4.6	3.2
1,2,4-Trichlorobenzene	<0.25-37	<0.25	0.5	<0.25-21	<0.25	0.4			<1.9	<0.74	<0.26	<0.26	<0.26	<0.26
1,1,1-Trichloroethane	<0.25-110	<0.25-1.1	2.5	<0.25-8.4	<0.25-0.3	0.6	22000		1.9	33	<0.19	<0.19	<0.19	<0.19
Trichloroethylene	<0.25-25	<0.25	0.5	<0.25-1.3	<0.25	0.4	22	5	<1.4	<0.54	<0.19	<0.19	<0.19	<0.19
Trichlorofluoromethane	<0.25-190	1.1-5.4	12	<0.25-20	<0.25-2.2	5.1	7000		32.	710	2	2.1	2.1	2.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.25-7.4	<0.25-1.1	2.5	<0.25-11	<0.25-1.1	2.5	300000		<1.9	<0.76	0.77	0.71	1	0.8
1,2,4-Trimethylbenzene	<0.25-260	0.7-4.3	9.8	<0.25-50	<0.25-0.8	1.9	60		<1.3	<0.50	0.52	0.98	0.9	0.94
1,3,5-Trimethylbenzene	<0.25-97	0.3-1.7	3.9	<0.25-2.5	<0.25-0.3	0.7	60		<1.3	<0.50	<0.18	0.25	0.22	0.25
Vinyl Acetate							2000		<3.6	<0.36	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	<0.25-1	<0.25	0.4	<0.25-4.8	<0.25	0.4	280		<0.65	<0.26	<0.1	<0.1	<0.1	<0.1
m/p-Xylene	<0.25-550	0.50-4.6	11	<0.25-20	<0.25-0.5	1	70000		<2.2	<0.86	1.1	2.7	2.7	3.2
o-Xylene	<0.25-310	0.4-3.1	7.1	<0.25-10	<0.25-0.6	1.2	70000		<1.1	<0.44	0.4	0.83	0.77	0.96

Notes:
1 - Background Range = 25th to 75th percentiles
2 - Upper Fence = 1.5 times the interquartile range (difference between 25th and 75th percentiles) above the 75th percentile.
3 - EPA Target shallow soil gas concentration corresponds to target indoor air concentration where soil gas to indoor air attenuation factor = 0.1
4 - Concentrations based on NYSDOH air guidelines

Concentration greater than NYSDOH Upper Fence value for VOC Levels in fuel oil heated homes.

Concentration greater than NYSDOH Upper Fence values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.

Concentration greater than NYSDOH Upper Fence and Sub-slab Final Guidance values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.

TABLE 7-8
SUMMARY OF DETECTED VOCs IN AIR AND SOIL VAPOR
HENRY JOHNSON BOULEVARD PROPERTIES ERP
ALBANY, NEW YORK

	NYSDOH VOC Levels in Fuel Oil Heated Home in NYS, 1997-2003						EPA DRAFT SHALLOW SOIL GAS VAPOR INTRUSION GUIDANCE ⁽³⁾ ug/m ³	NYSDOH SUB-SLAB FINAL GUIDANCE ⁽⁴⁾ ug/m ³	SS-1 Sub-Slab Air 8/7/2008 ug/m ³	IA-2 Indoor Air 8/7/2008 ug/m ³	BA-2 Basement Air 8/7/2008 ug/m ³
Sample ID	Indoor Air			Outdoor Air							
Sample Type	Min-Max Range	Background Range ⁽¹⁾	Upper Fence ⁽²⁾	Min-Max Range	Background Range ⁽¹⁾	Upper Fence ⁽²⁾					
Date											
Units											
VOCs											
Acetone	<0.25-690	9.9-52	115	<0.25-200	3.4-14	30	3500		23	8.5	13
Benzene	<0.25-460	1.1-5.9	13	<0.25-17	0.6-2.2	4.8	312		<0.16	0.42	0.61
2-Butanone (MEK)	<0.25-180	1.4-7.3	16	<0.25-210	0.8-2.6	5.3			1.3	0.36	1.8
Carbon Disulfide							7000		<0.16	<0.12	<0.12
Carbon Tetrachloride							160		0.37	0.57	0.62
Chloroform	<0.25-25	<0.25-0.5	1.2	<0.25-1.3	<0.25	0.5	110		1.6	0.22	0.82
Chloromethane	<0.25-260	<0.25-1.8	4.2	<0.25-13	<0.25-1.8	4.3			<0.1	0.94	2.4
Cyclohexane	<0.25-510	<0.25-2.6	6.3	<0.25-170	<0.25-0.4	0.9			<0.17	<0.12	<0.12
1,4-Dichlorobenzene	<0.25-770	<0.25-0.5	1.2	<0.25-7.1	<0.25	0.5	8000		<0.3	<0.21	0.24
Dichlorodifluoromethane	<0.25-300	<0.25-4.1	10	<0.25-38	<0.25-4.2	10	200		3.3	3.3	5.4
1,1-Dichloroethane							5000		<0.2	<0.14	<0.14
cis-1,2-Dichloroethylene							350		<0.2	<0.14	<0.14
Ethanol	<0.25-16,000	27-540	1,300	<0.25-930	3.3-16	34			47	2.5	140
Ethyl Acetate							32000		<0.37	<0.26	1.6
Ethylbenzene	<0.25-340	0.4-2.8	6.4	<0.25-21	<0.25-0.5	1	2200		<0.22	0.18	0.29
4-Ethyl Toluene									<0.25	<0.18	<0.18
n-Heptane	<0.25-670	1.0-7.6	18	<0.25-89	<0.25-1.9	4.5			<0.2	0.18	0.34
Hexane	<0.25-950	0.6-5.9	14	<0.25-67	<0.25-1	2.2	2000		0.31	11	0.82
2-Hexanone									<0.2	<0.14	<0.14
Isopropanol									5.8	3.7	10
Methylene Chloride	<0.25-2,100	0.3-6.6	16	<0.25-23	<0.25-0.7	1.6	5200	60	0.76	12	0.78
4-Methyl-2-Pentanone (MIBK)									<0.2	<0.14	<0.14
Propene									<0.18	<0.13	<0.13
Styrene	<0.25-50	<0.25-0.6	1.4	<0.25-3.6	<0.25	0.5	10000		0.25	0.25	0.18
Tetrachloroethylene	<0.25-51	<0.25-1.1	2.5	<0.25-20	<0.25-0.3	0.7	810	100	0.76	0.29	<0.24
Tetrahydrofuran									<0.15	<0.11	<0.11
Toluene	<0.25-510	3.5-25	57	<0.25-640	0.60-2.4	5.1			0.7	1.3	2.4
1,2,4-Trichlorobenzene	<0.25-37	<0.25	0.5	<0.25-21	<0.25	0.4			<0.37	<0.26	<0.26
1,1,1-Trichloroethane	<0.25-110	<0.25-1.1	2.5	<0.25-8.4	<0.25-0.3	0.6	22000		<0.27	<0.19	<0.19
Trichloroethylene	<0.25-25	<0.25	0.5	<0.25-1.3	<0.25	0.4	22	5	<0.27	<0.19	<0.19
Trichlorofluoromethane	<0.25-190	1.1-5.4	12	<0.25-20	<0.25-2.2	5.1	7000		3.8	9.6	4.6
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.25-7.4	<0.25-1.1	2.5	<0.25-11	<0.25-1.1	2.5	300000		0.9	0.79	0.78
1,2,4-Trimethylbenzene	<0.25-260	0.7-4.3	9.8	<0.25-50	<0.25-0.8	1.9	60		<0.25	0.21	0.71
1,3,5-Trimethylbenzene	<0.25-97	0.3-1.7	3.9	<0.25-2.5	<0.25-0.3	0.7	60		<0.25	<0.18	0.22
Vinyl Acetate							2000		<0.71	<0.50	<0.50
Vinyl Chloride	<0.25-1	<0.25	0.4	<0.25-4.8	<0.25	0.4	280		<0.13	<0.10	<0.10
m/p-Xylene	<0.25-550	0.50-4.6	11	<0.25-20	<0.25-0.5	1	70000		<0.43	0.47	0.88
o-Xylene	<0.25-310	0.4-3.1	7.1	<0.25-10	<0.25-0.6	1.2	70000		<0.22	0.17	0.35

Notes:

1 - Background Range = 25th to 75th percentiles

2 - Upper Fence = 1.5 times the interquartile range (difference between 25th and 75th percentiles) above the 75th percentile.

3 - EPA Target shallow soil gas concentration corresponds to target indoor air concentration where soil gas to indoor air attenuation factor = 0.1

4 - Concentrations based on NYSDOH air guidelines

Concentration greater than NYSDOH Upper Fence value for VOC Levels in fuel oil heated homes.

Concentration greater than NYSDOH Upper Fence values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.

Concentration greater than NYSDOH Upper Fence and Sub-slab Final Guidance values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.

TABLE 7-9
CALCULATED HYDRAULIC CONDUCTIVITY VALUES
HENRY JOHNSON BLVD PROPERTIES ERP
ALBANY, NEW YORK

Well ID	Units	Bouwer and Rice
MW-2R*	ft/d	0.18
	cm/s	6.35E-05
MW-10	ft/d	0.33
	cm/s	1.16E-04
MW-11	ft/d	0.22
	cm/s	7.76E-05
MW-16	ft/d	0.09
	cm/s	3.18E-05

Note: Calculations made using falling head data, which are not ideally suited to conditions where static water levels are below the well screen.

Table 11-1**Remedial Alternatives Summary**

SITE: HENRY JOHNSON BOULEVARD ERP
LOCATION: ALBANY, NEW YORK
PHASE: ALTERNATIVES ANALYSIS
BASE YEAR: 2009
DATE: JANUARY 2009

AREA REMEDIAL TECHNOLOGY**AREA 1**

ALTERNATIVE 1 NO FURTHER ACTION

AREA 2

ALTERNATIVE 1 NO FURTHER ACTION

ALTERNATIVE 2 MONITORED NATURAL ATTENUATION

ALTERNATIVE 3 IN-SITU CHEMICAL OXIDATION USING PERMANGANATE

AREA 3

ALTERNATIVE 1 NO FURTHER ACTION

ALTERNATIVE 2 MONITORED NATURAL ATTENUATION

AREA 4

ALTERNATIVE 1 NO FURTHER ACTION

ALTERNATIVE 2 MONITORED NATURAL ATTENUATION

ALTERNATIVE 3 IN-SITU CHEMICAL OXIDATION USING PERMANGANATE

ALTERNATIVE 4 AIR SPARGING/SOIL VAPOR EXTRACTION

ALTERNATIVE 5 ENHANCED BIOREMEDIATION USING HRC

TABLE 12-1 Remedial Alternative Cost Summary Area 2						
Alternative 2 MNA			OPINION OF PROBABLE COST			
Site:	Henry Johnson Boulevard ERP - Area 2		Description: Alternative 2 consists of monitored natural attenuation. O&M costs are incurred in Years 1-5.			
Location:	Albany, New York					
Phase:	Alternatives Analysis					
Base Year:	2009					
Date:	January 2009					
REMEDIAL COSTS:						
DESCRIPTION		QTY	UNIT	UNIT COST	TOTAL	NOTES:
None. Required monitoring wells are in-place.						
TOTAL REMEDIAL COST					\$0	
OPERATION, MAINTENANCE, AND MONITORING (OM&M) COSTS						
DESCRIPTION		QTY	UNIT	UNIT COST	TOTAL	NOTES:
Site Monitoring						
Groundwater Sampling & Analysis		1	YR	\$20,000	\$20,000	Quarterly sampling - 7 wells
Data Evaluation and Reporting		1	YR	\$5,000	\$5,000	
SUBTOTAL					\$25,000	
TOTAL ANNUAL O&M COST					\$25,000	
PRESENT VALUE ANALYSIS:						
COST TYPE	YEAR	TOTAL COST	TOTAL COST PER YEAR	DISCOUNT FACTOR (5%)	PRESENT VALUE	NOTES:
Annual OM&M	1-5	\$125,000	\$25,000	4.33	\$108,237	
		\$125,000			\$108,237	
TOTAL PRESENT VALUE OF ALTERNATIVE					\$108,000	

TABLE 12-2
Remedial Alternative Cost Summary
Area 2

Alternative 3 IN-SITU CHEMICAL OXIDATION USING PERMANGANATE	OPINION OF PROBABLE COST

Site: Henry Johnson Boulevard ERP - Area 4 Location: Albany, New York Phase: Alternatives Analysis Base Year: 2009 Date: January 2009	Description: Alternative 3 consists of in-situ chemical oxidation using sodium permanganate, followed by monitored natural attenuation. Capital costs are incurred in Year 1. O&M costs occur in Years 1-2.

CAPITAL COSTS:

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
ChemOx Bench-Scale and Field Pilot Testing	1	LS	\$15,000	\$15,000	
Chemical Oxidant Injection Includes Geoprobe points, chemicals, and site personnel	3	event	\$20,000	\$60,000	
Post-Injection sampling (10 soil samples for VOCs)	1	event	\$5,000	\$5,000	
SUBTOTAL				\$80,000	
Contingency	20%			\$16,000	
SUBTOTAL				\$96,000	
Project Management	15%			\$14,400	
Remedial Oversight/Reporting	15%			\$14,400	
TOTAL CAPITAL COST				\$124,800	

OPERATION, MAINTENANCE, AND MONITORING (OM&M) COSTS

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
Site Monitoring					
Groundwater Sampling & Analysis	1	YR	\$20,000	\$20,000	Quarterly sampling - 7 wells
Data Evaluation and Reporting	1	YR	\$5,000	\$5,000	
SUBTOTAL				\$25,000	
TOTAL ANNUAL O&M COST				\$25,000	

PRESENT VALUE ANALYSIS:

COST TYPE	YEAR	TOTAL COST	TOTAL COST PER YEAR	DISCOUNT FACTOR (5%)	PRESENT VALUE	NOTES:
Capital	1	\$149,800	\$149,800	1.00	\$149,800	Capital + 1st Year OM&M Costs
Annual OM&M	3	\$75,000	\$25,000	2.72	\$68,081	
		\$224,800			\$217,881	
TOTAL PRESENT VALUE OF ALTERNATIVE					\$218,000	

TABLE 13-1
Remedial Alternative Cost Summary
Area 3

Alternative 2
MNA

OPINION OF PROBABLE COST

Site: Henry Johnson Boulevard ERP - Area 3
Location: Albany, New York
Phase: Alternatives Analysis
Base Year: 2009
Date: January 2009

Description: Alternative 2 consists of monitored natural attenuation. O&M costs are incurred in Years 1-5.

REMEDIAL COSTS:

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
None. Required monitoring wells are in-place.					

TOTAL REMEDIAL COST

\$0

OPERATION, MAINTENANCE, AND MONITORING (OM&M) COSTS

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
Site Monitoring					
Groundwater Sampling & Analysis	1	YR	\$18,000	\$18,000	Quarterly sampling - 5 wells
Data Evaluation and Reporting	1	YR	\$5,000	\$5,000	
SUBTOTAL				\$23,000	

TOTAL ANNUAL O&M COST

\$23,000

PRESENT VALUE ANALYSIS:

COST TYPE	YEAR	TOTAL COST	TOTAL COST PER YEAR	DISCOUNT FACTOR (5%)	PRESENT VALUE	NOTES:
Annual OM&M	1-5	\$115,000	\$23,000	4.33	\$99,578	
		\$115,000			\$99,578	

TOTAL PRESENT VALUE OF ALTERNATIVE

\$100,000

TABLE 14-1

Remedial Alternative Cost Summary

Area 4

Alternative 2 MNA			OPINION OF PROBABLE COST			
Site:	Henry Johnson Boulevard ERP - Area 4		Description: Alternative 2 consists of monitored natural attenuation. O&M costs are incurred in Years 1-5.			
Location:	Albany, New York					
Phase:	Alternatives Analysis					
Base Year:	2009					
Date:	January 2009					
REMEDIAL COSTS:						
DESCRIPTION		QTY	UNIT	UNIT COST	TOTAL	NOTES:
None. Required monitoring wells are in-place.						
TOTAL REMEDIAL COST					\$0	
OPERATION, MAINTENANCE, AND MONITORING (OM&M) COSTS						
DESCRIPTION		QTY	UNIT	UNIT COST	TOTAL	NOTES:
Site Monitoring						
Groundwater Sampling & Analysis		1	YR	\$18,000	\$18,000	Quarterly sampling - 5 wells
Data Evaluation and Reporting		1	YR	\$5,000	\$5,000	
SUBTOTAL					\$23,000	
TOTAL ANNUAL O&M COST					\$23,000	
PRESENT VALUE ANALYSIS:						
COST TYPE	YEAR	TOTAL COST	TOTAL COST PER YEAR	DISCOUNT FACTOR (5%)	PRESENT VALUE	NOTES:
Annual OM&M	1-5	\$115,000	\$23,000	4.33	\$99,578	
		\$115,000			\$99,578	
TOTAL PRESENT VALUE OF ALTERNATIVE					\$100,000	

TABLE 14-2
Remedial Alternative Cost Summary
Area 4

Alternative 3

IN-SITU CHEMICAL OXIDATION USING PERMANGANATE

OPINION OF PROBABLE COST

Site: Henry Johnson Boulevard ERP - Area 4
Location: Albany, New York
Phase: Alternatives Analysis
Base Year: 2009
Date: January 2009

Description: Alternative 3 consists of in-situ chemical oxidation using sodium permanganate, followed by monitored natural attenuation. Capital costs are incurred in Year 1. O&M costs occur in Years 1-3.

CAPITAL COSTS:

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
ChemOx Bench-Scale and Field Pilot Testing	1	LS	\$25,000	\$25,000	
Injection well installation	1	each	\$2,000	\$2,000	4-inch PVC well
Drill Cuttings Disposal	4	drum	\$250	\$1,000	
Chemical Oxidant Injection Includes chemicals and site personnel	3	event	\$20,000	\$60,000	
Pre- and Post-Injection groundwater sampling	3	event	\$1,200	\$3,600	cations/anions, metals, MnO4
SUBTOTAL				\$91,600	
Contingency	20%			\$18,320	
SUBTOTAL				\$109,920	
Project Management	15%			\$16,488	
Remedial Oversight/Reporting	20%			\$21,984	
TOTAL CAPITAL COST				\$148,400	

OPERATION, MAINTENANCE, AND MONITORING (OM&M) COSTS

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
Site Monitoring					
Groundwater Sampling & Analysis	1	YR	\$18,000	\$18,000	Quarterly sampling - 5 wells
Data Evaluation and Reporting	1	YR	\$5,000	\$5,000	
SUBTOTAL				\$23,000	
TOTAL ANNUAL O&M COST				\$23,000	

PRESENT VALUE ANALYSIS:

COST TYPE	YEAR	TOTAL COST	TOTAL COST PER YEAR	DISCOUNT FACTOR (5%)	PRESENT VALUE	NOTES:
Capital	1	\$171,400	\$171,400	1.00	\$171,400	Capital + 1st Year OM&M Costs
Annual OM&M	3	\$69,000	\$23,000	2.72	\$62,635	
		\$240,400			\$234,035	
TOTAL PRESENT VALUE OF ALTERNATIVE					\$234,000	

TABLE 14-3
Remedial Alternative Cost Summary
Area 4

Alternative 4

AIR SPARGING/SOIL VAPOR EXTRACTION

OPINION OF PROBABLE COST

Site: Henry Johnson Boulevard ERP - Area 4
Location: Albany, New York
Phase: Alternatives Analysis
Base Year: 2009
Date: January 2009

Description: Alternative 4 consists of air sparging coupled with soil vapor extraction (SVE), followed by monitored natural attenuation. Capital costs are incurred in Year 1. O&M costs occur in Years 1-3.

CAPITAL COSTS:

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
Pilot Test	1	LS	\$25,000	\$25,000	
System Installation					
Mobilization	1	lump sum	\$30,000	\$30,000	
SVE Wells (with vault)	3	each	\$2,000	\$6,000	4-inch PVC well
AS Wells (with vault)	3	each	\$2,500	\$7,500	2-inch PVC well
Treatment Building (incl. PLC and blowers)	1	lump sum	\$60,000	\$60,000	
Buried Piping and Valve Vaults	1	lump sum	\$50,000	\$50,000	4" PVC, Schedule 40
Granular Activated Carbon	2	each	\$800	\$1,600	Carbtrol G-1 canisters
Purge Water and Cuttings Disposal	20	drums	\$250	\$5,000	
SUBTOTAL				\$185,100	
Contingency	20%			\$37,020	
SUBTOTAL				\$222,120	
Project Management	15%			\$33,318	
Remedial Design	20%			\$44,424	
Remedial Oversight/Reporting	10%			\$22,212	
TOTAL CAPITAL COST				\$322,100	

OPERATION, MAINTENANCE, AND MONITORING (OM&M) COSTS

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
SVE System Operation, Maintenance & Monitoring					
Treatment System Sampling & Analysis	1	YR	\$10,000	\$10,000	
Groundwater Sampling & Analysis	1	YR	\$18,000	\$18,000	Quarterly sampling
Operation & Maintenance Cost	1	YR	\$20,000	\$20,000	
Electrical Usage	1	YR	\$3,000	\$3,000	
System Repair	1	YR	\$5,000	\$5,000	
Data Evaluation and Reporting	1	YR	\$10,000	\$10,000	
TOTAL ANNUAL O&M COST				\$66,000	

PRESENT VALUE ANALYSIS:

COST TYPE	YEAR	TOTAL COST	TOTAL COST PER YEAR	DISCOUNT FACTOR (5%)	PRESENT VALUE	NOTES:
Capital	1	\$388,100	\$388,100	1.00	\$388,100	Capital + 1st Year OM&M Costs
Annual OM&M	2-3	\$198,000	\$66,000	2.72	\$179,734	
		\$586,100			\$567,834	
TOTAL PRESENT VALUE OF ALTERNATIVE					\$568,000	

TABLE 14-4
Remedial Alternative Cost Summary
Area 4

Alternative 5
 ENHANCED BIOREMEDIATION USING HRC

OPINION OF PROBABLE COST

Site: Henry Johnson Boulevard ERP - Area 4
Location: Albany, New York
Phase: Alternatives Analysis
Base Year: 2009
Date: January 2009

Description: Alternative 5 consists of enhanced bioremediation using HRC, followed by monitored natural attenuation. Capital costs are incurred in Year 1. O&M costs occur in Years 1-3.

CAPITAL COSTS:

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
HRC Field Pilot Testing	1	LS	\$10,000	\$10,000	
Injection well installation	1	each	\$2,000	\$2,000	4-inch PVC well
Drill Cuttings Disposal	4	drum	\$250	\$1,000	
HRC Injection Includes HRC and site personnel	3	event	\$20,000	\$60,000	
SUBTOTAL				\$73,000	
Contingency	20%			\$14,600	
SUBTOTAL				\$87,600	
Project Management	15%			\$13,140	
Remedial Oversight/Reporting	15%			\$13,140	
TOTAL CAPITAL COST				\$113,900	

OPERATION, MAINTENANCE, AND MONITORING (OM&M) COSTS

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES:
Site Monitoring					
Groundwater Sampling & Analysis	1	YR	\$15,000	\$15,000	Quarterly sampling - 3 wells
Data Evaluation and Reporting	1	YR	\$5,000	\$5,000	
SUBTOTAL				\$20,000	
TOTAL ANNUAL O&M COST				\$20,000	

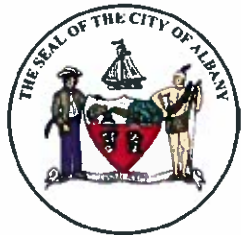
PRESENT VALUE ANALYSIS:

COST TYPE	YEAR	TOTAL COST	TOTAL COST PER YEAR	DISCOUNT FACTOR (5%)	PRESENT VALUE	NOTES:
Capital	1	\$133,900	\$133,900	1.00	\$133,900	Capital + 1st Year OM&M Costs
Annual OM&M	3	\$60,000	\$20,000	2.72	\$54,465	
		\$193,900			\$188,365	
TOTAL PRESENT VALUE OF ALTERNATIVE					\$188,000	

Table 15-1**Remedial Alternative Cost Summary****OPINION OF PROBABLE COST SUMMARY**

Site: Henry Johnson Boulevard ERP
Location: Albany, New York
Phase: Alternatives Analysis
Base Year: 2009
Date: January 2009

Alternative	Description	Capital Costs	Annual O&M Costs	Remediation Time (years)	Total Present Value
AREA 2					
Alternative 2	MONITORED NATURAL ATTENUATION	\$0	\$25,000	5	\$108,000
Alternative 3	IN-SITU CHEMICAL OXIDATION USING PERMANGANATE	\$149,800	\$25,000	3	\$218,000
AREA 3					
Alternative 2	MONITORED NATURAL ATTENUATION	\$0	\$23,000	5	\$100,000
AREA 4					
Alternative 2	MONITORED NATURAL ATTENUATION	\$0	\$23,000	5	\$100,000
Alternative 3	IN-SITU CHEMICAL OXIDATION USING PERMANGANATE	\$171,400	\$23,000	3	\$234,000
Alternative 4	AIR SPARGING/SOIL VAPOR EXTRACTION	\$388,100	\$66,000	3	\$568,000
Alternative 5	ENHANCED BIOREMEDIATION USING HRC	\$133,900	\$20,000	3	\$188,000



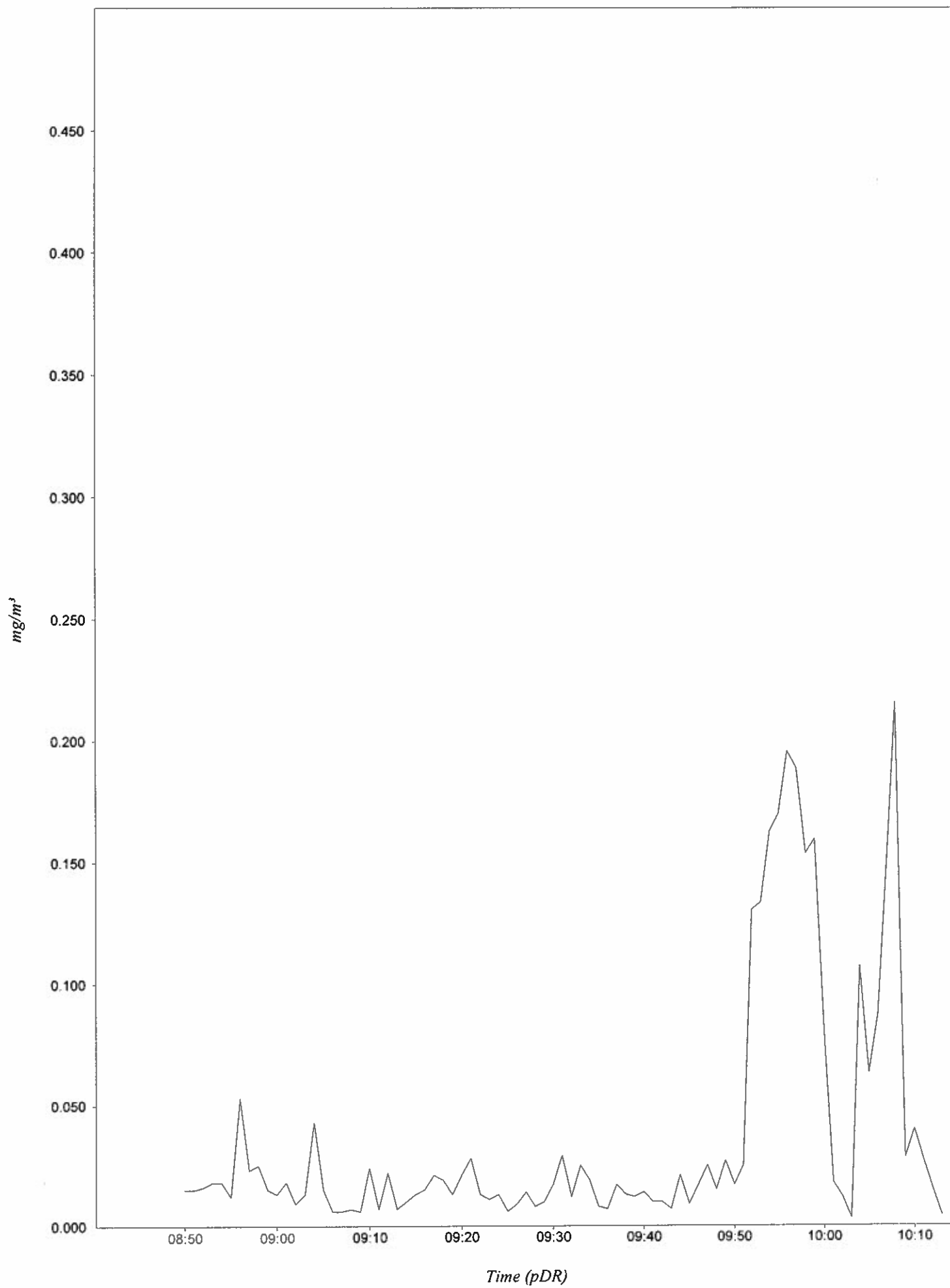
Albany Community Development Agency
Remedial Investigation / Alternatives Analysis Report

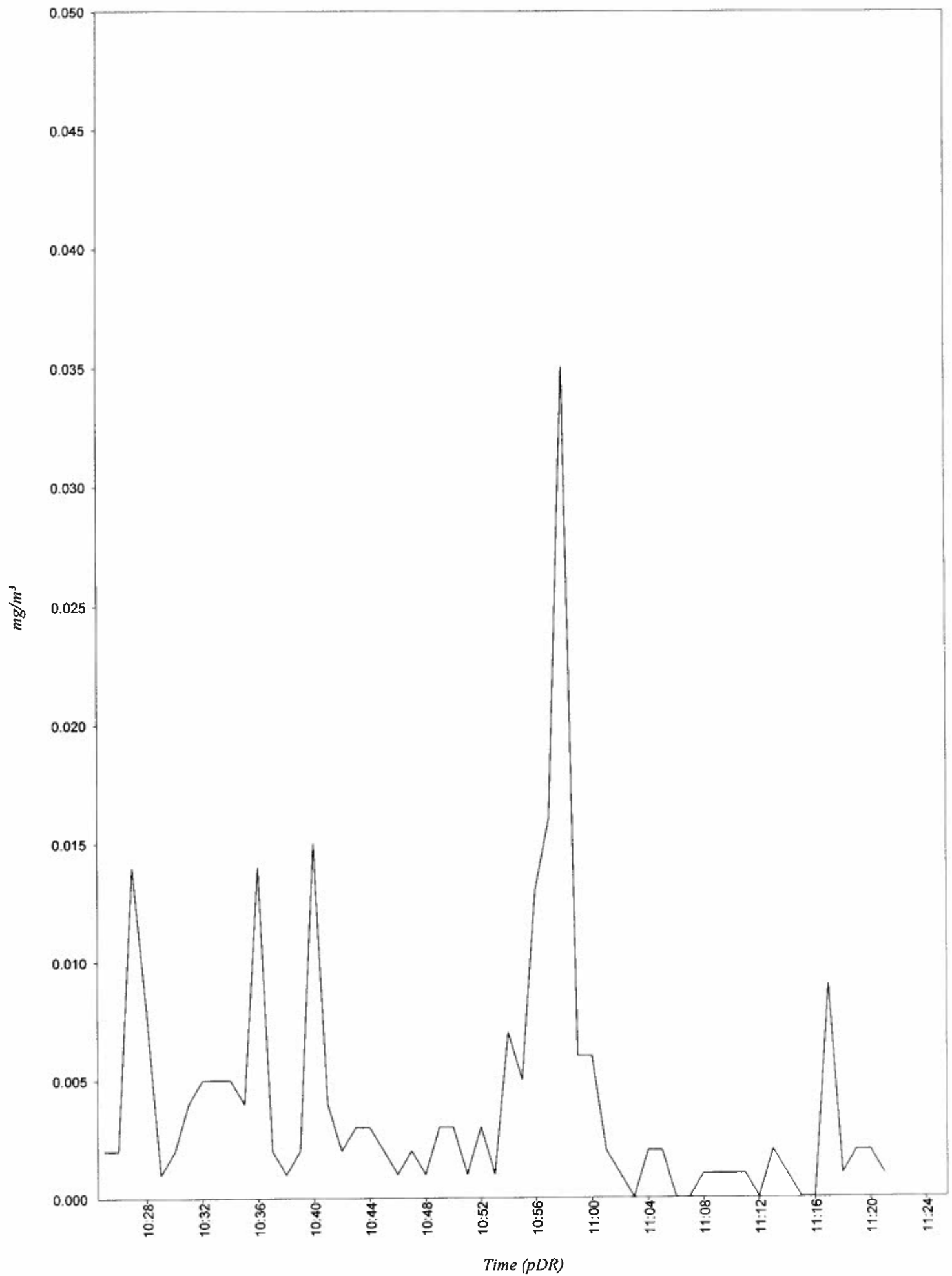
APPENDIX

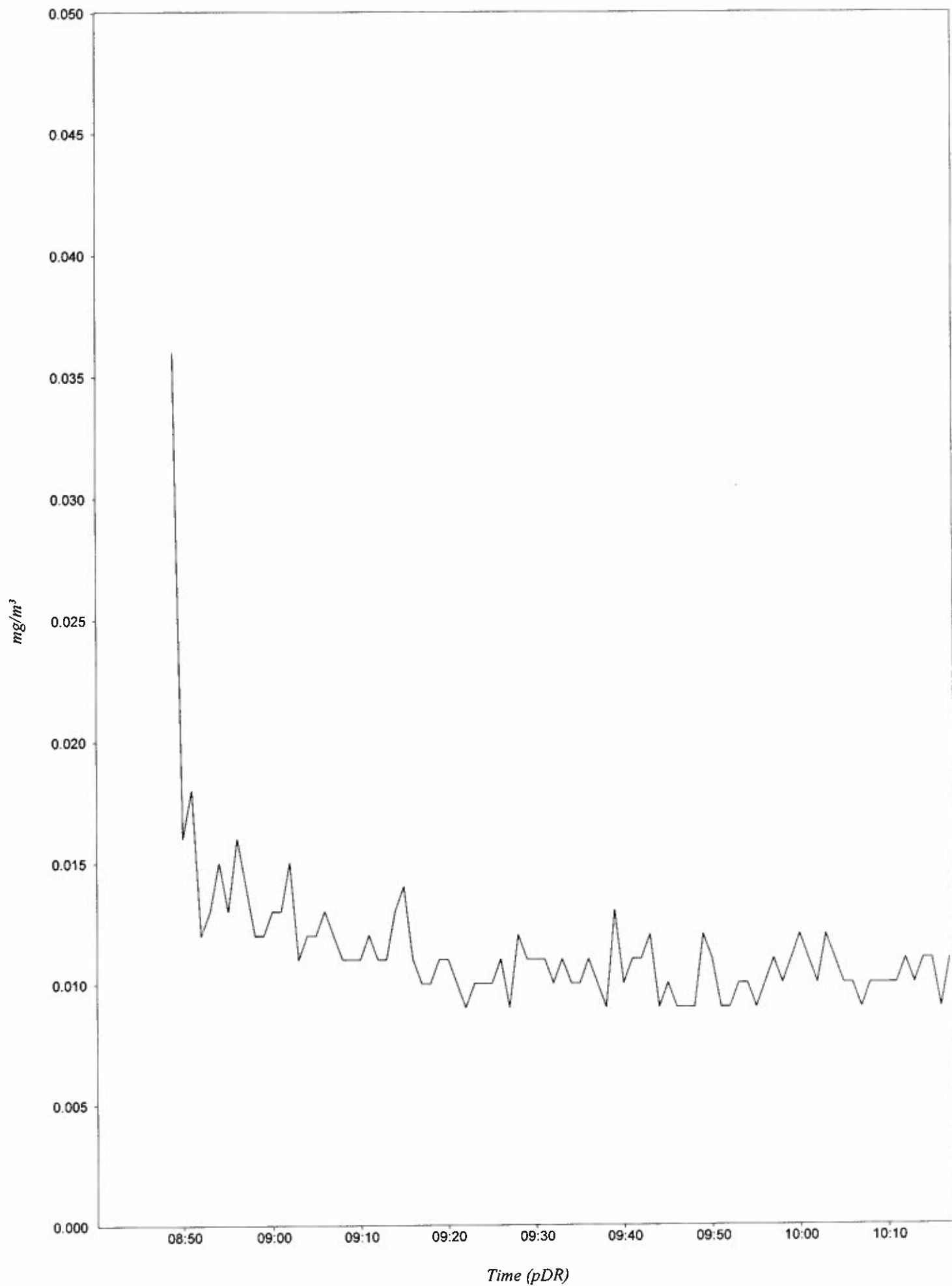
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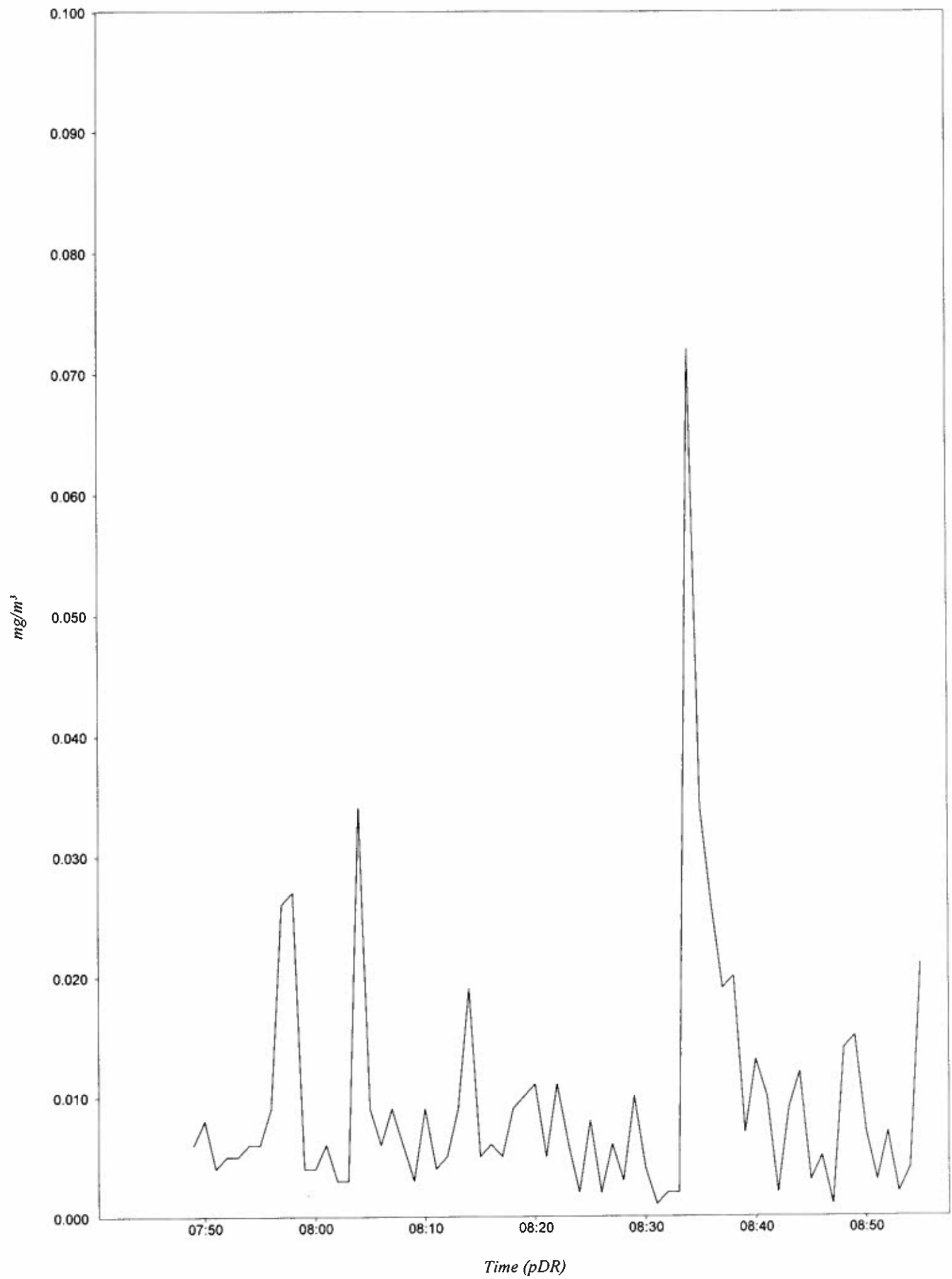
SRA Air Monitoring Data

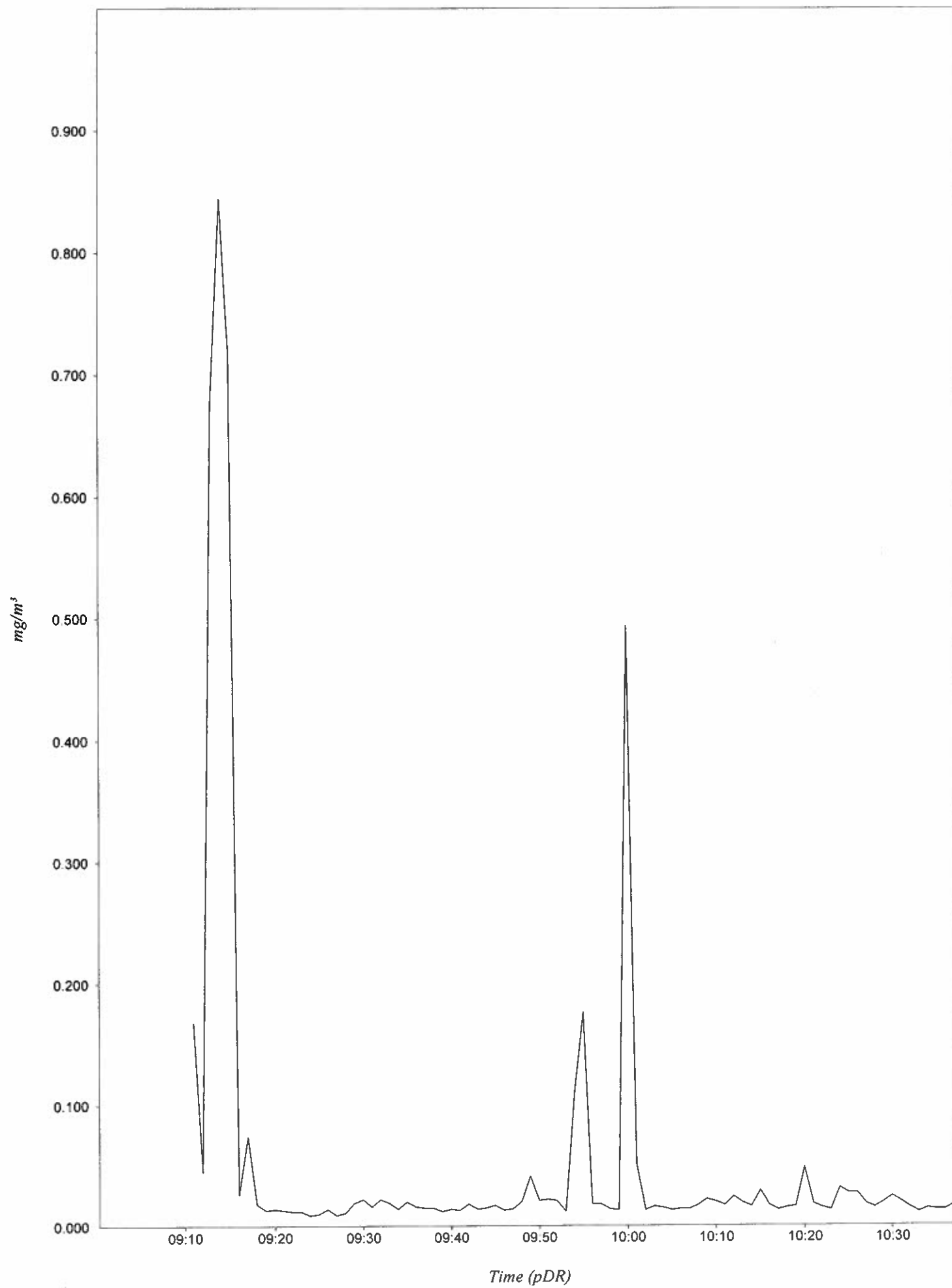


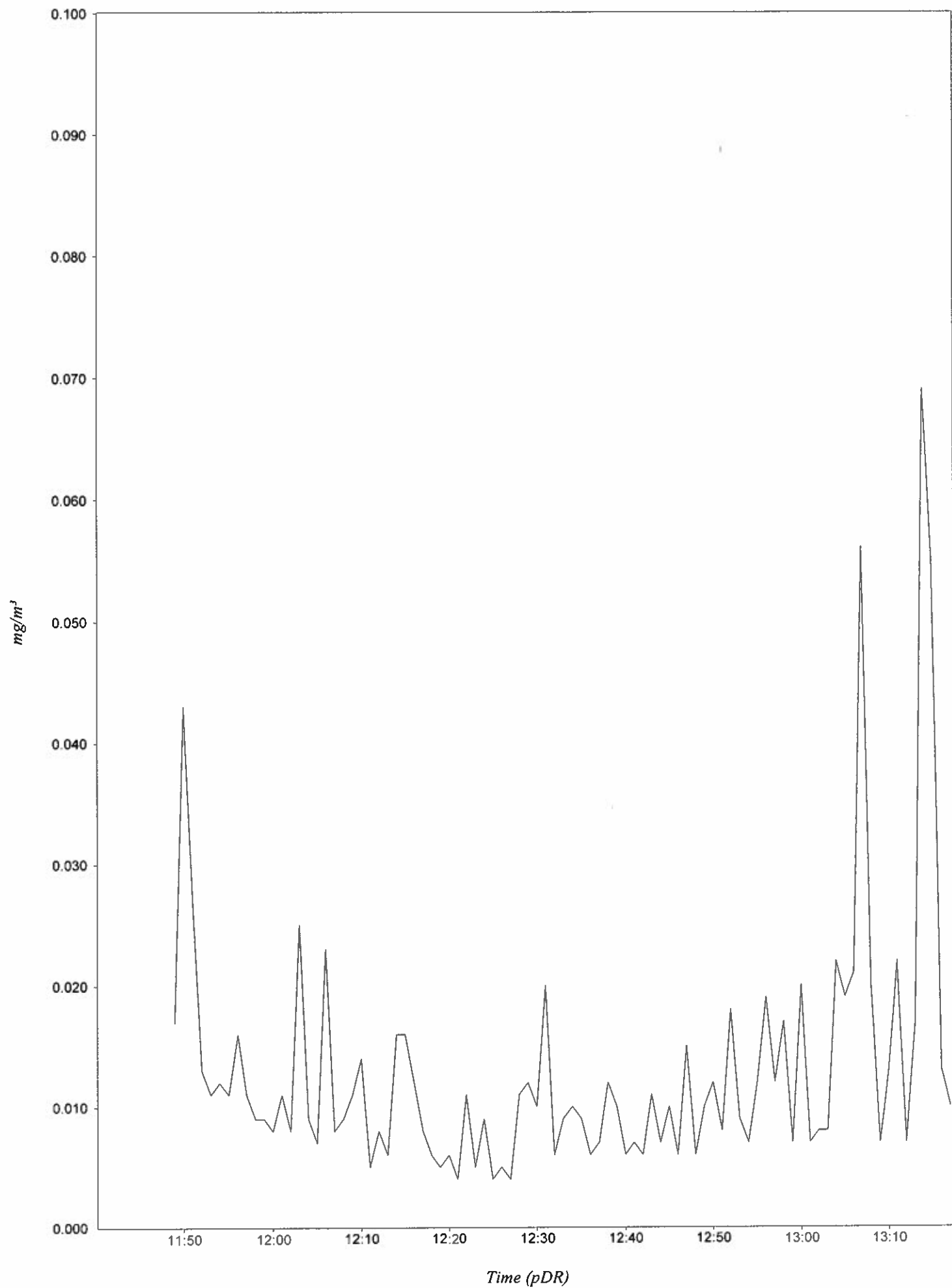


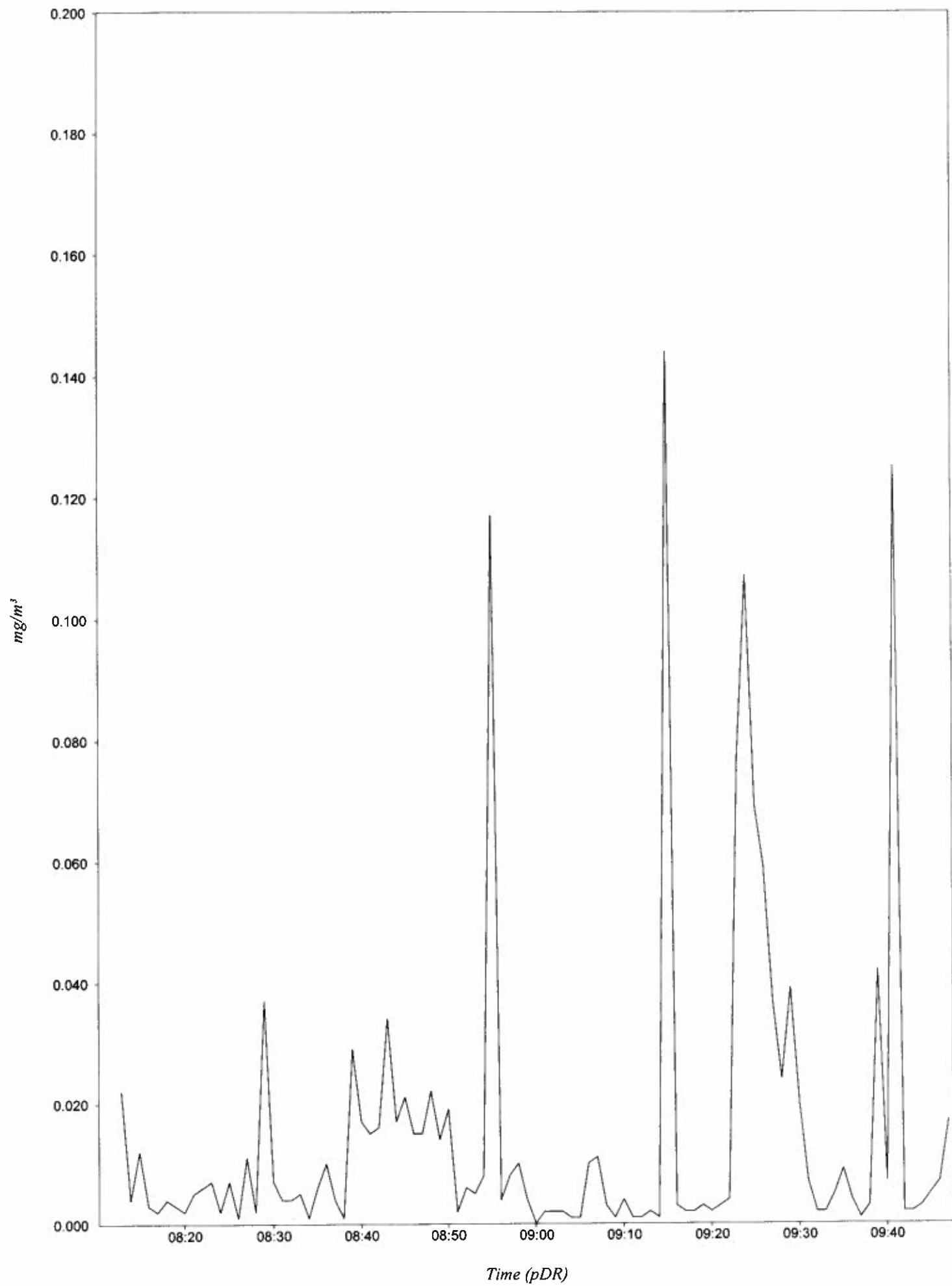


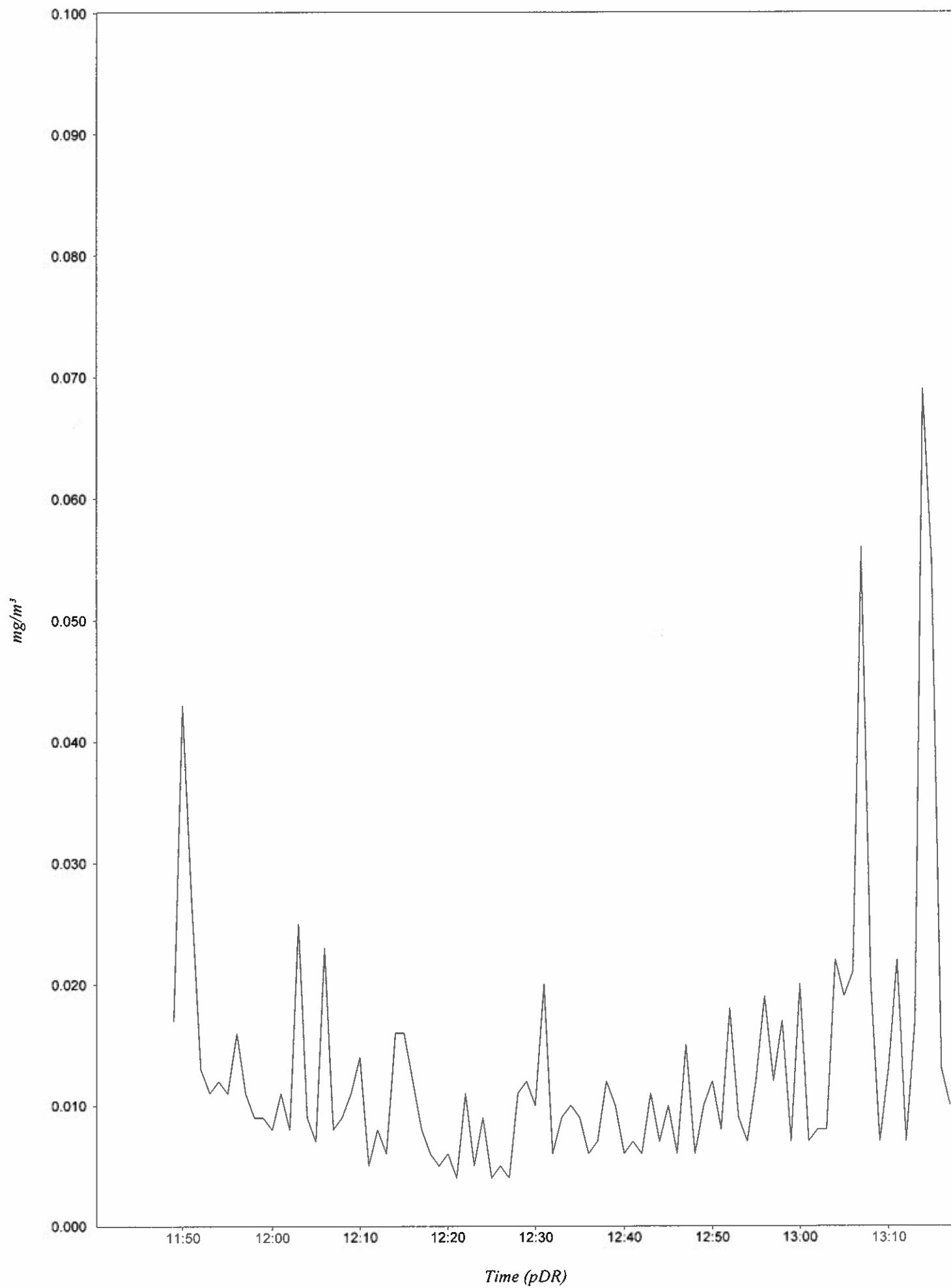


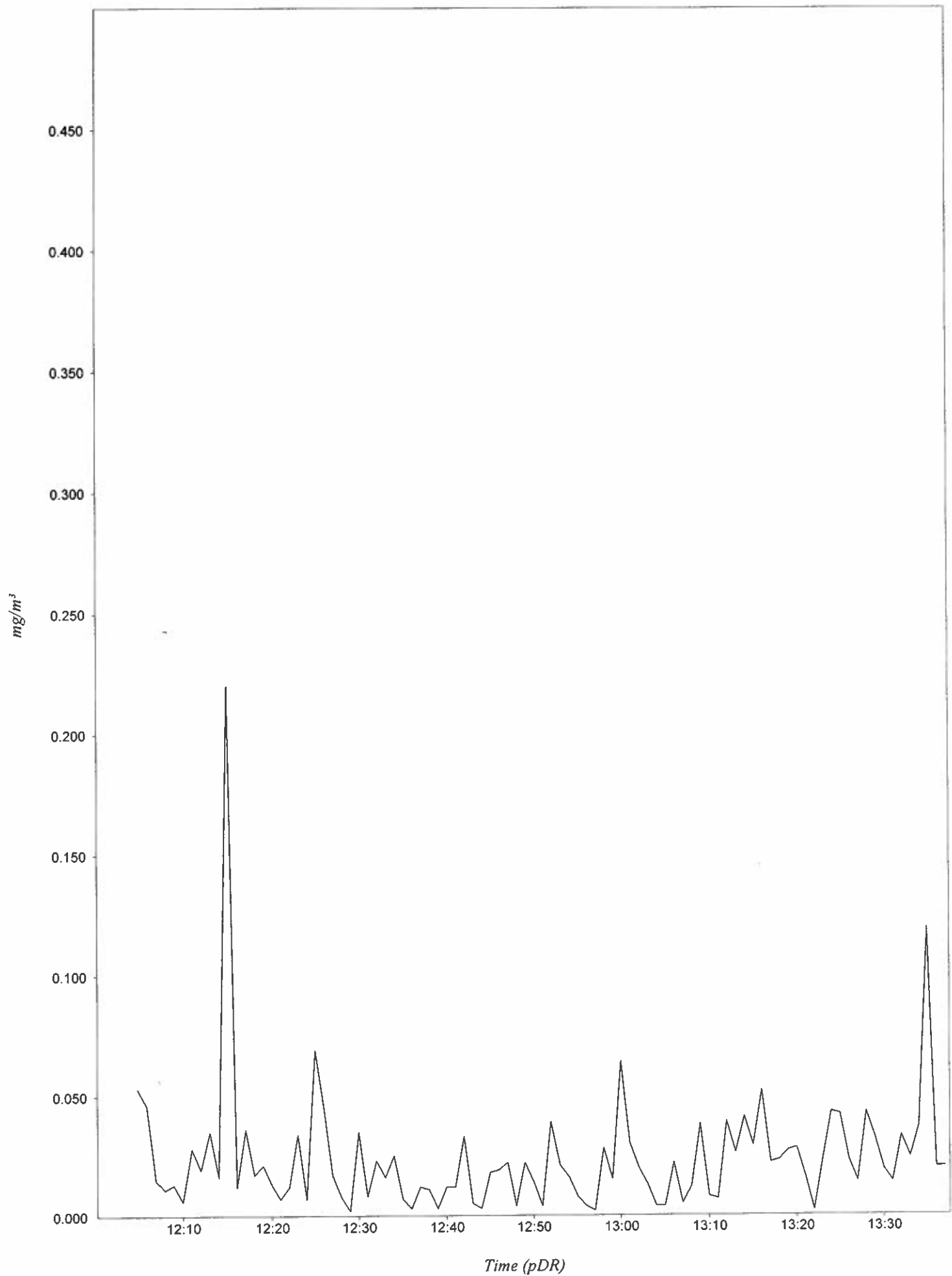


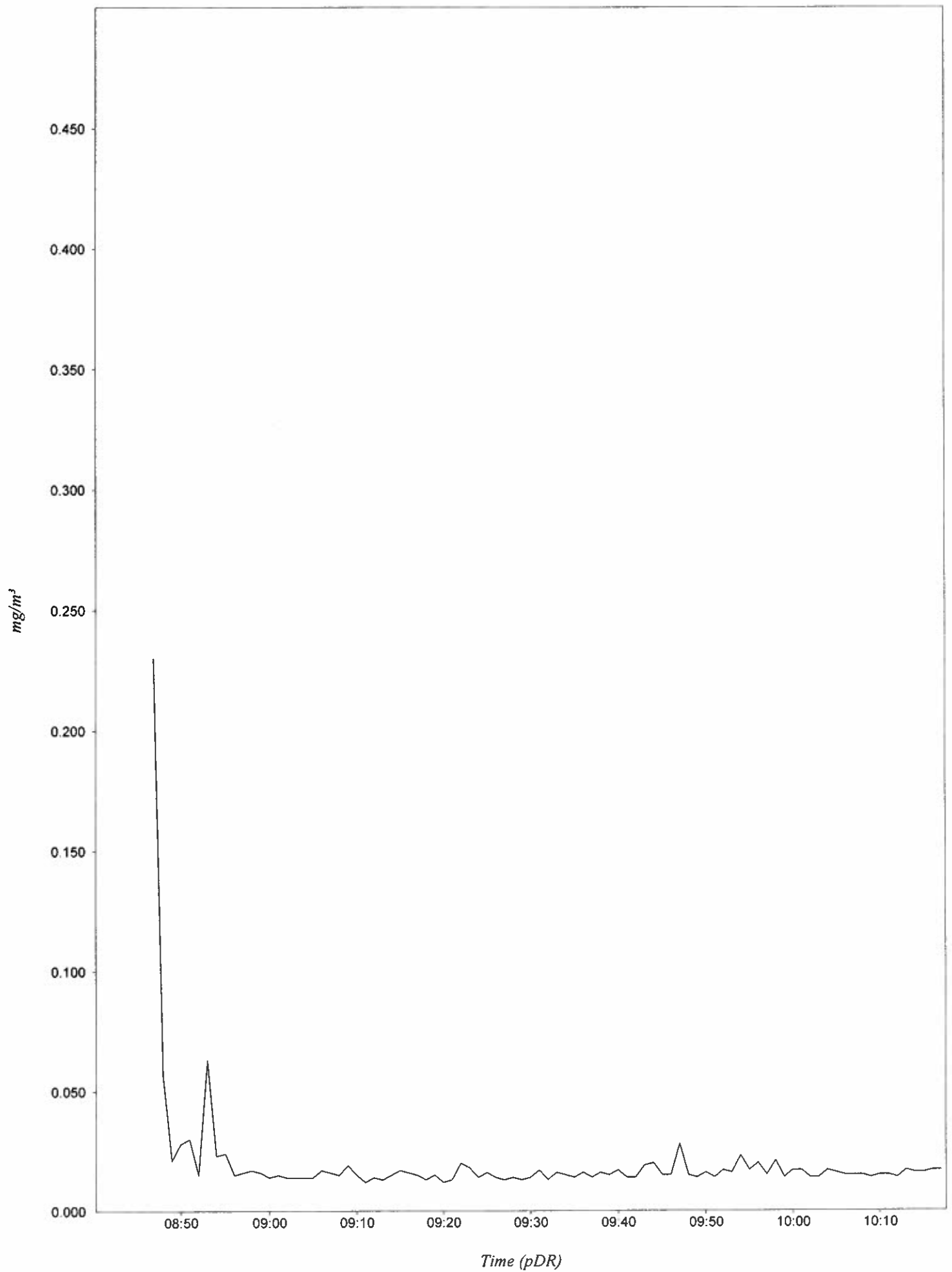


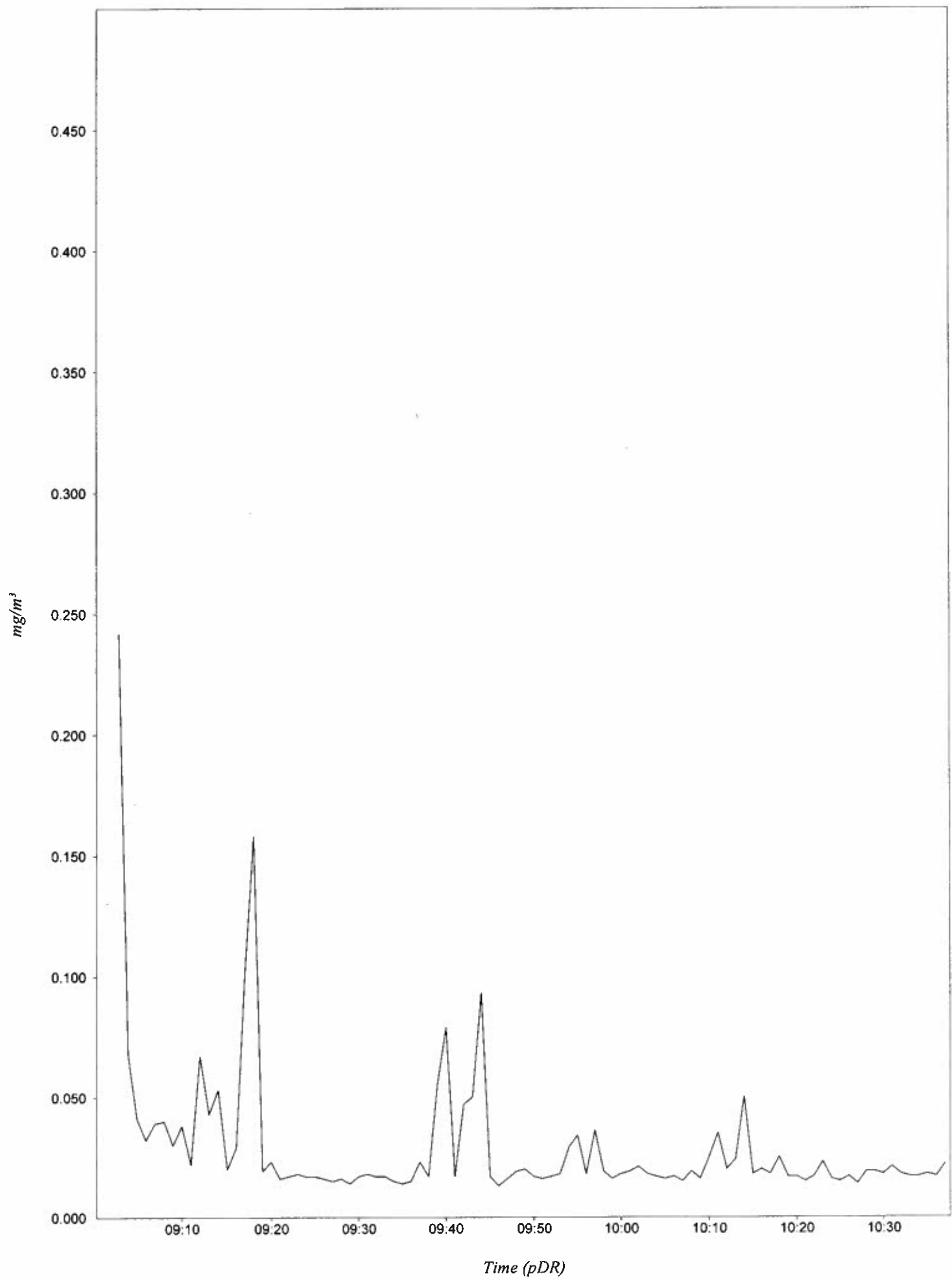


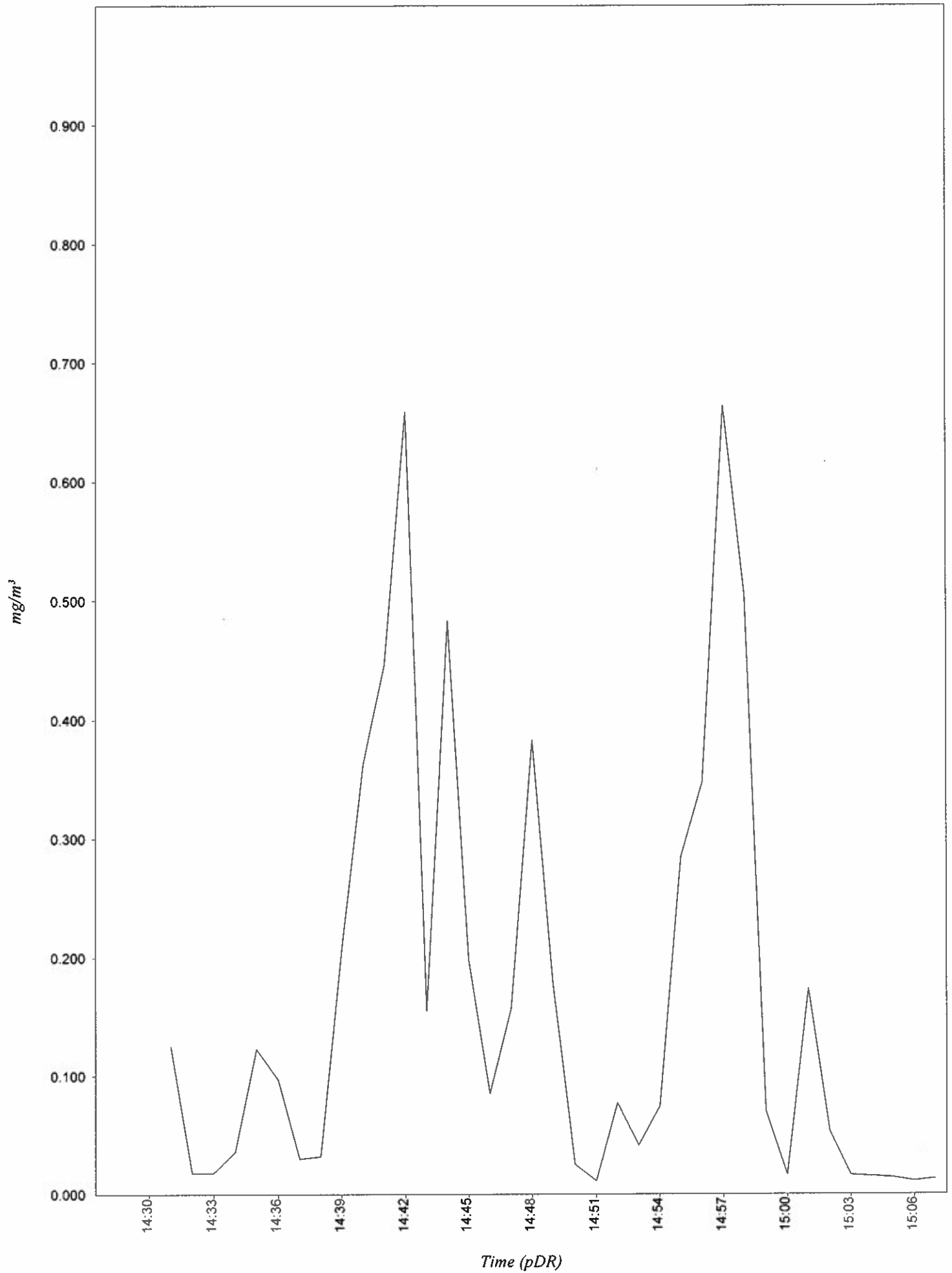


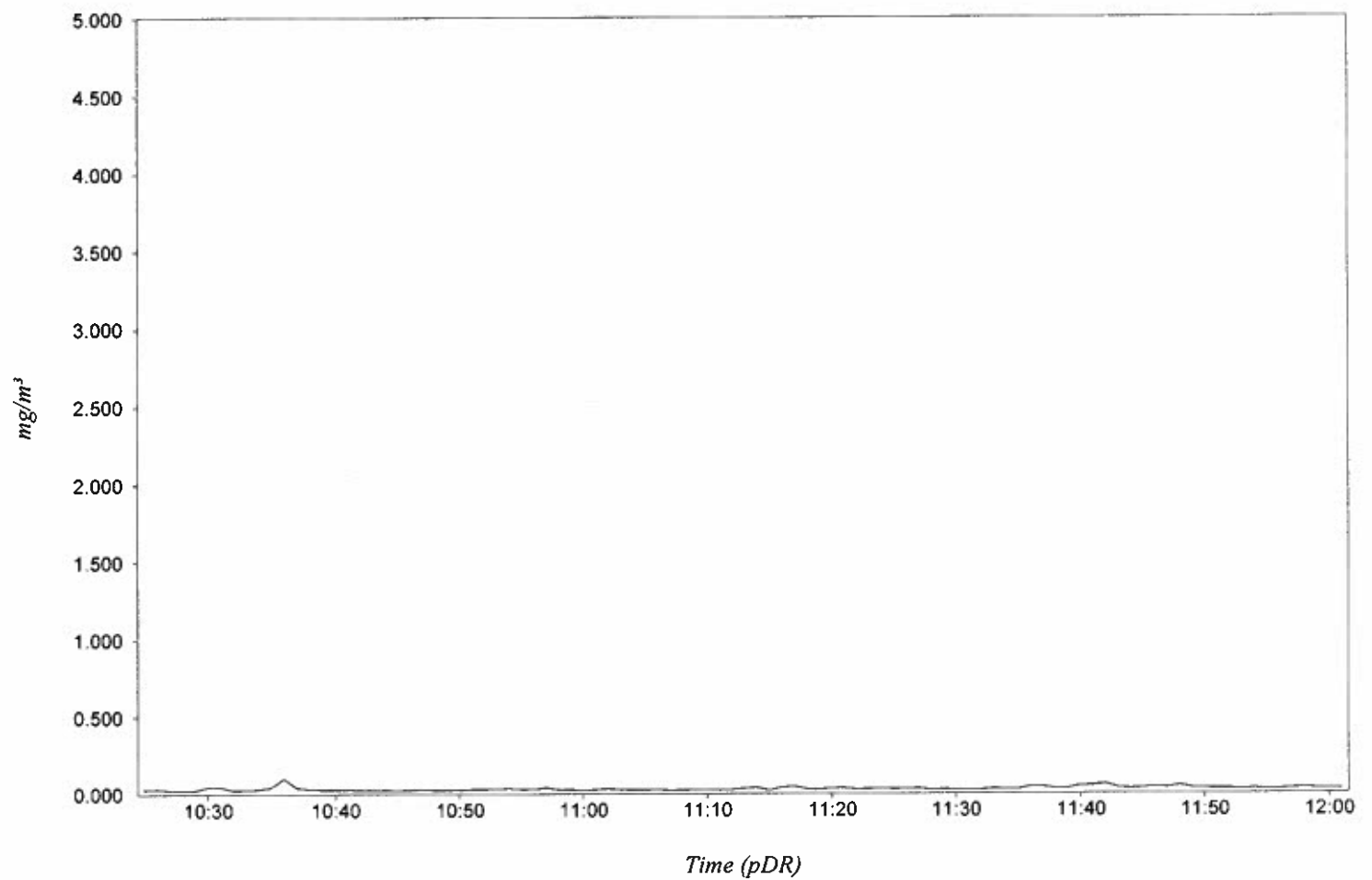
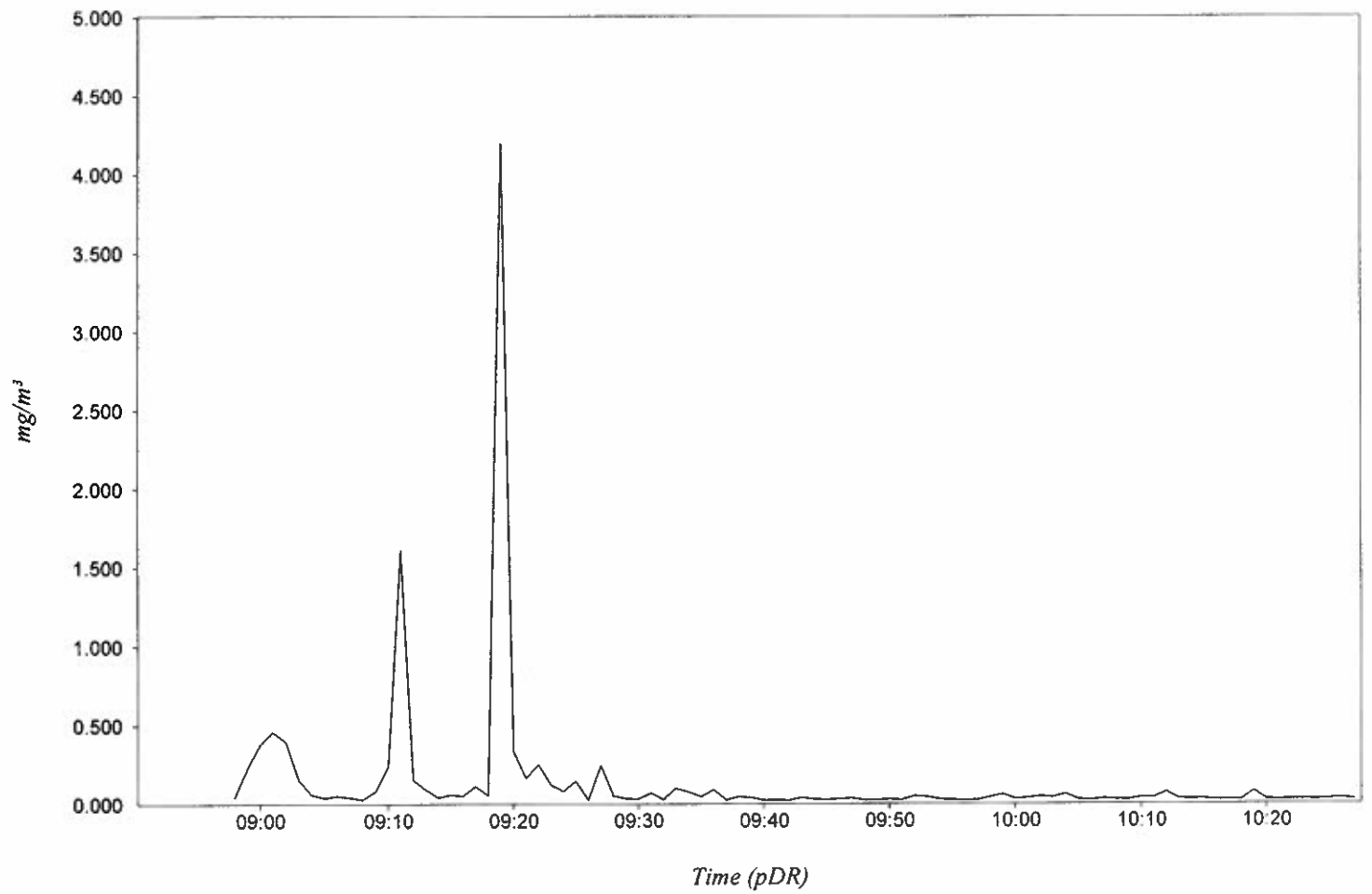


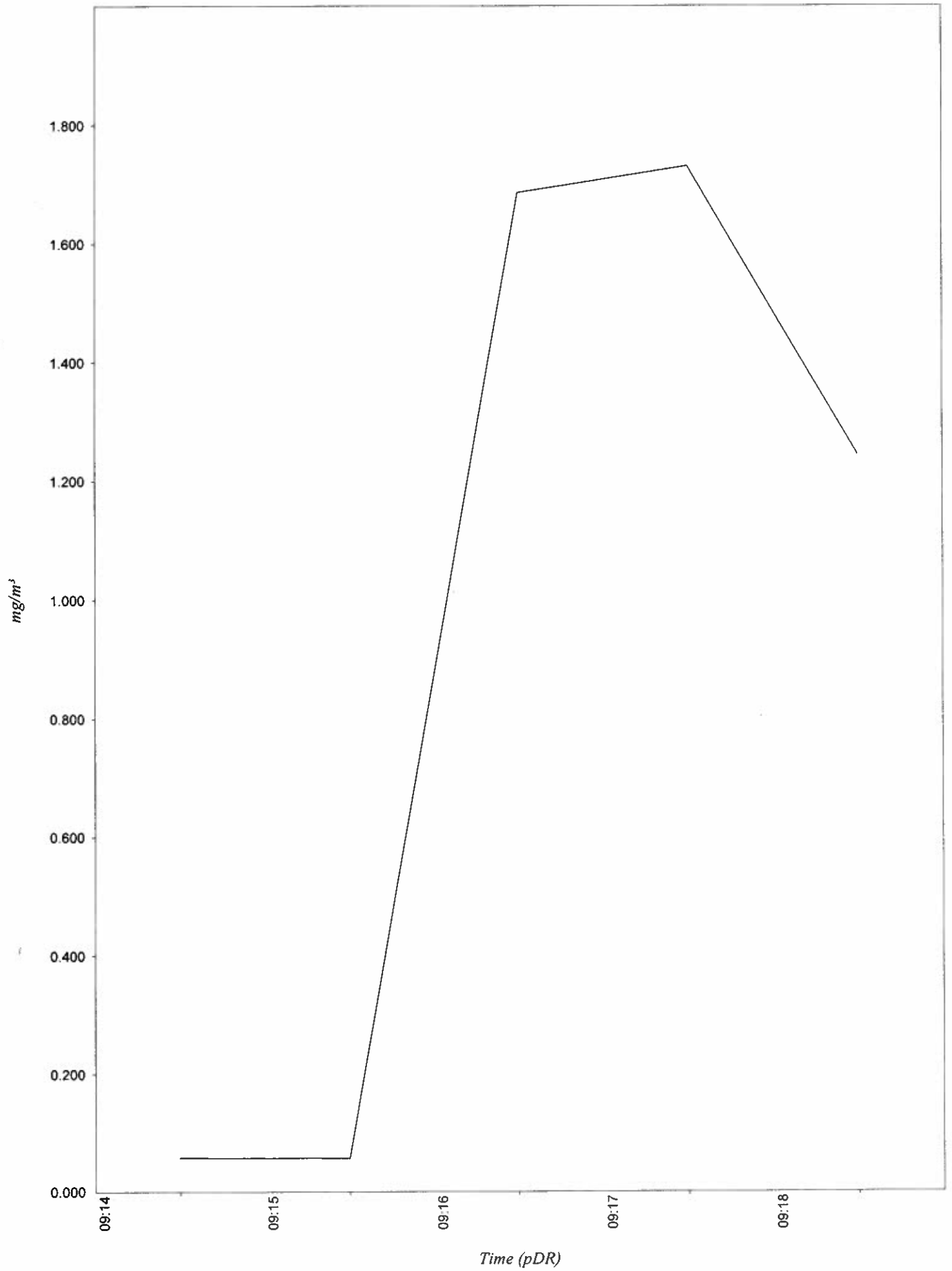


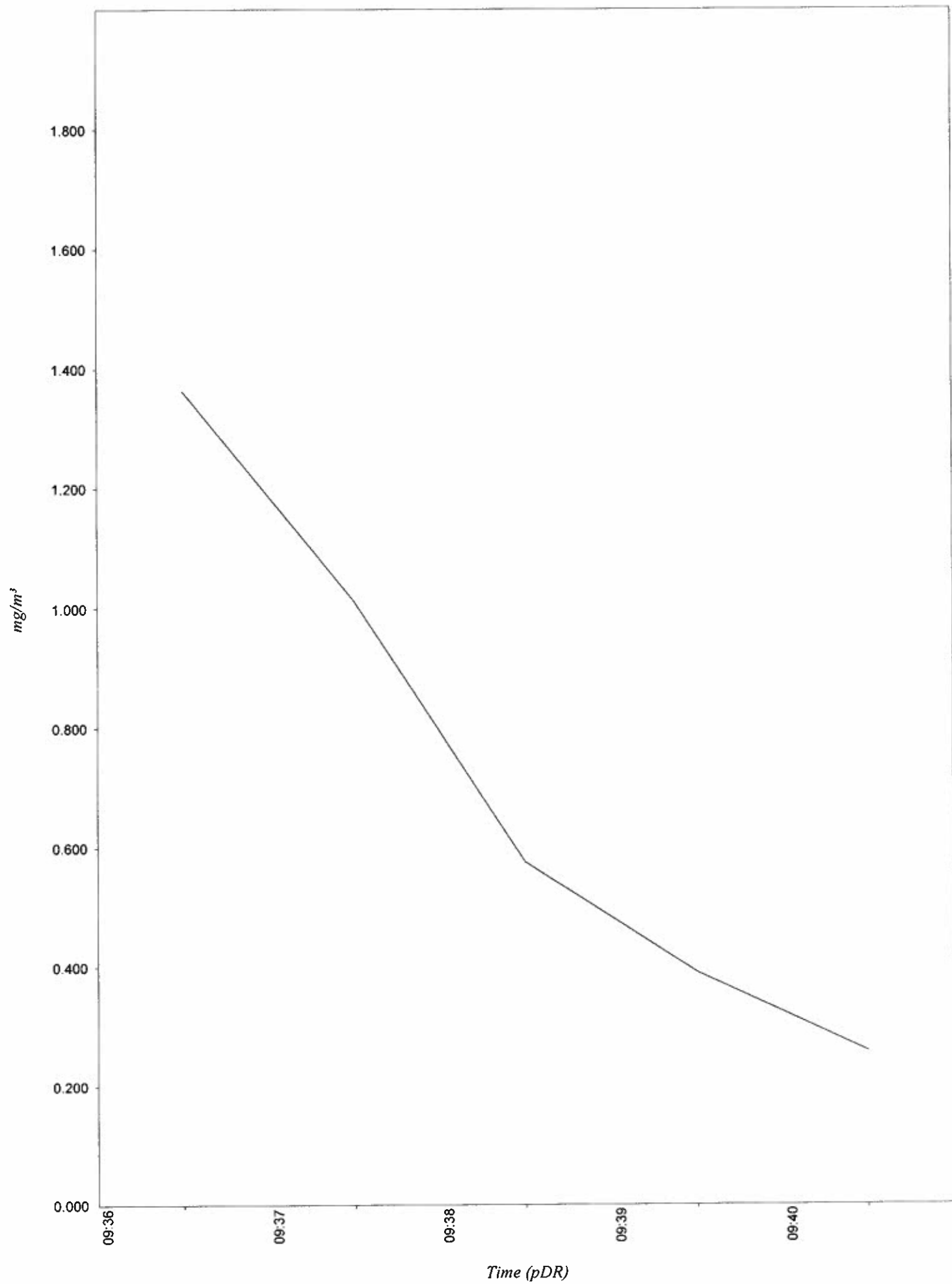


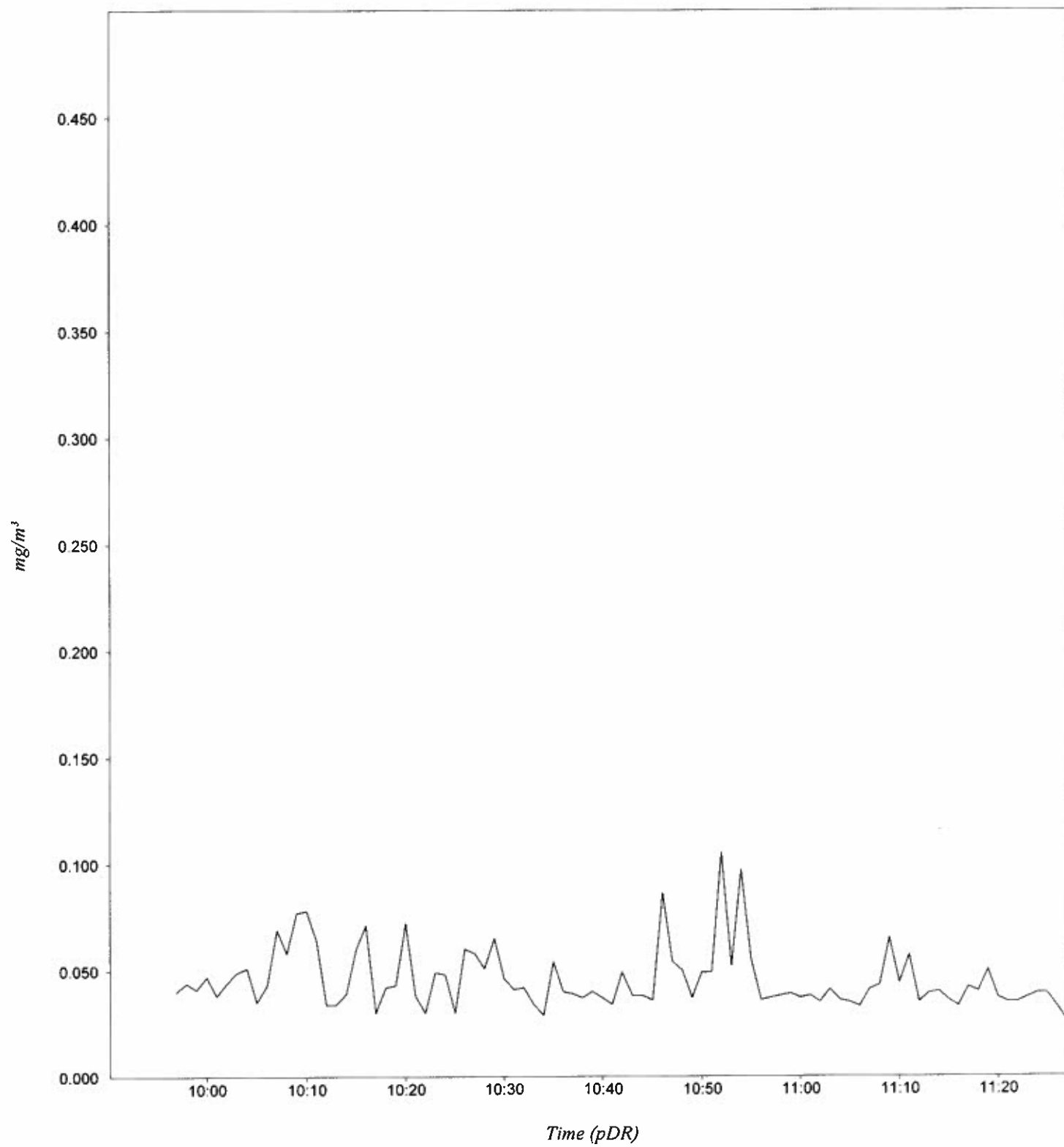


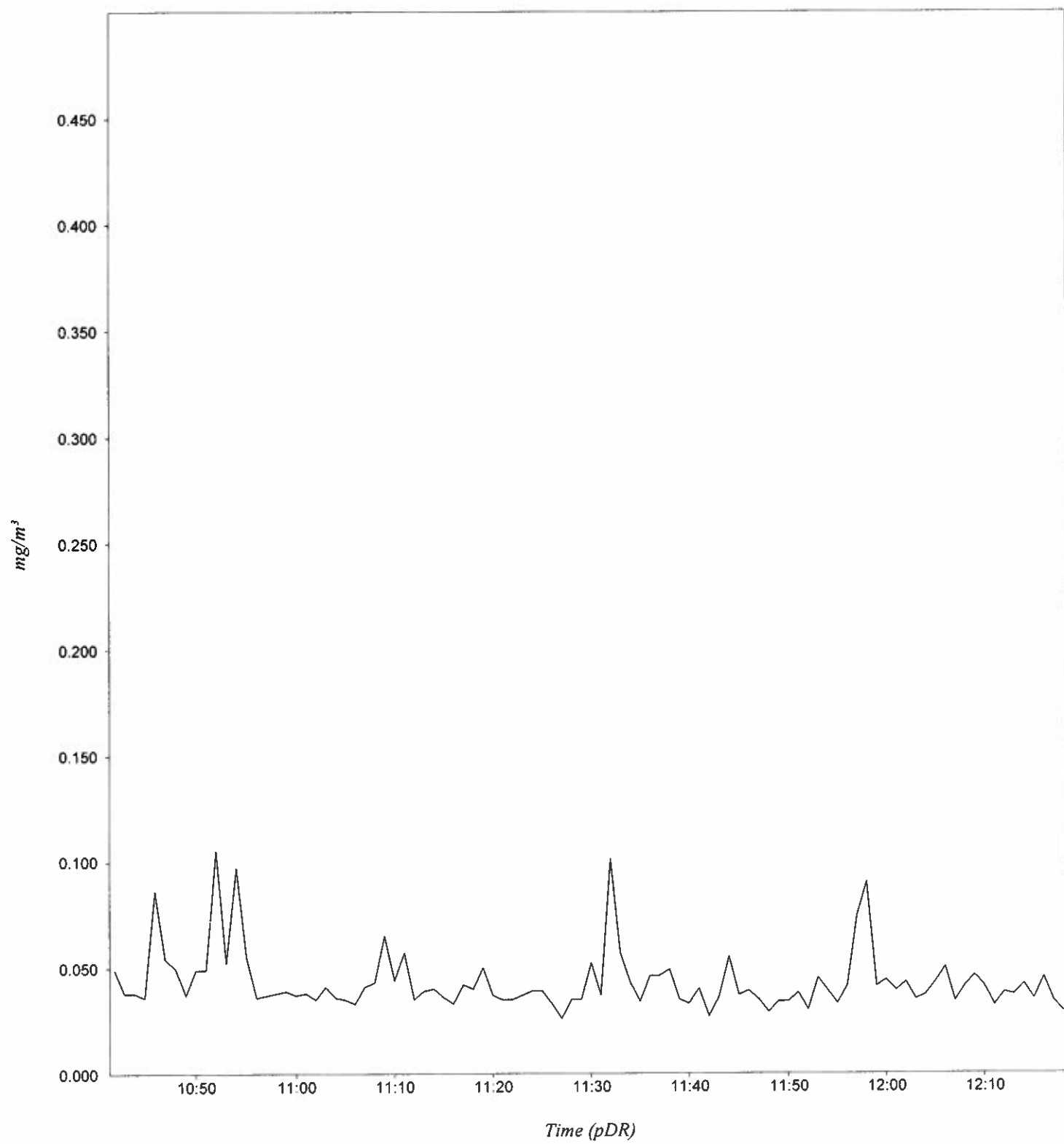


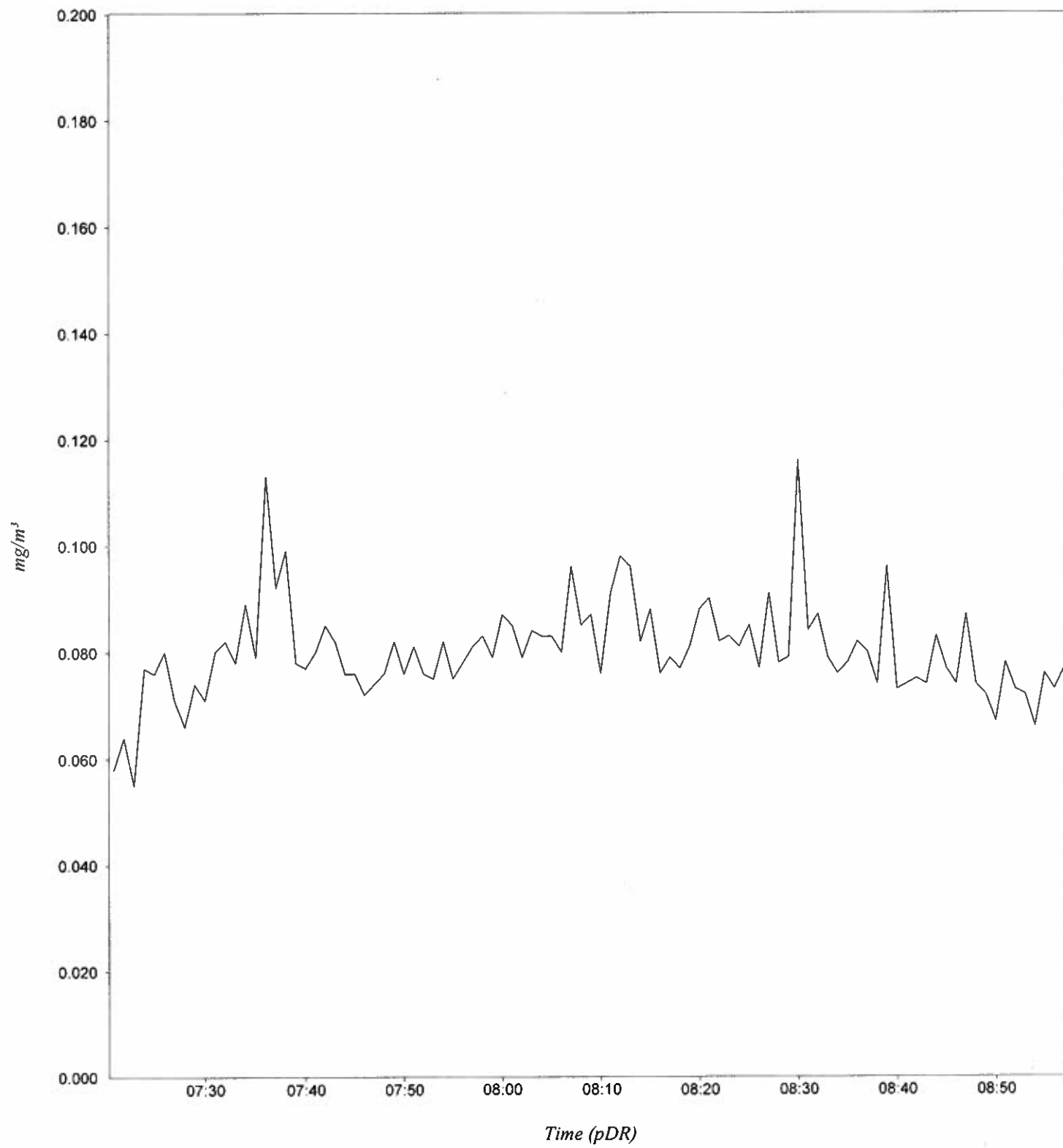


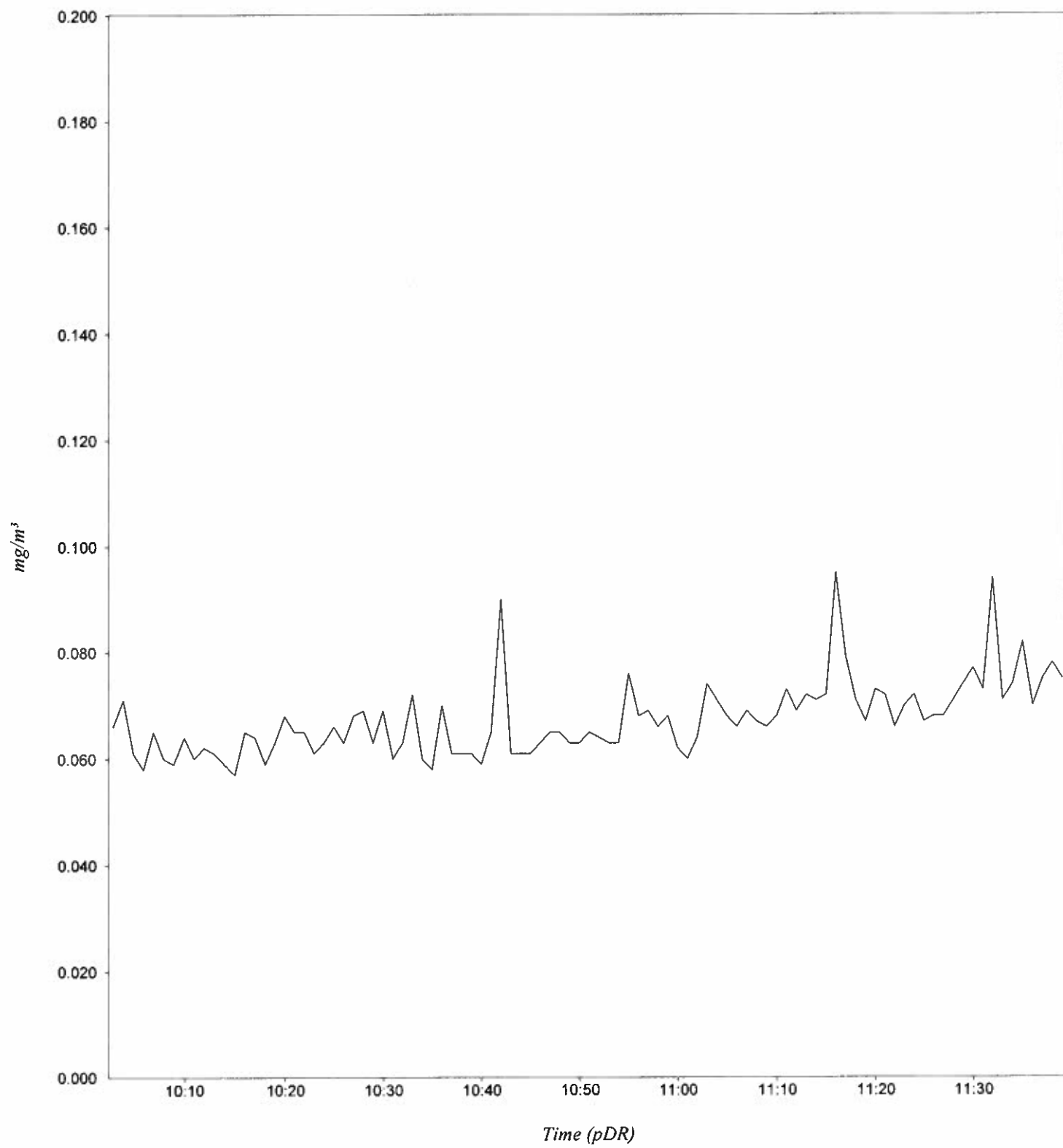


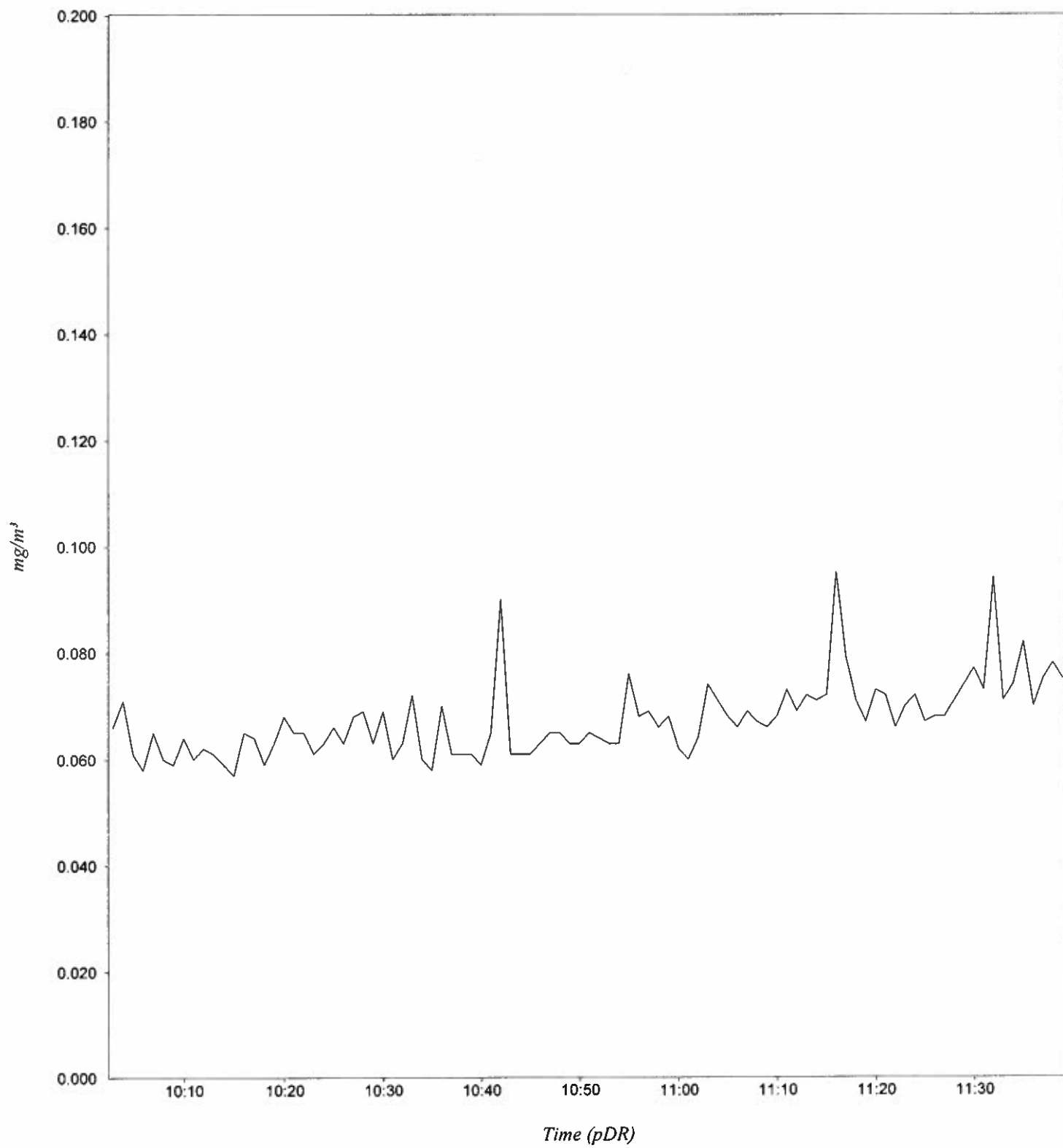


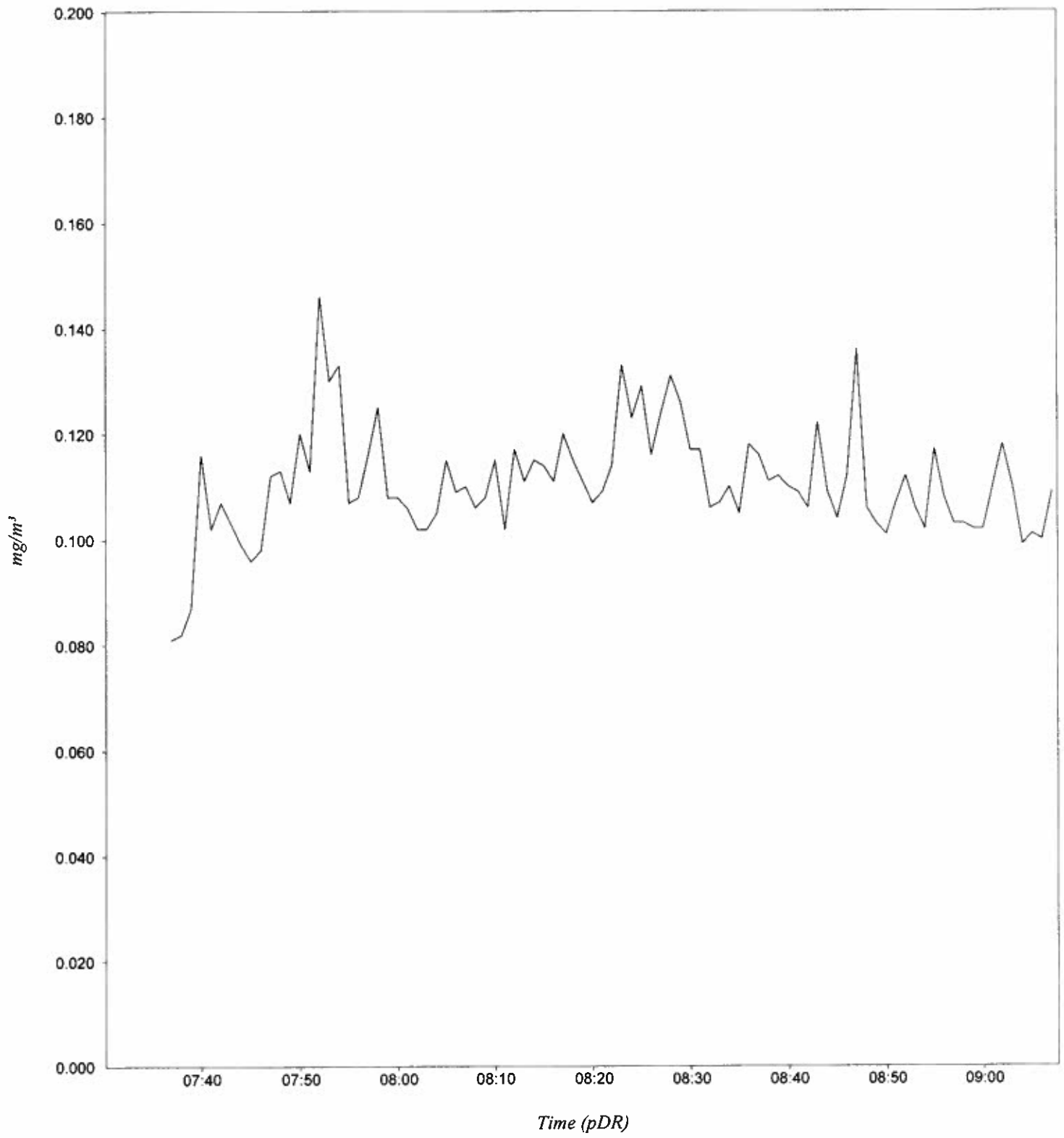


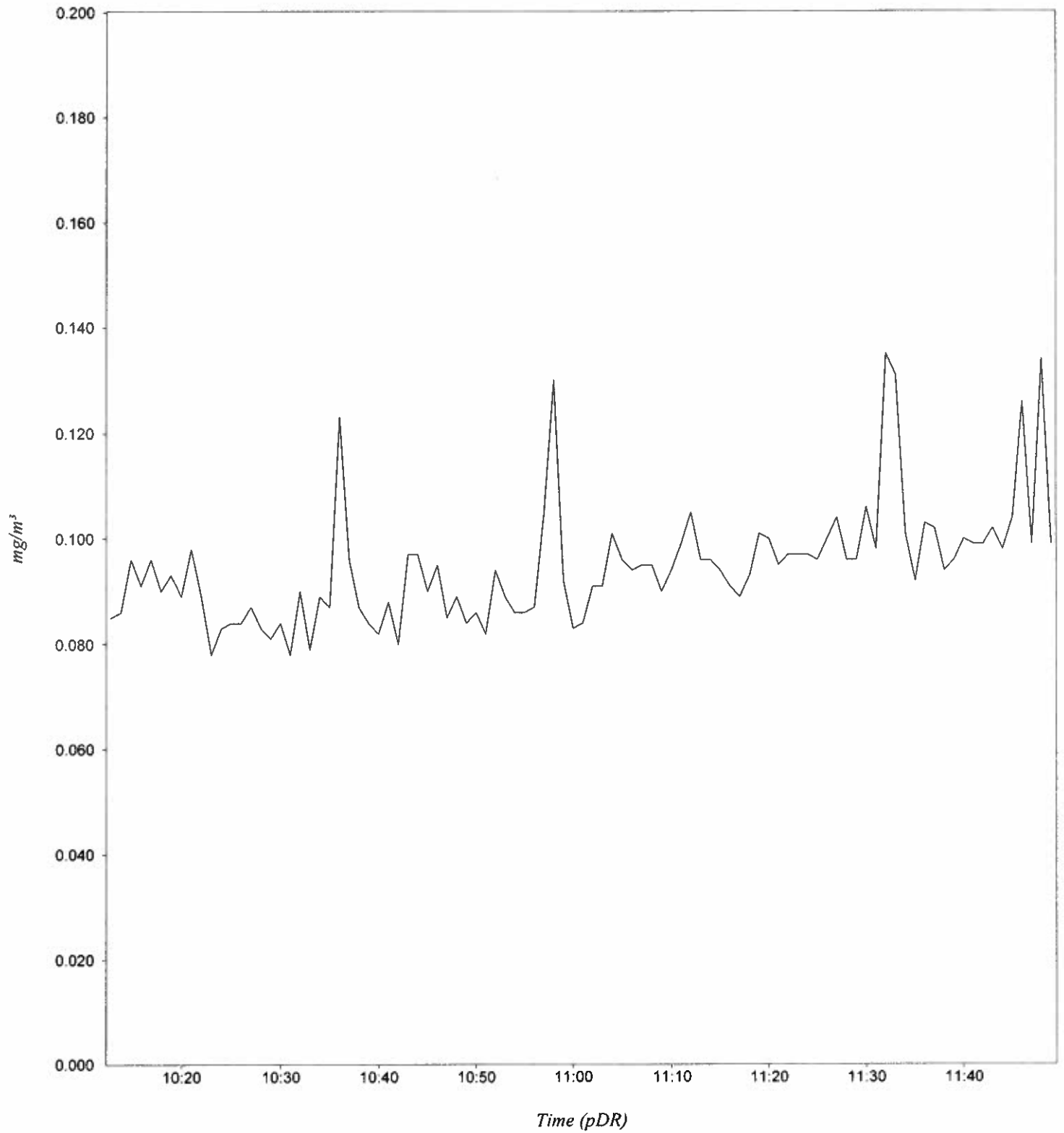


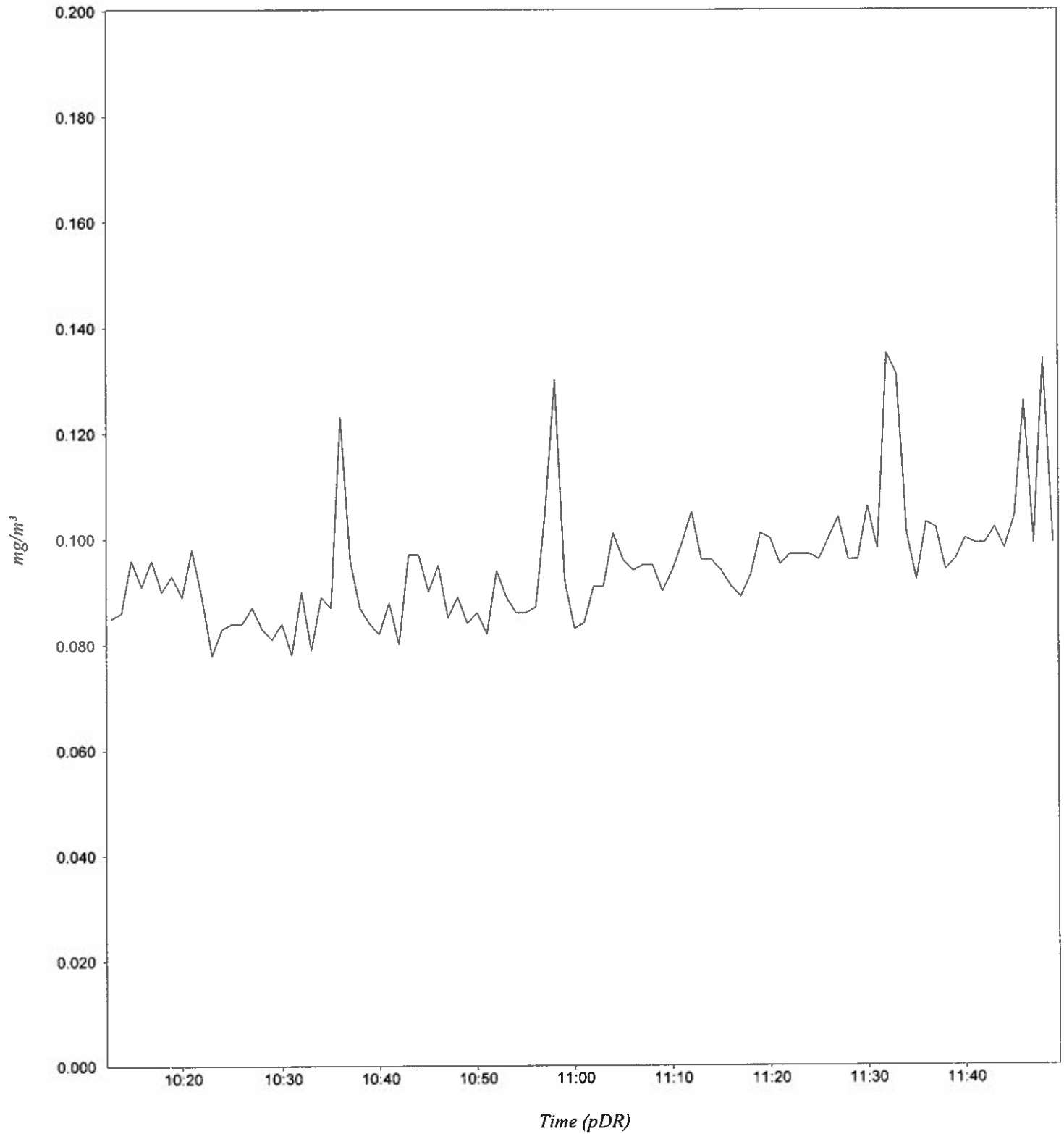


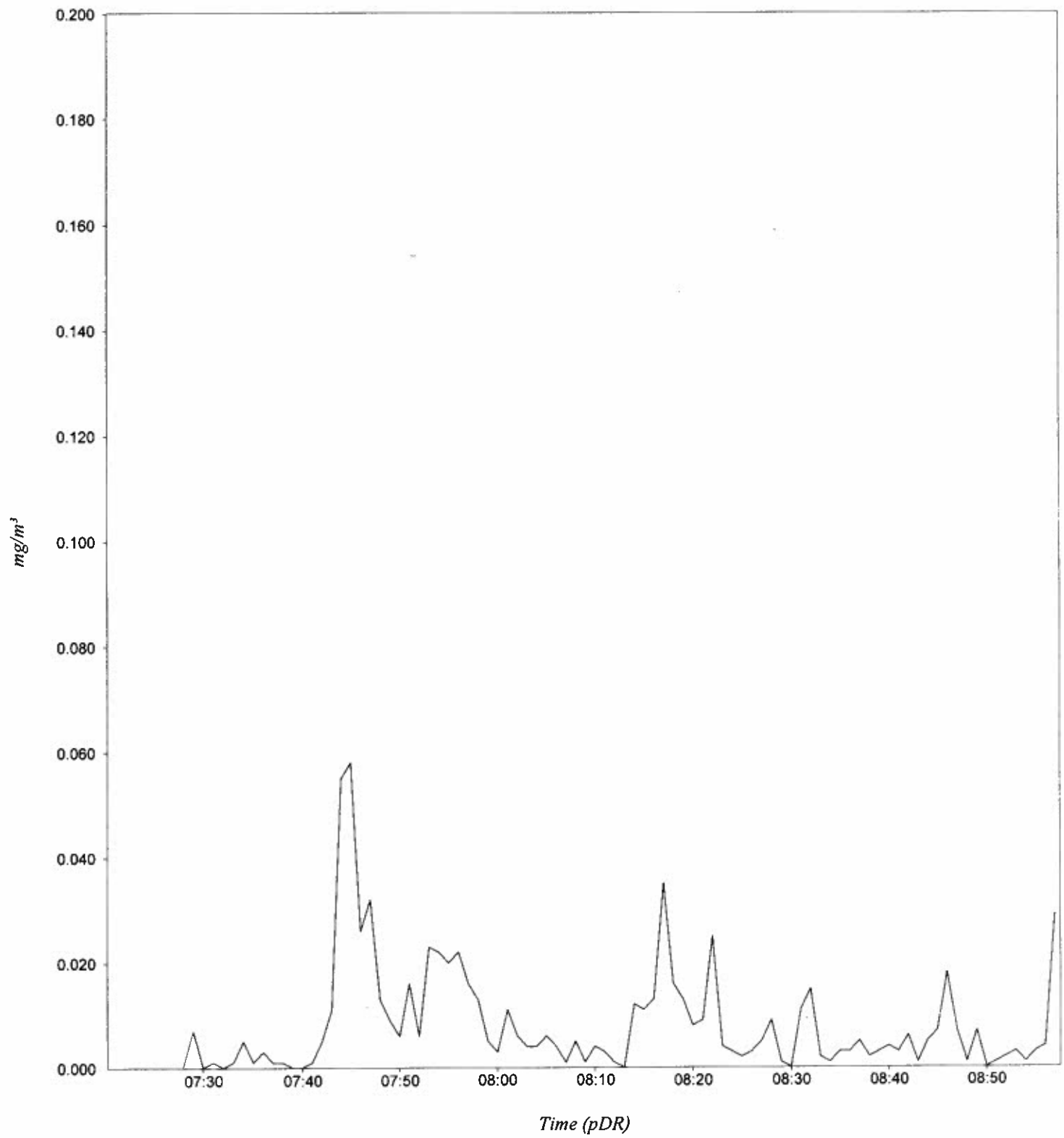








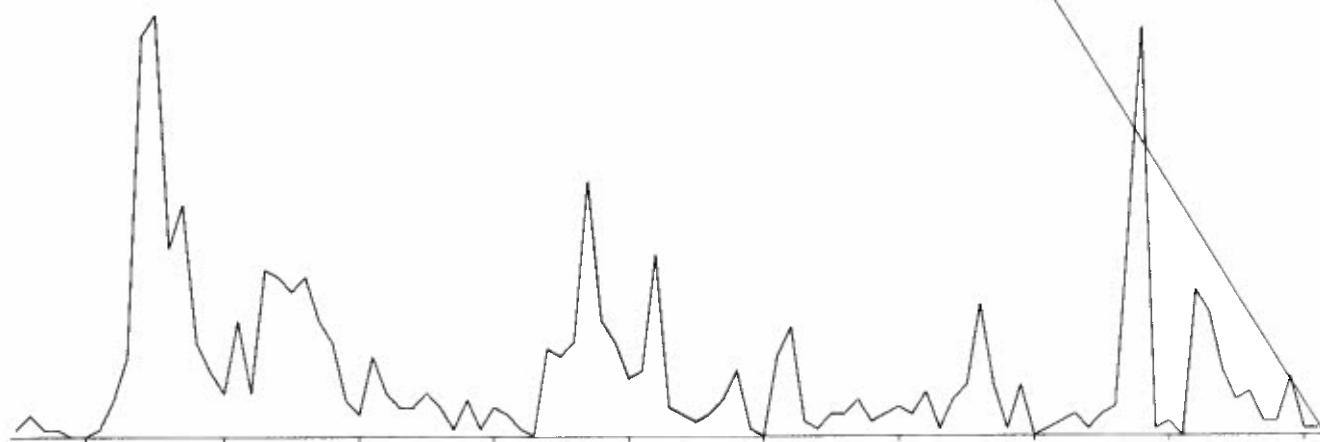




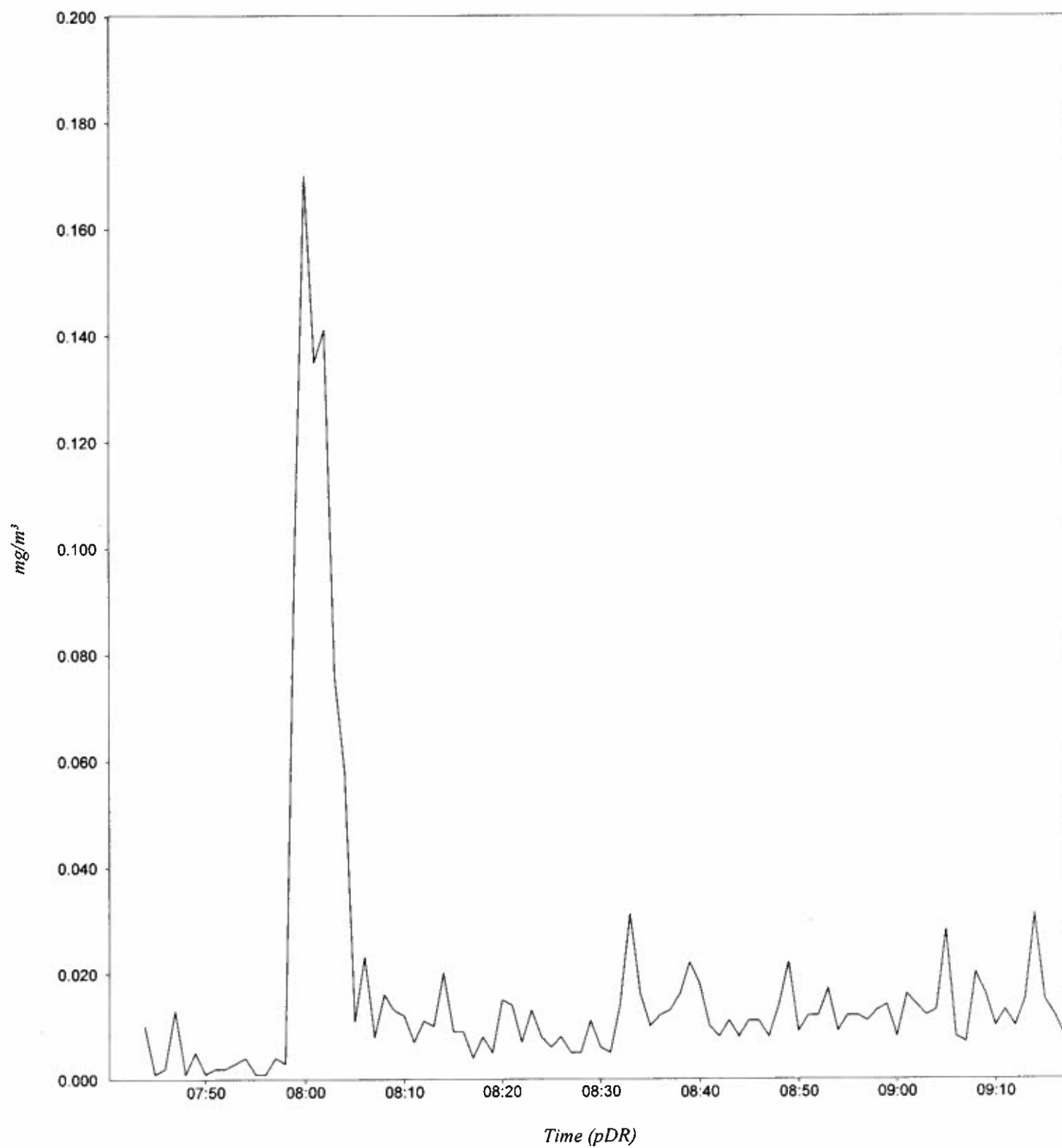
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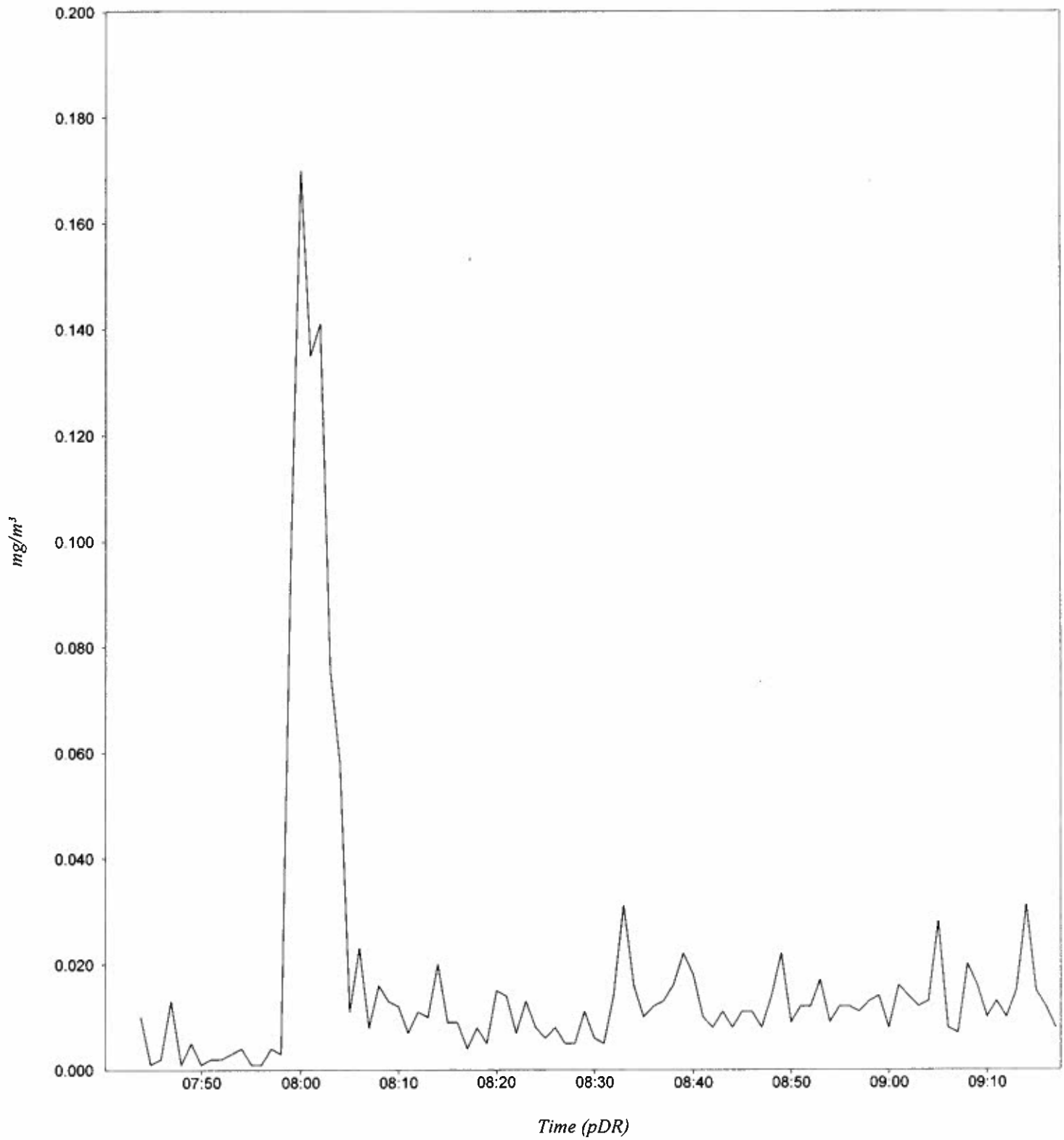
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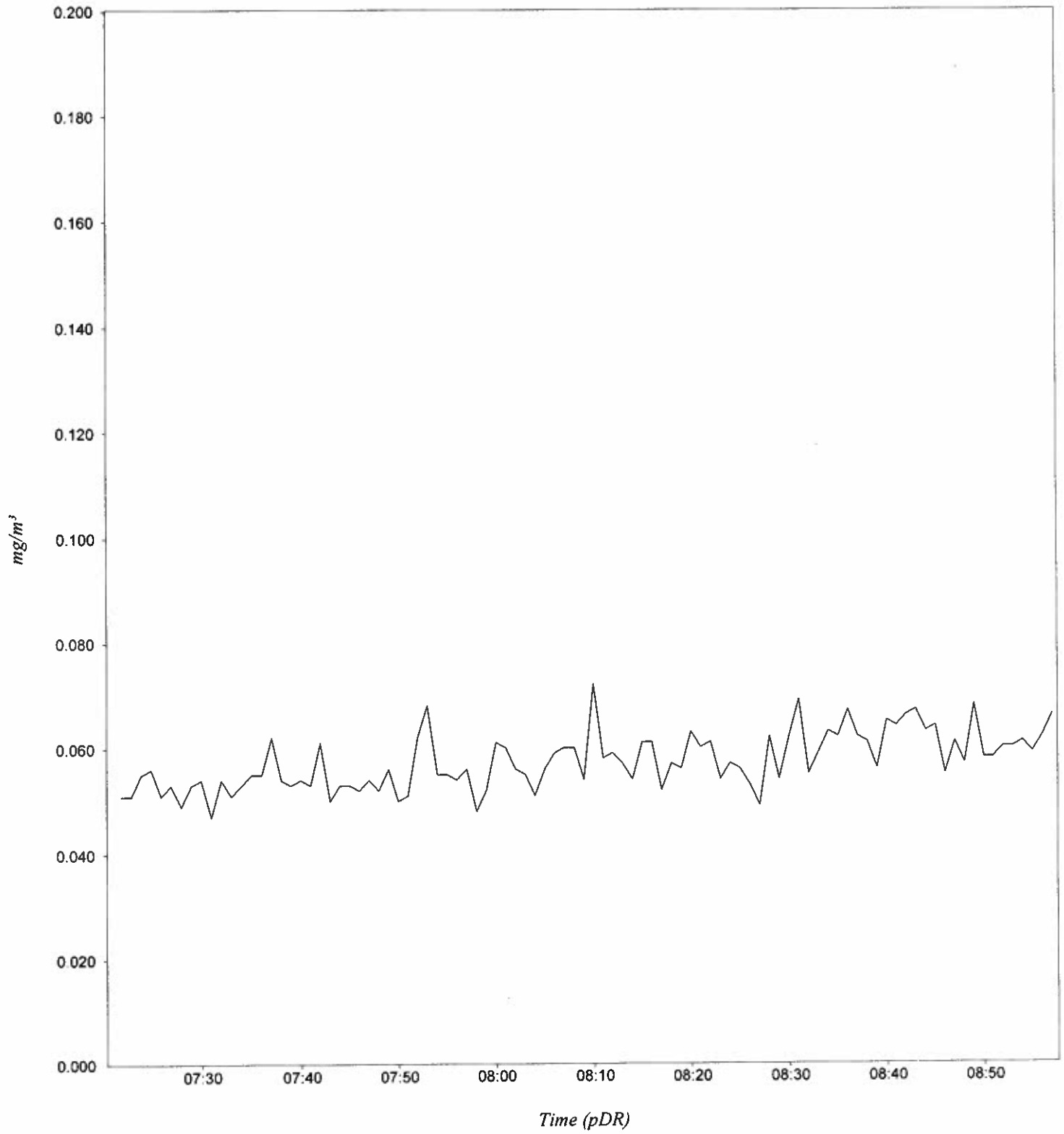
mg/m³



Time (pDR)







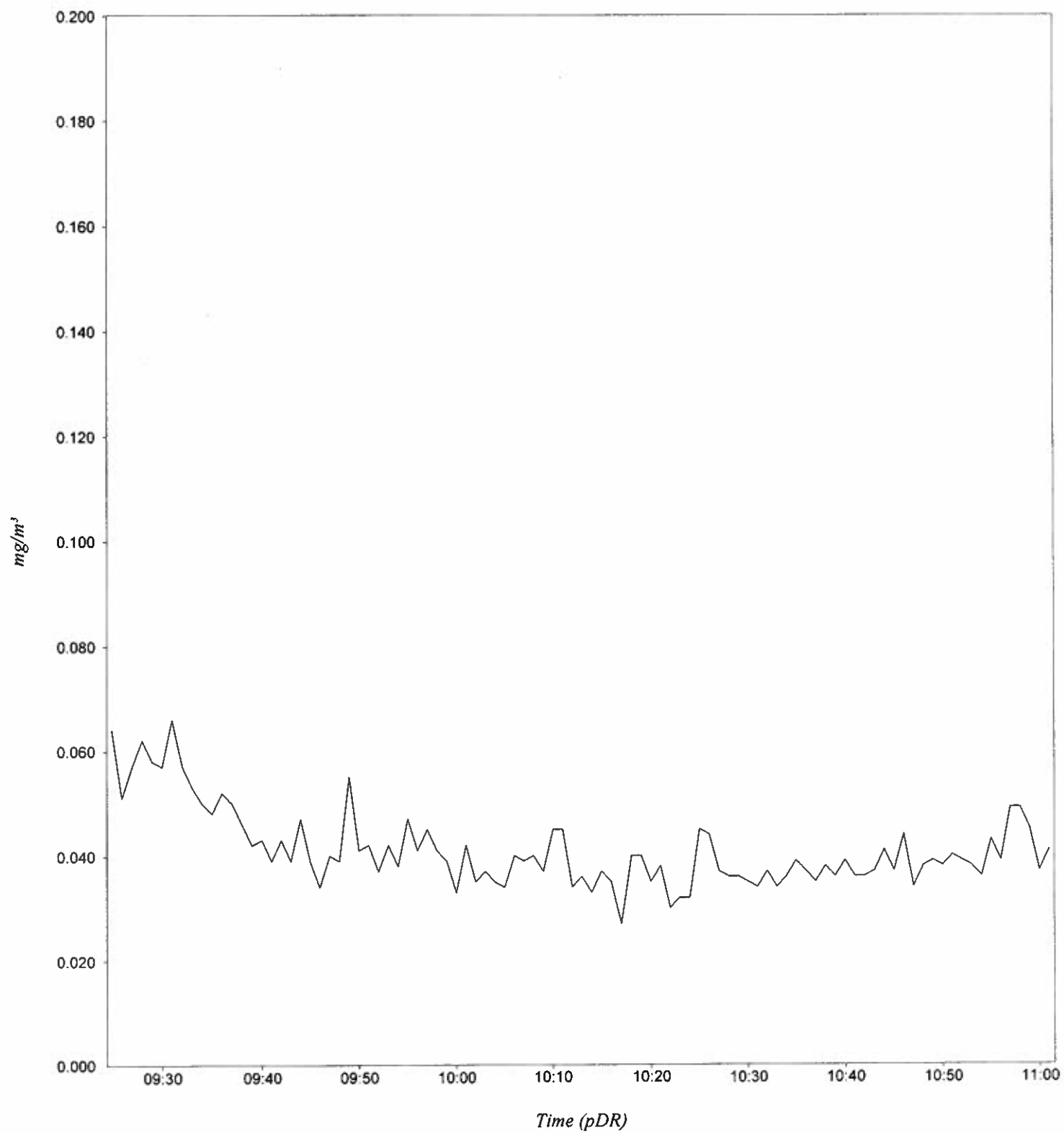
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0.000

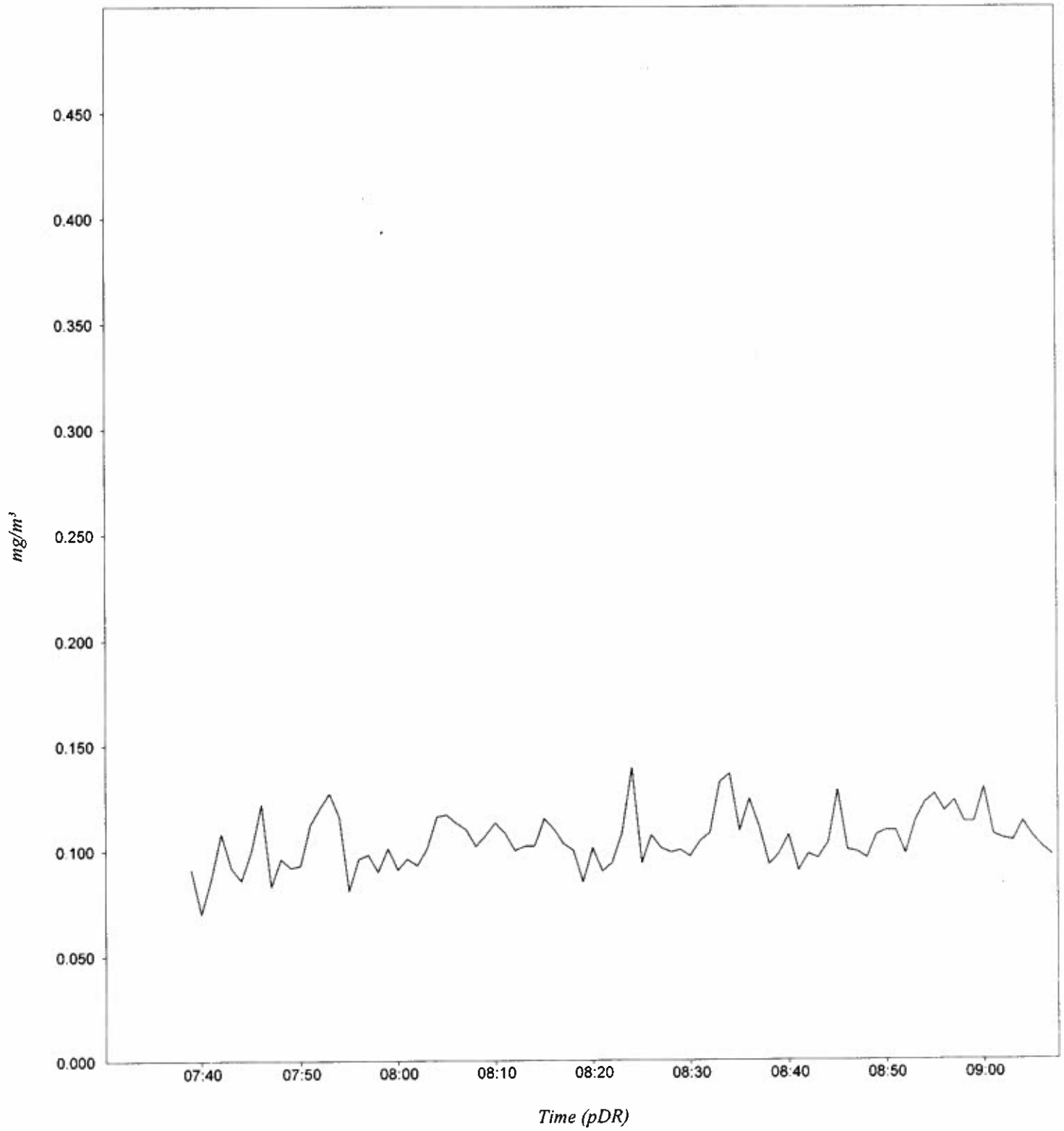
pDR-1000 / Tag # 11 / Start time: Jun 05, 07:21:19 / page 2

mg/m³



Time (pDR)



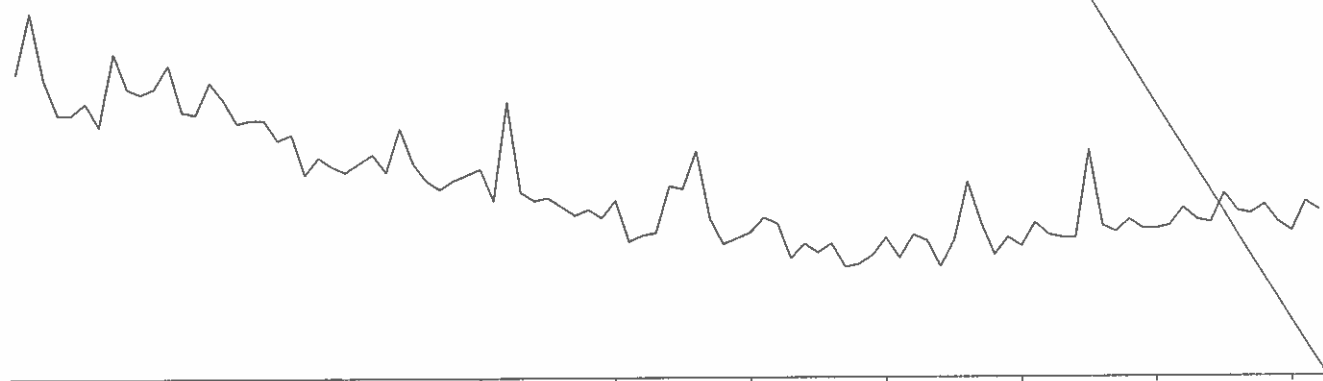


0.050

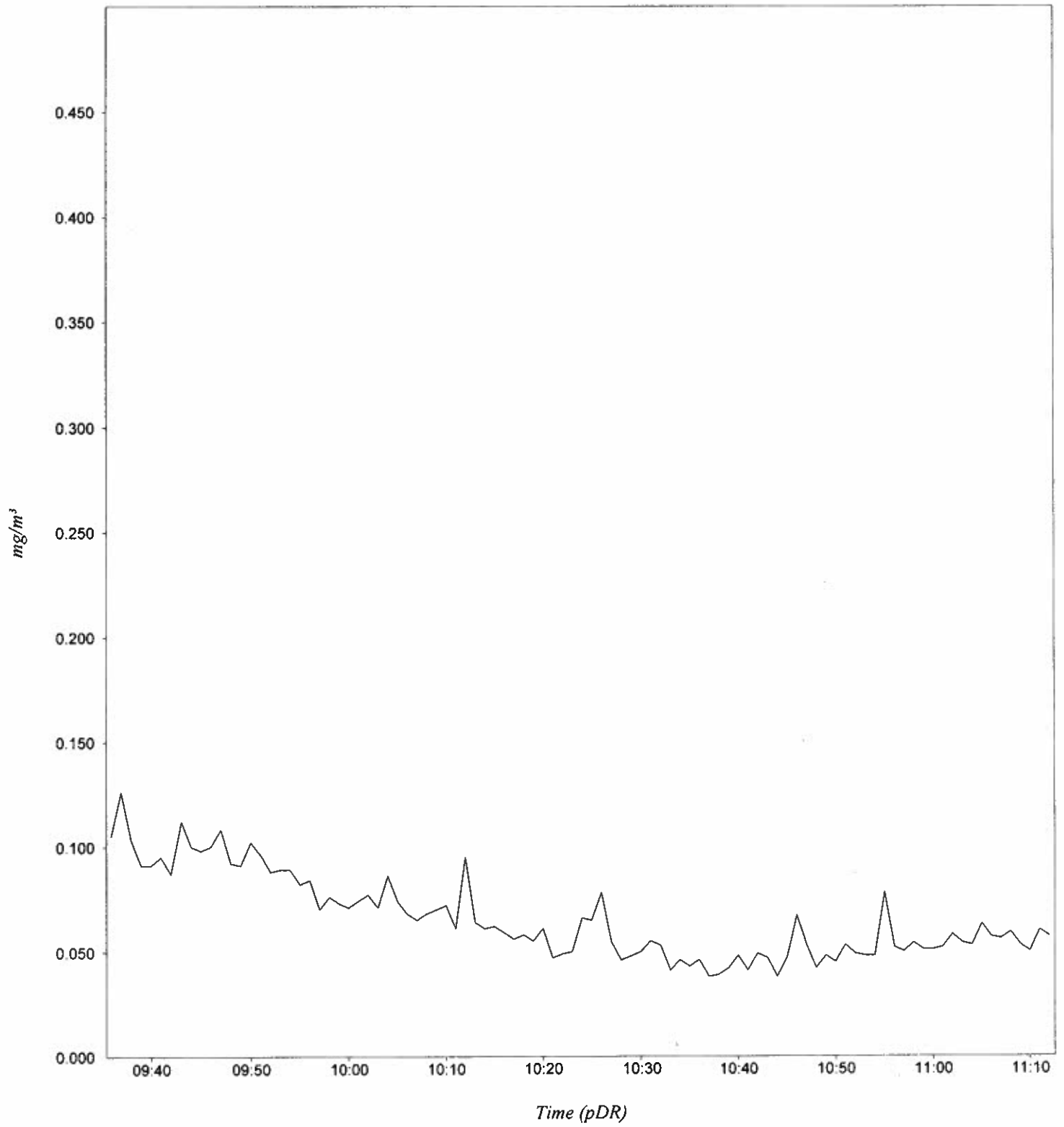
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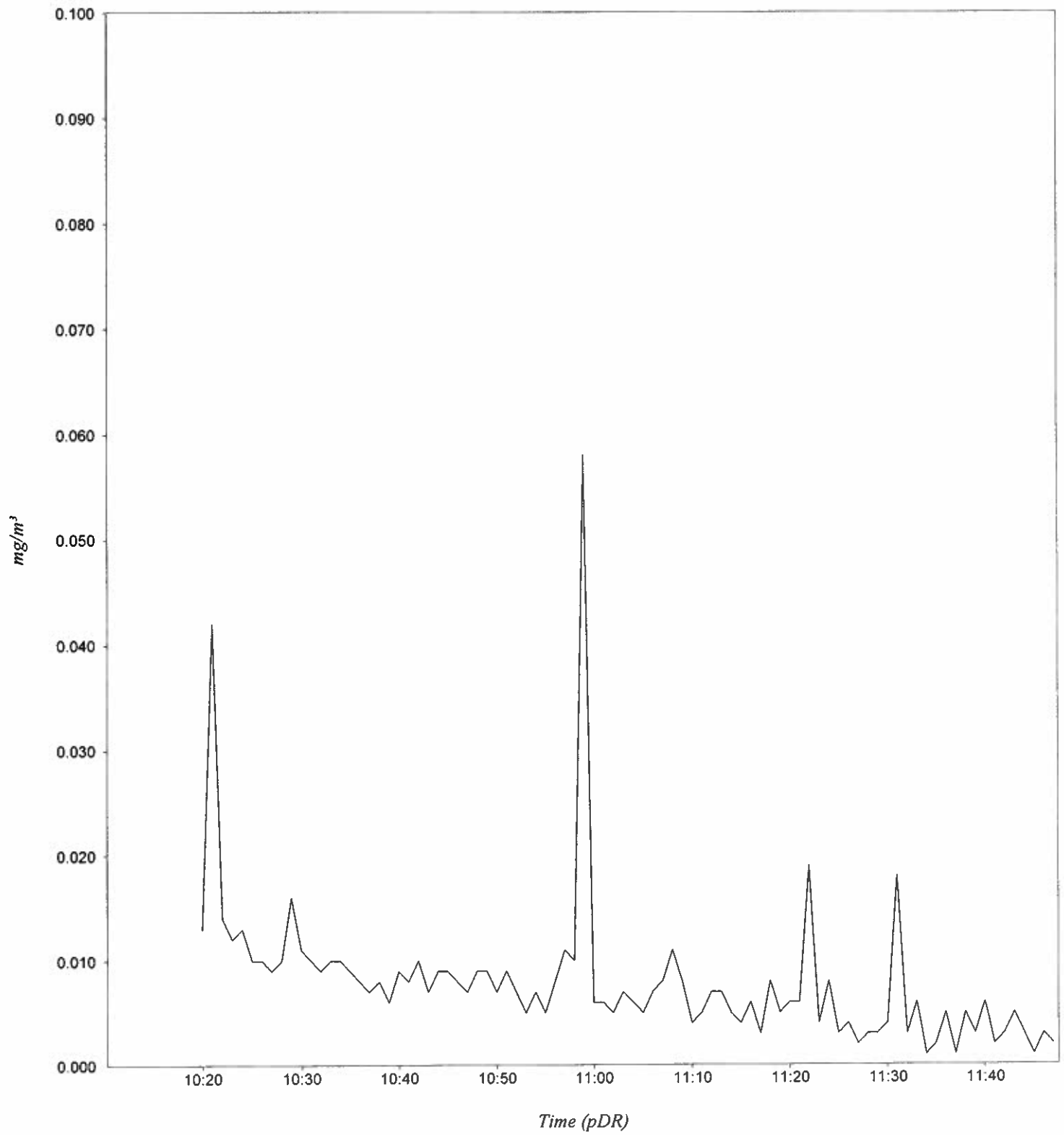
pDR-1000 / Tag # 11 / Start time: Jun 05, 07:38:02 / page 2

mg/m³



Time (pDR)

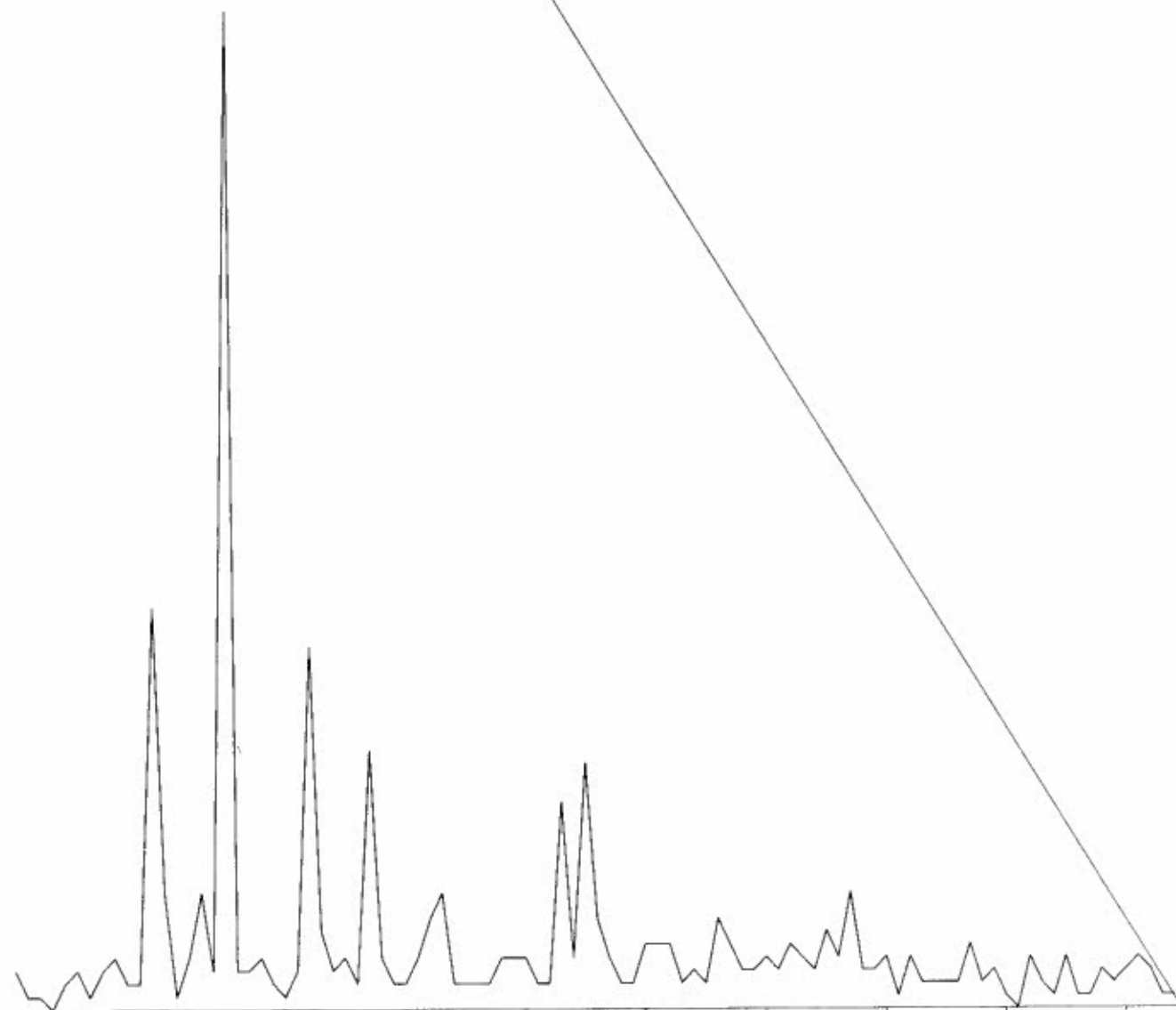




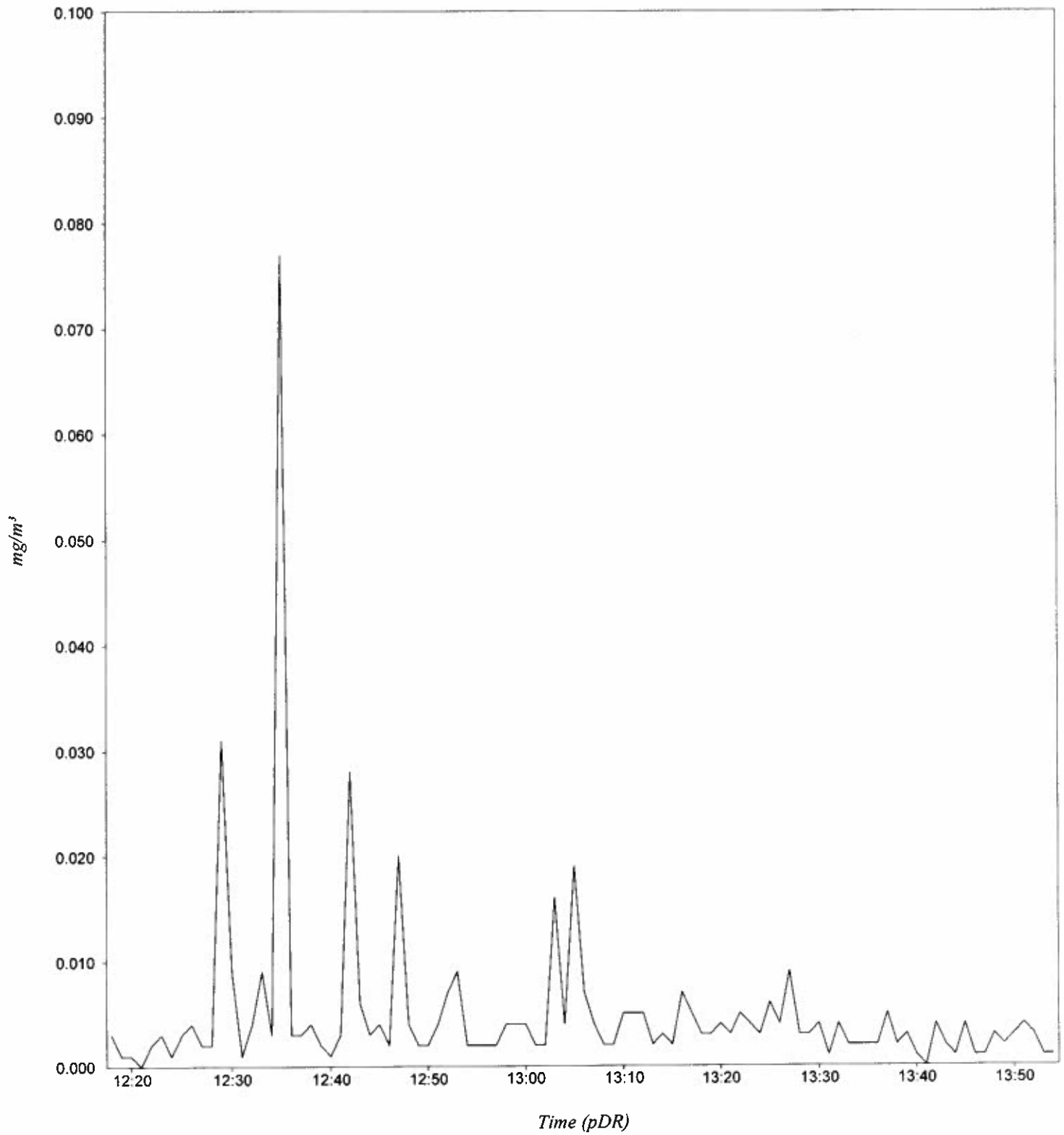
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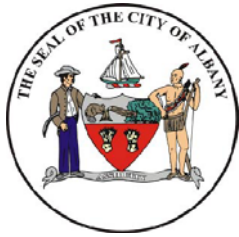
pDR-1000 / Tag # 12 / Start time: Jun 07, 10:18:31 / page 2

mg/m³



Time (pDR)





Albany Community Development Agency

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APPENDIX

B

SRA Photographs

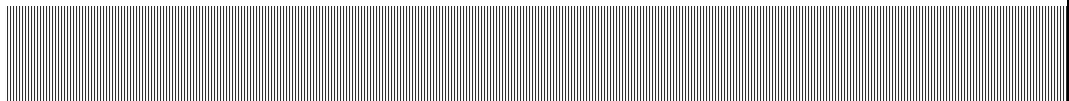




PHOTO 1. Southerly view of UST at SRA-1.



PHOTO 2. Southerly view of UST removal at SRA-1.



PHOTO 3. Northerly view of SRA-1.



PHOTO 4. Easterly view of SRA-1.



PHOTO 5. Easterly view of SRA-1.



PHOTO 6. Southeasterly view of backfilling at SRA-1.



PHOTO 7. Southeasterly view of SRA-2.



PHOTO 8. Northeasterly view of concrete foundation at SRA-2.



PHOTO 9. Southwesterly view of SRA-2.



PHOTO 10. Northerly view of removal of concrete foundation at SRA-2.



PHOTO 11. Northeasterly view of removal of concrete foundation at SRA-2.



PHOTO 12. Northerly view of SRA-2 prior to sheeting placement.



PHOTO 13. Northeasterly view of sheeting placement at SRA-2.



PHOTO 14. Southwesterly view of sheeting at SRA-2.



PHOTO 15. Southwesterly view of SRA-2 excavation within sheeting.



PHOTO 16. Southeasterly view of maximum excavation depth within sheeting at SRA-2.



PHOTO 17. Northeasterly view placing stone backfill at SRA-2.



PHOTO 18. Northeasterly view of stone backfill at SRA-2.



PHOTO 19. Southerly view of backfilling at SRA-2.



PHOTO 20. Southerly view of sheeting removal at SRA-2.



PHOTO 21. Southerly view of final backfilling and grading at SRA-2.



PHOTO 22. Southerly view of final backfilling and grading at SRA-2.

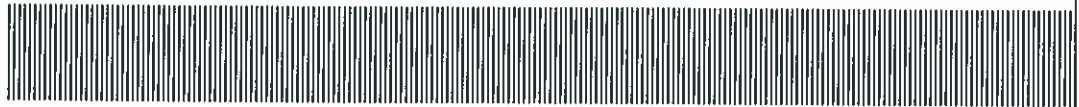


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APPENDIX

C

SRA Supporting Documentation





Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2007

FOR: Attn: Mr Mike Craft
MC Environmental Services
526 Queensbury Avenue
Queensbury, NY 12804

Sample Information

Matrix: SOIL
Location Code: MCES
Rush Request:
P.O.#:

Custody Information

Collected by:
Received by: LP
Analyzed by: see "By" below

Date

05/14/07
05/16/07

Time

0:00
10:10

Laboratory Data

SDG I.D.: GAJ14354

Phoenix I.D.: AJ14354

Client ID: ACOA-HENGRY JOHNSON BLVD BACKFILL MATERIAL

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.32	0.32	mg/Kg	05/17/07		EKT	SW6010
Aluminum	8340	3	mg/Kg	05/21/07		EK	SW6010
Arsenic	2.65	0.64	mg/Kg	05/17/07		EKT	SW6010
Barium	46.7	0.32	mg/Kg	05/17/07		EKT	SW6010
Beryllium	< 0.26	0.26	mg/Kg	05/17/07		EKT	SW6010
Calcium	4000	0.64	mg/Kg	05/17/07		EKT	6010/200.7
Cadmium	< 0.32	0.32	mg/Kg	05/17/07		EKT	SW6010
Cobalt	6.21	0.32	mg/Kg	05/17/07		EKT	SW6010
Chromium	9.25	0.32	mg/Kg	05/17/07		EKT	SW6010
Copper	18.1	0.32	mg/kg	05/17/07		EKT	SW6010
Iron	19700	2.50	mg/Kg	05/17/07		EK	SW6010
Mercury - Soil	< 0.10	0.10	mg/kg	05/17/07		RS	SW-7471
Potassium	1310	0.64	mg/Kg	05/17/07		EKT	SW6010
Magnesium	3600	0.64	mg/Kg	05/17/07		EKT	SW6010
Manganese	532	2.5	mg/Kg	05/17/07		EK	SW6010
Sodium	41.9	0.64	mg/Kg	05/17/07		EKT	SW6010
Nickel	14	0.32	mg/Kg	05/17/07		EKT	SW6010
Lead	6.62	0.32	mg/Kg	05/17/07		EKT	SW6010
Antimony	< 0.32	0.32	mg/Kg	05/17/07		EKT	SW6010
Selenium	< 1.6	1.6	mg/Kg	05/17/07		EKT	SW6010
Thallium	< 3.2	3.2	mg/Kg	05/17/07		EKT	SW6010
Vanadium	11.7	0.32	mg/Kg	05/17/07		EKT	6010
Zinc	45.4	0.32	mg/Kg	05/17/07		EKT	SW6010
Percent Solid	93		%	05/16/07		C/U/AM	E160.3
Mercury Digestion	Completed			05/17/07		H	SW7471

Parameter	Result	RL	Units	Date	Time	By	Reference
Soil Extraction for PCB	Completed			05/16/07		CUS/E	SW3545
Soil Ext. for Pesticide	Completed			05/16/07		CUS/E	3545
Soil Ext. for Semi- Vol	Completed			05/16/07		CUS/E	SW3545
Total Metals Digest	Completed			05/16/07		AG	SW846 - 3050

Polychlorinated Biphenyls

PCB-1016	ND	430	ug/Kg	05/21/07		MH	SW 8082
PCB-1221	ND	430	ug/Kg	05/21/07		MH	SW 8082
PCB-1232	ND	430	ug/Kg	05/21/07		MH	SW 8082
PCB-1242	ND	430	ug/Kg	05/21/07		MH	SW 8082
PCB-1248	ND	430	ug/Kg	05/21/07		MH	SW 8082
PCB-1254	ND	430	ug/Kg	05/21/07		MH	SW 8082
PCB-1260	ND	430	ug/Kg	05/21/07		MH	SW 8082
PCB-1262	ND	430	ug/Kg	05/21/07		MH	SW 8082
PCB-1268	ND	430	ug/Kg	05/21/07		MH	SW 8082

QA/QC Surrogates

% DCBP (Surrogate Rec)	76		%	05/21/07		MH	SW 8082
% TCMX (Surrogate Rec)	63		%	05/21/07		MH	SW 8082

Pesticides - Soil

4,4' -DDD	ND	32	ug/Kg	05/17/07		MH	SW8081
4,4' -DDE	ND	32	ug/Kg	05/17/07		MH	SW8081
4,4' -DDT	ND	32	ug/Kg	05/17/07		MH	SW8081
a-BHC	ND	16	ug/Kg	05/17/07		MH	SW8081
Alachlor	ND	16	ug/Kg	05/17/07		MH	SW8081
Aldrin	ND	7	ug/Kg	05/17/07		MH	SW8081
b-BHC	ND	16	ug/Kg	05/17/07		MH	SW8081
Chlordane	ND	66	ug/Kg	05/17/07		MH	SW8081
d-BHC	ND	16	ug/Kg	05/17/07		MH	SW8081
Dieldrin	ND	7.0	ug/Kg	05/17/07		MH	SW8081
Endosulfan I	ND	16	ug/Kg	05/17/07		MH	SW8081
Endosulfan II	ND	32	ug/Kg	05/17/07		MH	SW8081
Endosulfan sulfate	ND	32	ug/Kg	05/17/07		MH	SW8081
Endrin	ND	32	ug/Kg	05/17/07		MH	SW8081
Endrin aldehyde	ND	32	ug/Kg	05/17/07		MH	SW8081
Endrin ketone	ND	32	ug/Kg	05/17/07		MH	SW8081
g-BHC	ND	16	ug/Kg	05/17/07		MH	SW8081
Heptachlor	ND	13	ug/Kg	05/17/07		MH	SW8081
Heptachlor epoxide	ND	16	ug/Kg	05/17/07		MH	SW8081
Methoxychlor	ND	160	ug/Kg	05/17/07		MH	SW8081
Toxaphene	ND	160	ug/Kg	05/17/07		MH	SW8081

QA/QC Surrogates

% DCBP (Surrogate Rec)	67		%	05/17/07		MH	SW8081
% TCMX (Surrogate Rec)	63		%	05/17/07		MH	SW8081

Volatiles

1,1,1,2-Tetrachloroethane	ND	5	ug/Kg	05/16/07		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
1,1,1-Trichloroethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,1,2-Trichloroethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,1-Dichloroethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,1-Dichloroethene	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,1-Dichloropropene	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,2,3-Trichloropropane	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,2-Dichlorobenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,2-Dichloroethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,2-Dichloropropane	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,3-Dichlorobenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,3-Dichloropropane	ND	5	ug/Kg	05/16/07		R/J	SW8260
1,4-Dichlorobenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
2,2-Dichloropropane	ND	5	ug/Kg	05/16/07		R/J	SW8260
2-Chlorotoluene	ND	5	ug/Kg	05/16/07		R/J	SW8260
2-Hexanone	ND	25	ug/Kg	05/16/07		R/J	SW8260
2-Isopropyltoluene	ND	5	ug/Kg	05/16/07		R/J	SW8260
4-Chlorotoluene	ND	5	ug/Kg	05/16/07		R/J	SW8260
4-Methyl-2-pentanone	ND	25	ug/Kg	05/16/07		R/J	SW8260
Acetone	ND	100	ug/Kg	05/16/07		R/J	SW8260
Acrylonitrile	ND	10	ug/Kg	05/16/07		R/J	SW8260
Benzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Bromobenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Bromochloromethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Bromodichloromethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Bromoform	ND	5	ug/Kg	05/16/07		R/J	SW8260
Bromomethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Carbon Disulfide	ND	5	ug/Kg	05/16/07		R/J	SW8260
Carbon tetrachloride	ND	5	ug/Kg	05/16/07		R/J	SW8260
Chlorobenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Chloroethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Chloroform	ND	5	ug/Kg	05/16/07		R/J	SW8260
Chloromethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	5	ug/Kg	05/16/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Dibromochloromethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Dibromoethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Dibromomethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Dichlorodifluoromethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Ethylbenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Hexachlorobutadiene	ND	5	ug/Kg	05/16/07		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Isopropylbenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
m&p-Xylene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	05/16/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	05/16/07		R/J	SW8260
Methylene chloride	ND	5	ug/Kg	05/16/07		R/J	SW8260
n-Butylbenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
n-Propylbenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Naphthalene	ND	5	ug/Kg	05/16/07		R/J	SW8260
o-Xylene	ND	5	ug/Kg	05/16/07		R/J	SW8260
p-Isopropyltoluene	ND	5	ug/Kg	05/16/07		R/J	SW8260
sec-Butylbenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Styrene	ND	5	ug/Kg	05/16/07		R/J	SW8260
tert-Butylbenzene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Tetrachloroethene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	05/16/07		R/J	SW8260
Toluene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Total Xylenes	ND	5	ug/Kg	05/16/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	5	ug/Kg	05/16/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	5	ug/Kg	05/16/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	05/16/07		R/J	SW8260
Trichloroethene	ND	5	ug/Kg	05/16/07		R/J	SW8260
Trichlorofluoromethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Trichlorotrifluoroethane	ND	5	ug/Kg	05/16/07		R/J	SW8260
Vinyl chloride	ND	5	ug/Kg	05/16/07		R/J	SW8260
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	114		%	05/16/07		R/J	SW8260
% Bromofluorobenzene	64*		%	05/16/07		R/J	SW8260
% Dibromofluoromethane	116		%	05/16/07		R/J	SW8260
% Toluene-d8	90		%	05/16/07		R/J	SW8260

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	350	ug/Kg	05/17/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	350	ug/Kg	05/17/07		HM	SW 8270
1,2-Dichlorobenzene	ND	350	ug/Kg	05/17/07		HM	SW 8270
1,3-Dichlorobenzene	ND	350	ug/Kg	05/17/07		HM	SW 8270
1,4-Dichlorobenzene	ND	350	ug/Kg	05/17/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	350	ug/Kg	05/17/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	350	ug/Kg	05/17/07		HM	SW 8270
2,4-Dichlorophenol	ND	350	ug/Kg	05/17/07		HM	SW 8270
2,4-Dimethylphenol	ND	350	ug/Kg	05/17/07		HM	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	05/17/07		HM	SW 8270
2,4-Dinitrotoluene	ND	350	ug/Kg	05/17/07		HM	SW 8270
2,6-Dinitrotoluene	ND	350	ug/Kg	05/17/07		HM	SW 8270
2-Chloronaphthalene	ND	350	ug/Kg	05/17/07		HM	SW 8270
2-Chlorophenol	ND	350	ug/Kg	05/17/07		HM	SW 8270
2-Methylnaphthalene	ND	350	ug/Kg	05/17/07		HM	SW 8270

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	350	ug/Kg	05/17/07		HM	SW 8270
2-Nitroaniline	ND	560	ug/Kg	05/17/07		HM	SW 8270
2-Nitrophenol	ND	350	ug/Kg	05/17/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	05/17/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	420	ug/Kg	05/17/07		HM	SW 8270
3-Nitroaniline	ND	560	ug/Kg	05/17/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	05/17/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	05/17/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	420	ug/Kg	05/17/07		HM	SW 8270
4-Chloroaniline	ND	420	ug/Kg	05/17/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	350	ug/Kg	05/17/07		HM	SW 8270
4-Nitroaniline	ND	560	ug/Kg	05/17/07		HM	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	05/17/07		HM	SW 8270
Acenaphthene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Acenaphthylene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Acetophenone	ND	350	ug/Kg	05/17/07		HM	SW 8270
Aniline	ND	1000	ug/Kg	05/17/07		HM	SW 8270
Anthracene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Azobenzene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Benz(a)anthracene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Benzidine	ND	350	ug/Kg	05/17/07		HM	SW 8270
Benzo(a)pyrene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Benzo(b)fluoranthene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Benzo(ghi)perylene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Benzo(k)fluoranthene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Benzoic acid	ND	1000	ug/Kg	05/17/07		HM	SW 8270
Benzyl butyl phthalate	ND	350	ug/Kg	05/17/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	350	ug/Kg	05/17/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	05/17/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	350	ug/Kg	05/17/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	350	ug/Kg	05/17/07		HM	SW 8270
Carbazole	ND	1000	ug/Kg	05/17/07		HM	SW 8270
Chrysene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Di-n-butylphthalate	ND	350	ug/Kg	05/17/07		HM	SW 8270
Di-n-octylphthalate	ND	350	ug/Kg	05/17/07		HM	SW 8270
Dibenz(a,h)anthracene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Dibenzofuran	ND	350	ug/Kg	05/17/07		HM	SW 8270
Diethyl phthalate	ND	350	ug/Kg	05/17/07		HM	SW 8270
Dimethylphthalate	ND	350	ug/Kg	05/17/07		HM	SW 8270
Fluoranthene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Fluorene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Hexachlorobenzene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Hexachlorobutadiene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Hexachloroethane	ND	350	ug/Kg	05/17/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	ND	350	ug/Kg	05/17/07		HM	SW 8270

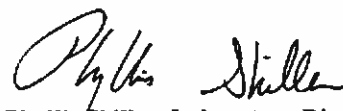
Parameter	Result	RL	Units	Date	Time	By	Reference
Isophorone	ND	350	ug/Kg	05/17/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	350	ug/Kg	05/17/07		HM	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	05/17/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	05/17/07		HM	SW 8270
Naphthalene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Nitrobenzene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Pentachlorophenol	ND	350	ug/Kg	05/17/07		HM	SW 8270
Phenanthrene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Phenol	ND	350	ug/Kg	05/17/07		HM	SW 8270
Pyrene	ND	350	ug/Kg	05/17/07		HM	SW 8270
Pyridine	ND	350	ug/Kg	05/17/07		HM	SW 8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	65		%	05/17/07		HM	SW 8270
% 2-Fluorobiphenyl	64		%	05/17/07		HM	SW 8270
% 2-Fluorophenol	52		%	05/17/07		HM	SW 8270
% Nitrobenzene-d5	62		%	05/17/07		HM	SW 8270
% Phenol-d5	56		%	05/17/07		HM	SW 8270
% Terphenyl-d14	66		%	05/17/07		HM	SW 8270

Comments:

*Poor surrogate recovery was observed.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit


Phyllis Shiller, Laboratory Director
May 23, 2007



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2007

FOR: Attn: Mr Mike Craft
MC Environmental Services
526 Queensbury Avenue
Queensbury, NY 12804

Sample Information

Matrix: SOIL
Location Code: MCES
Rush Request:
P.O.#:

Custody Information

Collected by:
Received by: LP
Analyzed by: see "By" below

Date

05/14/07
05/16/07

Time

0:00
10:10

Laboratory Data

SDG I.D.: GAJ14354
Phoenix I.D.: AJ14355

Client ID: ACOA-HENGRY JOHNSON BLVD SRA-1 EXCAVATION

Parameter	Result	RL	Units	Date	Time	By	Reference
TCLP Silver	< 0.01	0.01	mg/L	05/17/07		EK	E1311/SW6010
TCLP Arsenic	0.011	0.01	mg/L	05/17/07		EK	E1311/SW6010
TCLP Barium	0.308	0.01	mg/L	05/17/07		EK	E1311/SW6010
TCLP Cadmium	< 0.005	0.005	mg/L	05/17/07		EK	E1311/SW6010
TCLP Chromium	< 0.01	0.01	mg/L	05/17/07		EK	E1311/SW6010
TCLP Lead	0.523	0.015	mg/L	05/17/07		EK	SW1311/6010
TCLP Selenium	< 0.05	0.05	mg/L	05/17/07		EK	E1311/SW6010
TCLP Mercury	< 0.001	0.001	mg/L	05/17/07		RS	E1311/E245.1
Percent Solid	83		%	05/17/07		C/U/A	E160.3
Soil Extraction for PCB	Completed			05/16/07		CUS/E	SW3545
TCLP Digestion Mercury	Completed			05/17/07		H	E1311/7470
TCLP Herbicides Extraction	Completed			05/17/07		O/E	SW8150 Mod
TCLP Extraction for Metals	Completed			05/16/07		H	EPA 1311
TCLP Extraction for Organics	Completed			05/16/07		H	1311
TCLP Pesticides Extraction	Completed			05/21/07		O	SW3510/3520
TCLP Semi-Volatile Extraction	Completed			05/17/07		O/KQ	SW3510/3520
TCLP Extraction Volatiles.	Completed			05/16/07		H	EPA 1311
TCLP Metals Digestion	Completed			05/17/07		H	SW846 - 3005

Polychlorinated Biphenyls

PCB-1016	ND	470	ug/Kg	05/17/07		MH	SW 8082
PCB-1221	ND	470	ug/Kg	05/17/07		MH	SW 8082
PCB-1232	ND	470	ug/Kg	05/17/07		MH	SW 8082
PCB-1242	ND	470	ug/Kg	05/17/07		MH	SW 8082
PCB-1248	ND	470	ug/Kg	05/17/07		MH	SW 8082
PCB-1254	ND	470	ug/Kg	05/17/07		MH	SW 8082

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1260	ND	470	ug/Kg	05/17/07		MH	SW 8082
PCB-1262	ND	470	ug/Kg	05/17/07		MH	SW 8082
PCB-1268	ND	470	ug/Kg	05/17/07		MH	SW 8082
<u>QA/QC Surrogates</u>							
% DCBP (Surrogate Rec)	37		%	05/17/07		MH	SW 8082
% TCMX (Surrogate Rec)	32		%	05/17/07		MH	SW 8082
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	1.0	ug/L	05/22/07		KCA	SW8151
2,4-D	ND	5.0	ug/L	05/22/07		KCA	SW8151
<u>QA/QC Surrogates</u>							
% DCAA (Surrogate Rec)	91		%	05/22/07		KCA	SW8151
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	0.1	ug/L	05/22/07		MH	SW 8081
4,4' -DDE	ND	0.1	ug/L	05/22/07		MH	SW 8081
4,4' -DDT	ND	0.1	ug/L	05/22/07		MH	SW 8081
a-BHC	ND	0.05	ug/L	05/22/07		MH	SW 8081
Alachlor	ND	0.05	ug/L	05/22/07		MH	SW 8081
Aldrin	ND	0.05	ug/L	05/22/07		MH	SW 8081
b-BHC	ND	0.05	ug/L	05/22/07		MH	SW 8081
Chlordane	ND	0.3	ug/L	05/22/07		MH	SW 8081
d-BHC	ND	0.05	ug/L	05/22/07		MH	SW 8081
Dieldrin	ND	0.1	ug/L	05/22/07		MH	SW 8081
Endosulfan I	ND	0.05	ug/L	05/22/07		MH	SW 8081
Endosulfan II	ND	0.1	ug/L	05/22/07		MH	SW 8081
Endosulfan Sulfate	ND	0.1	ug/L	05/22/07		MH	SW 8081
Endrin	ND	0.1	ug/L	05/22/07		MH	SW 8081
Endrin Aldehyde	ND	0.1	ug/L	05/22/07		MH	SW 8081
g-BHC (Lindane)	ND	0.05	ug/L	05/22/07		MH	SW 8081
Heptachlor	ND	0.05	ug/L	05/22/07		MH	SW 8081
Heptachlor epoxide	ND	0.05	ug/L	05/22/07		MH	SW 8081
Methoxychlor	ND	0.2	ug/L	05/22/07		MH	SW 8081
Toxaphene	ND	1.0	ug/L	05/22/07		MH	SW 8081
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	114		%	05/22/07		MH	SW 8081
%TCMX (Surrogate Rec)	98		%	05/22/07		MH	SW 8081
<u>TCLP Volatiles</u>							
1,1-Dichloroethylene	ND	50	ug/L	05/17/07		RM	SW 8260
1,2-Dichloroethane	ND	50	ug/L	05/17/07		RM	SW 8260
Benzene	ND	50	ug/L	05/17/07		RM	SW 8260
Carbon tetrachloride	ND	50	ug/L	05/17/07		RM	SW 8260
Chlorobenzene	ND	50	ug/L	05/17/07		RM	SW 8260
Chloroform	ND	50	ug/L	05/17/07		RM	SW 8260
Methyl ethyl ketone	ND	50	ug/L	05/17/07		RM	SW 8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Tetrachloroethene	ND	50	ug/L	05/17/07		RM	SW 8260
Trichloroethene	ND	50	ug/L	05/17/07		RM	SW 8260
Vinyl chloride	ND	50	ug/L	05/17/07		RM	SW 8260
<u>QA/QC Surrogates</u>							
%4-Bromofluorobenzene (Surrogate)	94		%	05/17/07		RM	SW 8260
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	100	ug/L	05/18/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	100	ug/L	05/18/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	100	ug/L	05/18/07		HM	SW 8270
2,4-Dinitrotoluene	ND	100	ug/L	05/18/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	100	ug/L	05/18/07		HM	SW 8270
3&4-Methylphenol (m&p-Cresol)	ND	100	ug/L	05/18/07		HM	SW 8270
Hexachlorobenzene	ND	100	ug/L	05/18/07		HM	SW 8270
Hexachlorobutadiene	ND	100	ug/L	05/18/07		HM	SW 8270
Hexachloroethane	ND	100	ug/L	05/18/07		HM	SW 8270
Nitrobenzene	ND	100	ug/L	05/18/07		HM	SW 8270
Pentachlorophenol	ND	500	ug/L	05/18/07		HM	SW 8270
Pyridine	ND	100	ug/L	05/18/07		HM	SW 8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	110		%	05/18/07		HM	SW 8270
% 2-Fluorobiphenyl	99		%	05/18/07		HM	SW 8270
% 2-Fluorophenol	98		%	05/18/07		HM	SW 8270
% Nitrobenzene-d5	99		%	05/18/07		HM	SW 8270
% Phenol-d5	93		%	05/18/07		HM	SW 8270
% Terphenyl-d14	34		%	05/18/07		HM	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit


 Phyllis Shiller, Laboratory Director
 May 23, 2007



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2007

FOR: Attn: Mr Mike Craft
MC Environmental Services
526 Queensbury Avenue
Queensbury, NY 12804

Sample Information

Matrix: SOIL
Location Code: MCES
Rush Request:
P.O.#:

Custody Information

Collected by:
Received by: LP
Analyzed by: see "By" below

Date

05/14/07
05/16/07

Time

0:00
10:10

Laboratory Data

SDG I.D.: GAJ14354
Phoenix I.D.: AJ14356

Client ID: ACOA-HENGRY JOHNSON BLVD SRA-2 EXCAVATION

Parameter	Result	RL	Units	Date	Time	By	Reference
TCLP Silver	< 0.01	0.01	mg/L	05/17/07		EK	E1311/SW6010
TCLP Arsenic	0.012	0.01	mg/L	05/17/07		EK	E1311/SW6010
TCLP Barium	0.563	0.01	mg/L	05/17/07		EK	E1311/SW6010
TCLP Cadmium	< 0.005	0.005	mg/L	05/17/07		EK	E1311/SW6010
TCLP Chromium	< 0.01	0.01	mg/L	05/17/07		EK	E1311/SW6010
TCLP Lead	< 0.015	0.015	mg/L	05/17/07		EK	SW1311/6010
TCLP Selenium	< 0.05	0.05	mg/L	05/17/07		EK	E1311/SW6010
TCLP Mercury	< 0.001	0.001	mg/L	05/17/07		RS	E1311/E245.1
Percent Solid	80		%	05/17/07		C/U/A	E160.3
Soil Extraction for PCB	Completed			05/16/07		CUS/E	SW3545
TCLP Digestion Mercury	Completed			05/17/07		H	E1311/7470
TCLP Herbicides Extraction	Completed			05/17/07		O/E	SW8150 Mod
TCLP Extraction for Metals	Completed			05/16/07		H	EPA 1311
TCLP Extraction for Organics	Completed			05/16/07		H	1311
TCLP Pesticides Extraction	Completed			05/21/07		O	SW3510/3520
TCLP Semi-Volatile Extraction	Completed			05/17/07		O/KQ	SW3510/3520
TCLP Extraction Volatiles.	Completed			05/16/07		H	EPA 1311
TCLP Metals Digestion	Completed			05/17/07		H	SW846 - 3005

Polychlorinated Biphenyls

PCB-1016	ND	500	ug/Kg	05/17/07		MH	SW 8082
PCB-1221	ND	500	ug/Kg	05/17/07		MH	SW 8082
PCB-1232	ND	500	ug/Kg	05/17/07		MH	SW 8082
PCB-1242	ND	500	ug/Kg	05/17/07		MH	SW 8082
PCB-1248	ND	500	ug/Kg	05/17/07		MH	SW 8082
PCB-1254	ND	500	ug/Kg	05/17/07		MH	SW 8082

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1260	ND	500	ug/Kg	05/17/07		MH	SW 8082
PCB-1262	ND	500	ug/Kg	05/17/07		MH	SW 8082
PCB-1268	ND	500	ug/Kg	05/17/07		MH	SW 8082
<u>QA/QC Surrogates</u>							
% DCBP (Surrogate Rec)	71		%	05/17/07		MH	SW 8082
% TCMX (Surrogate Rec)	80		%	05/17/07		MH	SW 8082
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	1.0	ug/L	05/22/07		KCA	SW8151
2,4-D	ND	5.0	ug/L	05/22/07		KCA	SW8151
<u>QA/QC Surrogates</u>							
% DCAA (Surrogate Rec)	101		%	05/22/07		KCA	SW8151
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	0.1	ug/L	05/22/07		MH	SW 8081
4,4' -DDE	ND	0.1	ug/L	05/22/07		MH	SW 8081
4,4' -DDT	ND	0.1	ug/L	05/22/07		MH	SW 8081
a-BHC	ND	0.05	ug/L	05/22/07		MH	SW 8081
Alachlor	ND	0.05	ug/L	05/22/07		MH	SW 8081
Aldrin	ND	0.05	ug/L	05/22/07		MH	SW 8081
b-BHC	ND	0.05	ug/L	05/22/07		MH	SW 8081
Chlordane	ND	0.3	ug/L	05/22/07		MH	SW 8081
d-BHC	ND	0.05	ug/L	05/22/07		MH	SW 8081
Dieldrin	ND	0.1	ug/L	05/22/07		MH	SW 8081
Endosulfan I	ND	0.05	ug/L	05/22/07		MH	SW 8081
Endosulfan II	ND	0.1	ug/L	05/22/07		MH	SW 8081
Endosulfan Sulfate	ND	0.1	ug/L	05/22/07		MH	SW 8081
Endrin	ND	0.1	ug/L	05/22/07		MH	SW 8081
Endrin Aldehyde	ND	0.1	ug/L	05/22/07		MH	SW 8081
g-BHC (Lindane)	ND	0.05	ug/L	05/22/07		MH	SW 8081
Heptachlor	ND	0.05	ug/L	05/22/07		MH	SW 8081
Heptachlor epoxide	ND	0.05	ug/L	05/22/07		MH	SW 8081
Methoxychlor	ND	0.2	ug/L	05/22/07		MH	SW 8081
Toxaphene	ND	1.0	ug/L	05/22/07		MH	SW 8081
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	83		%	05/22/07		MH	SW 8081
%TCMX (Surrogate Rec)	77		%	05/22/07		MH	SW 8081
<u>TCLP Volatiles</u>							
1,1-Dichloroethylene	ND	50	ug/L	05/17/07		RM	SW 8260
1,2-Dichloroethane	ND	50	ug/L	05/17/07		RM	SW 8260
Benzene	ND	50	ug/L	05/17/07		RM	SW 8260
Carbon tetrachloride	ND	50	ug/L	05/17/07		RM	SW 8260
Chlorobenzene	ND	50	ug/L	05/17/07		RM	SW 8260
Chloroform	ND	50	ug/L	05/17/07		RM	SW 8260
Methyl ethyl ketone	ND	50	ug/L	05/17/07		RM	SW 8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Tetrachloroethene	ND	50	ug/L	05/17/07		RM	SW 8260
Trichloroethene	ND	50	ug/L	05/17/07		RM	SW 8260
Vinyl chloride	ND	50	ug/L	05/17/07		RM	SW 8260
<u>QA/QC Surrogates</u>							
%4-Bromofluorobenzene (Surrogate)	95		%	05/17/07		RM	SW 8260

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	100	ug/L	05/18/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	100	ug/L	05/18/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	100	ug/L	05/18/07		HM	SW 8270
2,4-Dinitrotoluene	ND	100	ug/L	05/18/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	100	ug/L	05/18/07		HM	SW 8270
3&4-Methylphenol (m&p-Cresol)	ND	100	ug/L	05/18/07		HM	SW 8270
Hexachlorobenzene	ND	100	ug/L	05/18/07		HM	SW 8270
Hexachlorobutadiene	ND	100	ug/L	05/18/07		HM	SW 8270
Hexachloroethane	ND	100	ug/L	05/18/07		HM	SW 8270
Nitrobenzene	ND	100	ug/L	05/18/07		HM	SW 8270
Pentachlorophenol	ND	500	ug/L	05/18/07		HM	SW 8270
Pyridine	ND	100	ug/L	05/18/07		HM	SW 8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	121		%	05/18/07		HM	SW 8270
% 2-Fluorobiphenyl	102		%	05/18/07		HM	SW 8270
% 2-Fluorophenol	103		%	05/18/07		HM	SW 8270
% Nitrobenzene-d5	105		%	05/18/07		HM	SW 8270
% Phenol-d5	106		%	05/18/07		HM	SW 8270
% Terphenyl-d14	68		%	05/18/07		HM	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
 ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller, Laboratory Director
 May 23, 2007

CHAIN OF CUSTODY RECORD

NORTHEAST ANALYTICAL, INC.

2190 Technology Drive, Schenectady, NY 12308
Telephone (518) 346-4592 Fax (518) 381-6055
www.nealab.com information@nealab.com

PAGE 1 OF 1

LR# # <07050171>

DISPOSAL REQUIREMENTS: (To be filled in by Client)

☐ RETURN TO CLIENT

☒ DISPOSAL BY NORTHEAST ANALYTICAL

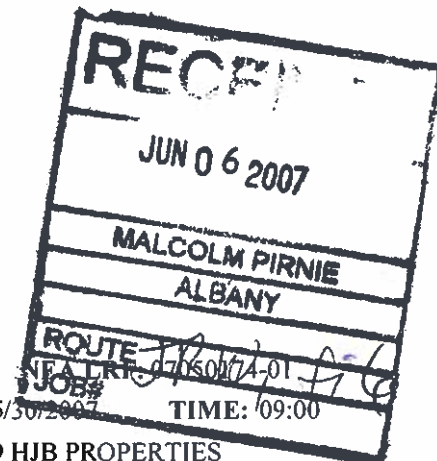
☐ ARCHIVAL BY NORTHEAST ANALYTICAL

Additional charges incurred for disposal (if hazardous) or archival. Call for details.

CLIENT (REPORTS TO BE SENT TO):		PROJECT/PROJECT NAME:		ENTER ANALYSIS AND METHOD NUMBER REQUESTED		PRESERVATIVE KEY	
PROJECT MANAGER:		PROJECT LOCATION (CITY/STATE) ADDRESS:		PRESERVATIVE CODE	BOTTLE TYPE	BOTTLE SIZE	PRESERVATIVE KEY
Malcolm Pirnie, Inc.		4279009 HJB Properties		0	0	0	0 - NONE
Bruce Nelson		Henry Johnson Boulevard			6135	403	1 - HCL
PHONE: 518-782-2100		ALBANY, NY					2 - HNO3
SAMPLED BY: (Please Print)		REQUIRED TURN AROUND TIME:					3 - H2SO4
Jeremy Wiskott		RUSH 24 hour					4 - NaOH
SAMPLING FIRM:		NAME OF COURIER (IF USED):					5 - Zn. Acetate
MPI		NEA					6 - MeOH
		Data Report: ☐ CLP* ☒ Certificates Only					7 - NaHSO4
		LAB					8 - Other
		SAMPLE ID					
		(NEA USE ONLY)					
		GRAB/COMP					
		DATE					
		TIME					
		MATRIX					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
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		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
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		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
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		SRA-1B-8.5					
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		SRA-1W					
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		SRA-1B-8.5					
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		SRA-1B-8.5					
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		SRA-1B-8.5					
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		SRA-1B-8.5					
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		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					
		SRA-1E					
		SRA-1W					
		SRA-1N					
		SRA-1B-8.5					



CERTIFICATE OF ANALYSIS
05/31/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON



CUSTOMER ID: HJB-SRA-1S
MATRIX: SOIL
DATE RECEIVED: 05/30/2007 **TIME:** 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04633
DATE SAMPLED: 05/30/2007 **TIME:** 09:00
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
1,1,1-Trichloroethane	ND	5.01	ug/kg	05/31/2007	U
1,1,2,2-Tetrachloroethane	ND	5.01	ug/kg	05/31/2007	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.01	ug/kg	05/31/2007	U
1,1,2-Trichloroethane	ND	5.01	ug/kg	05/31/2007	U
1,1-Dichloroethane	ND	5.01	ug/kg	05/31/2007	U
1,1-Dichloroethene	ND	5.01	ug/kg	05/31/2007	U
1,2,3-Trichlorobenzene	ND	5.01	ug/kg	05/31/2007	U
1,2,4-Trichlorobenzene	ND	5.01	ug/kg	05/31/2007	U
1,2-Dibromo-3-chloropropane	ND	5.01	ug/kg	05/31/2007	U
1,2-Dibromoethane	ND	5.01	ug/kg	05/31/2007	U
1,2-Dichlorobenzene	ND	5.01	ug/kg	05/31/2007	U
1,2-Dichloroethane	ND	5.01	ug/kg	05/31/2007	U
1,2-Dichloropropane	ND	5.01	ug/kg	05/31/2007	U
1,3-Dichlorobenzene	ND	5.01	ug/kg	05/31/2007	U
1,4-Dichlorobenzene	ND	5.01	ug/kg	05/31/2007	U
2-Butanone	ND	5.01	ug/kg	05/31/2007	U
2-Hexanone	ND	5.01	ug/kg	05/31/2007	U
4-Methyl-2-pentanone	ND	5.01	ug/kg	05/31/2007	U
Acetone	ND	25.1	ug/kg	05/31/2007	U
Benzene	ND	5.01	ug/kg	05/31/2007	U
Bromodichloromethane	ND	5.01	ug/kg	05/31/2007	U
Bromoform	ND	5.01	ug/kg	05/31/2007	U
Bromomethane	ND	5.01	ug/kg	05/31/2007	U
Carbon disulfide	ND	5.01	ug/kg	05/31/2007	U
Carbon tetrachloride	ND	5.01	ug/kg	05/31/2007	U
Chlorobenzene	ND	5.01	ug/kg	05/31/2007	U
Chloroethane	ND	5.01	ug/kg	05/31/2007	U
Chloroform	ND	5.01	ug/kg	05/31/2007	U
Chloromethane	ND	5.01	ug/kg	05/31/2007	U



CERTIFICATE OF ANALYSIS
05/31/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-1S
MATRIX: SOIL
DATE RECEIVED: 05/30/2007 **TIME:** 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04633 **NEA LRF:** 07050174-01
DATE SAMPLED: 05/30/2007 **TIME:** 09:00
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	ND	5.01	ug/kg	05/31/2007	U
cis-1,3-Dichloropropene	ND	5.01	ug/kg	05/31/2007	U
Cyclohexane	ND	5.01	ug/kg	05/31/2007	U
Dibromochloromethane	ND	5.01	ug/kg	05/31/2007	U
Dichlorodifluoromethane	ND	5.01	ug/kg	05/31/2007	U
Ethylbenzene	ND	5.01	ug/kg	05/31/2007	U
Isopropylbenzene	ND	5.01	ug/kg	05/31/2007	U
m&p-Xylene	ND	5.01	ug/kg	05/31/2007	U
Methyl acetate	ND	5.01	ug/kg	05/31/2007	U
Methyl tert-butyl ether	ND	5.01	ug/kg	05/31/2007	U
Methylcyclohexane	ND	5.01	ug/kg	05/31/2007	U
Methylene chloride	ND	25.1	ug/kg	05/31/2007	U
o-Xylene	ND	5.01	ug/kg	05/31/2007	U
Styrene	ND	5.01	ug/kg	05/31/2007	U
Tetrachloroethene	ND	5.01	ug/kg	05/31/2007	U
Toluene	ND	5.01	ug/kg	05/31/2007	U
trans-1,2-Dichloroethene	ND	5.01	ug/kg	05/31/2007	U
trans-1,3-Dichloropropene	ND	5.01	ug/kg	05/31/2007	U
Trichloroethene	ND	5.01	ug/kg	05/31/2007	U
Trichlorofluoromethane	ND	5.01	ug/kg	05/31/2007	U
Vinyl chloride	ND	5.01	ug/kg	05/31/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer
Robert F. Wagner
Laboratory Director

**CERTIFICATE OF ANALYSIS****06/01/2007**

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-1S**MATRIX:** SOIL**DATE RECEIVED:** 05/30/2007 **TIME:** 16:10**SAMPLED BY:** J. WYCKOFF**CUSTOMER PO:** N/A**NEA ID:** AK04633 **NEA LRF:** 07050174-01**DATE SAMPLED:** 05/30/2007 **TIME:** 09:00**PROJECT:** 4279009 HJB PROPERTIES**LOCATION:** ALBANY, NY**LAB ELAP#:** 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
1,1'-Biphenyl	ND	425	ug/kg	06/01/2007	U
2,4,5-Trichlorophenol	ND	425	ug/kg	06/01/2007	U
2,4,6-Trichlorophenol	ND	425	ug/kg	06/01/2007	U
2,4-Dichlorophenol	ND	425	ug/kg	06/01/2007	U
2,4-Dimethylphenol	ND	425	ug/kg	06/01/2007	U
2,4-Dinitrophenol	ND	425	ug/kg	06/01/2007	U
2,4-Dinitrotoluene	ND	425	ug/kg	06/01/2007	U
2,6-Dinitrotoluene	ND	425	ug/kg	06/01/2007	U
2-Chloronaphthalene	ND	425	ug/kg	06/01/2007	U
2-Chlorophenol	ND	425	ug/kg	06/01/2007	U
2-Methylnaphthalene	ND	425	ug/kg	06/01/2007	U
2-Methylphenol	ND	425	ug/kg	06/01/2007	U
2-Nitroaniline	ND	425	ug/kg	06/01/2007	U
2-Nitrophenol	ND	425	ug/kg	06/01/2007	U
3,3'-Dichlorobenzidine	ND	425	ug/kg	06/01/2007	U
3-Nitroaniline	ND	425	ug/kg	06/01/2007	U
4,6-Dinitro-2-methylphenol	ND	425	ug/kg	06/01/2007	U
4-Bromophenyl-phenylether	ND	425	ug/kg	06/01/2007	U
4-Chloro-3-methylphenol	ND	425	ug/kg	06/01/2007	U
4-Chloroaniline	ND	425	ug/kg	06/01/2007	U
4-Chlorophenyl-phenylether	ND	425	ug/kg	06/01/2007	U
4-Methylphenol	ND	425	ug/kg	06/01/2007	U
4-Nitroaniline	ND	425	ug/kg	06/01/2007	U
4-Nitrophenol	ND	425	ug/kg	06/01/2007	U
Acenaphthene	ND	425	ug/kg	06/01/2007	U
Acenaphthylene	ND	425	ug/kg	06/01/2007	U
Acetophenone	ND	425	ug/kg	06/01/2007	U
Anthracene	ND	425	ug/kg	06/01/2007	U
Atrazine	ND	425	ug/kg	06/01/2007	U



CERTIFICATE OF ANALYSIS
06/01/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-1S
MATRIX: SOIL
DATE RECEIVED: 05/30/2007 **TIME:** 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04633 **NEA LRF:** 07050174-01
DATE SAMPLED: 05/30/2007 **TIME:** 09:00
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Benzaldehyde	ND	425	ug/kg	06/01/2007	U
Benzo(a)anthracene	ND	425	ug/kg	06/01/2007	U
Benzo(a)pyrene	ND	425	ug/kg	06/01/2007	U
Benzo(b)fluoranthene	ND	425	ug/kg	06/01/2007	U
Benzo(g,h,i)perylene	ND	425	ug/kg	06/01/2007	U
Benzo(k)fluoranthene	ND	425	ug/kg	06/01/2007	U
bis(2-chloroethoxy)methane	ND	425	ug/kg	06/01/2007	U
bis(2-Chloroisopropyl)ether	ND	425	ug/kg	06/01/2007	U
bis(2-Ethylhexyl)phthalate	ND	425	ug/kg	06/01/2007	U
Butylbenzylphthalate	ND	425	ug/kg	06/01/2007	U
Caprolactam	ND	425	ug/kg	06/01/2007	U
Carbazole	ND	425	ug/kg	06/01/2007	U
Chrysene	ND	425	ug/kg	06/01/2007	U
Di-n-butylphthalate	ND	425	ug/kg	06/01/2007	U
Di-n-octylphthalate	ND	425	ug/kg	06/01/2007	U
Dibenz(a,h)anthracene	ND	425	ug/kg	06/01/2007	U
Dibenzofuran	ND	425	ug/kg	06/01/2007	U
Diethylphthalate	ND	425	ug/kg	06/01/2007	U
Dimethylphthalate	ND	425	ug/kg	06/01/2007	U
Fluoranthene	ND	425	ug/kg	06/01/2007	U
Fluorene	ND	425	ug/kg	06/01/2007	U
Hexachlorobenzene	ND	425	ug/kg	06/01/2007	U
Hexachlorobutadiene	ND	425	ug/kg	06/01/2007	U
Hexachlorocyclopentadiene	ND	425	ug/kg	06/01/2007	U
Hexachloroethane	ND	425	ug/kg	06/01/2007	U
Indeno(1,2,3-cd)pyrene	ND	425	ug/kg	06/01/2007	U
Isophorone	ND	425	ug/kg	06/01/2007	U
N-Nitroso-di-n-propylamine	ND	425	ug/kg	06/01/2007	U
N-Nitrosodiphenylamine	ND	425	ug/kg	06/01/2007	U

**CERTIFICATE OF ANALYSIS****06/01/2007**

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-1S**MATRIX:** SOIL**DATE RECEIVED:** 05/30/2007 **TIME:** 16:10**SAMPLED BY:** J. WYCKOFF**CUSTOMER PO:** N/A**NEA ID:** AK04633 **NEA LRF:** 07050174-01**DATE SAMPLED:** 05/30/2007 **TIME:** 09:00**PROJECT:** 4279009 HJB PROPERTIES**LOCATION:** ALBANY, NY**LAB ELAP#:** 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Naphthalene	ND	425	ug/kg	06/01/2007	U
Nitrobenzene	ND	425	ug/kg	06/01/2007	U
Pentachlorophenol	ND	425	ug/kg	06/01/2007	U
Phenanthrene	ND	425	ug/kg	06/01/2007	U
Phenol	ND	425	ug/kg	06/01/2007	U
Pyrene	ND	425	ug/kg	06/01/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:William A. Kotas
Quality Assurance OfficerRobert E. Wagner
Laboratory Director



CERTIFICATE OF ANALYSIS
06/01/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1E **NEA ID:** AK04610 **NEA LRF:** 07050171-01
MATRIX: SOIL **DATE SAMPLED:** 05/29/2007 **TIME:** 12:30
DATE RECEIVED: 05/29/2007 **TIME:** 16:20 **PROJECT:** 4279009 HJB PROPERTIES
SAMPLED BY: J. WYCKOFF **LOCATION:** ALBANY, NY
CUSTOMER PO: N/A **LAB ELAP#:** 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
1,1'-Biphenyl	ND	413	ug/kg	06/01/2007	U
2,4,5-Trichlorophenol	ND	413	ug/kg	06/01/2007	U
2,4,6-Trichlorophenol	ND	413	ug/kg	06/01/2007	U
2,4-Dichlorophenol	ND	413	ug/kg	06/01/2007	U
2,4-Dimethylphenol	ND	413	ug/kg	06/01/2007	U
2,4-Dinitrophenol	ND	413	ug/kg	06/01/2007	U
2,4-Dinitrotoluene	ND	413	ug/kg	06/01/2007	U
2,6-Dinitrotoluene	ND	413	ug/kg	06/01/2007	U
2-Chloronaphthalene	ND	413	ug/kg	06/01/2007	U
2-Chlorophenol	ND	413	ug/kg	06/01/2007	U
2-Methylnaphthalene	ND	413	ug/kg	06/01/2007	U
2-Methylphenol	ND	413	ug/kg	06/01/2007	U
2-Nitroaniline	ND	413	ug/kg	06/01/2007	U
2-Nitrophenol	ND	413	ug/kg	06/01/2007	U
3,3'-Dichlorobenzidine	ND	413	ug/kg	06/01/2007	U
3-Nitroaniline	ND	413	ug/kg	06/01/2007	U
4,6-Dinitro-2-methylphenol	ND	413	ug/kg	06/01/2007	U
4-Bromophenyl-phenylether	ND	413	ug/kg	06/01/2007	U
4-Chloro-3-methylphenol	ND	413	ug/kg	06/01/2007	U
4-Chloroaniline	ND	413	ug/kg	06/01/2007	U
4-Chlorophenyl-phenylether	ND	413	ug/kg	06/01/2007	U
4-Methylphenol	ND	413	ug/kg	06/01/2007	U
4-Nitroaniline	ND	413	ug/kg	06/01/2007	U
4-Nitrophenol	ND	413	ug/kg	06/01/2007	U
Acenaphthene	ND	413	ug/kg	06/01/2007	U
Acenaphthylene	ND	413	ug/kg	06/01/2007	U
Acetophenone	ND	413	ug/kg	06/01/2007	U
Anthracene	ND	413	ug/kg	06/01/2007	U
Atrazine	ND	413	ug/kg	06/01/2007	U



CERTIFICATE OF ANALYSIS
06/01/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1E
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04610 **NEA LRF:** 07050171-01
DATE SAMPLED: 05/29/2007 **TIME:** 12:30
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Benzaldehyde	ND	413	ug/kg	06/01/2007	U
Benzo(a)anthracene	ND	413	ug/kg	06/01/2007	U
Benzo(a)pyrene	ND	413	ug/kg	06/01/2007	U
Benzo(b)fluoranthene	ND	413	ug/kg	06/01/2007	U
Benzo(g,h,i)perylene	ND	413	ug/kg	06/01/2007	U
Benzo(k)fluoranthene	ND	413	ug/kg	06/01/2007	U
bis(2-chloroethoxy)methane	ND	413	ug/kg	06/01/2007	U
bis(2-Chloroisopropyl)ether	ND	413	ug/kg	06/01/2007	U
bis(2-Ethylhexyl)phthalate	ND	413	ug/kg	06/01/2007	U
Butylbenzylphthalate	ND	413	ug/kg	06/01/2007	U
Caprolactam	ND	413	ug/kg	06/01/2007	U
Carbazole	ND	413	ug/kg	06/01/2007	U
Chrysene	ND	413	ug/kg	06/01/2007	U
Di-n-butylphthalate	ND	413	ug/kg	06/01/2007	U
Di-n-octylphthalate	ND	413	ug/kg	06/01/2007	U
Dibenz(a,h)anthracene	ND	413	ug/kg	06/01/2007	U
Dibenzofuran	ND	413	ug/kg	06/01/2007	U
Diethylphthalate	ND	413	ug/kg	06/01/2007	U
Dimethylphthalate	ND	413	ug/kg	06/01/2007	U
Fluoranthene	ND	413	ug/kg	06/01/2007	U
Fluorene	ND	413	ug/kg	06/01/2007	U
Hexachlorobenzene	ND	413	ug/kg	06/01/2007	U
Hexachlorobutadiene	ND	413	ug/kg	06/01/2007	U
Hexachlorocyclopentadiene	ND	413	ug/kg	06/01/2007	U
Hexachloroethane	ND	413	ug/kg	06/01/2007	U
Indeno(1,2,3-cd)pyrene	ND	413	ug/kg	06/01/2007	U
Isophorone	ND	413	ug/kg	06/01/2007	U
N-Nitroso-di-n-propylamine	ND	413	ug/kg	06/01/2007	U
N-Nitrosodiphenylamine	ND	413	ug/kg	06/01/2007	U

**CERTIFICATE OF ANALYSIS****06/01/2007**

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1E**MATRIX:** SOIL**DATE RECEIVED:** 05/29/2007 **TIME:** 16:20**SAMPLED BY:** J. WYCKOFF**CUSTOMER PO:** N/A**NEA ID:** AK04610**NEA LRF:** 07050171-01**DATE SAMPLED:** 05/29/2007 **TIME:** 12:30**PROJECT:** 4279009 HJB PROPERTIES**LOCATION:** ALBANY, NY**LAB ELAP#:** 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Naphthalene	ND	413	ug/kg	06/01/2007	U
Nitrobenzene	ND	413	ug/kg	06/01/2007	U
Pentachlorophenol	ND	413	ug/kg	06/01/2007	U
Phenanthrene	ND	413	ug/kg	06/01/2007	U
Phenol	ND	413	ug/kg	06/01/2007	U
Pyrene	ND	413	ug/kg	06/01/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:William A. Kotas
Quality Assurance OfficerRobert E. Wagner
Laboratory Director

**CERTIFICATE OF ANALYSIS**

06/01/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1W**MATRIX:** SOIL**DATE RECEIVED:** 05/29/2007 **TIME:** 16:20**SAMPLED BY:** J. WYCKOFF**CUSTOMER PO:** N/A**NEA ID:** AK04611 **NEA LRF:** 07050171-02**DATE SAMPLED:** 05/29/2007 **TIME:** 12:40**PROJECT:** 4279009 HJB PROPERTIES**LOCATION:** ALBANY, NY**LAB ELAP#:** 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
1,1'-Biphenyl	ND	389	ug/kg	06/01/2007	U
2,4,5-Trichlorophenol	ND	389	ug/kg	06/01/2007	U
2,4,6-Trichlorophenol	ND	389	ug/kg	06/01/2007	U
2,4-Dichlorophenol	ND	389	ug/kg	06/01/2007	U
2,4-Dimethylphenol	ND	389	ug/kg	06/01/2007	U
2,4-Dinitrophenol	ND	389	ug/kg	06/01/2007	U
2,4-Dinitrotoluene	ND	389	ug/kg	06/01/2007	U
2,6-Dinitrotoluene	ND	389	ug/kg	06/01/2007	U
2-Chloronaphthalene	ND	389	ug/kg	06/01/2007	U
2-Chlorophenol	ND	389	ug/kg	06/01/2007	U
2-Methylnaphthalene	ND	389	ug/kg	06/01/2007	U
2-Methylphenol	ND	389	ug/kg	06/01/2007	U
2-Nitroaniline	ND	389	ug/kg	06/01/2007	U
2-Nitrophenol	ND	389	ug/kg	06/01/2007	U
3,3'-Dichlorobenzidine	ND	389	ug/kg	06/01/2007	U
3-Nitroaniline	ND	389	ug/kg	06/01/2007	U
4,6-Dinitro-2-methylphenol	ND	389	ug/kg	06/01/2007	U
4-Bromophenyl-phenylether	ND	389	ug/kg	06/01/2007	U
4-Chloro-3-methylphenol	ND	389	ug/kg	06/01/2007	U
4-Chloroaniline	ND	389	ug/kg	06/01/2007	U
4-Chlorophenyl-phenylether	ND	389	ug/kg	06/01/2007	U
4-Methylphenol	ND	389	ug/kg	06/01/2007	U
4-Nitroaniline	ND	389	ug/kg	06/01/2007	U
4-Nitrophenol	ND	389	ug/kg	06/01/2007	U
Acenaphthene	ND	389	ug/kg	06/01/2007	U
Acenaphthylene	ND	389	ug/kg	06/01/2007	U
Acetophenone	ND	389	ug/kg	06/01/2007	U
Anthracene	ND	389	ug/kg	06/01/2007	U
Atrazine	ND	389	ug/kg	06/01/2007	U



CERTIFICATE OF ANALYSIS
06/01/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1W **NEA ID:** AK04611 **NEA LRF:** 07050171-02
MATRIX: SOIL **DATE SAMPLED:** 05/29/2007 **TIME:** 12:40
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF **PROJECT:** 4279009 HJB PROPERTIES
CUSTOMER PO: N/A **LOCATION:** ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Benzaldehyde	ND	389	ug/kg	06/01/2007	U
Benzo(a)anthracene	ND	389	ug/kg	06/01/2007	U
Benzo(a)pyrene	ND	389	ug/kg	06/01/2007	U
Benzo(b)fluoranthene	ND	389	ug/kg	06/01/2007	U
Benzo(g,h,i)perylene	ND	389	ug/kg	06/01/2007	U
Benzo(k)fluoranthene	ND	389	ug/kg	06/01/2007	U
bis(2-chloroethoxy)methane	ND	389	ug/kg	06/01/2007	U
bis(2-Chloroisopropyl)ether	ND	389	ug/kg	06/01/2007	U
bis(2-Ethylhexyl)phthalate	ND	389	ug/kg	06/01/2007	U
Butylbenzylphthalate	ND	389	ug/kg	06/01/2007	U
Caprolactam	ND	389	ug/kg	06/01/2007	U
Carbazole	ND	389	ug/kg	06/01/2007	U
Chrysene	ND	389	ug/kg	06/01/2007	U
Di-n-butylphthalate	ND	389	ug/kg	06/01/2007	U
Di-n-octylphthalate	ND	389	ug/kg	06/01/2007	U
Dibenz(a,h)anthracene	ND	389	ug/kg	06/01/2007	U
Dibenzofuran	ND	389	ug/kg	06/01/2007	U
Diethylphthalate	ND	389	ug/kg	06/01/2007	U
Dimethylphthalate	ND	389	ug/kg	06/01/2007	U
Fluoranthene	ND	389	ug/kg	06/01/2007	U
Fluorene	ND	389	ug/kg	06/01/2007	U
Hexachlorobenzene	ND	389	ug/kg	06/01/2007	U
Hexachlorobutadiene	ND	389	ug/kg	06/01/2007	U
Hexachlorocyclopentadiene	ND	389	ug/kg	06/01/2007	U
Hexachloroethane	ND	389	ug/kg	06/01/2007	U
Indeno(1,2,3-cd)pyrene	ND	389	ug/kg	06/01/2007	U
Isophorone	ND	389	ug/kg	06/01/2007	U
N-Nitroso-di-n-propylamine	ND	389	ug/kg	06/01/2007	U
N-Nitrosodiphenylamine	ND	389	ug/kg	06/01/2007	U



CERTIFICATE OF ANALYSIS

06/01/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1W

MATRIX: SOIL

DATE RECEIVED: 05/29/2007 TIME: 16:20

SAMPLED BY: J. WYCKOFF

CUSTOMER PO: N/A

NEA ID: AK04611 NEA LRF: 07050171-02

DATE SAMPLED: 05/29/2007 TIME: 12:40

PROJECT: 4279009 HJB PROPERTIES

LOCATION: ALBANY, NY

LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Naphthalene	ND	389	ug/kg	06/01/2007	U
Nitrobenzene	ND	389	ug/kg	06/01/2007	U
Pentachlorophenol	ND	389	ug/kg	06/01/2007	U
Phenanthrene	ND	389	ug/kg	06/01/2007	U
Phenol	ND	389	ug/kg	06/01/2007	U
Pyrene	ND	389	ug/kg	06/01/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer

Robert E. Wagner
Laboratory Director

**CERTIFICATE OF ANALYSIS****06/01/2007**

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1N
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04612 **NEA LRF:** 07050171-03
DATE SAMPLED: 05/29/2007 **TIME:** 12:50
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
1,1'-Biphenyl	ND	386	ug/kg	06/01/2007	U
2,4,5-Trichlorophenol	ND	386	ug/kg	06/01/2007	U
2,4,6-Trichlorophenol	ND	386	ug/kg	06/01/2007	U
2,4-Dichlorophenol	ND	386	ug/kg	06/01/2007	U
2,4-Dimethylphenol	ND	386	ug/kg	06/01/2007	U
2,4-Dinitrophenol	ND	386	ug/kg	06/01/2007	U
2,4-Dinitrotoluene	ND	386	ug/kg	06/01/2007	U
2,6-Dinitrotoluene	ND	386	ug/kg	06/01/2007	U
2-Chloronaphthalene	ND	386	ug/kg	06/01/2007	U
2-Chlorophenol	ND	386	ug/kg	06/01/2007	U
2-Methylnaphthalene	ND	386	ug/kg	06/01/2007	U
2-Methylphenol	ND	386	ug/kg	06/01/2007	U
2-Nitroaniline	ND	386	ug/kg	06/01/2007	U
2-Nitrophenol	ND	386	ug/kg	06/01/2007	U
3,3'-Dichlorobenzidine	ND	386	ug/kg	06/01/2007	U
3-Nitroaniline	ND	386	ug/kg	06/01/2007	U
4,6-Dinitro-2-methylphenol	ND	386	ug/kg	06/01/2007	U
4-Bromophenyl-phenylether	ND	386	ug/kg	06/01/2007	U
4-Chloro-3-methylphenol	ND	386	ug/kg	06/01/2007	U
4-Chloroaniline	ND	386	ug/kg	06/01/2007	U
4-Chlorophenyl-phenylether	ND	386	ug/kg	06/01/2007	U
4-Methylphenol	ND	386	ug/kg	06/01/2007	U
4-Nitroaniline	ND	386	ug/kg	06/01/2007	U
4-Nitrophenol	ND	386	ug/kg	06/01/2007	U
Acenaphthene	ND	386	ug/kg	06/01/2007	U
Acenaphthylene	ND	386	ug/kg	06/01/2007	U
Acetophenone	ND	386	ug/kg	06/01/2007	U
Anthracene	ND	386	ug/kg	06/01/2007	U
Atrazine	ND	386	ug/kg	06/01/2007	U

**CERTIFICATE OF ANALYSIS****06/01/2007**

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1N
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04612 **NEA LRF:** 07050171-03
DATE SAMPLED: 05/29/2007 **TIME:** 12:50
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Benzaldehyde	ND	386	ug/kg	06/01/2007	U
Benzo(a)anthracene	ND	386	ug/kg	06/01/2007	U
Benzo(a)pyrene	ND	386	ug/kg	06/01/2007	U
Benzo(b)fluoranthene	ND	386	ug/kg	06/01/2007	U
Benzo(g,h,i)perylene	ND	386	ug/kg	06/01/2007	U
Benzo(k)fluoranthene	ND	386	ug/kg	06/01/2007	U
bis(2-chloroethoxy)methane	ND	386	ug/kg	06/01/2007	U
bis(2-Chloroisopropyl)ether	ND	386	ug/kg	06/01/2007	U
bis(2-Ethylhexyl)phthalate	ND	386	ug/kg	06/01/2007	U
Butylbenzylphthalate	ND	386	ug/kg	06/01/2007	U
Caprolactam	ND	386	ug/kg	06/01/2007	U
Carbazole	ND	386	ug/kg	06/01/2007	U
Chrysene	ND	386	ug/kg	06/01/2007	U
Di-n-butylphthalate	ND	386	ug/kg	06/01/2007	U
Di-n-octylphthalate	ND	386	ug/kg	06/01/2007	U
Dibenz(a,h)anthracene	ND	386	ug/kg	06/01/2007	U
Dibenzofuran	ND	386	ug/kg	06/01/2007	U
Diethylphthalate	ND	386	ug/kg	06/01/2007	U
Dimethylphthalate	ND	386	ug/kg	06/01/2007	U
Fluoranthene	ND	386	ug/kg	06/01/2007	U
Fluorene	ND	386	ug/kg	06/01/2007	U
Hexachlorobenzene	ND	386	ug/kg	06/01/2007	U
Hexachlorobutadiene	ND	386	ug/kg	06/01/2007	U
Hexachlorocyclopentadiene	ND	386	ug/kg	06/01/2007	U
Hexachloroethane	ND	386	ug/kg	06/01/2007	U
Indeno(1,2,3-cd)pyrene	ND	386	ug/kg	06/01/2007	U
Isophorone	ND	386	ug/kg	06/01/2007	U
N-Nitroso-di-n-propylamine	ND	386	ug/kg	06/01/2007	U
N-Nitrosodiphenylamine	ND	386	ug/kg	06/01/2007	U



CERTIFICATE OF ANALYSIS
06/01/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1N
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04612 **NEA LRF:** 07050171-03
DATE SAMPLED: 05/29/2007 **TIME:** 12:50
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Naphthalene	ND	386	ug/kg	06/01/2007	U
Nitrobenzene	ND	386	ug/kg	06/01/2007	U
Pentachlorophenol	ND	386	ug/kg	06/01/2007	U
Phenanthrene	ND	386	ug/kg	06/01/2007	U
Phenol	ND	386	ug/kg	06/01/2007	U
Pyrene	ND	386	ug/kg	06/01/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer
Robert E. Wagner
Laboratory Director

**CERTIFICATE OF ANALYSIS****06/01/2007**

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1B-8.5**MATRIX:** SOIL**DATE RECEIVED:** 05/29/2007 **TIME:** 16:20**SAMPLED BY:** J. WYCKOFF**CUSTOMER PO:** N/A**NEA ID:** AK04613 **NEA LRF:** 07050171-04**DATE SAMPLED:** 05/29/2007 **TIME:** 13:00**PROJECT:** 4279009 HJB PROPERTIES**LOCATION:** ALBANY, NY**LAB ELAP#:** 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
1,1'-Biphenyl	ND	416	ug/kg	06/01/2007	U
2,4,5-Trichlorophenol	ND	416	ug/kg	06/01/2007	U
2,4,6-Trichlorophenol	ND	416	ug/kg	06/01/2007	U
2,4-Dichlorophenol	ND	416	ug/kg	06/01/2007	U
2,4-Dimethylphenol	ND	416	ug/kg	06/01/2007	U
2,4-Dinitrophenol	ND	416	ug/kg	06/01/2007	U
2,4-Dinitrotoluene	ND	416	ug/kg	06/01/2007	U
2,6-Dinitrotoluene	ND	416	ug/kg	06/01/2007	U
2-Chloronaphthalene	ND	416	ug/kg	06/01/2007	U
2-Chlorophenol	ND	416	ug/kg	06/01/2007	U
2-Methylnaphthalene	ND	416	ug/kg	06/01/2007	U
2-Methylphenol	ND	416	ug/kg	06/01/2007	U
2-Nitroaniline	ND	416	ug/kg	06/01/2007	U
2-Nitrophenol	ND	416	ug/kg	06/01/2007	U
3,3'-Dichlorobenzidine	ND	416	ug/kg	06/01/2007	U
3-Nitroaniline	ND	416	ug/kg	06/01/2007	U
4,6-Dinitro-2-methylphenol	ND	416	ug/kg	06/01/2007	U
4-Bromophenyl-phenylether	ND	416	ug/kg	06/01/2007	U
4-Chloro-3-methylphenol	ND	416	ug/kg	06/01/2007	U
4-Chloroaniline	ND	416	ug/kg	06/01/2007	U
4-Chlorophenyl-phenylether	ND	416	ug/kg	06/01/2007	U
4-Methylphenol	ND	416	ug/kg	06/01/2007	U
4-Nitroaniline	ND	416	ug/kg	06/01/2007	U
4-Nitrophenol	ND	416	ug/kg	06/01/2007	U
Acenaphthene	ND	416	ug/kg	06/01/2007	U
Acenaphthylene	ND	416	ug/kg	06/01/2007	U
Acetophenone	ND	416	ug/kg	06/01/2007	U
Anthracene	ND	416	ug/kg	06/01/2007	U
Atrazine	ND	416	ug/kg	06/01/2007	U



CERTIFICATE OF ANALYSIS
06/01/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1B-8.5

MATRIX: SOIL

DATE RECEIVED: 05/29/2007 **TIME:** 16:20

SAMPLED BY: J. WYCKOFF

CUSTOMER PO: N/A

NEA ID: AK04613 **NEA LRF:** 07050171-04

DATE SAMPLED: 05/29/2007 **TIME:** 13:00

PROJECT: 4279009 HJB PROPERTIES

LOCATION: ALBANY, NY

LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Benzaldehyde	ND	416	ug/kg	06/01/2007	U
Benzo(a)anthracene	ND	416	ug/kg	06/01/2007	U
Benzo(a)pyrene	ND	416	ug/kg	06/01/2007	U
Benzo(b)fluoranthene	ND	416	ug/kg	06/01/2007	U
Benzo(g,h,i)perylene	ND	416	ug/kg	06/01/2007	U
Benzo(k)fluoranthene	ND	416	ug/kg	06/01/2007	U
bis(2-chloroethoxy)methane	ND	416	ug/kg	06/01/2007	U
bis(2-Chloroisopropyl)ether	ND	416	ug/kg	06/01/2007	U
bis(2-Ethylhexyl)phthalate	ND	416	ug/kg	06/01/2007	U
Butylbenzylphthalate	ND	416	ug/kg	06/01/2007	U
Caprolactam	ND	416	ug/kg	06/01/2007	U
Carbazole	ND	416	ug/kg	06/01/2007	U
Chrysene	ND	416	ug/kg	06/01/2007	U
Di-n-butylphthalate	ND	416	ug/kg	06/01/2007	U
Di-n-octylphthalate	ND	416	ug/kg	06/01/2007	U
Dibenz(a,h)anthracene	ND	416	ug/kg	06/01/2007	U
Dibenzofuran	ND	416	ug/kg	06/01/2007	U
Diethylphthalate	ND	416	ug/kg	06/01/2007	U
Dimethylphthalate	ND	416	ug/kg	06/01/2007	U
Fluoranthene	ND	416	ug/kg	06/01/2007	U
Fluorene	ND	416	ug/kg	06/01/2007	U
Hexachlorobenzene	ND	416	ug/kg	06/01/2007	U
Hexachlorobutadiene	ND	416	ug/kg	06/01/2007	U
Hexachlorocyclopentadiene	ND	416	ug/kg	06/01/2007	U
Hexachloroethane	ND	416	ug/kg	06/01/2007	U
Indeno(1,2,3-cd)pyrene	ND	416	ug/kg	06/01/2007	U
Isophorone	ND	416	ug/kg	06/01/2007	U
N-Nitroso-di-n-propylamine	ND	416	ug/kg	06/01/2007	U
N-Nitrosodiphenylamine	ND	416	ug/kg	06/01/2007	U



CERTIFICATE OF ANALYSIS
06/01/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1B-8.5
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 TIME: 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04613 NEA LRF: 07050171-04
DATE SAMPLED: 05/29/2007 TIME: 13:00
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8270C CLP OLM 4.3 List					
Naphthalene	ND	416	ug/kg	06/01/2007	U
Nitrobenzene	ND	416	ug/kg	06/01/2007	U
Pentachlorophenol	ND	416	ug/kg	06/01/2007	U
Phenanthrene	ND	416	ug/kg	06/01/2007	U
Phenol	ND	416	ug/kg	06/01/2007	U
Pyrene	ND	416	ug/kg	06/01/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Note: Preliminary result pending sample re-analysis. Low surrogate recovery was observed for this sample indicating possible low bias.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer

Robert E. Wagner
Laboratory Director

**CERTIFICATE OF ANALYSIS****05/31/2007**

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1E
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04610 **NEA LRF:** 07050171-01
DATE SAMPLED: 05/29/2007 **TIME:** 12:30
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
1,1,1-Trichloroethane	ND	2.88	ug/kg	05/30/2007	U
1,1,2,2-Tetrachloroethane	ND	2.88	ug/kg	05/30/2007	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.88	ug/kg	05/30/2007	U
1,1,2-Trichloroethane	ND	2.88	ug/kg	05/30/2007	U
1,1-Dichloroethane	ND	2.88	ug/kg	05/30/2007	U
1,1-Dichloroethene	ND	2.88	ug/kg	05/30/2007	U
1,2,3-Trichlorobenzene	ND	2.88	ug/kg	05/30/2007	U
1,2,4-Trichlorobenzene	ND	2.88	ug/kg	05/30/2007	U
1,2-Dibromo-3-chloropropane	ND	2.88	ug/kg	05/30/2007	U
1,2-Dibromoethane	ND	2.88	ug/kg	05/30/2007	U
1,2-Dichlorobenzene	ND	2.88	ug/kg	05/30/2007	U
1,2-Dichloroethane	ND	2.88	ug/kg	05/30/2007	U
1,2-Dichloropropane	ND	2.88	ug/kg	05/30/2007	U
1,3-Dichlorobenzene	ND	2.88	ug/kg	05/30/2007	U
1,4-Dichlorobenzene	ND	2.88	ug/kg	05/30/2007	U
2-Butanone	ND	2.88	ug/kg	05/30/2007	U
2-Hexanone	ND	2.88	ug/kg	05/30/2007	U
4-Methyl-2-pentanone	ND	2.88	ug/kg	05/30/2007	U
Acetone	ND	14.4	ug/kg	05/30/2007	U
Benzene	ND	2.88	ug/kg	05/30/2007	U
Bromodichloromethane	ND	2.88	ug/kg	05/30/2007	U
Bromoform	ND	2.88	ug/kg	05/30/2007	U
Bromomethane	ND	2.88	ug/kg	05/30/2007	U
Carbon disulfide	ND	2.88	ug/kg	05/30/2007	U
Carbon tetrachloride	ND	2.88	ug/kg	05/30/2007	U
Chlorobenzene	ND	2.88	ug/kg	05/30/2007	U
Chloroethane	ND	2.88	ug/kg	05/30/2007	U
Chloroform	ND	2.88	ug/kg	05/30/2007	U
Chloromethane	ND	2.88	ug/kg	05/30/2007	U



CERTIFICATE OF ANALYSIS
05/31/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1E
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04610 **NEA LRF:** 07050171-01
DATE SAMPLED: 05/29/2007 **TIME:** 12:30
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	ND	2.88	ug/kg	05/30/2007	U
cis-1,3-Dichloropropene	ND	2.88	ug/kg	05/30/2007	U
Cyclohexane	ND	2.88	ug/kg	05/30/2007	U
Dibromochloromethane	ND	2.88	ug/kg	05/30/2007	U
Dichlorodifluoromethane	ND	2.88	ug/kg	05/30/2007	U
Ethylbenzene	ND	2.88	ug/kg	05/30/2007	U
Isopropylbenzene	ND	2.88	ug/kg	05/30/2007	U
m&p-Xylene	ND	2.88	ug/kg	05/30/2007	U
Methyl acetate	ND	2.88	ug/kg	05/30/2007	U
Methyl tert-butyl ether	ND	2.88	ug/kg	05/30/2007	U
Methylcyclohexane	ND	2.88	ug/kg	05/30/2007	U
Methylene chloride	ND	14.4	ug/kg	05/30/2007	U
o-Xylene	ND	2.88	ug/kg	05/30/2007	U
Styrene	ND	2.88	ug/kg	05/30/2007	U
Tetrachloroethene	ND	2.88	ug/kg	05/30/2007	U
Toluene	ND	2.88	ug/kg	05/30/2007	U
trans-1,2-Dichloroethene	ND	2.88	ug/kg	05/30/2007	U
trans-1,3-Dichloropropene	ND	2.88	ug/kg	05/30/2007	U
Trichloroethene	ND	2.88	ug/kg	05/30/2007	U
Trichlorofluoromethane	ND	2.88	ug/kg	05/30/2007	U
Vinyl chloride	ND	2.88	ug/kg	05/30/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer

Robert E. Wagner
Laboratory Director

**CERTIFICATE OF ANALYSIS****05/31/2007**

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1W
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04611 **NEA LRF:** 07050171-02
DATE SAMPLED: 05/29/2007 **TIME:** 12:40
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
1,1,1-Trichloroethane	ND	2.73	ug/kg	05/30/2007	U
1,1,2,2-Tetrachloroethane	ND	2.73	ug/kg	05/30/2007	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.73	ug/kg	05/30/2007	U
1,1,2-Trichloroethane	ND	2.73	ug/kg	05/30/2007	U
1,1-Dichloroethane	ND	2.73	ug/kg	05/30/2007	U
1,1-Dichloroethene	ND	2.73	ug/kg	05/30/2007	U
1,2,3-Trichlorobenzene	ND	2.73	ug/kg	05/30/2007	U
1,2,4-Trichlorobenzene	ND	2.73	ug/kg	05/30/2007	U
1,2-Dibromo-3-chloropropane	ND	2.73	ug/kg	05/30/2007	U
1,2-Dibromoethane	ND	2.73	ug/kg	05/30/2007	U
1,2-Dichlorobenzene	ND	2.73	ug/kg	05/30/2007	U
1,2-Dichloroethane	ND	2.73	ug/kg	05/30/2007	U
1,2-Dichloropropane	ND	2.73	ug/kg	05/30/2007	U
1,3-Dichlorobenzene	ND	2.73	ug/kg	05/30/2007	U
1,4-Dichlorobenzene	ND	2.73	ug/kg	05/30/2007	U
2-Butanone	ND	2.73	ug/kg	05/30/2007	U
2-Hexanone	ND	2.73	ug/kg	05/30/2007	U
4-Methyl-2-pentanone	ND	2.73	ug/kg	05/30/2007	U
Acetone	ND	13.7	ug/kg	05/30/2007	U
Benzene	ND	2.73	ug/kg	05/30/2007	U
Bromodichloromethane	ND	2.73	ug/kg	05/30/2007	U
Bromoform	ND	2.73	ug/kg	05/30/2007	U
Bromomethane	ND	2.73	ug/kg	05/30/2007	U
Carbon disulfide	ND	2.73	ug/kg	05/30/2007	U
Carbon tetrachloride	ND	2.73	ug/kg	05/30/2007	U
Chlorobenzene	ND	2.73	ug/kg	05/30/2007	U
Chloroethane	ND	2.73	ug/kg	05/30/2007	U
Chloroform	ND	2.73	ug/kg	05/30/2007	U
Chloromethane	ND	2.73	ug/kg	05/30/2007	U



CERTIFICATE OF ANALYSIS
05/31/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1W
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04611 **NEA LRF:** 07050171-02
DATE SAMPLED: 05/29/2007 **TIME:** 12:40
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	ND	2.73	ug/kg	05/30/2007	U
cis-1,3-Dichloropropene	ND	2.73	ug/kg	05/30/2007	U
Cyclohexane	ND	2.73	ug/kg	05/30/2007	U
Dibromochloromethane	ND	2.73	ug/kg	05/30/2007	U
Dichlorodifluoromethane	ND	2.73	ug/kg	05/30/2007	U
Ethylbenzene	ND	2.73	ug/kg	05/30/2007	U
Isopropylbenzene	ND	2.73	ug/kg	05/30/2007	U
m&p-Xylene	ND	2.73	ug/kg	05/30/2007	U
Methyl acetate	ND	2.73	ug/kg	05/30/2007	U
Methyl tert-butyl ether	ND	2.73	ug/kg	05/30/2007	U
Methylcyclohexane	ND	2.73	ug/kg	05/30/2007	U
Methylene chloride	ND	13.7	ug/kg	05/30/2007	U
o-Xylene	ND	2.73	ug/kg	05/30/2007	U
Styrene	ND	2.73	ug/kg	05/30/2007	U
Tetrachloroethene	ND	2.73	ug/kg	05/30/2007	U
Toluene	ND	2.73	ug/kg	05/30/2007	U
trans-1,2-Dichloroethene	ND	2.73	ug/kg	05/30/2007	U
trans-1,3-Dichloropropene	ND	2.73	ug/kg	05/30/2007	U
Trichloroethene	ND	2.73	ug/kg	05/30/2007	U
Trichlorofluoromethane	ND	2.73	ug/kg	05/30/2007	U
Vinyl chloride	ND	2.73	ug/kg	05/30/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer

Robert E. Wagner
Laboratory Director

**CERTIFICATE OF ANALYSIS****05/31/2007****MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON****CUSTOMER ID:** SRA-1N
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A**NEA ID:** AK04612 **NEA LRF:** 07050171-03
DATE SAMPLED: 05/29/2007 **TIME:** 12:50
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
1,1,1-Trichloroethane	ND	4.49	ug/kg	05/30/2007	U
1,1,2,2-Tetrachloroethane	ND	4.49	ug/kg	05/30/2007	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.49	ug/kg	05/30/2007	U
1,1,2-Trichloroethane	ND	4.49	ug/kg	05/30/2007	U
1,1-Dichloroethane	ND	4.49	ug/kg	05/30/2007	U
1,1-Dichloroethene	ND	4.49	ug/kg	05/30/2007	U
1,2,3-Trichlorobenzene	ND	4.49	ug/kg	05/30/2007	U
1,2,4-Trichlorobenzene	ND	4.49	ug/kg	05/30/2007	U
1,2-Dibromo-3-chloropropane	ND	4.49	ug/kg	05/30/2007	U
1,2-Dibromoethane	ND	4.49	ug/kg	05/30/2007	U
1,2-Dichlorobenzene	ND	4.49	ug/kg	05/30/2007	U
1,2-Dichloroethane	ND	4.49	ug/kg	05/30/2007	U
1,2-Dichloropropane	ND	4.49	ug/kg	05/30/2007	U
1,3-Dichlorobenzene	ND	4.49	ug/kg	05/30/2007	U
1,4-Dichlorobenzene	ND	4.49	ug/kg	05/30/2007	U
2-Butanone	ND	4.49	ug/kg	05/30/2007	U
2-Hexanone	ND	4.49	ug/kg	05/30/2007	U
4-Methyl-2-pentanone	ND	4.49	ug/kg	05/30/2007	U
Acetone	ND	22.4	ug/kg	05/30/2007	U
Benzene	ND	4.49	ug/kg	05/30/2007	U
Bromodichloromethane	ND	4.49	ug/kg	05/30/2007	U
Bromoform	ND	4.49	ug/kg	05/30/2007	U
Bromomethane	ND	4.49	ug/kg	05/30/2007	U
Carbon disulfide	ND	4.49	ug/kg	05/30/2007	U
Carbon tetrachloride	ND	4.49	ug/kg	05/30/2007	U
Chlorobenzene	ND	4.49	ug/kg	05/30/2007	U
Chloroethane	ND	4.49	ug/kg	05/30/2007	U
Chloroform	ND	4.49	ug/kg	05/30/2007	U
Chloromethane	ND	4.49	ug/kg	05/30/2007	U

**CERTIFICATE OF ANALYSIS****05/31/2007**

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1N
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04612 **NEA LRF:** 07050171-03
DATE SAMPLED: 05/29/2007 **TIME:** 12:50
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	ND	4.49	ug/kg	05/30/2007	U
cis-1,3-Dichloropropene	ND	4.49	ug/kg	05/30/2007	U
Cyclohexane	ND	4.49	ug/kg	05/30/2007	U
Dibromochloromethane	ND	4.49	ug/kg	05/30/2007	U
Dichlorodifluoromethane	ND	4.49	ug/kg	05/30/2007	U
Ethylbenzene	ND	4.49	ug/kg	05/30/2007	U
Isopropylbenzene	ND	4.49	ug/kg	05/30/2007	U
m&p-Xylene	ND	4.49	ug/kg	05/30/2007	U
Methyl acetate	ND	4.49	ug/kg	05/30/2007	U
Methyl tert-butyl ether	ND	4.49	ug/kg	05/30/2007	U
Methylcyclohexane	ND	4.49	ug/kg	05/30/2007	U
Methylene chloride	ND	22.4	ug/kg	05/30/2007	U
o-Xylene	ND	4.49	ug/kg	05/30/2007	U
Styrene	ND	4.49	ug/kg	05/30/2007	U
Tetrachloroethene	ND	4.49	ug/kg	05/30/2007	U
Toluene	ND	4.49	ug/kg	05/30/2007	U
trans-1,2-Dichloroethene	ND	4.49	ug/kg	05/30/2007	U
trans-1,3-Dichloropropene	ND	4.49	ug/kg	05/30/2007	U
Trichloroethene	ND	4.49	ug/kg	05/30/2007	U
Trichlorofluoromethane	ND	4.49	ug/kg	05/30/2007	U
Vinyl chloride	ND	4.49	ug/kg	05/30/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer

Robert E. Wagner
Laboratory Director



CERTIFICATE OF ANALYSIS
05/31/2007
MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-1B-8.5
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04613 **NEA LRF:** 07050171-04
DATE SAMPLED: 05/29/2007 **TIME:** 13:00
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
1,1,1-Trichloroethane	ND	4.80	ug/kg	05/30/2007	U
1,1,2,2-Tetrachloroethane	ND	4.80	ug/kg	05/30/2007	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.80	ug/kg	05/30/2007	U
1,1,2-Trichloroethane	ND	4.80	ug/kg	05/30/2007	U
1,1-Dichloroethane	ND	4.80	ug/kg	05/30/2007	U
1,1-Dichloroethene	ND	4.80	ug/kg	05/30/2007	U
1,2,3-Trichlorobenzene	ND	4.80	ug/kg	05/30/2007	U
1,2,4-Trichlorobenzene	ND	4.80	ug/kg	05/30/2007	U
1,2-Dibromo-3-chloropropane	ND	4.80	ug/kg	05/30/2007	U
1,2-Dibromoethane	ND	4.80	ug/kg	05/30/2007	U
1,2-Dichlorobenzene	ND	4.80	ug/kg	05/30/2007	U
1,2-Dichloroethane	ND	4.80	ug/kg	05/30/2007	U
1,2-Dichloropropane	ND	4.80	ug/kg	05/30/2007	U
1,3-Dichlorobenzene	ND	4.80	ug/kg	05/30/2007	U
1,4-Dichlorobenzene	ND	4.80	ug/kg	05/30/2007	U
2-Butanone	ND	4.80	ug/kg	05/30/2007	U
2-Hexanone	ND	4.80	ug/kg	05/30/2007	U
4-Methyl-2-pentanone	ND	4.80	ug/kg	05/30/2007	U
Acetone	ND	24.0	ug/kg	05/30/2007	U
Benzene	ND	4.80	ug/kg	05/30/2007	U
Bromodichloromethane	ND	4.80	ug/kg	05/30/2007	U
Bromoform	ND	4.80	ug/kg	05/30/2007	U
Bromomethane	ND	4.80	ug/kg	05/30/2007	U
Carbon disulfide	ND	4.80	ug/kg	05/30/2007	U
Carbon tetrachloride	ND	4.80	ug/kg	05/30/2007	U
Chlorobenzene	ND	4.80	ug/kg	05/30/2007	U
Chloroethane	ND	4.80	ug/kg	05/30/2007	U
Chloroform	ND	4.80	ug/kg	05/30/2007	U
Chloromethane	ND	4.80	ug/kg	05/30/2007	U

**CERTIFICATE OF ANALYSIS****05/31/2007****MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON****CUSTOMER ID:** SRA-1B-8.5
MATRIX: SOIL
DATE RECEIVED: 05/29/2007 **TIME:** 16:20
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A**NEA ID:** AK04613 **NEA LRF:** 07050171-04
DATE SAMPLED: 05/29/2007 **TIME:** 13:00
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	ND	4.80	ug/kg	05/30/2007	U
cis-1,3-Dichloropropene	ND	4.80	ug/kg	05/30/2007	U
Cyclohexane	ND	4.80	ug/kg	05/30/2007	U
Dibromochloromethane	ND	4.80	ug/kg	05/30/2007	U
Dichlorodifluoromethane	ND	4.80	ug/kg	05/30/2007	U
Ethylbenzene	ND	4.80	ug/kg	05/30/2007	U
Isopropylbenzene	ND	4.80	ug/kg	05/30/2007	U
m&p-Xylene	ND	4.80	ug/kg	05/30/2007	U
Methyl acetate	ND	4.80	ug/kg	05/30/2007	U
Methyl tert-butyl ether	ND	4.80	ug/kg	05/30/2007	U
Methylcyclohexane	ND	4.80	ug/kg	05/30/2007	U
Methylene chloride	ND	24.0	ug/kg	05/30/2007	U
o-Xylene	ND	4.80	ug/kg	05/30/2007	U
Styrene	ND	4.80	ug/kg	05/30/2007	U
Tetrachloroethene	ND	4.80	ug/kg	05/30/2007	U
Toluene	ND	4.80	ug/kg	05/30/2007	U
trans-1,2-Dichloroethene	ND	4.80	ug/kg	05/30/2007	U
trans-1,3-Dichloropropene	ND	4.80	ug/kg	05/30/2007	U
Trichloroethene	ND	4.80	ug/kg	05/30/2007	U
Trichlorofluoromethane	ND	4.80	ug/kg	05/30/2007	U
Vinyl chloride	ND	4.80	ug/kg	05/30/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:William A. Kotas
Quality Assurance OfficerRobert E. Wagner
Laboratory Director

**CERTIFICATE OF ANALYSIS**

6/1/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-2N
MATRIX: SOIL
DATE RECEIVED: 5/30/2007 **TIME:** 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04634 **NEA LRF:** 07050174-02
DATE SAMPLED: 05/30/2007 **TIME:** 12:30
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	ND	9.47	ug/kg	05/31/2007	U
cis-1,3-Dichloropropene	ND	9.47	ug/kg	05/31/2007	U
Cyclohexane	ND	9.47	ug/kg	05/31/2007	U
Dibromochloromethane	ND	9.47	ug/kg	05/31/2007	U
Dichlorodifluoromethane	ND	9.47	ug/kg	05/31/2007	U
Ethylbenzene	ND	9.47	ug/kg	05/31/2007	U
Isopropylbenzene	ND	9.47	ug/kg	05/31/2007	U
m&p-Xylene	ND	9.47	ug/kg	05/31/2007	U
Methyl acetate	ND	9.47	ug/kg	05/31/2007	U
Methyl tert-butyl ether	ND	9.47	ug/kg	05/31/2007	U
Methylcyclohexane	ND	9.47	ug/kg	05/31/2007	U
Methylene chloride	ND	47.4	ug/kg	05/31/2007	U
o-Xylene	ND	9.47	ug/kg	05/31/2007	U
Styrene	ND	9.47	ug/kg	05/31/2007	U
Tetrachloroethene	ND	9.47	ug/kg	05/31/2007	U
Toluene	ND	9.47	ug/kg	05/31/2007	U
trans-1,2-Dichloroethene	ND	9.47	ug/kg	05/31/2007	U
trans-1,3-Dichloropropene	ND	9.47	ug/kg	05/31/2007	U
Trichloroethene	ND	9.47	ug/kg	05/31/2007	U
Trichlorofluoromethane	ND	9.47	ug/kg	05/31/2007	U
Vinyl chloride	ND	9.47	ug/kg	05/31/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer

Robert E. Wagner
Laboratory Director



CERTIFICATE OF ANALYSIS

6/1/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-2S
MATRIX: SOIL
DATE RECEIVED: 5/30/2007 TIME: 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04635 NEA LRF: 07050174-03
DATE SAMPLED: 05/30/2007 TIME: 12:35
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
1,1,1-Trichloroethane	ND	5.38	ug/kg	05/31/2007	U
1,1,2,2-Tetrachloroethane	ND	5.38	ug/kg	05/31/2007	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.38	ug/kg	05/31/2007	U
1,1,2-Trichloroethane	ND	5.38	ug/kg	05/31/2007	U
1,1-Dichloroethane	ND	5.38	ug/kg	05/31/2007	U
1,1-Dichloroethene	ND	5.38	ug/kg	05/31/2007	U
1,2,3-Trichlorobenzene	ND	5.38	ug/kg	05/31/2007	U
1,2,4-Trichlorobenzene	ND	5.38	ug/kg	05/31/2007	U
1,2-Dibromo-3-chloropropane	ND	5.38	ug/kg	05/31/2007	U
1,2-Dibromoethane	ND	5.38	ug/kg	05/31/2007	U
1,2-Dichlorobenzene	ND	5.38	ug/kg	05/31/2007	U
1,2-Dichloroethane	ND	5.38	ug/kg	05/31/2007	U
1,2-Dichloropropane	ND	5.38	ug/kg	05/31/2007	U
1,3-Dichlorobenzene	ND	5.38	ug/kg	05/31/2007	U
1,4-Dichlorobenzene	ND	5.38	ug/kg	05/31/2007	U
2-Butanone	ND	5.38	ug/kg	05/31/2007	U
2-Hexanone	ND	5.38	ug/kg	05/31/2007	U
4-Methyl-2-pentanone	ND	5.38	ug/kg	05/31/2007	U
Acetone	ND	26.9	ug/kg	05/31/2007	U
Benzene	ND	5.38	ug/kg	05/31/2007	U
Bromodichloromethane	ND	5.38	ug/kg	05/31/2007	U
Bromoform	ND	5.38	ug/kg	05/31/2007	U
Bromomethane	ND	5.38	ug/kg	05/31/2007	U
Carbon disulfide	ND	5.38	ug/kg	05/31/2007	U
Carbon tetrachloride	ND	5.38	ug/kg	05/31/2007	U
Chlorobenzene	ND	5.38	ug/kg	05/31/2007	U
Chloroethane	ND	5.38	ug/kg	05/31/2007	U
Chloroform	ND	5.38	ug/kg	05/31/2007	U
Chloromethane	ND	5.38	ug/kg	05/31/2007	U

**CERTIFICATE OF ANALYSIS**

6/1/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-2S
MATRIX: SOIL
DATE RECEIVED: 5/30/2007 **TIME:** 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04635 **NEA LRF:** 07050174-03
DATE SAMPLED: 05/30/2007 **TIME:** 12:35
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	ND	5.38	ug/kg	05/31/2007	U
cis-1,3-Dichloropropene	ND	5.38	ug/kg	05/31/2007	U
Cyclohexane	ND	5.38	ug/kg	05/31/2007	U
Dibromochloromethane	ND	5.38	ug/kg	05/31/2007	U
Dichlorodifluoromethane	ND	5.38	ug/kg	05/31/2007	U
Ethylbenzene	ND	5.38	ug/kg	05/31/2007	U
Isopropylbenzene	ND	5.38	ug/kg	05/31/2007	U
m&p-Xylene	ND	5.38	ug/kg	05/31/2007	U
Methyl acetate	ND	5.38	ug/kg	05/31/2007	U
Methyl tert-butyl ether	ND	5.38	ug/kg	05/31/2007	U
Methylcyclohexane	ND	5.38	ug/kg	05/31/2007	U
Methylene chloride	ND	26.9	ug/kg	05/31/2007	U
o-Xylene	ND	5.38	ug/kg	05/31/2007	U
Styrene	ND	5.38	ug/kg	05/31/2007	U
Tetrachloroethene	133	5.38	ug/kg	05/31/2007	
Toluene	ND	5.38	ug/kg	05/31/2007	U
trans-1,2-Dichloroethene	ND	5.38	ug/kg	05/31/2007	U
trans-1,3-Dichloropropene	ND	5.38	ug/kg	05/31/2007	U
Trichloroethene	ND	5.38	ug/kg	05/31/2007	U
Trichlorofluoromethane	ND	5.38	ug/kg	05/31/2007	U
Vinyl chloride	ND	5.38	ug/kg	05/31/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer

Robert E. Wagner
Laboratory Director



CERTIFICATE OF ANALYSIS

6/1/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-2E
MATRIX: SOIL
DATE RECEIVED: 5/30/2007 TIME: 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04636 NEA LRF: 07050174-04
DATE SAMPLED: 05/30/2007 TIME: 12:40
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
1,1,1-Trichloroethane	ND	11.0	ug/kg	05/31/2007	U
1,1,2,2-Tetrachloroethane	ND	11.0	ug/kg	05/31/2007	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	11.0	ug/kg	05/31/2007	U
1,1,2-Trichloroethane	ND	11.0	ug/kg	05/31/2007	U
1,1-Dichloroethane	ND	11.0	ug/kg	05/31/2007	U
1,1-Dichloroethene	ND	11.0	ug/kg	05/31/2007	U
1,2,3-Trichlorobenzene	ND	11.0	ug/kg	05/31/2007	U
1,2,4-Trichlorobenzene	ND	11.0	ug/kg	05/31/2007	U
1,2-Dibromo-3-chloropropane	ND	11.0	ug/kg	05/31/2007	U
1,2-Dibromoethane	ND	11.0	ug/kg	05/31/2007	U
1,2-Dichlorobenzene	ND	11.0	ug/kg	05/31/2007	U
1,2-Dichloroethane	ND	11.0	ug/kg	05/31/2007	U
1,2-Dichloropropane	ND	11.0	ug/kg	05/31/2007	U
1,3-Dichlorobenzene	ND	11.0	ug/kg	05/31/2007	U
1,4-Dichlorobenzene	ND	11.0	ug/kg	05/31/2007	U
2-Butanone	ND	11.0	ug/kg	05/31/2007	U
2-Hexanone	ND	11.0	ug/kg	05/31/2007	U
4-Methyl-2-pentanone	ND	11.0	ug/kg	05/31/2007	U
Acetone	ND	55.1	ug/kg	05/31/2007	U
Benzene	ND	11.0	ug/kg	05/31/2007	U
Bromodichloromethane	ND	11.0	ug/kg	05/31/2007	U
Bromoform	ND	11.0	ug/kg	05/31/2007	U
Bromomethane	ND	11.0	ug/kg	05/31/2007	U
Carbon disulfide	ND	11.0	ug/kg	05/31/2007	U
Carbon tetrachloride	ND	11.0	ug/kg	05/31/2007	U
Chlorobenzene	ND	11.0	ug/kg	05/31/2007	U
Chloroethane	ND	11.0	ug/kg	05/31/2007	U
Chloroform	ND	11.0	ug/kg	05/31/2007	U
Chloromethane	ND	11.0	ug/kg	05/31/2007	U

**CERTIFICATE OF ANALYSIS**

6/1/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-2E
MATRIX: SOIL
DATE RECEIVED: 5/30/2007 **TIME:** 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04636 **NEA LRF:** 07050174-04
DATE SAMPLED: 05/30/2007 **TIME:** 12:40
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	ND	11.0	ug/kg	05/31/2007	U
cis-1,3-Dichloropropene	ND	11.0	ug/kg	05/31/2007	U
Cyclohexane	ND	11.0	ug/kg	05/31/2007	U
Dibromochloromethane	ND	11.0	ug/kg	05/31/2007	U
Dichlorodifluoromethane	ND	11.0	ug/kg	05/31/2007	U
Ethylbenzene	ND	11.0	ug/kg	05/31/2007	U
Isopropylbenzene	ND	11.0	ug/kg	05/31/2007	U
m&p-Xylene	ND	11.0	ug/kg	05/31/2007	U
Methyl acetate	ND	11.0	ug/kg	05/31/2007	U
Methyl tert-butyl ether	ND	11.0	ug/kg	05/31/2007	U
Methylcyclohexane	ND	11.0	ug/kg	05/31/2007	U
Methylene chloride	ND	55.1	ug/kg	05/31/2007	U
o-Xylene	ND	11.0	ug/kg	05/31/2007	U
Styrene	ND	11.0	ug/kg	05/31/2007	U
Tetrachloroethene	320	11.0	ug/kg	05/31/2007	
Toluene	ND	11.0	ug/kg	05/31/2007	U
trans-1,2-Dichloroethene	ND	11.0	ug/kg	05/31/2007	U
trans-1,3-Dichloropropene	ND	11.0	ug/kg	05/31/2007	U
Trichloroethene	ND	11.0	ug/kg	05/31/2007	U
Trichlorofluoromethane	ND	11.0	ug/kg	05/31/2007	U
Vinyl chloride	ND	11.0	ug/kg	05/31/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer
Robert E. Wagner
Laboratory Director



CERTIFICATE OF ANALYSIS

6/1/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-2W
MATRIX: SOIL
DATE RECEIVED: 5/30/2007 TIME: 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04637 NEA LRF: 07050174-05
DATE SAMPLED: 05/30/2007 TIME: 12:50
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
1,1,1-Trichloroethane	ND	2.13	ug/kg	05/31/2007	U
1,1,2,2-Tetrachloroethane	ND	2.13	ug/kg	05/31/2007	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.13	ug/kg	05/31/2007	U
1,1,2-Trichloroethane	ND	2.13	ug/kg	05/31/2007	U
1,1-Dichloroethane	ND	2.13	ug/kg	05/31/2007	U
1,1-Dichloroethene	ND	2.13	ug/kg	05/31/2007	U
1,2,3-Trichlorobenzene	ND	2.13	ug/kg	05/31/2007	U
1,2,4-Trichlorobenzene	ND	2.13	ug/kg	05/31/2007	U
1,2-Dibromo-3-chloropropane	ND	2.13	ug/kg	05/31/2007	U
1,2-Dibromoethane	ND	2.13	ug/kg	05/31/2007	U
1,2-Dichlorobenzene	ND	2.13	ug/kg	05/31/2007	U
1,2-Dichloroethane	ND	2.13	ug/kg	05/31/2007	U
1,2-Dichloropropane	ND	2.13	ug/kg	05/31/2007	U
1,3-Dichlorobenzene	ND	2.13	ug/kg	05/31/2007	U
1,4-Dichlorobenzene	ND	2.13	ug/kg	05/31/2007	U
2-Butanone	ND	2.13	ug/kg	05/31/2007	U
2-Hexanone	ND	2.13	ug/kg	05/31/2007	U
4-Methyl-2-pentanone	ND	2.13	ug/kg	05/31/2007	U
Acetone	ND	10.6	ug/kg	05/31/2007	U
Benzene	ND	2.13	ug/kg	05/31/2007	U
Bromodichloromethane	ND	2.13	ug/kg	05/31/2007	U
Bromoform	ND	2.13	ug/kg	05/31/2007	U
Bromomethane	ND	2.13	ug/kg	05/31/2007	U
Carbon disulfide	ND	2.13	ug/kg	05/31/2007	U
Carbon tetrachloride	ND	2.13	ug/kg	05/31/2007	U
Chlorobenzene	ND	2.13	ug/kg	05/31/2007	U
Chloroethane	ND	2.13	ug/kg	05/31/2007	U
Chloroform	ND	2.13	ug/kg	05/31/2007	U
Chloromethane	ND	2.13	ug/kg	05/31/2007	U



**NORTHEAST ANALYTICAL, INC.
ENVIRONMENTAL LAB SERVICES
2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308
(518) 346-4592 FAX: (518) 381-6055**

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NAME	COMPANY	FAX NO.
Andy Vitolins	Malcolm Pirnie, Inc.	(518) 782-0500
Bruce Nelson	Malcolm Pirnie, Inc.	(518) 782-0500

FROM: _____

DELIVER IMMEDIATELY: _____ ROUTINE: _____

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FAX OPERATOR: Kellyann Ozer

COMMENTS: _____

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**CERTIFICATE OF ANALYSIS**

6/1/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: HJB-SRA-2W
MATRIX: SOIL
DATE RECEIVED: 5/30/2007 **TIME:** 16:10
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04637 **NEA LRF:** 07050174-05
DATE SAMPLED: 05/30/2007 **TIME:** 12:50
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	ND	2.13	ug/kg	05/31/2007	U
cis-1,3-Dichloropropene	ND	2.13	ug/kg	05/31/2007	U
Cyclohexane	ND	2.13	ug/kg	05/31/2007	U
Dibromochloromethane	ND	2.13	ug/kg	05/31/2007	U
Dichlorodifluoromethane	ND	2.13	ug/kg	05/31/2007	U
Ethylbenzene	ND	2.13	ug/kg	05/31/2007	U
Isopropylbenzene	ND	2.13	ug/kg	05/31/2007	U
m&p-Xylene	ND	2.13	ug/kg	05/31/2007	U
Methyl acetate	ND	2.13	ug/kg	05/31/2007	U
Methyl tert-butyl ether	ND	2.13	ug/kg	05/31/2007	U
Methylcyclohexane	ND	2.13	ug/kg	05/31/2007	U
Methylene chloride	ND	10.6	ug/kg	05/31/2007	U
o-Xylene	ND	2.13	ug/kg	05/31/2007	U
Styrene	ND	2.13	ug/kg	05/31/2007	U
Tetrachloroethene	2.90	2.13	ug/kg	05/31/2007	
Toluene	ND	2.13	ug/kg	05/31/2007	U
trans-1,2-Dichloroethene	ND	2.13	ug/kg	05/31/2007	U
trans-1,3-Dichloropropene	ND	2.13	ug/kg	05/31/2007	U
Trichloroethene	ND	2.13	ug/kg	05/31/2007	U
Trichlorofluoromethane	ND	2.13	ug/kg	05/31/2007	U
Vinyl chloride	ND	2.13	ug/kg	05/31/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

William A. Kotas
Quality Assurance Officer

Robert E. Wagner
Laboratory Director

NORTHEAST ANALYTICAL, INC.

22190 Technology Drive, Schenectady, NY 12308
Telephone (518) 346-4592 Fax (518) 381-6055
www.nealab.com information@nealab.com

LR# # **<07060037>**

DISPOSAL REQUIREMENTS: (To be filled in by Client)

○ RETURN TO CLIENT

DISPOSAL BY NORTHEAST ANALYTICAL

ARCHIVAL BY NORTHEAST ANALYTICAL

Additional charges incurred after disposal (if hazardous) or arrival. for details[illegible]

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**CERTIFICATE OF ANALYSIS**

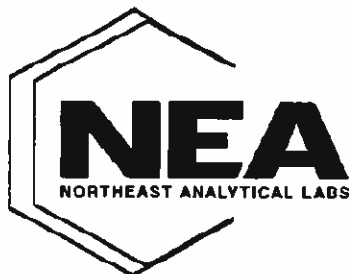
06/07/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

CUSTOMER ID: SRA-2B-12
MATRIX: SOIL
DATE RECEIVED: 06/05/2007 **TIME:** 16:15
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04973 **NEA LRF:** 07060037-01
DATE SAMPLED: 06/05/2007 **TIME:** 07:30
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
1,1,1-Trichloroethane	ND	4.74	ug/kg	06/06/2007	U
1,1,2,2-Tetrachloroethane	ND	4.74	ug/kg	06/06/2007	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.74	ug/kg	06/06/2007	U
1,1,2-Trichloroethane	ND	4.74	ug/kg	06/06/2007	U
1,1-Dichloroethane	ND	4.74	ug/kg	06/06/2007	U
1,1-Dichloroethene	7.00	4.74	ug/kg	06/06/2007	U
1,2,3-Trichlorobenzene	ND	4.74	ug/kg	06/06/2007	U
1,2,4-Trichlorobenzene	ND	4.74	ug/kg	06/06/2007	U
1,2-Dibromo-3-chloropropane	ND	4.74	ug/kg	06/06/2007	U
1,2-Dibromoethane	ND	4.74	ug/kg	06/06/2007	U
1,2-Dichlorobenzene	ND	4.74	ug/kg	06/06/2007	U
1,2-Dichloroethane	ND	4.74	ug/kg	06/06/2007	U
1,2-Dichloropropane	ND	4.74	ug/kg	06/06/2007	U
1,3-Dichlorobenzene	ND	4.74	ug/kg	06/06/2007	U
1,4-Dichlorobenzene	ND	4.74	ug/kg	06/06/2007	U
2-Butanone	ND	4.74	ug/kg	06/06/2007	U
2-Hexanone	ND	4.74	ug/kg	06/06/2007	U
4-Methyl-2-pentanone	ND	4.74	ug/kg	06/06/2007	U
Acetone	ND	23.7	ug/kg	06/06/2007	U
Benzene	ND	4.74	ug/kg	06/06/2007	U
Bromodichloromethane	ND	4.74	ug/kg	06/06/2007	U
Bromoform	ND	4.74	ug/kg	06/06/2007	U
Bromomethane	ND	4.74	ug/kg	06/06/2007	U
Carbon disulfide	ND	4.74	ug/kg	06/06/2007	U
Carbon tetrachloride	ND	4.74	ug/kg	06/06/2007	U
Chlorobenzene	ND	4.74	ug/kg	06/06/2007	U
Chloroethane	ND	4.74	ug/kg	06/06/2007	U
Chloroform	ND	4.74	ug/kg	06/06/2007	U
Chloromethane	ND	4.74	ug/kg	06/06/2007	U



CERTIFICATE OF ANALYSIS

06/07/2007

MALCOLM PIRNIE, INC.
43 BRITISH AMERICAN ROAD
LATHAM, NY 12110
CONTACT: BRUCE NELSON

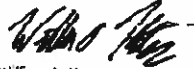
CUSTOMER ID: SRA-2B-12
MATRIX: SOIL
DATE RECEIVED: 06/05/2007 TIME: 16:15
SAMPLED BY: J. WYCKOFF
CUSTOMER PO: N/A

NEA ID: AK04973 NEA LRF: 07060037-01
DATE SAMPLED: 06/05/2007 TIME: 07:30
PROJECT: 4279009 HJB PROPERTIES
LOCATION: ALBANY, NY
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
EPA Method 8260B CLP OLM 4.3 List					
cis-1,2-Dichloroethene	225	4.74	ug/kg	06/06/2007	
cis-1,3-Dichloropropene	ND	4.74	ug/kg	06/06/2007	U
Cyclohexane	ND	4.74	ug/kg	06/06/2007	U
Dibromochloromethane	ND	4.74	ug/kg	06/06/2007	U
Dichlorodifluoromethane	ND	4.74	ug/kg	06/06/2007	U
Ethylbenzene	ND	4.74	ug/kg	06/06/2007	U
Isopropylbenzene	ND	4.74	ug/kg	06/06/2007	U
m&p-Xylene	ND	4.74	ug/kg	06/06/2007	U
Methyl acetate	ND	4.74	ug/kg	06/06/2007	U
Methyl tert-butyl ether	ND	4.74	ug/kg	06/06/2007	U
Methylcyclohexane	ND	4.74	ug/kg	06/06/2007	U
Methylene chloride	ND	23.7	ug/kg	06/06/2007	U
o-Xylene	ND	4.74	ug/kg	06/06/2007	U
Styrene	ND	4.74	ug/kg	06/06/2007	U
Tetrachloroethene	1220	12.7	ug/kg	06/06/2007	
Toluene	ND	4.74	ug/kg	06/06/2007	U
trans-1,2-Dichloroethene	ND	4.74	ug/kg	06/06/2007	U
trans-1,3-Dichloropropene	ND	4.74	ug/kg	06/06/2007	U
Trichloroethene	78.7	4.74	ug/kg	06/06/2007	
Trichlorofluoromethane	ND	4.74	ug/kg	06/06/2007	U
Vinyl chloride	ND	4.74	ug/kg	06/06/2007	U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:


William A. Kovas
Quality Assurance Officer
Robert P. Wagner
Laboratory Director



Albany Community Development Agency
Remedial Investigation / Alternatives Analysis Report

APPENDIX

D

Soil Disposal Documentation





CITY OF ALBANY
DEPARTMENT OF GENERAL SERVICES
 Rapp Road Waste Management Facility
 525 Rapp Rd • Albany, N.Y. 12205
 (518) 869-3651

006066 MC Environmental
 526 Queensbury Avenue
 Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	303421	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
05/29/07	05/29/07	10:53	11:19	7002	
2750					

Scale 1 Gross Wt. 107080 LB
 Scale 2 Tare Wt. 39740 LB
 Net Weight 67340 LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
33.67	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
 NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
 AGREEMENT

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

LOT # 2750

SIGNATURE _____



CITY OF ALBANY
DEPARTMENT OF GENERAL SERVICES
 Rapp Road Waste Management Facility
 525 Rapp Rd • Albany, N.Y. 12205
 (518) 869-3651

006066 MC Environmental
 526 Queensbury Avenue
 Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	303432	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
05/29/07	05/29/07	11:20	11:38	7006	
2750					

Scale 1 Gross Wt. 75120 LB
 Scale 2 Tare Wt. 23740 LB
 Net Weight 51380 LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
25.69	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
 NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
 AGREEMENT

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

LOT # 2750



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525 Rapp Rd • Albany, N.Y. 12205
(518) 869-3651

006066 MC Environmental
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Queensbury NY 12804

SITE	TICKET	GRID	WEIGHMASTER		
02	303387	P41	BRENDA		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
05/29/07	05/29/07	09:10	09:38	7001	
2750					

Scale 1 Gross Wt. 104220 LB
Scale 2 Tare Wt. 39640 LB
Net Weight 64580 LB

Inbound - Charge ticket

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	SEE	TOTAL
32.29	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NEW MOUNT
TENDERED
CHANGE
CHECK NO.

LOT # 2750

SIGNATURE _____



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525 Rapp Rd • Albany, N.Y. 12205
(518) 869-3651

006066 MC Environmental
526 Queensbury Avenue
Queensbury NY 12804

SITE	TICKET	GRID	WEIGHMASTER		
02	303394	P41	BRENDA		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
05/29/07	05/29/07	09:36	09:50	7002	
2750					

Scale 1 Gross Wt. 68060 LB
Scale 2 Tare Wt. 23940 LB
Net Weight 44120 LB

Inbound - Charge ticket

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	SEE	TOTAL
22.06	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

TENDERED
CHANGE

LOT # 2750



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(518) 869-3651

006066 MC Environmental
526 Queensbury Avenue
Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	303477	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
05/29/07	05/29/07	13:56	14:14	7001	
REFERENCE					
2750					

Scale 1 Gross Wt. 70700 LB
Scale 2 Tare Wt. 28580 LB
Net Weight 42120 LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
21.06	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NET AMOUNT

526.50

TENDERED

CHANGE

CHECK NO.

LOT # 2750

SIGNATURE



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(518) 869-3651

006066 MC Environmental
526 Queensbury Avenue
Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	303554	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
05/30/07	05/30/07	10:30	10:50	7002	
REFERENCE					
2750					

Scale 1 Gross Wt. 68060 LB
Scale 2 Tare Wt. 28900 LB
Net Weight 39160 LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
19.58	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

LOT # 2750



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525 Rapp Rd • Albany, N.Y. 12205
(518) 869-3651

006066 MC Environmental
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Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	303701	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
05/31/07	05/31/07	10:24	10:52	7001	
REFERENCE					
2750					

Scale 1 Gross Wt. 117160 LB
Scale 2 Tare Wt. 32440 LB
Net Weight 84720 LB
Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
42.36	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

LOT # 2750

SIGNATURE _____



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Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	303923	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
06/04/07	06/04/07	08:57	09:14	7002	
REFERENCE					
2750-301					

Scale 1 Gross Wt. 68920 LB
Scale 1 Tare Wt. 29440 LB
Net Weight 39480 LB
Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
19.74	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

LOT # 2750

Handwritten signature



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525 Rapp Rd • Albany, N.Y. 12205
(518) 869-3651

006066 MC Environmental
526 Queensbury Avenue
Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	303951	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
06/04/07	06/04/07	10:24	10:24	7001	
REFERENCE			ORIGIN		
2750-301					

Scale 1 Gross Wt. 67340 LB Inbound - Charge ticket
Manual Tare Wt. 29440 LB
Net Weight 37900 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
18.95	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

LOT # 2750

SIGNATURE _____



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525 Rapp Rd • Albany, N.Y. 12205
(518) 869-3651

006066 MC Environmental
526 Queensbury Avenue
Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	303980	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
06/04/07	06/04/07	11:45	11:45	7001	
REFERENCE			ORIGIN		
2750-301					

Scale 1 Gross Wt. 65720 LB Inbound - Charge ticket
Manual Tare Wt. 29440 LB
Net Weight 36280 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
18.14	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

LOT # 2750



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Queensbury NY 12804

SITE		TICKET		GRID		WEIGHMASTER					
02		303918		P4 I		BRENDA					
DATE IN		DATE OUT		TIME IN		TIME CUT		VEHICLE		ROLL OFF	
06/04/07		06/04/07		08:41		09:10		7001			
REFERENCE											
2750											

Scale 1 Gross Wt. 101600 LB
Scale 1 Tare Wt. 33240 LB
Net Weight 68360 LB
Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
34.18	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NET AMOUNT

854.50

TENDERED

CHANGE

CHECK NO.

LOT # 2750

SIGNATURE



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525 Rapp Rd • Albany, N.Y. 12205
(518) 869-3651

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526 Queensbury Avenue
Queensbury NY 12804

TICKET		GRID		WEIGHMASTER	
02	303993	P41		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
06/04/07	06/04/07	12:59	13:17	7001	
REFERENCE					
2750--301					

Scale 1 Gross Wt. 68580 LB
Scale 2 Tare Wt. 29240 LB
Net Weight 39340 LB
Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
19.67	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

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NET AMOUNT

TENDERED

CHANGE

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SITE		TICKET		GRID		WEIGHMASTER					
02		303946		P4 I		BRENDA					
DATE IN		DATE OUT		TIME IN		TIME OUT		VEHICLE		ROLL OFF	
06/04/07		06/04/07		10:08		10:08		7001			
REFERENCE											
2750											

Scale 1 Gross Wt. 109480 LB Inbound - Charge ticket
Manual Tare Wt. 33240 LB
Net Weight 76240 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
38.12	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

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NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
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NET AMOUNT
TENDERED
CHANGE
CHECK NO.

LOT # 2750

SIGNATURE _____



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Queensbury NY 12804

SITE		TICKET		GRID		WEIGHMASTER					
02		303975		P4 I		BRENDA					
DATE IN		DATE OUT		TIME IN		TIME OUT		VEHICLE		ROLL OFF	
06/04/07		06/04/07		11:33		11:33		7001			
REFERENCE											
2750											

Scale 1 Gross Wt. 109500 LB Inbound - Charge ticket
Manual Tare Wt. 33240 LB
Net Weight 76260 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
38.13	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
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NET AMOUNT
TENDERED
CHANGE
CHECK NO.

LOT # 2750



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006066 MC Environmental
526 Queensbury Avenue
Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	304040	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
06/05/07	06/05/07	08:45	09:11	7001	
2750					

Scale 1 Gross Wt. 69340 LB
Scale 1 Tare Wt. 28520 LB
Net Weight 40820 LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
20.41	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

LOT # 2750

SIGNATURE



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Queensbury NY 12804

SITE	TICKET	GRID		WEIGHMASTER	
02	304068	P4 I		BRENDA	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
06/05/07	06/05/07	10:04	10:04	7001	
2750					

Scale 1 Gross Wt. 76820 LB
Manual Tare Wt. 28520 LB
Net Weight 48300 LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
24.15	TON	CONTAMINATED SOIL			0.00	

Operating hours: 7 am to 3 pm, Monday - Friday

THIS IS TO CERTIFY THAT THIS LOAD DOES NOT CONTAIN ANY
NON ACCEPTABLE MATERIALS AS DEFINED BY LANDFILL PERMIT
AGREEMENT

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

LOT # 2750

**WEIGHMASTER CERTIFICATE
TRUCK SCALE**



SIMS HUGO NEU

HUDSON RIVER RECYCLING
PORT OF ALBANY
ALBANY, NEW YORK 12202
(518) 465-2288 □ FAX (518) 465-4240

TICKET #: TENWPZ

Purchased From: CP013P

N.Y.S. D.M.V. 7002740SCP

HUDSON RIVER

Ver # TK TENWPZ ID # MGES

Vendor 00

SHIPMENT# COMMODITY	GROSS	TARE	NET	ADJ REASON	# CARS	PD NT
TENWPZ UNPREP #1 HPS	14060A	13520A	540			540

UST - Malcolm Pirnie / ACDA Project
Henry Johnson Blvd Properties Site

ALL WEIGHTS ARE REPORTED IN POUNDS UNLESS OTHERWISE INDICATED. ALL NON-POUND WEIGHTS ARE ASSUMED TO BE MANUAL WEIGHTS

TOTALS	14060	13520	540	540

WEIGHMASTER SIGNATURE _____

GRS Date 05/21/07 GROSS TONS

GRS Time 10:50 2410

CUSTOMER SIGNATURE _____

TRE Date 05/21/07

TRE Time 10:39

A=SCALE 1 B=SCALE 2 C=SCALE 3 D=SCALE 4 M=MANUAL WEIGHT

THIS IS TO CERTIFY THAT I DELIVERED THE ABOVE MATERIAL FOR THE NAMED SUPPLIER. This will also certify that I, on behalf of the above named supplier, am familiar with SIMS/HUGO NEU list of unacceptable/prohibited materials, and that the above load does not contain any unacceptable/prohibited materials, including any Class I (chlorofluorocarbons) or Class II (hydrochlorofluorocarbons) refrigerants (FREON), which under the federal Clean Air Act must be reclaimed, not vented. HRR-1 (Rev.11/05)



Pallette Stone Corporation

373 WASHINGTON ST. P.O. BOX 4550
SARATOGA SPRINGS, N.Y. 12866
Ph (518) 584-2475

Ticket 4219831

6/6/2007 1:12:56PM

Location: QUARRY

Carrier:
Vehicle:
Customer: 13101 MC Environmental Services Inc.
Order:

Product: WCR Recyclable Concrete Received
Mix:
Freight: Pickup
Zone:
P.O.:
Deliver:

Comment:
Weighmaster: Jennifer L Smith

Received: Sign: _____
Print: _____

	Qty	Rate	Amount
Product	15.69 Ton		
Freight			
Tax (County)	SARA		
Fuel Surcharge			
Total		\$	

	Pounds	Tons	Metric
Gross	60440	30.22	27.42
Tare	29060	14.53	13.18
Net	31380	15.69	14.23

	Today
Loads	1
Cumulative	15.69



Pallette Stone Corporation

373 WASHINGTON ST. P.O. BOX 4550
SARATOGA SPRINGS, N.Y. 12866
Ph (518) 584-2475

Ticket 4220094

6/8/2007 9:37:51AM

Location: QUARRY

Carrier:
Vehicle:
Customer: 13101 MC Environmental Services Inc.
Order:

Product: WCR Recyclable Concrete Received
Mix:
Freight: Pickup
Zone:
P.O.:
Deliver:

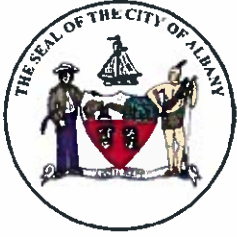
Comment:
Weighmaster: Jennifer L Smith

Received: Sign: _____
Print: _____

	Qty	Rate	Amount
Product	4.54 Ton		
Freight			
Tax (County)	SARA		
Fuel Surcharge			
Total		\$	

	Pounds	Tons	Metric
Gross	38580	19.29	17.50
Tare	29500	14.75	13.38
Net	9080	4.54	4.12

	Today
Loads	1
Cumulative	4.54



Albany Community Development Agency

Remedial Investigation / Alternatives Analysis Report

APPENDIX

E

Permits





**City of Albany, New York
Department of General Services**

Street Opening Permit

Notice: Call UFPO two (2) days prior to digging. 1-800-962-7962

Permit Granted to: **Jeremy Wyckoff Malcolm**

Address: **cell #**

Phone Number: **518 782-2100**

In front of: **Henry Johnson Blvd &**

For 30 days for the purpose of Instalation of soil vapor monitoring points and ground water monitoring wells.

Working being **Aztech Technologies**
Done by:

In accordance with the laws and ordinances of the City of Albany and the directions of the Commissioner of General Services. The grantee shall take all precautions to prevent accidents to persons or property and shall place barricades and lights on all openings and bridge it where necessary or directed. Trees must be protected with barricades.

Permit Number: **719**

Permit Granted: **June 19, 2006**

Permit Expires: **July 21, 2006**

UPON SITE INSPECTION IF THE ACTUAL DEMENSIONS ARE GREATER THAN THOSE IN THE PERMIT APPLICATION YOU WILL BE BILLED FOR THE DIFFERENCE.

For the Commissioner of General Services

Per

CFUGia

Application No. 3603

City of Albany - Streets & Sidewalks Opening Permit Application

Instructions: This application shall be completed in full, either typed or printed clearly in ink, and filed with the City of Albany Department of General Services, located at One Conners Boulevard, Albany, New York, 12204 (518-432-1144), together with the following items:

- Detailed sketch of work involved, including restoration (drawn to scale with dimensions)
- Certificate of Insurance, naming the City of Albany as an additional insured... YES
- Permit application fee = \$ 50.00..... NO
- Opening fee = \$ 3.00 per square foot of disturbance..... WAIVED

Location (Street Address) of Opening: Intersection of Henry Johnson Blvd and Clinton Ave (see Map)
Remedial Investigation/Alternative Analysis, for the City of Albany.

Purpose of Opening: Installation of Soil Vapor monitoring points and Groundwater monitoring wells.

Applicant's Name: Jeremy Wyckoff (Malcolm Pirnie, Inc.) Telephone No: 518-782-2100
Address: 43 British American Blvd, Latham, NY 12110

Contractor's Name: Aztech Technologies Telephone No: 518-885-5383
Address: 5 McLean Hill Road, Ballston SPA, NY 12020

Proposed Dimensions of Opening: Lawn _____
Street _____
Sidewalk _____

Twelve Approx 2x2 Foot openings (see Map) and
Schematics

Date and Time when Opening is Desired: _____
Length of Time Opening will Remain Open: _____

June 12, 2006
June 23, 2006

All work shall be performed in accordance with the City of Albany Pavement Openings Ordinance and related Rules and Regulations, and shall be completed within 30 days of the date of permit issuance, or a new permit shall be obtained by the Applicant.

I, the undersigned, understand that the permit which may be issued pursuant to this application is issued on the assumption that all of the representations made on this permit application are true and accurate. I have read and understand the provisions of the Pavement Openings Ordinance and related Rules and Regulations and shall comply with said requirements. I understand that if any of the information on this form is found to be untrue or inaccurate, or if the work initiated pursuant to a permit granted based on the representations made on this application is not completed in accordance with the representations made on this permit application, then the permit may be revoked without notice to myself, the contractor, or any other party.

Applicant's Signature

Please Print Name

Jeremy Wyckoff

Date June 7, 2006

Do Not Write Below this Line

This permit application is hereby APPROVED ✓

DENIED _____

Signature

Date 6/21/06

Special Conditions: - See next page!

City of Albany – Streets & Sidewalks Opening Permit Review FormCity of Albany Engineering:

Comments: HIB under moratorium 2005. Sidewalk panels must
be replaced in full, matching existing finish. Must
coordinate interaction with job log, & notify in
advance.

☒ Moratorium Check Completed☐ Emergency WorkPlans Approved by: OMP 10/10/06 Denied by: _____City of Albany Water Department:Comments: Please see V890

Plans Approved by: _____ Denied by: _____

City of Albany Department of General Services:

Comments: _____

Plans Approved by: _____ Denied by: _____

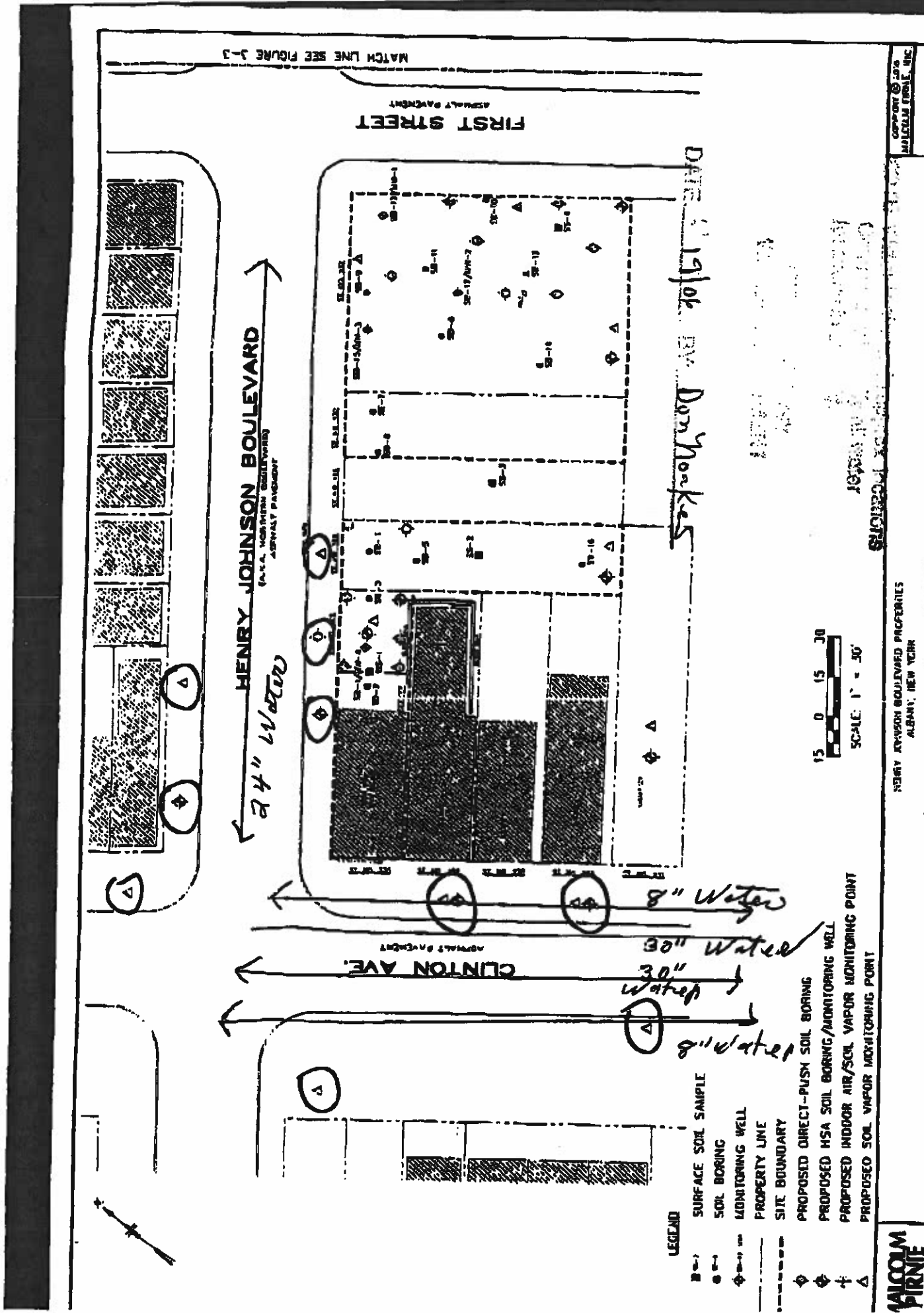
City of Albany Traffic Safety Notified by: _____

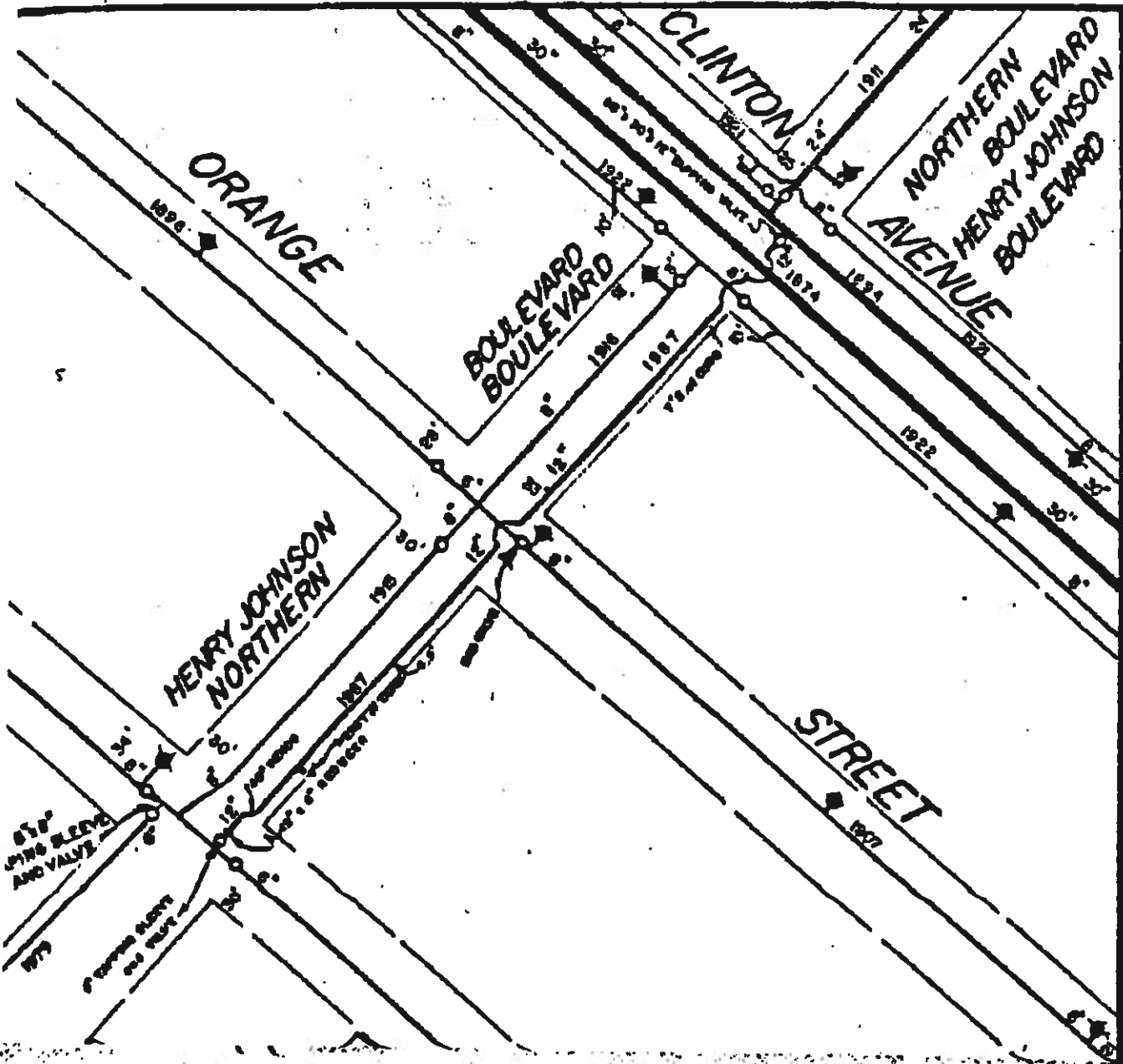
Comments: _____

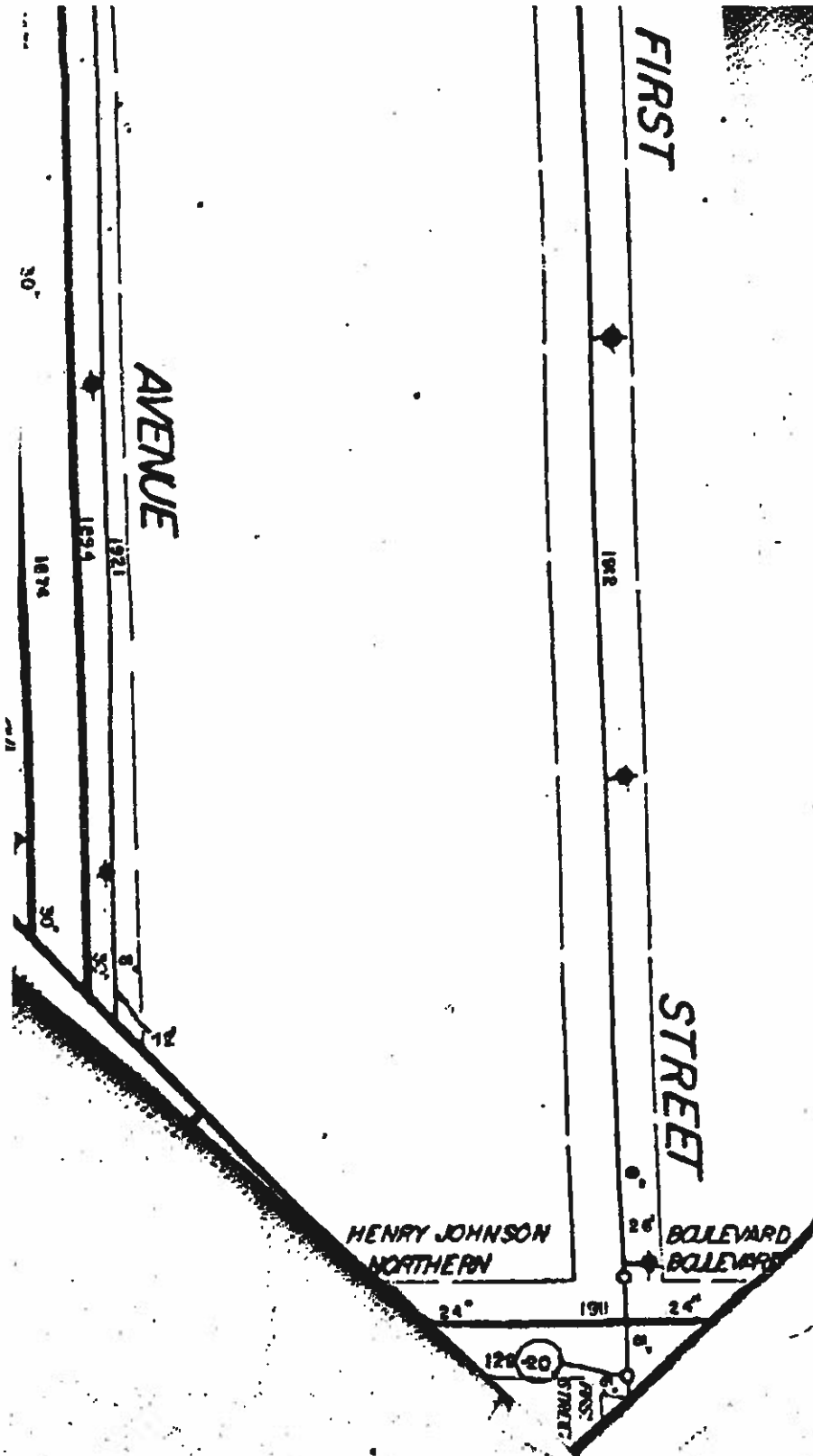
Work Site Inspected by: _____ Date: _____

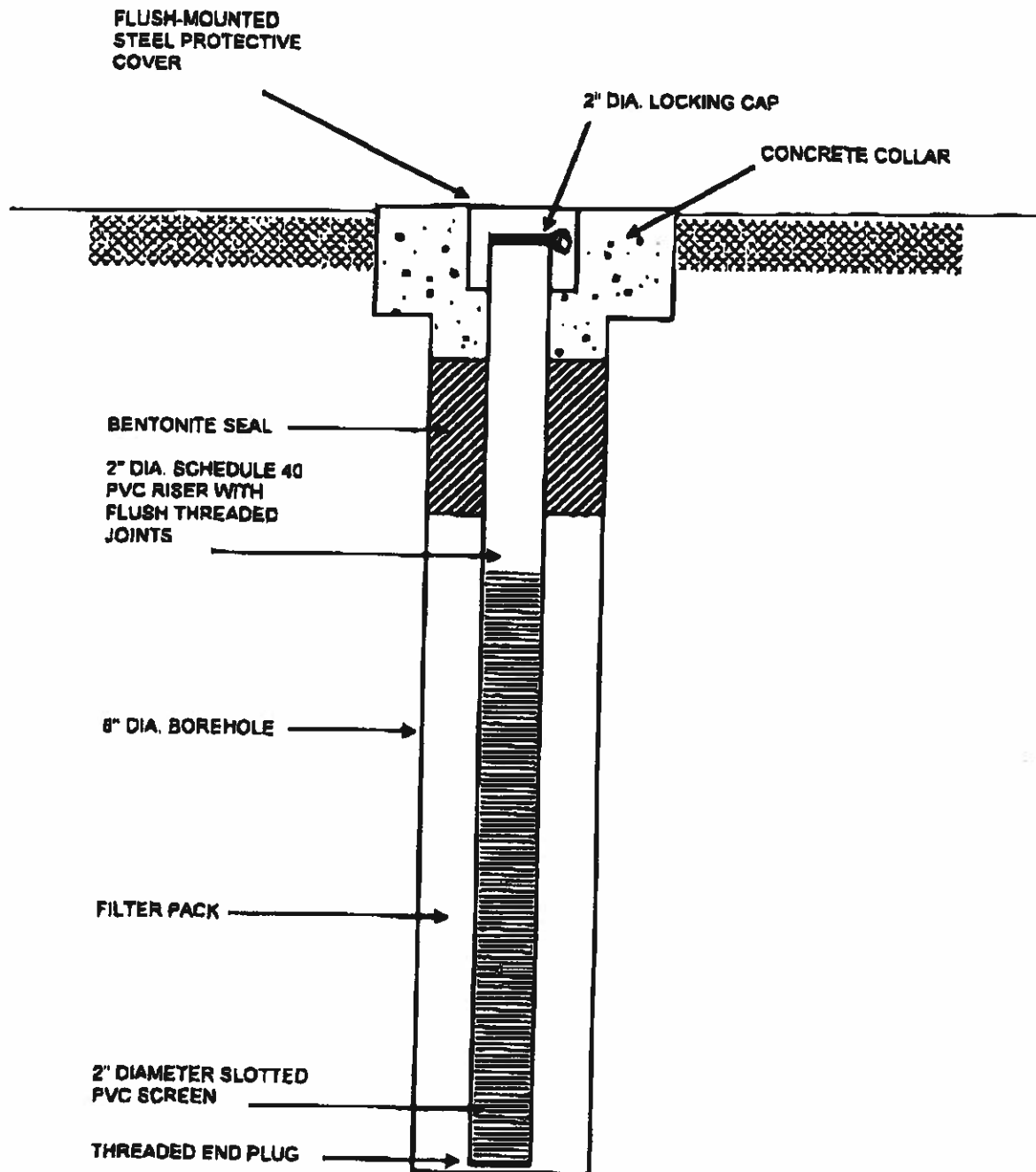
T-734 P 003/004 F-704

06-07-2006 04:58PM







**MALCOLM
PIRNIE****WELL CONSTRUCTION SCHEMATIC (TYPICAL)****FIGURE 1**



**City of Albany, New York
Department of General Services**

Street Opening Permit

Notice: Call UFPO two (2) days prior to digging. 1-800-962-7962

Permit Granted to: Malcome Pirnie Inc
Address: 43 British American Boulevard
Latham NY 12110
Phone Number: 518 782-2100
In front of: 149 Henry Johnson Boulevard

For 30 days for the purpose of Install Monitoring Wells

Working being Aztech Technologies
Done by:

In accordance with the laws and ordinances of the City of Albany and the directions of the Commissioner of General Services. The grantee shall take all precautions to prevent accidents to persons or property and shall place barricades and lights on all openings and bridge it where necessary or directed. Trees must be protected with barricades.

Permit Number:	4332
Permit Granted:	September 30, 2008
Permit Expires:	October 30, 2008

**UPON SITE INSPECTION IF THE ACTUAL DEMENSIONS ARE GREATER THAN
THOSE IN THE PERMIT APPLICATION YOU WILL BE BILLED FOR THE DIFFERENCE.**

For the Commissioner of General Services

Per

REQUEST RECEIVED
SEP 16 2008

Application No. 5492

Dept. of General Services
City of Albany

Streets & Sidewalks Opening Permit Application

Instructions: This application shall be completed in full, either typed or printed clearly in ink, and filed with the City of Albany Department of General Services, located at One Conners Boulevard, Albany, New York, 12204 (518-432-1144), together with the following items:

- Detailed sketch of work involved, including restoration (drawn to scale with dimensions)
- Certificate of Insurance, naming the City of Albany as an additional insured... 65.00 waived
- Permit application fee = \$ 65.00
- Opening fee = \$ 5.00 per square foot of disturbance

Location (Street Address) of Opening: 149 Henry Johnson Blvd. AND 231 First St., ALBANY,

Purpose of Opening: Remedial Investigation for City of Albany (ACDA)
Install ground water monitoring wells and soil vapor sample point.

Applicant's Name: Jeremy Wyckoff (Malcolm Pirnie, Inc.) Telephone No: 518-782-2100

Address: 43 British American Blvd., Latham, NY 12110.

Contractor's Name: A2tech Technologies Telephone No: 518-885-5383

Address: 5 McCrea Hill Road, Ballston SPA, NY 12020

Proposed Dimensions of Opening: Lawn _____
Street _____
Sidewalk _____

Three Approx 1-foot by 1-foot openings.
(See map & schematic)

Date and Time when Opening is Desired: _____
Length of Time Opening will Remain Open: _____

9/23/08 @ 8 AM
ONE DAY, Approx 8 hours

All work shall be performed in accordance with the City of Albany Pavement Openings Ordinance and related Rules and Regulations, and shall be completed within 30 days of the date of permit issuance, or a new permit shall be obtained by the Applicant.

I, the undersigned, understand that the permit which may be issued pursuant to this application is issued on the assumption that all of the representations made on this permit application are true and accurate. I have read and understand the provisions of the Pavement Openings Ordinance and related Rules and Regulations and shall comply with said requirements. I understand that if any of the information on this form is found to be untrue or inaccurate, or if the work initiated pursuant to a permit granted based on the representations made on this application is not completed in accordance with the representations made on this permit application, then the permit may be revoked without notice to myself, the contractor, or any other party.

Applicant's Signature _____
Please Print Name Jeremy Wyckoff

Date Sept 2, 2008

Do Not Write Below this Line

This permit application is hereby: APPROVED

DENIED _____

Signature _____

Date 9/30/08

Special Conditions: _____

City of Albany – Streets & Sidewalks Opening Permit Review Form

City of Albany Engineering:

Comments: MORATORIUM 2005 - H. JOHNSON BLVD
MORATORIUM 2004 - 1ST STREET

☐ Moratorium Check Completed ☐ Emergency Work

Plans Approved by: _____ Denied by: _____

City of Albany Water Department:

Comments: Refer to on-site VFA MARKS

Plans Approved by: L.D. 9/29/09 Denied by: _____

City of Albany Department of General Services:

Comments: _____

Plans Approved by: _____ Denied by: _____

City of Albany Traffic Safety Notified by: _____

Comments: _____

Work Site Inspected by: _____ Date: _____

City of Albany Moratorium List (2003-2007)

Year Completed	Street Name	Project Limits	Comments	Street Reconstruction	Street Resurfacing	Sidewalk Reconstruction	ADA Ramp
2007	Ash Grove Place	Grand Street	to Trinity Place	Engineering			
2007	Austain Avenue	Central Avenue	to Pinhurst Avenue	Engineering / DGS	Y	N	N
2007	Besch Avenue	Delaware Avenue	to Dead End	Engineering	Y	N	N
2007	Catherine Street	Delaware Avenue	to Oneida Terrace	Engineering	Y	N	N
2007	Croswell Street	Lincoln Avenue	to Washington Avenue	Engineering	Y	N	N
2007	Cuyler Street	Sloan Street	to Elizabeth Street	Engineering	Y	N	N
2007	Dana Avenue	Knox Street	to Delaware Avenue	Engineering	Y	N	N
2007	Edgewood Avenue	Washington Avenue	to Melrose Avenue	Engineering	Y	N	N
2007	Heiderberg Avenue	Sycamore Street	to Hollywood Avenue	Engineering / DGS	Y	N	Y
2007	Heiderberg Avenue	Main Avenue (South)	to Fleetwood Avenue	Engineering / DGS	Y	N	N
2007	Heiderberg Avenue	Fleetwood Avenue	to Van Schoick Avenue	Engineering / DGS	Y	N	N
2007	Jeanette Street	Delaware Avenue	to Second Avenue	Engineering / DGS	Y	N	N
2007	Marlette Place	Whitehall Road	to Dartmouth Street	Engineering	Y	N	N
2007	Myrtle Avenue	Partridge Street	to Lake Avenue (South)	Engineering	Y	N	N
2007	New Scotland Avenue	Allen Street (South)	to Erie Street (West)	Engineering	Y	Y	Y
2007	Olive Tree Lane	Olympus Court	to Cul-de-Sac	Engineering	Y	N	N
2007	Olympus Court	Cul-de-Sac	to Cul-de-Sac	Engineering	Y	N	N
2007	Park Avenue	Eagle Street	to Dr. Martin Luther King Jr. Blvd.	Engineering / DGS	Y	N	N
2007	Partridge Street	Madison Avenue	to Western Avenue	Engineering	Y	N	N
2007	Pine Street	Lodge Street	to Pearl Street (North)	DGS	Y	N	N
2007	Pine Street	Eagle Street	to Lodge Street	DGS	Y	N	N
2007	Pinewood Avenue	Intersection	of Hackett Boulevard	Engineering	N	Y	N
2007	Second Street	Swan Street (North)	to Lark Street	Engineering	Y	N	N
2007	Sloan Street	Second Avenue	to Third Avenue	Engineering	Y	N	N
2007	Van Schoick Avenue	New Scotland Avenue	to Heiderberg Avenue	Engineering	Y	N	N
2007	Western Avenue	Tudor Road	to Beacon Avenue	Engineering	Y	N	N
2007	White Oak Lane	New Scotland Road	to Olive Tree Lane	Engineering	Y	N	N
2006	Avenue "A"	Ontario Street	to Dead End	Engineering	Y	N	N
2006	Berkshire Boulevard	Colonial Avenue	to Davis Avenue	DGS	Y	N	N
2006	Brevator Street	Washington Avenue	to Lincoln Avenue	DGS	Y	N	N
2006	Bucci McTague Drive	Slingerland Street	to Dove Street (South)	DGS	Y	N	N
2006	Catherine Street	Avondale Terrace	to Oneida Terrace	North Side & South Side	Y	Y	Y
2006	Center Street	Center Street (20)	to Champlain Street	New Granite Curb Only - South Side	N	Y	N
2006	Clermont	Intersection	@ Hawkins	N.E. / N.W. & S.E. / S.W. Corners	N	Y	N
2006	Clermont	Intersection	@ Melrose Avenue	S.E. & S.W. Corners	N	Y	Y
2006	Dartmouth Street	Rose Court	to Holmes Court	DGS	N	Y	N
2006	Dove Street (South)	Second Avenue	to Bucci McTague Drive	Engineering	Y	N	N
2006	Edgewood Avenue	Intersection	@ Belvidere Avenue	N.E. & S.E. Corners	N	Y	Y
2006	Elleen Street	Intersection	@ Hawkins	N.E. / N.W. & S.E. / S.W. Corners	N	Y	Y
2006	Elleen Street	Intersection	@ Belvidere Avenue	S.E. & S.W. Corners	N	Y	Y
2006	Englewood Place	State Street	to Dead End	New Granite Curb Only - Both Sides	N	N	N
2006	Euclid Avenue	Intersection	@ Greenway	N.E. / N.W. & S.E. / S.W. Corners	N	Y	Y
2006	Fay Street	Russell Blessing Road	to 200' east on Fay Street	DGS	N	N	N
2006	First Street	Lexington Avenue	to Henry Johnson Boulevard	Engineering	Y	N	N
2006	Fourth Avenue	Green Street	to Franklin Street	DGS	Y	N	N
2006	Frisbie Avenue	Avenue B	to McCarty Avenue	DGS	Y	N	N
2006	Garden Street	Garden Street (1)	to Slingerland Street	North Side	Y	N	N
2006	Harman Road	New Scotland Road	to Dead End	DGS	Y	N	N
2006	Henry Johnson Boulevard	Intersection	@ Hudson Avenue	Various Corners (5)	Y	N	N
2006	Henry Johnson Boulevard	Intersection	@ Sheridan Avenue	S.E. Corner	N	Y	Y
2006	Highland Court	Woodridge Street	to Cul-de-Sac	Engineering	Y	N	N

City of Albany Moratorium List (2003-2007)

Year Completed	Street Name	Project Limits	Comments	Scope of Work Completed			
				Street Reconstruction	Street Resurfacing	Sidewalk Reconstruction	ADA Ramp
2006	Woodlawn Avenue	Grove Avenue	DGS	N	Y	N	N
2006	Woodridge Street	Pinehurst Boulevard	Engineering	N	Y	N	N
2006	Yates Street	Allen Street (South)	DGS	N	Y	N	N
2005	Allen Street (South)	Intersection	N.W., S.W. Corners	N	N	Y	Y
2005	Beaver Street	Pearl Street (South)	DGS	N	Y	N	N
2005	Bogart Terrace	Second Avenue	Engineering	N	Y	N	N
2005	Broadway	Colonia Street	DGS	N	Y	N	N
2005	Eagle Street	Park Avenue	Engineering	N	Y	Y	N
2005	Eagle Street	Intersection	N.E. CORNER	N	N	Y	N
2005	Eagle Street	Intersection	N.W. & S.W. CORNERS	N	N	Y	Y
2005	Erie Street (West)	Benson Street	Engineering	N	N	Y	Y
2005	Euckd Avenue	Berkshire Boulevard	DGS	N	Y	N	N
2005	Franklin Street	Westlark Avenue	Engineering	N	Y	N	N
2005	Garden Alley	Dove Street	Engineering	N	Y	N	N
2005	Hackett Boulevard	Holland Avenue	Engineering	N	Y	Y	N
2005	Henry Johnson Boulevard	Sheridan Avenue	Engineering	N	Y	Y	N
2005	Harkimer Street	Pearl Street (South)	Engineering	N	Y	Y	N
2005	Hickree Avenue	Russell Road	DGS	N	Y	N	Y
2005	Homeslead Avenue	Lincoln Avenue	Engineering	N	Y	N	N
2005	Hopi Street	New Scotland Road	DGS	N	Y	N	N
2005	Jennings Drive	Woodlawn Avenue	Housing Development	Y	N	Y	Y
2005	Lawrence Street (West)	Western Avenue	Engineering	N	Y	N	N
2005	Lincoln Avenue	Allen Street (North)	Engineering	N	Y	N	N
2005	Livingston Avenue	Intersection	N.W. & S.W. CORNERS	N	N	Y	Y
2005	Livingston Avenue	Intersection	N.E. CORNER	N	N	Y	Y
2005	Livingston Avenue	Intersection	N.E. & N.W. CORNERS	N	N	Y	Y
2005	Livingston Avenue	Intersection	N.E. & N.W. CORNERS	N	N	Y	Y
2005	Livingston Avenue	Intersection	S.E. & S.W. CORNERS	N	N	Y	Y
2005	Livingston Avenue	Manning Boulevard	Engineering	N	N	Y	Y
2005	Monroe Street	Chapel Street	Private Developer	N	N	Y	Y
2005	New Scotland Avenue	Manning Boulevard (South)	Engineering	N	Y	Y	N
2005	New Scotland Road	NYS Thruway Overpass	TIP Project	Y	Y	Y	Y
2005	Pearl Street (North)	Van Woert Street	DGS	N	Y	N	N
2005	Providence Street	Lake Avenue (South)	Engineering	N	Y	N	N
2005	Quail Street	Clinton Avenue	Engineering	N	N	Y	Y
2005	Quail Street	Intersection	N.E. N.W. S.E., S.W. CORNERS	N	N	Y	Y
2005	Quail Street	Western Avenue	Engineering	N	N	Y	Y
2005	Rosemont Street	Intersection	S.E. & S.W. CORNERS	N	N	Y	Y
2005	Rosemont Street	Intersection	S.E. & S.W. CORNERS	N	N	Y	Y
2005	Rykeman Avenue	Main Avenue (South)	Engineering	N	Y	N	N
2005	Sand Street	Second Avenue	National Grid Restoration Work	N	Y	N	N
2005	Second Street	Judson Street	Engineering	N	Y	N	N
2005	Second Street	Lake Avenue (North)	Engineering	N	Y	N	N
2005	Sheridan Avenue	Chapel Street	Private Developer	N	N	Y	Y
2005	Slingerland Street	Second Avenue	National Grid Restoration Work	N	Y	N	N
2005	Thornton Street	Intersection	N.E. N.W. S.E., S.W. CORNERS	N	N	Y	Y
2005	Van Zandt Street	Grand Street	DGS	N	Y	N	N
2005	Warren Street	Quail Street	Engineering	N	Y	Y	Y
2005	Washington Avenue	S.U.N.Y. Entrance	Engineering	N	Y	Y	N
2005	Western Avenue	Robin Street	Engineering	N	N	Y	Y

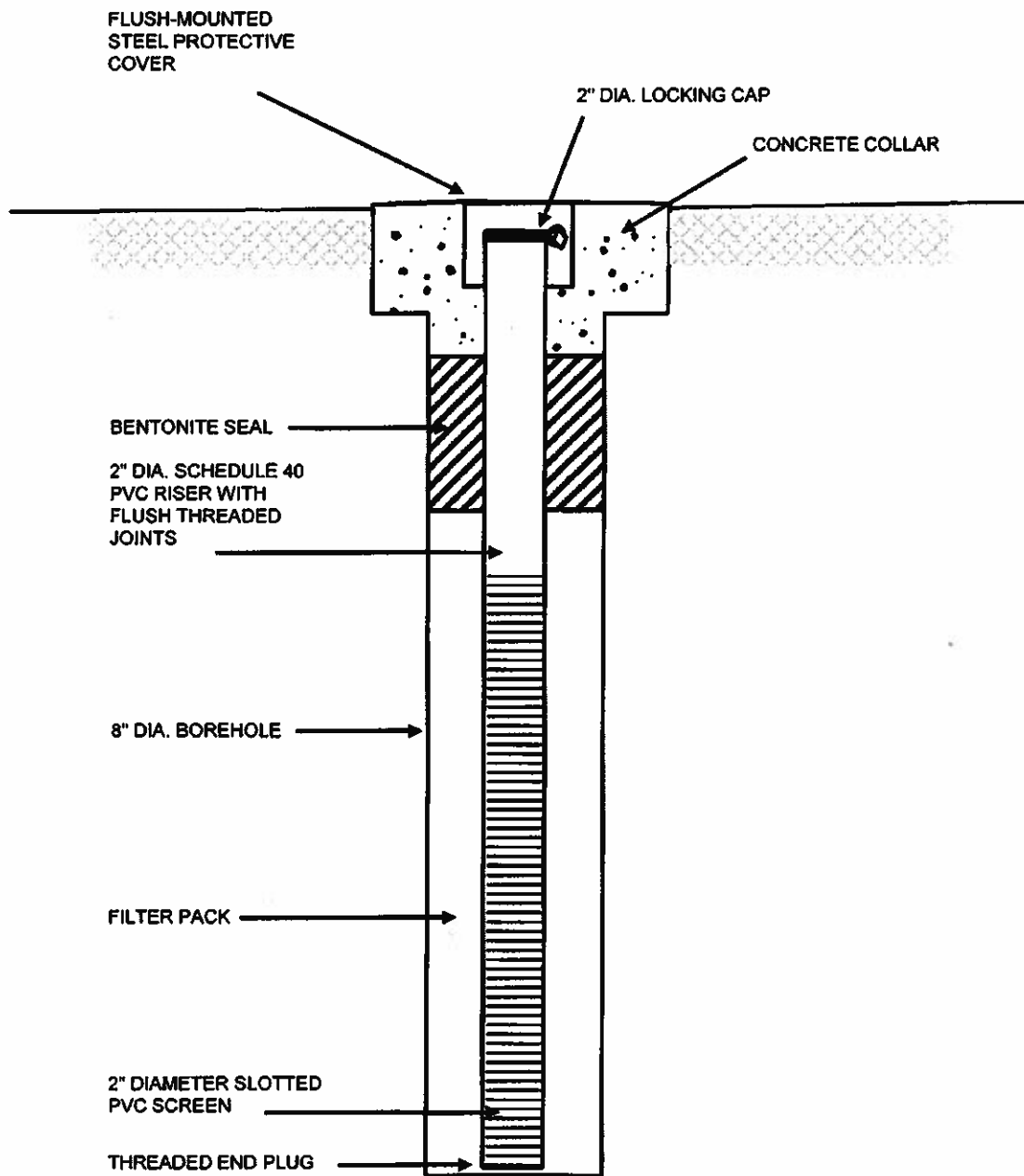


**MALCOLM
PIRNIE**

**HENRY JOHNSON BOULEVARD PROPERTIES
ALBANY, NEW YORK
PROPOSED SIDEWALK OPENING LOCATIONS**

SEPTEMBER 2008

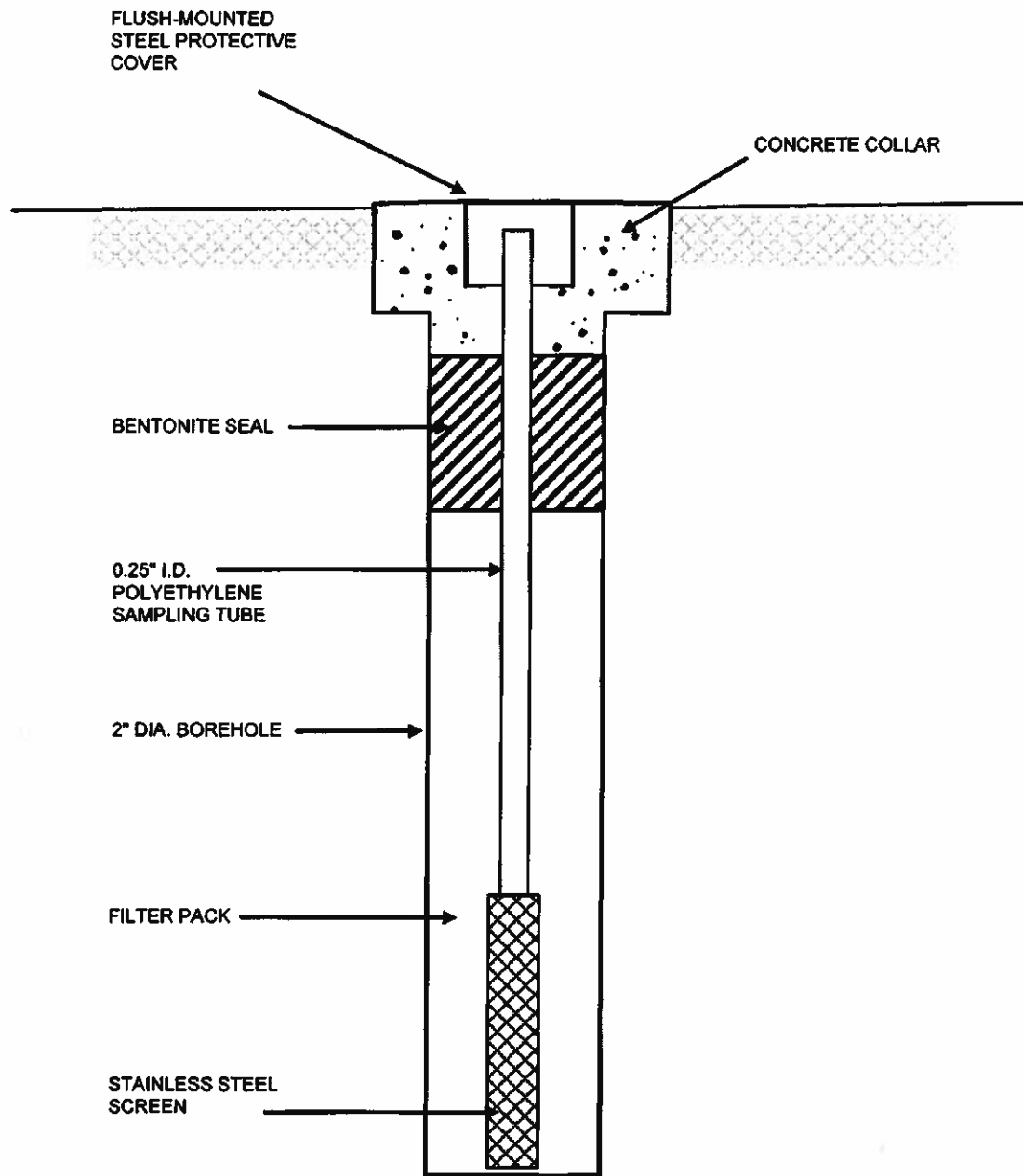
FIGURE 1

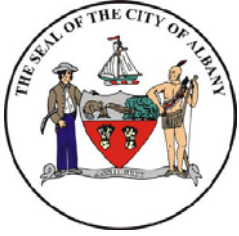


**MALCOLM
PIRNIE**

WELL CONSTRUCTION SCHEMATIC (TYPICAL)

FIGURE 2



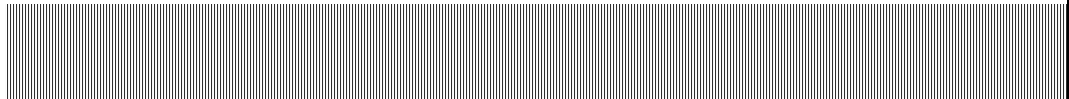


Albany Community Development Agency
Remedial Investigation / Alternatives Analysis Report

APPENDIX

F

SVT, Inc. Phase II ESA



DASNY

SITE INVESTIGATION REPORT
for the
PHASE II ENVIRONMENTAL SITE ASSESSMENT
at
140-146 HENRY JOHNSON BOULEVARD
ALBANY, NEW YORK

Prepared For:

THE DORMITORY AUTHORITY STATE OF NEW YORK

Prepared By:



STV Incorporated
225 Park Avenue South
New York, NY 10003

AUGUST 2006

PN 07-11128



SITE INVESTIGATION REPORT
for the
PHASE II ENVIRONMENTAL SITE ASSESSMENT
for
140-146 HENRY JOHNSON BOULEVARD
ALBANY, NY

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- 2 Detected Semivolatile Organic Compounds (SVOCs) in Soil and Groundwater
- 3 RCRA Metals in Soil

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- 1 Site Location Map
- 2 Soil Boring/Monitoring Well Location Map

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- A Boring Logs
- B Laboratory Data



1.0 INTRODUCTION

STV Incorporated (STV) was retained by the Dormitory Authority State of New York (DASNY) to perform a Phase II Environmental Site Assessment (ESA) at the proposed site of the Arbor Hill branch of the Albany Public Library, located in Albany, New York. The area of investigation (the "Site") is currently a vacant lot, and was formerly occupied by storefronts and residential dwellings.

The Site is located at 140-146 Henry Johnson Boulevard, New York (Figure 1). A site plan is depicted as Figure 2. The Site is an irregular shaped lot bounded by Henry Johnson Boulevard to the west, First Street to the south, a pre-school building to the northeast, and residential dwellings and a vegetated area to the east. The Site includes an abandoned residential dwelling (148 Henry Johnson Boulevard).

This document presents summaries and findings for the Phase II Environmental Site Assessment (ESA) conducted in August 2006 in accordance with the proposal approved by DASNY on July 28, 2006. The proposal describes the field sampling procedures, the analytical requirements, and the quality assurance and quality control (QA/QC) procedures followed during the completion of the ESA. All field procedures and protocols were completed in accordance with the "Health and Safety Plan for the Phase II Subsurface Site Investigation at 140-146 Henry Johnson Boulevard, Albany, NY." (STV, 2006).

1.1 Site Background

1.1.1 Phase I ESA

In July 2006, STV was retained by DASNY to perform a Phase I ESA on the Site. The Phase I identified one recognized environmental condition (REC) in connection with the



vacant lot to the south, which was formerly a retail gasoline station from the 1930s until the 1980s.

1.2 ESA Objectives

This ESA was conducted to determine the presence or absence of soil and/or groundwater contamination at the Site as a result of the long-term operation of the retail gasoline station on the property directly across the street, where petroleum releases may have occurred. The ESA included the installation of soil borings and monitoring wells and the collection of soil and groundwater samples to evaluate potential impacts to soil and groundwater underneath the Site. Soil samples were submitted for laboratory analysis to test for the presence of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and RCRA metals. Groundwater samples were analyzed for VOCs and SVOCs.



2.0 SITE DESCRIPTION AND SETTING

2.1 Site Description

The proposed Site, located at 140-148 Henry Johnson Boulevard, consists of several adjoining vacant property lots, and one lot containing a vacant residential dwelling, comprising an overall Site area of 27,000 ft². The vacant lots are partially covered with asphalt and grass cover.

The Project Site is situated on the northeast corner of First Avenue and Henry Johnson Boulevard, in a primarily residential urban area with a few commercial properties (Figure 1). Adjoining properties include a pre-school building to the northeast, residential properties to the east, another vacant lot to the south, and residential and commercial properties to the west.

2.2 Environmental Setting

2.2.1 *Topography*

The Project Site is located in Albany, New York in Albany County. The area is located in the Piedmont Physiographic Province. The most recent (1994) United States Geologic Survey (USGS) 7.5-minute topographic map for Albany, NY depicts basic topographic features of the area (Figure 1). The regional topography of this portion of Albany County is generally flat or rolling with low relief. The Project Site surface elevation is about 188 feet above mean sea level (msl), and the Site has a gentle slope to the south-southeast.

2.2.2 *Geology*

The regional geology of Albany County consists of unconsolidated till and alluvium of Pleistocene and Holocene age overlying sedimentary and metamorphic bedrock of Ordovician age. The consolidated rocks in Albany County are sedimentary in origin. The two principal rock formations in Albany County from oldest to youngest are the



Normanskill Shale and the Snake Hill Formation (shale with some limestone and sandstone), both of middle Ordovician age. The consolidated rocks of Albany County are generally buried by glacial till and alluvial deposits (Halberg et al., 1964).

The area of Project Site is underlain by till deposited during the Pleistocene glaciation consisting of unstratified and unsorted clay, silt, sand, gravel, and boulders, as well as alluvial deposits. This extends to an unknown depth beneath the site, below which is middle Ordovician (Paleozoic) sedimentary bedrock.

2.2.3 Surface Water and Groundwater

There are no surface water bodies within the immediate vicinity of the Project Site. The closest surface water body is Tivoli Lake. It is located more than ½-mile to the north of the Project Site. The Hudson River, the nearest major water body, is located one mile east of the Project Site.

According to a topographic map of the Albany, New York quadrangle (USGS 1994), the topography in the vicinity of the project site slopes to the south-southeast. Therefore, since groundwater flow often mimics surface topography, local groundwater is assumed to flow to the south-southeast. Groundwater in this investigation was encountered at approximately nine and 10 feet below grade.



3.0 SITE INVESTIGATION METHODS

This ESA was conducted according to the accepted proposal that included field sampling procedures, analytical requirements, data quality objectives, chain-of-custody (COC) documentation, and equipment calibration procedures. The scope of work procedures were developed in accordance with NYSDEC and STV sampling techniques and analytical protocols. This ESA was conducted to determine the presence or absence of soil and/or groundwater contamination at the Site as a result of the long-term operation of the retail gasoline station on a property directly across the street, where petroleum releases may have occurred.

3.1 Utility Clearance

The Drilling Contractor, Aquifer Drilling and Testing, Inc. (ADT) called for utility location service ("call before you dig") prior to the work. In addition, all boring locations were cleared by hand to a depth of five feet below grade to ensure the absence of any subsurface utilities or structures at each location.

3.2 Subsurface Investigation

Three soil borings were completed as part of this assessment. Soil samples collected from the three borings were used to delineate the presence of any chemicals of concern in Site soils. Three monitoring wells were also installed as part of this investigation. Groundwater samples from the three wells were used to determine the overall condition of groundwater on the Site, as well as any residual petroleum contamination from the former neighboring gasoline station. An existing monitoring well was located at the Site and also sampled along with the three new wells. The boring locations were completed in a triangular pattern outlined on Figure 2.



3.2.1 Soil Sampling

Soil borings were advanced using a CME 750 Hollow-Stem Auger drill rig. Soil samples were obtained using a 2-foot stainless-steel split spoon sampler, and logged continuously from 4 to approximately 14 feet in each boring location.

Soil samples were field characterized from each split spoon, and screened with a PID to check for the presence of organic vapors. One soil sample from above the water table depth (approximately 8 to 10 feet) was forwarded for laboratory analysis from each boring location. Discreet soil samples for VOC analysis was collected first, followed by a composite sample for SVOCs and RCRA Metals. The soil was directly transferred to the VOC sample jars ensuring that no headspace existed in the sample jars. All other analyses required a composite soil sample, which was collected and mixed in a stainless steel mixing bowl. The soil was then directly transferred to the appropriate sampling jar. All soil samples submitted were analyzed for SVOCs by EPA Method 8270, VOCs by EPA Method 8260 and RCRA metals. Sampling equipment was properly decontaminated between sample locations. QA/QC procedures were followed for field soil sampling based on STV's "Environmental Field Procedures Manual" (2004 revised).

3.2.2 Monitoring Well Installation

Groundwater monitoring wells were installed at three locations on the lot, two of which were located along the southern boundary of the property, nearest the former gas station, and one of which was located in the northwest corner of the lot in an assumed upgradient location from the other wells (Figure 2). The wells were installed to a depth of approximately 15 feet below ground surface (bgs). The monitoring wells consisted of five feet of 2-inch diameter, Schedule-40 polyvinyl chloride (PVC) casing threaded to a 2-inch diameter, ten-foot long, Schedule-40 PVC screen with appropriately sized slotting across the water table boundary. A continuous sand pack consistent to the screen slot size



(e.g. #2 Morie sand) was installed around the well screen from the bottom to approximately one foot above the well screen. A bentonite seal of approximately 2 vertical feet was installed above the sand pack. The remaining annular space was filled with a cement-bentonite grout using Type I Portland cement, and pure powdered bentonite and potable water. A concrete collar consisted of Type I Portland Cement, clean sand aggregate and potable water. The collar was a minimum of 6 inches greater than the skirt and a minimum of 8 inches in depth. The concrete collar slope was 2% from the manhole cover to meet flush with the ground surface to allow for drainage. The top of the well casing was fitted with an expandable rubber seal with a locking cap. Following installation, the well was monitored for total depth and depth to water.

3.2.3 Groundwater Sampling

Groundwater samples were collected after well development to ensure complete equilibrium and flow through the water table. Groundwater samples were collected from the three newly installed monitoring wells, and one existing on-Site monitoring well, using a low-flow pump. At each location, groundwater was purged until free of sediment, or until dry, and monitored using a water-quality meter to ensure low turbidity when possible. Groundwater samples for VOC analysis were collected first at each sampling location, avoiding splashing and agitation of the sample and ensuring that no headspace existed in the sample containers. In addition, a blind duplicate sample was collected from MW-1 for quality assurance/quality control (QA/QC) purposes. All samples were analyzed for Target Compound List (TCL) VOCs by EPA Method 8260, and TCL SVOCs by EPA Method 8270. Sampling equipment was properly decontaminated between well locations. The samples were forwarded for laboratory analysis in a cooler packed with ice to keep the sample temperature at or below 4°C during shipping. QA/QC procedures were followed for field sampling based on STV's "Environmental Field Procedures Manual" (2004 revised).



4.0 FINDINGS OF SITE INVESTIGATION

The results of the subsurface investigation are presented in this section. This includes field observations made during soil boring drilling and analytical results for soil and groundwater samples. The conclusions and recommendations for the Site are included in Section 5.0 of this Phase II ESA report.

A total of three soil borings finished as groundwater monitoring wells were completed during the subsurface investigation at 140-146 Henry Johnson Boulevard. Three soil samples, four groundwater samples (one from an existing well), and one duplicate groundwater sample were collected for laboratory analysis. Monitoring well locations are depicted on the Well Location Plan (Figure 2). The results of the laboratory analysis are presented in Tables 1-3.

4.1 Field Observations

The Site is generally underlain by fill material containing sand, gravel, brick and rock fragments and to an approximate depth of nine feet, beneath which is grey medium density clay, which extends to greater than 30 feet beneath the Site. Photoionization Detector (PID) readings exhibited no detectable readings for most soil samples, with a maximum level of 3.7 ppm. (See Boring Logs in Appendix A for PID readings at each sampling location).

Groundwater was generally encountered between 9 to 10 feet bgs during monitoring well installation and groundwater sampling. Groundwater is expected to flow in a south-southeasterly direction based on the slope at the Site and vicinity.

4.2 Analytical Results – Soil

Soil samples were collected according to the procedure discussed above in Section 3.2.1. The soil sample results for VOCs, SVOCs and RCRA Metals were compared to the "NYSDEC



Technical and Administrative Guidance Memo (TAGM) 4046 – Recommended Soil Cleanup Objectives (RSCOs)”.

4.2.1 Volatile Organic Compounds

All soil samples collected were analyzed for VOC compounds. Only low concentrations of cis-1,2-dichloroethene, vinyl chloride, and methylene chloride were detected, but did not exceed RSCOs. Traces of methylene chloride were found in all soil samples, but also detected in the laboratory QA/QC blank, indicating that its presence is likely due to laboratory contamination.

4.2.2 Semi-Volatile Organic Compounds

All samples were analyzed for SVOC compounds. Low levels of three SVOC compounds [2-methylnaphthalene, bis (2-ethylhexyl) phthalate, butyl benzyl phthalate] were detected, but did not exceed RSCOs. See Table 2 for the individual compound concentrations detected compared to the NYSDEC RSCO guidance values.

4.2.3 RCRA Metals

Soil samples were analyzed for RCRA metals. None of the three samples submitted exceeded the Eastern USA background levels for metals in soil, as shown in Table 3.

4.3 Analytical Results - Groundwater

Groundwater samples were taken from all three monitoring wells installed, and also from an existing monitoring well (EW-1) on the south side of the Site between MW-1 and MW-2. The groundwater sample results were compared to Class GA drinking water standards as described in the “Ambient Water Quality Standards and Guidance Values and Groundwater Effluent



Limitations” – Division of Water Technical and Operational Guidance Series (1.1.1) (TOGS). Groundwater analytical results are presented in Tables 1 and 2.

4.3.1 Volatile Organic Compounds

All groundwater samples were analyzed for VOCs. Traces of methylene chloride were found in all groundwater samples, as well as in the laboratory QA/QC blank, indicating that its presence in the samples is most likely due to laboratory contamination. The only other VOC detected was cis-1,2-dichloroethene, which was detected in MW-3 at 15 ppb, exceeding the Class GA groundwater criteria of 5 ppb.

4.3.2 Semi-Volatile Organic Compounds

All groundwater samples were analyzed for SVOCs. Five SVOCs were detected at concentrations below laboratory quantitation limits, none of which exceeded the guidance values. Low concentrations of 2-methylnaphthalene were detected in MW-1 and MW-3. Bis(2-ethylhexyl)phthalate was detected in MW-2 and MW-3 at concentrations of 12 ppb and 5.8 ppb respectively, slightly exceeding the Class GA standard value of 5 ppb.

Sample DUP was submitted to the laboratory as a blind duplicate of MW-1. Results show generally minor variations between the two samples, with concentrations showing mostly trace concentrations in both samples.



5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Soil

Soil concentrations of VOCs, SVOCs, and RCRA metals are shown in this investigation to be generally typical of urban fill material, with only low levels or trace concentrations of VOCs and SVOCs, and metals concentrations well within the range of background levels for the eastern USA. Soil concentrations do not approach or exceed RSCO standard values, and are not considered to be of concern at the Site.

5.2 Groundwater

Groundwater samples were analyzed for TCL VOCs and TCL SVOCs. The detected VOCs and SVOCs were found at generally low concentrations. Sample MW-3 contained one VOC and one SVOC slightly in excess of the TOGS Class GA groundwater standards. Sample MW-2 also contained one SVOC slightly exceeding the standard. The GA-class groundwater standard used for characterization is the most conservative water quality screening criteria available. Less conservative characterization criteria for groundwater may be considered to determine an appropriate method for managing, treating and discharging of groundwater during construction activities in this area.

The Site is considered appropriate for use as a library based on the findings of this soil and groundwater assessment.



6.0 REFERENCES

- STV 2003, "Environmental Field Procedures Manual", Revised 2004.
- NYSDEC, 1994a. Division of Hazardous Waste Remediation, Technical and Administrative Guidance Memorandum (TAGM) - Determination of Soil Cleanup Objectives and Cleanup Levels - HWR-92-4046, January 1994.
- NYSDEC, 2000. Division of Environmental Remediation, Soil Cleanup Consolidation Memorandum, December 20, 2000.
- NYSDEC, 2002. Division of Environmental Remediation, Draft DER-10 – Technical Guidance for Site Investigation and Remediation, December 2002.
- United States Geologic Survey (USGS), 1994. USGS Topographic map, Albany, New York Quadrangle, 7.5 Minute Series, 1994.
- NYSDEC, 1992. Division of Construction Management, Spill Technology and Remediation Series (STARS) Memo #1 – Petroleum-Contaminated Soil Guidance Policy, August 1992.
- STV 2006, Phase I Environmental Assessment for Arbor Hill Site #2, 140-148 Henry Johnson Boulevard, Albany, NY, July 2006.
- STV 2006, Health and Safety Plan for the Phase II Subsurface Site Investigation at 140-146 Henry Johnson Boulevard, Albany, NY, August 2006.



- Halberg, H.N., Hunt, O.P., and Pauszek, F.H., 1964. *Water Resources of the Albany-Schenectady-Troy Area, New York*: U.S. Geological Survey Water-Supply Paper 1499-D, p. D1-D64.

TABLES

TABLE 1

**SOIL AND GROUNDWATER SAMPLE RESULTS
FOR
VOLATILE ORGANIC COMPOUNDS**

**ARBOR HILL SITE
ALBANY, NY**

Compound	RSCO		Sample ID		Laboratory Sample ID		Matrix		Sample Date	
	NYSDEC Criteria* (ppb)		SB/MW-1 (8-10)		SB/MW-2 (8-10)		SB/MW-3 (10-12)			
cis-1,2-Dichloroethene	NA		0608139-06	08/09/2006	0608139-06	08/10/2006	0608139-07	08/09/2006	Soil	97
Methylene chloride	100		22B		25B		21B		Soil	16
Vinyl chloride	200		ND		ND				Soil	

Compound	Class GA		Sample ID		Laboratory Sample ID		Matrix		Sample Date	
	NYSDEC Criteria** (ppb)		EW-1		MW-1		MW-2		MW-3	
cis-1,2-Dichloroethene	5		0608139-01	08/09/2006	0608139-01	08/09/2006	0608139-05	08/09/2006	0608139-03	08/09/2006
Methylene chloride	5		13B		17B		14B		14B	
Vinyl chloride	2		ND		ND		ND		ND	

* Indicates TAGM 4046 recommended soil cleanup objectives (RSCO).

** Based on NYSDEC Regulations Part 703.5- Groundwater Quality Standards for Class GA water

All data is in parts per billion (ppb).

Detected compounds only are shown

J = Estimated Value Below Method Detection Limit

B - Found in QA/QC Lab Blank

ND = Not detected.

Bold: Value exceeds guidance values or recommended soil cleanup objective.

TABLE 2

**SOIL AND GROUNDWATER SAMPLE RESULTS
FOR
SEMIVOLATILE ORGANIC COMPOUNDS**

**ARBOR HILL SITE
ALBANY, NY**

Compound	Sample ID Laboratory Sample ID Matrix Sample Date	RSCO NYSDEC Criteria* ppb	MW-1 (8-10)			MW-2 (8-10)			MW-3 (10-12)		
			0608139-06			0608139-08			0608139-07		
			Soil			Soil			Soil		
			08/09/2006			08/10/2006			08/09/2006		
2-Methylnaphthalene		36,400	ND	ND	ND	ND	ND	ND	ND	ND	170
3+4-Methylphenol		NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis (2-ethylhexyl) phthalate		50,000	220	ND	ND	ND	ND	ND	700	ND	ND
Butyl benzyl phthalate		50,000	ND	ND	ND	ND	ND	ND	92J	ND	ND
Diethyl phthalate		7,100	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate		2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate		8,100	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		13,000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene		50,000	ND	ND	ND	ND	ND	ND	ND	ND	ND

Compound	Sample ID Laboratory Sample ID Matrix Sample Date	Class GA NYSDEC Criteria** (ppb)	EW-1			MW-1			MW-2			MW-3			MW-1 DUP		
			0608139-01			0608139-02			0608139-05			0608139-03			0608139-04		
			Water			Water			Water			Water			Water		
			08/09/2006			08/09/2006			08/09/2006			08/09/2006			08/09/2006		
2-Methylnaphthalene		NA	ND	ND	ND	0.86	ND	ND	ND	ND	ND	9.5	ND	ND	ND	ND	ND
3+4-Methylphenol		NA	ND	ND	ND	1.6J	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND
bis (2-ethylhexyl) phthalate		5	1.4J	ND	ND	1.6J	ND	ND	12	ND	ND	5.8	ND	ND	ND	ND	ND
Butyl benzyl phthalate		NA	ND	ND	ND	ND	ND	ND	1.8J	ND	ND	3.1J	ND	ND	ND	ND	ND
Diethyl phthalate		NA	ND	ND	ND	1.1J	ND	ND	0.76J	ND	ND	1.2J	ND	ND	ND	ND	ND
Dimethyl phthalate		NA	ND	ND	ND	ND	ND	ND	1.3J	ND	ND	1.4J	ND	ND	ND	ND	ND
Di-n-butyl phthalate		50	ND	ND	ND	1.6J	ND	ND	1.1J	ND	ND	1.4J	ND	ND	1.5J	ND	ND
Naphthalene		10	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND
Phenanthrene		NA	ND	ND	ND	1.6J	ND	ND	1.3J	ND	ND	1.9J	ND	ND	1.4J	ND	ND

* Indicates TAGM 4046 and STARS Memo #1 recommended soil cleanup objective values.

** Based on NYSDEC Regulations Part 703.5- Groundwater Quality Standards for Class GA water
Samples analyzed for TCL SVOC by EPA Method 8270.

All data is in parts per billion (ppb).

ND = Not detected.

J - Estimated Value Below Method Detection Limit

Bold: Value exceeds guidance values or recommended soil cleanup objective

Table 3

RCRA Metals in Soil

Arbor Hill Site
Albany, NY

Sample ID		Laboratory Sample ID		Matrix		Sample Date	
		RSCO		Eastern USA Background** [ppm]			
		NYSDEC Criteria* [ppm]					
Mercury		0.1		0.001-0.2			
Arsenic		7.5 or SB		3-12			
Barium		300 or SB		15-600			
Cadmium		1 or SB		0.1-1			
Chromium (Total)		10 or SB		1.5-40			
Lead		SB (200-500)		200-500			
Selenium		2 or SB		0.1-3.9			
Silver		SB		NA			

Notes:

All concentrations are in parts per million (ppm)

ND = Not Detected using standard CLP MDL's/CRDL's

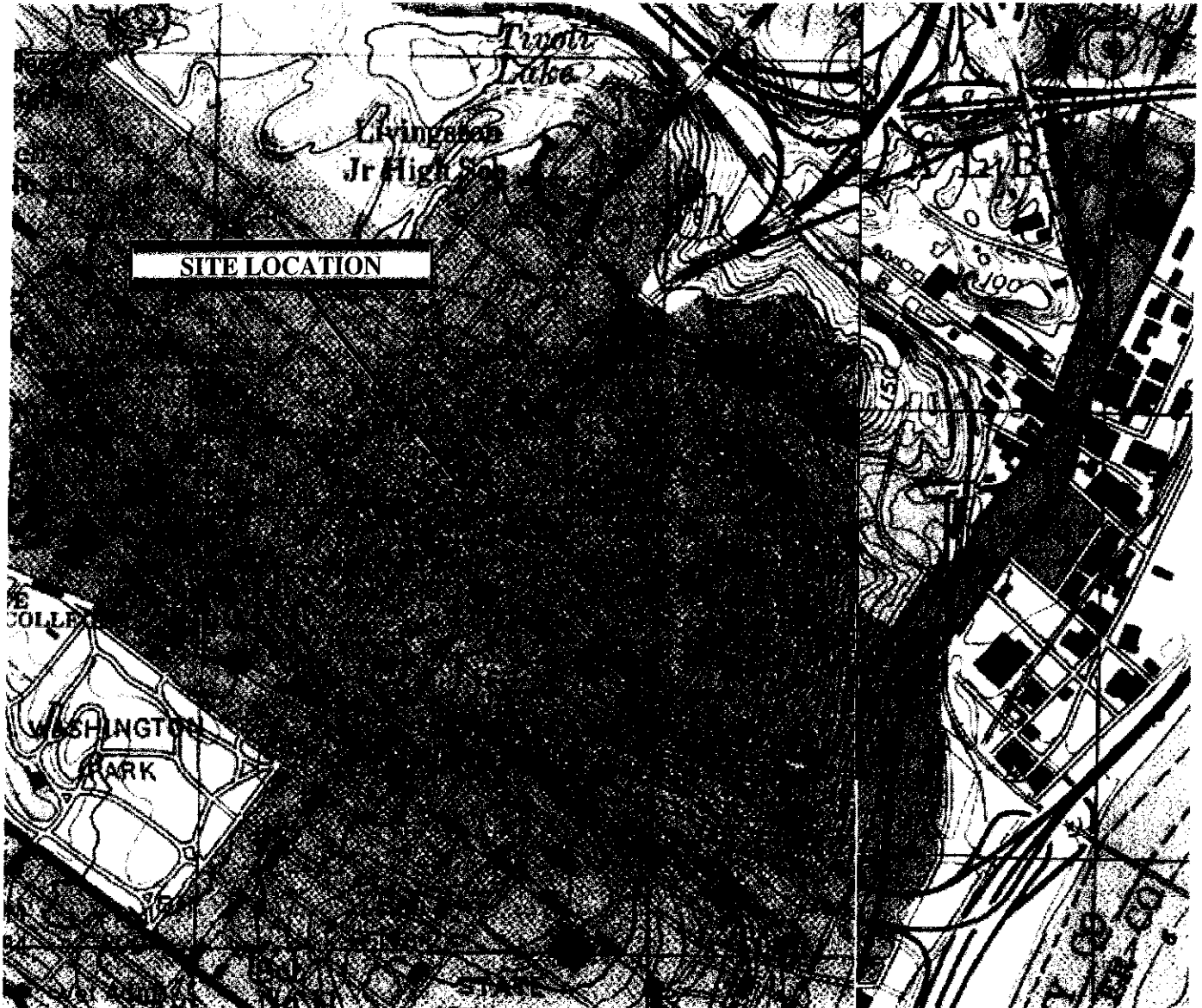
SB = site background

* RSCOs - Recommended soil cleanup objectives as per NYSDEC Consolidation Memo, 12/20/00.

**Eastern USA background levels as indicated by NYSDEC Table 4 RSCOs heavy metals

Shaded value indicates an exceedance of both RSCO and Eastern USA Background.

FIGURES



Prepared by: STV Incorporated
Prepared for: Dormitory Authority of the State of New York

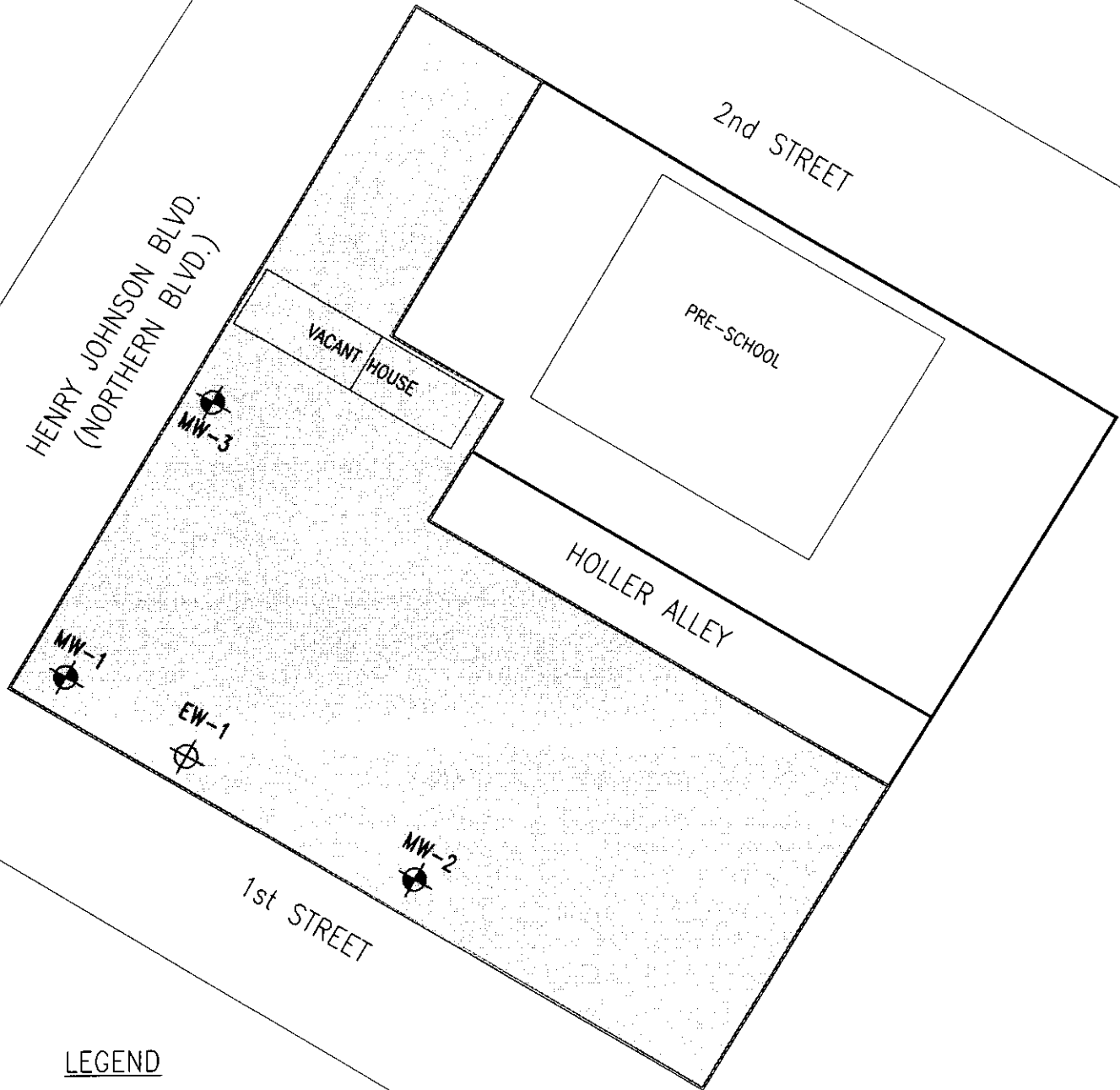
USGS TOPOGRAPHIC MAP, 7.5 MINUTE SERIES

ALBANY NY, 1994. QUADRANGLE, & NASSAU, NY-1953 QUADRANGLE PHOTOREVISED
1978 SCALE: 1:24,000

H:\PROJECTS\DA\SNY\ALBANY\ARBOR HILL-2\1-SITELOCATION.ppt

FIGURE 1
SITE LOCATION MAP

ARBOR HILL - SITE #2
140-148 HENRY JOHNSON BLVD.
ALBANY, N.Y. 12210



LEGEND



SUBJECT SITE



MONITORING WELL
(INSTALLED)



EXISTING WELL



STV Incorporated

225 PARK AVENUE SOUTH, N.Y., N.Y. 10003

ARBOR HILL - SITE 2
140-148 HENRY JOHNSON BLVD.
ALBANY, NEW YORK 12210

DORMITORY AUTHORITY OF THE STATE OF NEW YORK

FIGURE 2 WELL LOCATION PLAN

DATE:
AUGUST 2006
SCALE:
AS NOTED
SHEET NO:
1 OF 1

APPENDICES

APPENDIX A – BORING LOGS

SOIL BORING #: MW-1
PROJECT ID: Arbor Hill Site **STV PROJECT NO.:** 07-11128
LOCATION: Albany, New York
DRILLER: ADT **GEOLOGIST:** J. Mausner
DRILLING METHOD: Hollow Stem Auger
SOIL SAMPLING METHOD: 2" Split Spoon
DATE BORING INSTALLED: 8/9/2006
TOTAL BORING DEPTH: 17 feet below grade surface (bgs) **DEPTH TO WATER:** 9-10 feet

DEPTH (FT) BELOW SURFACE	PID READING (PPM)	BLOWS	RECOVERY (inches)	LITHOLOGIC DESCRIPTION	WELL CONSTRUCTION
0					Well Cap
1					Cap
2		NA		Brown sandy FILL with brick and rock fragments, gravel	
3	0.0		NA		Bentonite Seal
4					PVC
5	0.0	3-5-4-5	9	Brown FILL with gravel, cobbles, coarse sand	Riser
6					
7	2.7	3-4-3-2	8	FILL material with soil, brick, rock fragments, black material, CLAY at bottom	
8					PVC
9	0.0	1/12"-WH/6"	15	Grey CLAY, medium dense, moist	Well Screen
10					
11	0.0	2-2-2-3	8	Grey CLAY, some organic material and fine sand lenses, dark grey very fine sand at bottom, moist	Sand Pack
12					
13					
14					
15					
16	0.0	1-2-1-1	22	Grey CLAY, medium dense, moist, few very fine sand lenses	

17

Terminal Depth- 17 ft bgs

SOIL BORING LOG

DATE: 8/17/2006
 SCALE: NTS
 FILE NAME: H:\GENERAL\SECTIONS\ENV\IRON\PROJECTS\111128 - DASNY\Albany Public Library\Arbor Hill Site #2\Boring Logs.xls
 DRAWN BY: JM
 APP'D BY: PB



STV INCORPORATED
 225 PARK AVENUE SOUTH
 NEW YORK, NY 10003

SOIL BORING #: MW-2

PROJECT ID:	Arbor Hill Site	STV PROJECT NO.:	07-11128
LOCATION:	Albany, New York		
DRILLER:	ADT	GEOLOGIST:	J. Mausner
DRILLING METHOD:	Hollow Stem Auger		
SOIL SAMPLING METHOD:	2' Split Spoon		
DATE BORING INSTALLED:	8/10/2006		
TOTAL BORING DEPTH:	15 feet below grade surface (bgs)	DEPTH TO WATER:	9-10 feet

DEPTH (FT) BELOW SURFACE	PID READING (PPM)	BLOWS	RECOVERY (Inches)	LITHOLOGIC DESCRIPTION	WELL CONSTRUCTION
0					Well Cap
1		NA		Brown sandy FILL with brick and rock fragments, gravel	
2	0.0		NA		Bentonite Seal
3					
4	0.0	8-8-9-4	1	FILL material, low recovery	PVC Riser
5					
6	0.0	3-3-3-2	3	FILL material with fine sand, rock fragments	
7					
8	0.0	1-1-1-3	17	Grey CLAY, dry to moist at 9.5', some fine sand lenses present	PVC Well Screen
9					
10	0.0	2-1-1-3	9	Grey CLAY, moist, some fine sand lenses present	Sand Pack
11					
12	0.0	WH/6"-1-1-1	18	Grey CLAY, moist, layer of brick at 13'	
13					
14					

15

Terminal Depth- 15 ft bgs

SOIL BORING LOG

DATE: 8/17/2006
SCALE: NTS
FILE NAME: H:\GENERAL\SECTIONS\NEW\IRON\PROJECTS\11128 - DASNY
Albany Public Library\Arbor Hill Site #2Boring Logs.xls

DRAWN BY: JM
APP'D BY: PB



STV INCORPORATED
225 PARK AVENUE SOUTH
NEW YORK, NY 10003

SOIL BORING #: MW-3

PROJECT ID:	Arbor Hill Site	STV PROJECT NO.:	07-11128
LOCATION:	Albany, New York		
DRILLER:	ADT	GEOLOGIST:	J. Mausner
DRILLING METHOD:	Hollow Stem Auger		
SOIL SAMPLING METHOD:	2" Split Spoon		
DATE BORING INSTALLED:	8/9/2006		
TOTAL BORING DEPTH:	15 feet below grade surface (bgs)	DEPTH TO WATER:	9-10 feet

DEPTH (FT) BELOW SURFACE	PID READING (PPM)	BLOWS	RECOVERY (Inches)	LITHOLOGIC DESCRIPTION	WELL CONSTRUCTION
0					Well Cap
1					
2	0.0	NA	NA	Brown FILL with soil, rock fragments, gravel, wood	Bentonite Seal
3					
4					PVC Riser
5	0.0	3-3-4-4	7	2" FILL with brick, Brown-grey CLAY with some silt beneath fill	
6					
7	0.0	2-3-5-2	10	Brown-grey CLAY, moist at bottom	
8					PVC Well Screen
9	0.0	WH-1/4"-1	0	No Recovery	
10					
11	3.6	WH/2'	15	Dark grey CLAY, moist	Sand Pack
12					
13	0.0	WH/2'	22	Dark grey CLAY, moist, with black organic material	
14					

15

Terminal Depth- 15 ft bgs

SOIL BORING LOG

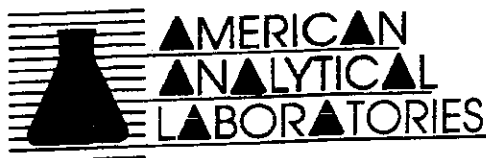
DATE: 8/17/2006
SCALE: NTS
FILE NAME: H:\GENERAL\SECTIONS\ENVIRON\PROJECTS\111128 - DASNY\Albany Public Library\Arbor Hill Site #2\Boring Logs.xls

DRAWN BY: JM
APP'D BY: PB



STV INCORPORATED
225 PARK AVENUE SOUTH
NEW YORK, NY 10003

APPENDIX B – LABORATORY DATA



NYSDOH 11418
NJDEP NY050
CTDOH PH-0205
PADEP 68-00573

Thursday, August 17, 2006

Mark Waznys
Environmental Energy Associates, Inc.
57 Verdi Street
Farmingdale, New York 11735

TEL: (631) 420-1866
FAX (631) 420-1767

RE: Arbor Hill Albany, N.Y.

Order No.: 0608139

Dear Mark Waznys:

American Analytical Laboratories, LLC. received 8 sample(s) on 8/11/2006 for the analyses presented in the following report.

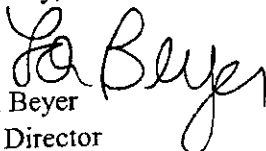
Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report.

The limits provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,


Lori Beyer
Lab Director

56 TOLEDO STREET • FARMINGDALE, NEW YORK 11735
(631) 454-6100 • FAX: (631) 454-8027

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Project: Arbor Hill Albany, N.Y.
Lab Order: 0608139

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Date Collected	Date Received
0608139-01A	EW-1	10871	8/9/2006 10:00:00 AM	8/11/2006
0608139-02A	MW-1	10871	8/9/2006 9:30:00 AM	8/11/2006
0608139-03A	MW-3	10871	8/9/2006 11:30:00 AM	8/11/2006
0608139-04A	DUPLICATE	10871	8/9/2006 10:00:00 AM	8/11/2006
0608139-05A	MW-2	10871	8/9/2006 12:30:00 PM	8/11/2006
0608139-06A	MW-1 [8'-10']	10871	8/10/2006 9:30:00 AM	8/11/2006
0608139-07A	MW-3 [10'-12']	10871	8/10/2006 2:30:00 PM	8/11/2006
0608139-08A	MW-2 [8'-10']	10871	8/10/2006 10:30:00 AM	8/11/2006



NYSDOH
CTDOH
NJDEP

NYSDOH
CTDOH
NJDEP

TAG # / COC 10871

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

[illegible]

WHITE-OFFICE / CANARY-LAB / PINK-SAMPLE CUSTODIAN / GOLDENROD-CLIENT

AMERICAN ANALYTICAL LABORATORIES, LLC

56 TOLEDO STREET

FARMINGDALE, NEW YORK 11735

TELEPHONE: (631) 454-6100

FAX: (631) 454-8027

DATA REPORTING QUALIFIERS

For reporting results, the following "Results Qualifiers" are used:

Value	If the result is greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
J	Indicates an estimated value. The flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3ug/L was calculated report as 3J. This flag is used when similar situations arise on any organic parameter i.e. Pesticide, PCBs and others.
B	Indicates the analyte was found in the blank as well as the sample report "10B".
E	Indicates the analytes concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide / PCB target analyte when there is >25% difference for detected concentrations between the two GC Columns. The higher of the two values is reported on Form I and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
H	Indicates sample was received and/or analyzed outside of The method allowable holding time

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-01A

Client Sample ID: EW-1
Tag Number: 10871
Collection Date: 8/9/2006 10:00:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3510		Analyst: PT
1,2,4-Trichlorobenzene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
1,2-Dichlorobenzene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
1,3-Dichlorobenzene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
1,4-Dichlorobenzene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2,4,5-Trichlorophenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2,4,6-Trichlorophenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2,4-Dichlorophenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2,4-Dimethylphenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2,4-Dinitrophenol	U	20		µg/L	1	8/15/2006 10:54:00 PM
2,4-Dinitrotoluene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2,6-Dinitrotoluene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2-Chloronaphthalene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2-Chlorophenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2-Methylnaphthalene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2-Methylphenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2-Nitroaniline	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
2-Nitrophenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
3,3'-Dichlorobenzidine	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
3+4-Methylphenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
3-Nitroaniline	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
4,6-Dinitro-2-methylphenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
4-Bromophenyl phenyl ether	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
4-Chloro-3-methylphenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
4-Chloroaniline	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
4-Chlorophenyl phenyl ether	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
4-Nitroaniline	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
4-Nitrophenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Acenaphthene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Acenaphthylene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Anthracene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Azobenzene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Benzo(a)anthracene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Benzo(a)pyrene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Benzo(b)fluoranthene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Benzo(g,h,i)perylene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Benzo(k)fluoranthene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Benzyl alcohol	U	20		µg/L	1	8/15/2006 10:54:00 PM
Bis(2-chloroethoxy)methane	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Bis(2-chloroethyl)ether	U	5.0		µg/L	1	8/15/2006 10:54:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-01A

Client Sample ID: EW-1
Tag Number: 10871
Collection Date: 8/9/2006 10:00:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3510		Analyst: PT
Bis(2-chloroisopropyl)ether	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Bis(2-ethylhexyl)phthalate	1.4	5.0	J	µg/L	1	8/15/2006 10:54:00 PM
Butyl benzyl phthalate	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Carbazole	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Chrysene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Dibenzo(a,h)anthracene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Dibenzofuran	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Diethyl phthalate	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Dimethyl phthalate	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Di-n-butyl phthalate	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Di-n-octyl phthalate	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Fluoranthene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Fluorene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Hexachlorobenzene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Hexachlorobutadiene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Hexachlorocyclopentadiene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Hexachloroethane	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Indeno(1,2,3-c,d)pyrene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Isophorone	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Naphthalene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Nitrobenzene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
N-Nitrosodimethylamine	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
N-Nitrosodi-n-propylamine	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
N-Nitrosodiphenylamine	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Pentachlorophenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Phenanthrene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Phenol	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
Pyrene	U	5.0		µg/L	1	8/15/2006 10:54:00 PM
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
1,1,1-Trichloroethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
1,1,2,2-Tetrachloroethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
1,1,2-Trichloroethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
1,1-Dichloroethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
1,1-Dichloroethene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
1,2-Dichloroethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
1,2-Dichloropropane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
2-Butanone	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
2-Hexanone	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
4-Methyl-2-pentanone	U	1.0		µg/L	1	8/17/2006 10:13:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
U Indicates the compound was analyzed for but not detected

E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits
X Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-01A

Client Sample ID: EW-1
Tag Number: 10871
Collection Date: 8/9/2006 10:00:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE-TARGET COMPOUND LIST		SW8260B	SW5030A	Analyst: MMR		
Acetone	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Benzene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Bromodichloromethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Bromoform	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Bromomethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Carbon disulfide	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Carbon tetrachloride	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Chlorobenzene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Chloroethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Chloroform	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Chloromethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
cis-1,2-Dichloroethene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
cis-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Dibromochloromethane	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Ethylbenzene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
m,p-Xylene	U	2.0		µg/L	1	8/17/2006 10:13:00 AM
Methylene chloride	13	1.0	B	µg/L	1	8/17/2006 10:13:00 AM
o-Xylene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Styrene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Tetrachloroethene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Toluene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
trans-1,2-Dichloroethene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
trans-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Trichloroethene	U	1.0		µg/L	1	8/17/2006 10:13:00 AM
Vinyl chloride	U	1.0		µg/L	1	8/17/2006 10:13:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT:	Environmental Energy Associates, Inc.	Client Sample ID:	MW-1
Lab Order:	0608139	Tag Number:	10871
Project:	Arbor Hill Albany, N.Y.	Collection Date:	8/9/2006 9:30:00 AM
Lab ID:	0608139-02A	Matrix:	LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3510		Analyst: PT
1,2,4-Trichlorobenzene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
1,2-Dichlorobenzene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
1,3-Dichlorobenzene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
1,4-Dichlorobenzene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2,4,5-Trichlorophenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2,4,6-Trichlorophenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2,4-Dichlorophenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2,4-Dimethylphenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2,4-Dinitrophenol	U	22		µg/L	1	8/15/2006 11:20:00 PM
2,4-Dinitrotoluene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2,6-Dinitrotoluene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2-Chloronaphthalene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2-Chlorophenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2-Methylnaphthalene	0.86	5.6	J	µg/L	1	8/15/2006 11:20:00 PM
2-Methylphenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2-Nitroaniline	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
2-Nitrophenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
3,3'-Dichlorobenzidine	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
3+4-Methylphenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
3-Nitroaniline	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
4,6-Dinitro-2-methylphenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
4-Bromophenyl phenyl ether	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
4-Chloro-3-methylphenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
4-Chloroaniline	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
4-Chlorophenyl phenyl ether	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
4-Nitroaniline	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
4-Nitrophenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Acenaphthene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Acenaphthylene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Anthracene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Azobenzene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Benzo(a)anthracene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Benzo(a)pyrene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Benzo(b)fluoranthene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Benzo(g,h,i)perylene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Benzo(k)fluoranthene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Benzyl alcohol	U	22		µg/L	1	8/15/2006 11:20:00 PM
Bis(2-chloroethoxy)methane	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Bis(2-chloroethyl)ether	U	5.6		µg/L	1	8/15/2006 11:20:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-02A

Client Sample ID: MW-1
Tag Number: 10871
Collection Date: 8/9/2006 9:30:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3510		Analyst: PT
Bis(2-chloroisopropyl)ether	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Bis(2-ethylhexyl)phthalate	1.6	5.6	J	µg/L	1	8/15/2006 11:20:00 PM
Butyl benzyl phthalate	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Carbazole	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Chrysene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Dibenzo(a,h)anthracene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Dibenzofuran	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Diethyl phthalate	1.1	5.6	J	µg/L	1	8/15/2006 11:20:00 PM
Dimethyl phthalate	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Di-n-butyl phthalate	1.6	5.6	J	µg/L	1	8/15/2006 11:20:00 PM
Di-n-octyl phthalate	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Fluoranthene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Fluorene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Hexachlorobenzene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Hexachlorobutadiene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Hexachlorocyclopentadiene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Hexachloroethane	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Indeno(1,2,3-c,d)pyrene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Isophorone	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Naphthalene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Nitrobenzene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
N-Nitrosodimethylamine	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
N-Nitrosodi-n-propylamine	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
N-Nitrosodiphenylamine	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Pentachlorophenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Phenanthrene	1.6	5.6	J	µg/L	1	8/15/2006 11:20:00 PM
Phenol	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
Pyrene	U	5.6		µg/L	1	8/15/2006 11:20:00 PM
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
1,1,1-Trichloroethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
1,1,2,2-Tetrachloroethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
1,1,2-Trichloroethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
1,1-Dichloroethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
1,1-Dichloroethene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
1,2-Dichloroethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
1,2-Dichloropropane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
2-Butanone	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
2-Hexanone	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
4-Methyl-2-pentanone	U	1.0		µg/L	1	8/17/2006 10:57:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-02A

Client Sample ID: MW-1
Tag Number: 10871
Collection Date: 8/9/2006 9:30:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
Acetone	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Benzene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Bromodichloromethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Bromoform	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Bromomethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Carbon disulfide	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Carbon tetrachloride	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Chlorobenzene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Chloroethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Chloroform	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Chloromethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
cis-1,2-Dichloroethene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
cis-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Dibromochloromethane	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Ethylbenzene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
m,p-Xylene	U	2.0		µg/L	1	8/17/2006 10:57:00 AM
Methylene chloride	17	1.0	B	µg/L	1	8/17/2006 10:57:00 AM
o-Xylene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Styrene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Tetrachloroethene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Toluene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
trans-1,2-Dichloroethene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
trans-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Trichloroethene	U	1.0		µg/L	1	8/17/2006 10:57:00 AM
Vinyl chloride	U	1.0		µg/L	1	8/17/2006 10:57:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-03A

Client Sample ID: MW-3
Tag Number: 10871
Collection Date: 8/9/2006 11:30:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D	SW3510	Analyst: PT		
1,2,4-Trichlorobenzene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
1,2-Dichlorobenzene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
1,3-Dichlorobenzene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
1,4-Dichlorobenzene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2,4,5-Trichlorophenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2,4,6-Trichlorophenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2,4-Dichlorophenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2,4-Dimethylphenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2,4-Dinitrophenol	U	21		µg/L	1	8/15/2006 11:47:00 PM
2,4-Dinitrotoluene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2,6-Dinitrotoluene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2-Chloronaphthalene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2-Chlorophenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2-Methylnaphthalene	9.5	5.2		µg/L	1	8/15/2006 11:47:00 PM
2-Methylphenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2-Nitroaniline	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
2-Nitrophenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
3,3'-Dichlorobenzidine	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
3+4-Methylphenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
3-Nitroaniline	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
4,6-Dinitro-2-methylphenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
4-Bromophenyl phenyl ether	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
4-Chloro-3-methylphenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
4-Chloroaniline	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
4-Chlorophenyl phenyl ether	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
4-Nitroaniline	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
4-Nitrophenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Acenaphthene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Acenaphthylene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Anthracene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Azobenzene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Benzo(a)anthracene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Benzo(a)pyrene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Benzo(b)fluoranthene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Benzo(g,h,i)perylene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Benzo(k)fluoranthene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Benzyl alcohol	U	21		µg/L	1	8/15/2006 11:47:00 PM
Bis(2-chloroethoxy)methane	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Bis(2-chloroethyl)ether	U	5.2		µg/L	1	8/15/2006 11:47:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-03A

Client Sample ID: MW-3
Tag Number: 10871
Collection Date: 8/9/2006 11:30:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3510		Analyst: PT
Bis(2-chloroisopropyl)ether	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Bis(2-ethylhexyl)phthalate	5.8	5.2		µg/L	1	8/15/2006 11:47:00 PM
Butyl benzyl phthalate	3.1	5.2	J	µg/L	1	8/15/2006 11:47:00 PM
Carbazole	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Chrysene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Dibenzo(a,h)anthracene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Dibenzofuran	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Diethyl phthalate	1.2	5.2	J	µg/L	1	8/15/2006 11:47:00 PM
Dimethyl phthalate	1.3	5.2	J	µg/L	1	8/15/2006 11:47:00 PM
Di-n-butyl phthalate	1.4	5.2	J	µg/L	1	8/15/2006 11:47:00 PM
Di-n-octyl phthalate	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Fluoranthene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Fluorene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Hexachlorobenzene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Hexachlorobutadiene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Hexachlorocyclopentadiene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Hexachloroethane	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Indeno(1,2,3-c,d)pyrene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Isophorone	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Naphthalene	6.2	5.2		µg/L	1	8/15/2006 11:47:00 PM
Nitrobenzene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
N-Nitrosodimethylamine	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
N-Nitrosodi-n-propylamine	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
N-Nitrosodiphenylamine	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Pentachlorophenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Phenanthrene	1.9	5.2	J	µg/L	1	8/15/2006 11:47:00 PM
Phenol	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
Pyrene	U	5.2		µg/L	1	8/15/2006 11:47:00 PM
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
1,1,1-Trichloroethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
1,1,2,2-Tetrachloroethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
1,1,2-Trichloroethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
1,1-Dichloroethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
1,1-Dichloroethene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
1,2-Dichloroethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
1,2-Dichloropropane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
2-Butanone	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
2-Hexanone	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
4-Methyl-2-pentanone	U	1.0		µg/L	1	8/17/2006 11:41:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
U Indicates the compound was analyzed for but not detected

E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits
X Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-03A

Client Sample ID: MW-3
Tag Number: 10871
Collection Date: 8/9/2006 11:30:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
Acetone	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Benzene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Bromodichloromethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Bromoform	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Bromomethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Carbon disulfide	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Carbon tetrachloride	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Chlorobenzene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Chloroethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Chloroform	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Chloromethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
cis-1,2-Dichloroethene	15	1.0		µg/L	1	8/17/2006 11:41:00 AM
cis-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Dibromochloromethane	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Ethylbenzene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
m,p-Xylene	U	2.0		µg/L	1	8/17/2006 11:41:00 AM
Methylene chloride	14	1.0	B	µg/L	1	8/17/2006 11:41:00 AM
o-Xylene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Styrene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Tetrachloroethene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Toluene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
trans-1,2-Dichloroethene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
trans-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Trichloroethene	U	1.0		µg/L	1	8/17/2006 11:41:00 AM
Vinyl chloride	U	1.0		µg/L	1	8/17/2006 11:41:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-04A

Client Sample ID: DUPLICATE
Tag Number: 10871
Collection Date: 8/9/2006 10:00:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D	SW3510	Analyst: PT		
1,2,4-Trichlorobenzene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
1,2-Dichlorobenzene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
1,3-Dichlorobenzene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
1,4-Dichlorobenzene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2,4,5-Trichlorophenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2,4,6-Trichlorophenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2,4-Dichlorophenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2,4-Dimethylphenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2,4-Dinitrophenol	U	20		µg/L	1	8/16/2006 12:14:00 AM
2,4-Dinitrotoluene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2,6-Dinitrotoluene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2-Chloronaphthalene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2-Chlorophenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2-Methylnaphthalene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2-Methylphenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2-Nitroaniline	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
2-Nitrophenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
3,3'-Dichlorobenzidine	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
3+4-Methylphenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
3-Nitroaniline	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
4,6-Dinitro-2-methylphenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
4-Bromophenyl phenyl ether	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
4-Chloro-3-methylphenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
4-Chloroaniline	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
4-Chlorophenyl phenyl ether	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
4-Nitroaniline	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
4-Nitrophenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Acenaphthene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Acenaphthylene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Anthracene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Azobenzene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Benzo(a)anthracene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Benzo(a)pyrene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Benzo(b)fluoranthene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Benzo(g,h,i)perylene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Benzo(k)fluoranthene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Benzyl alcohol	U	20		µg/L	1	8/16/2006 12:14:00 AM
Bis(2-chloroethoxy)methane	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Bis(2-chloroethyl)ether	U	5.1		µg/L	1	8/16/2006 12:14:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
U Indicates the compound was analyzed for but not detected

E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits
X Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-04A

Client Sample ID: DUPLICATE
Tag Number: 10871
Collection Date: 8/9/2006 10:00:00 AM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D	SW3510	Analyst: PT		
Bis(2-chloroisopropyl)ether	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Bis(2-ethylhexyl)phthalate	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Butyl benzyl phthalate	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Carbazole	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Chrysene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Dibenzo(a,h)anthracene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Dibenzofuran	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Diethyl phthalate	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Dimethyl phthalate	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Di-n-butyl phthalate	1.5	5.1	J	µg/L	1	8/16/2006 12:14:00 AM
Di-n-octyl phthalate	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Fluoranthene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Fluorene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Hexachlorobenzene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Hexachlorobutadiene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Hexachlorocyclopentadiene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Hexachloroethane	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Indeno(1,2,3-c,d)pyrene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Isophorone	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Naphthalene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Nitrobenzene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
N-Nitrosodimethylamine	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
N-Nitrosodi-n-propylamine	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
N-Nitrosodiphenylamine	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Pentachlorophenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Phenanthrene	1.4	5.1	J	µg/L	1	8/16/2006 12:14:00 AM
Phenol	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
Pyrene	U	5.1		µg/L	1	8/16/2006 12:14:00 AM
VOLATILE-TARGET COMPOUND LIST		SW8260B	SW5030A	Analyst: MMR		
1,1,1-Trichloroethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
1,1,2,2-Tetrachloroethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
1,1,2-Trichloroethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
1,1-Dichloroethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
1,1-Dichloroethene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
1,2-Dichloroethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
1,2-Dichloropropane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
2-Butanone	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
2-Hexanone	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
4-Methyl-2-pentanone	U	1.0		µg/L	1	8/17/2006 12:24:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT:	Environmental Energy Associates, Inc.	Client Sample ID:	DUPLICATE
Lab Order:	0608139	Tag Number:	10871
Project:	Arbor Hill Albany, N.Y.	Collection Date:	8/9/2006 10:00:00 AM
Lab ID:	0608139-04A	Matrix:	LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
Acetone	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Benzene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Bromodichloromethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Bromofom	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Bromomethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Carbon disulfide	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Carbon tetrachloride	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Chlorobenzene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Chloroethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Chloroform	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Chloromethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
cis-1,2-Dichloroethene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
cis-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Dibromochloromethane	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Ethylbenzene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
m,p-Xylene	U	2.0		µg/L	1	8/17/2006 12:24:00 PM
Methylene chloride	14	1.0	B	µg/L	1	8/17/2006 12:24:00 PM
o-Xylene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Styrene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Tetrachloroethene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Toluene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
trans-1,2-Dichloroethene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
trans-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Trichloroethene	U	1.0		µg/L	1	8/17/2006 12:24:00 PM
Vinyl chloride	U	1.0		µg/L	1	8/17/2006 12:24:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-05A

Client Sample ID: MW-2
Tag Number: 10871
Collection Date: 8/9/2006 12:30:00 PM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3510		Analyst: PT
1,2,4-Trichlorobenzene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
1,2-Dichlorobenzene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
1,3-Dichlorobenzene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
1,4-Dichlorobenzene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2,4,5-Trichlorophenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2,4,6-Trichlorophenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2,4-Dichlorophenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2,4-Dimethylphenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2,4-Dinitrophenol	U	21		µg/L	1	8/16/2006 12:40:00 AM
2,4-Dinitrotoluene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2,6-Dinitrotoluene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2-Chloronaphthalene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2-Chlorophenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2-Methylnaphthalene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2-Methylphenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2-Nitroaniline	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
2-Nitrophenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
3,3'-Dichlorobenzidine	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
3+4-Methylphenol	12	5.3		µg/L	1	8/16/2006 12:40:00 AM
3-Nitroaniline	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
4,6-Dinitro-2-methylphenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
4-Bromophenyl phenyl ether	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
4-Chloro-3-methylphenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
4-Chloroaniline	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
4-Chlorophenyl phenyl ether	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
4-Nitroaniline	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
4-Nitrophenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Acenaphthene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Acenaphthylene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Anthracene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Azobenzene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Benzo(a)anthracene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Benzo(a)pyrene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Benzo(b)fluoranthene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Benzo(g,h,i)perylene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Benzo(k)fluoranthene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Benzyl alcohol	U	21		µg/L	1	8/16/2006 12:40:00 AM
Bis(2-chloroethoxy)methane	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Bis(2-chloroethyl)ether	U	5.3		µg/L	1	8/16/2006 12:40:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-05A

Client Sample ID: MW-2
Tag Number: 10871
Collection Date: 8/9/2006 12:30:00 PM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3510		Analyst: PT
Bis(2-chloroisopropyl)ether	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Bis(2-ethylhexyl)phthalate	12	5.3		µg/L	1	8/16/2006 12:40:00 AM
Butyl benzyl phthalate	1.8	5.3	J	µg/L	1	8/16/2006 12:40:00 AM
Carbazole	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Chrysene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Dibenzo(a,h)anthracene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Dibenzofuran	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Diethyl phthalate	0.76	5.3	J	µg/L	1	8/16/2006 12:40:00 AM
Dimethyl phthalate	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Di-n-butyl phthalate	1.1	5.3	J	µg/L	1	8/16/2006 12:40:00 AM
Di-n-octyl phthalate	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Fluoranthene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Fluorene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Hexachlorobenzene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Hexachlorobutadiene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Hexachlorocyclopentadiene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Hexachloroethane	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Indeno(1,2,3-c,d)pyrene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Isophorone	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Naphthalene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Nitrobenzene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
N-Nitrosodimethylamine	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
N-Nitrosodi-n-propylamine	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
N-Nitrosodiphenylamine	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Pentachlorophenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Phenanthrene	1.3	5.3	J	µg/L	1	8/16/2006 12:40:00 AM
Phenol	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
Pyrene	U	5.3		µg/L	1	8/16/2006 12:40:00 AM
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
1,1,1-Trichloroethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
1,1,2,2-Tetrachloroethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
1,1,2-Trichloroethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
1,1-Dichloroethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
1,1-Dichloroethene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
1,2-Dichloroethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
1,2-Dichloropropane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
2-Butanone	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
2-Hexanone	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
4-Methyl-2-pentanone	U	1.0		µg/L	1	8/17/2006 1:07:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-05A

Client Sample ID: MW-2
Tag Number: 10871
Collection Date: 8/9/2006 12:30:00 PM
Matrix: LIQUID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
Acetone	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Benzene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Bromodichloromethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Bromoform	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Bromomethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Carbon disulfide	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Carbon tetrachloride	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Chlorobenzene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Chloroethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Chloroform	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Chloromethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
cis-1,2-Dichloroethene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
cis-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Dibromochloromethane	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Ethylbenzene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
m,p-Xylene	U	2.0		µg/L	1	8/17/2006 1:07:00 PM
Methylene chloride	14	1.0	B	µg/L	1	8/17/2006 1:07:00 PM
o-Xylene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Styrene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Tetrachloroethene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Toluene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
trans-1,2-Dichloroethene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
trans-1,3-Dichloropropene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Trichloroethene	U	1.0		µg/L	1	8/17/2006 1:07:00 PM
Vinyl chloride	U	1.0		µg/L	1	8/17/2006 1:07:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-06A

Client Sample ID: MW-1 [8'-10']
Tag Number: 10871
Collection Date: 8/10/2006 9:30:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
MERCURY		SW7471B		SW7471B		Analyst: JP
Mercury	0.0624	0.0130		mg/Kg-dry	1	8/15/2006 12:13:10 PM
PERCENT MOISTURE		D2216				Analyst: PA
Percent Moisture	26.8	0		wt%	1	8/15/2006
RCRA METALS		SW6010B		SW3050A		Analyst: JP
Arsenic	10.6	0.677		mg/Kg-dry	1	8/15/2006 9:42:33 AM
Barium	81.6	0.542		mg/Kg-dry	1	8/15/2006 9:42:33 AM
Cadmium	U	0.271		mg/Kg-dry	1	8/15/2006 9:42:33 AM
Chromium	15.2	0.542		mg/Kg-dry	1	8/15/2006 9:42:33 AM
Lead	17.7	0.406		mg/Kg-dry	1	8/15/2006 9:42:33 AM
Selenium	U	0.677		mg/Kg-dry	1	8/15/2006 9:42:33 AM
Silver	U	0.542		mg/Kg-dry	1	8/15/2006 9:42:33 AM
TARGET COMPOUND LIST 8270		SW8270D		SW3550A		Analyst: PT
1,2,4-Trichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
1,2-Dichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
1,3-Dichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
1,4-Dichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2,4,5-Trichlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2,4,6-Trichlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2,4-Dichlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2,4-Dimethylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2,4-Dinitrophenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2,4-Dinitrotoluene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2,6-Dinitrotoluene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2-Chloronaphthalene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2-Chlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2-Methylnaphthalene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2-Methylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2-Nitroaniline	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
2-Nitrophenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
3,3'-Dichlorobenzidine	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
3+4-Methylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
3-Nitroaniline	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
4,6-Dinitro-2-methylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
4-Bromophenyl phenyl ether	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
4-Chloro-3-methylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
4-Chloroaniline	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
4-Chlorophenyl phenyl ether	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
4-Nitroaniline	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-06A

Client Sample ID: MW-1 [8'-10']
Tag Number: 10871
Collection Date: 8/10/2006 9:30:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3550A		Analyst: PT
4-Nitrophenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Acenaphthene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Acenaphthylene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Anthracene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Benzo(a)anthracene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Benzo(a)pyrene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Benzo(b)fluoranthene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Benzo(g,h,i)perylene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Benzo(k)fluoranthene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Bis(2-chloroethoxy)methane	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Bis(2-chloroethyl)ether	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Bis(2-chloroisopropyl)ether	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Bis(2-ethylhexyl)phthalate	220	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Butyl benzyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Carbazole	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Chrysene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Dibenzo(a,h)anthracene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Dibenzofuran	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Diethyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Dimethyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Di-n-butyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Di-n-octyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Fluoranthene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Fluorene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Hexachlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Hexachlorobutadiene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Hexachlorocyclopentadiene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Hexachloroethane	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Indeno(1,2,3-c,d)pyrene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Isophorone	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Naphthalene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Nitrobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
N-Nitrosodi-n-propylamine	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
N-Nitrosodiphenylamine	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Pentachlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Phenanthrene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Phenol	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM
Pyrene	U	160		µg/Kg-dry	1	8/16/2006 6:07:00 PM

VOLATILE-TARGET COMPOUND LIST

SW8260B

SW5030A

Analyst: MMR

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-06A

Client Sample ID: MW-1 [8'-10']
Tag Number: 10871
Collection Date: 8/10/2006 9:30:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
1,1,1-Trichloroethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
1,1,2,2-Tetrachloroethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
1,1,2-Trichloroethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
1,1-Dichloroethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
1,1-Dichloroethene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
1,2-Dichloroethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
1,2-Dichloropropane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
2-Butanone	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
2-Hexanone	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
4-Methyl-2-pentanone	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Acetone	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Benzene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Bromodichloromethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Bromoform	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Bromomethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Carbon disulfide	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Carbon tetrachloride	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Chlorobenzene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Chloroethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Chloroform	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Chloromethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
cis-1,2-Dichloroethene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
cis-1,3-Dichloropropene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Dibromochloromethane	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Ethylbenzene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
m,p-Xylene	U	13		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Methylene chloride	22	6.6	B	µg/Kg-dry	1	8/16/2006 12:51:00 AM
o-Xylene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Styrene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Tetrachloroethene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Toluene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
trans-1,2-Dichloroethene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
trans-1,3-Dichloropropene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Trichloroethene	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM
Vinyl chloride	U	6.6		µg/Kg-dry	1	8/16/2006 12:51:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-07A

Client Sample ID: MW-3 [10'-12']
Tag Number: 10871
Collection Date: 8/10/2006 2:30:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
MERCURY		SW7471B	SW7471B			Analyst: JP
Mercury	0.0392	0.0114		mg/Kg-dry	1	8/15/2006 12:15:19 PM
PERCENT MOISTURE		D2216				Analyst: PA
Percent Moisture	24.1	0		wt%	1	8/15/2006
RCRA METALS		SW6010B	SW3050A			Analyst: JP
Arsenic	6.44	0.659		mg/Kg-dry	1	8/15/2006 9:44:33 AM
Barium	70.2	0.527		mg/Kg-dry	1	8/15/2006 9:44:33 AM
Cadmium	U	0.264		mg/Kg-dry	1	8/15/2006 9:44:33 AM
Chromium	12.8	0.527		mg/Kg-dry	1	8/15/2006 9:44:33 AM
Lead	18.5	0.395		mg/Kg-dry	1	8/15/2006 9:44:33 AM
Selenium	U	0.659		mg/Kg-dry	1	8/15/2006 9:44:33 AM
Silver	U	0.527		mg/Kg-dry	1	8/15/2006 9:44:33 AM
TARGET COMPOUND LIST 8270		SW8270D	SW3550A			Analyst: PT
1,2,4-Trichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
1,2-Dichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
1,3-Dichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
1,4-Dichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2,4,5-Trichlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2,4,6-Trichlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2,4-Dichlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2,4-Dimethylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2,4-Dinitrophenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2,4-Dinitrotoluene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2,6-Dinitrotoluene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2-Chloronaphthalene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2-Chlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2-Methylnaphthalene	170	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2-Methylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2-Nitroaniline	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
2-Nitrophenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
3,3'-Dichlorobenzidine	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
3+4-Methylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
3-Nitroaniline	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
4,6-Dinitro-2-methylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
4-Bromophenyl phenyl ether	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
4-Chloro-3-methylphenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
4-Chloroaniline	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
4-Chlorophenyl phenyl ether	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
4-Nitroaniline	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-07A

Client Sample ID: MW-3 [10'-12']
Tag Number: 10871
Collection Date: 8/10/2006 2:30:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3550A		Analyst: PT
4-Nitrophenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Acenaphthene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Acenaphthylene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Anthracene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Benzo(a)anthracene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Benzo(a)pyrene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Benzo(b)fluoranthene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Benzo(g,h,i)perylene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Benzo(k)fluoranthene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Bis(2-chloroethoxy)methane	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Bis(2-chloroethyl)ether	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Bis(2-chloroisopropyl)ether	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Bis(2-ethylhexyl)phthalate	700	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Butyl benzyl phthalate	92	160	J	µg/Kg-dry	1	8/16/2006 6:34:00 PM
Carbazole	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Chrysene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Dibenzo(a,h)anthracene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Dibenzofuran	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Diethyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Dimethyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Di-n-butyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Di-n-octyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Fluoranthene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Fluorene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Hexachlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Hexachlorobutadiene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Hexachlorocyclopentadiene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Hexachloroethane	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Indeno(1,2,3-c,d)pyrene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Isophorone	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Naphthalene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Nitrobenzene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
N-Nitrosodi-n-propylamine	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
N-Nitrosodiphenylamine	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Pentachlorophenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Phenanthrene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Phenol	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM
Pyrene	U	160		µg/Kg-dry	1	8/16/2006 6:34:00 PM

VOLATILE-TARGET COMPOUND LIST

SW8260B

SW5030A

Analyst: MMR

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-07A

Client Sample ID: MW-3 [10'-12']
Tag Number: 10871
Collection Date: 8/10/2006 2:30:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
1,1,1-Trichloroethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
1,1,2,2-Tetrachloroethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
1,1,2-Trichloroethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
1,1-Dichloroethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
1,1-Dichloroethene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
1,2-Dichloroethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
1,2-Dichloropropane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
2-Butanone	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
2-Hexanone	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
4-Methyl-2-pentanone	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Acetone	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Benzene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Bromodichloromethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Bromoform	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Bromomethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Carbon disulfide	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Carbon tetrachloride	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Chlorobenzene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Chloroethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Chloroform	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Chloromethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
cis-1,2-Dichloroethene	97	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
cis-1,3-Dichloropropene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Dibromochloromethane	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Ethylbenzene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
m,p-Xylene	U	13		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Methylene chloride	21	6.4	B	µg/Kg-dry	1	8/16/2006 1:35:00 AM
o-Xylene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Styrene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Tetrachloroethene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Toluene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
trans-1,2-Dichloroethene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
trans-1,3-Dichloropropene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Trichloroethene	U	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM
Vinyl chloride	16	6.4		µg/Kg-dry	1	8/16/2006 1:35:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-08A

Client Sample ID: MW-2 [8'-10']
Tag Number: 10871
Collection Date: 8/10/2006 10:30:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
MERCURY		SW7471B		SW7471B		Analyst: JP
Mercury	0.0931	0.0123		mg/Kg-dry	1	8/15/2006 12:17:28 PM
PERCENT MOISTURE		D2216				Analyst: PA
Percent Moisture	25.6	0		wt%	1	8/15/2006
RCRA METALS		SW6010B		SW3050A		Analyst: JP
Arsenic	6.19	0.657		mg/Kg-dry	1	8/15/2006 9:46:52 AM
Barium	84.0	0.525		mg/Kg-dry	1	8/15/2006 9:46:52 AM
Cadmium	U	0.263		mg/Kg-dry	1	8/15/2006 9:46:52 AM
Chromium	14.5	0.525		mg/Kg-dry	1	8/15/2006 9:46:52 AM
Lead	20.0	0.394		mg/Kg-dry	1	8/15/2006 9:46:52 AM
Selenium	U	0.657		mg/Kg-dry	1	8/15/2006 9:46:52 AM
Silver	U	0.525		mg/Kg-dry	1	8/15/2006 9:46:52 AM
TARGET COMPOUND LIST 8270		SW8270D		SW3550A		Analyst: PT
1,2,4-Trichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
1,2-Dichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
1,3-Dichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
1,4-Dichlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2,4,5-Trichlorophenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2,4,6-Trichlorophenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2,4-Dichlorophenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2,4-Dimethylphenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2,4-Dinitrophenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2,4-Dinitrotoluene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2,6-Dinitrotoluene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2-Chloronaphthalene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2-Chlorophenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2-Methylnaphthalene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2-Methylphenol	92	160	J	µg/Kg-dry	1	8/16/2006 7:01:00 PM
2-Nitroaniline	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
2-Nitrophenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
3,3'-Dichlorobenzidine	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
3+4-Methylphenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
3-Nitroaniline	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
4,6-Dinitro-2-methylphenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
4-Bromophenyl phenyl ether	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
4-Chloro-3-methylphenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
4-Chloroaniline	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
4-Chlorophenyl phenyl ether	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
4-Nitroaniline	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc. Client Sample ID: MW-2 [8'-10']
 Lab Order: 0608139 Tag Number: 10871
 Project: Arbor Hill Albany, N.Y. Collection Date: 8/10/2006 10:30:00 AM
 Lab ID: 0608139-08A Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TARGET COMPOUND LIST 8270		SW8270D		SW3550A		Analyst: PT
4-Nitrophenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Acenaphthene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Acenaphthylene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Anthracene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Benzo(a)anthracene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Benzo(a)pyrene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Benzo(b)fluoranthene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Benzo(g,h,i)perylene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Benzo(k)fluoranthene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Bis(2-chloroethoxy)methane	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Bis(2-chloroethyl)ether	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Bis(2-chloroisopropyl)ether	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Bis(2-ethylhexyl)phthalate	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Butyl benzyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Carbazole	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Chrysene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Dibenzo(a,h)anthracene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Dibenzofuran	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Diethyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Dimethyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Di-n-butyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Di-n-octyl phthalate	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Fluoranthene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Fluorene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Hexachlorobenzene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Hexachlorobutadiene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Hexachlorocyclopentadiene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Hexachloroethane	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Indeno(1,2,3-c,d)pyrene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Isophorone	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Naphthalene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Nitrobenzene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
N-Nitrosodi-n-propylamine	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
N-Nitrosodiphenylamine	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Pentachlorophenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Phenanthrene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Phenol	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM
Pyrene	U	160		µg/Kg-dry	1	8/16/2006 7:01:00 PM

VOLATILE-TARGET COMPOUND LIST

SW8260B

SW5030A

Analyst: MMR

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level

American Analytical Laboratories, LLC.

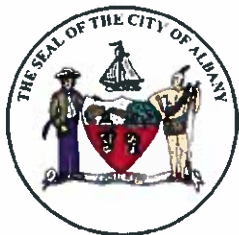
Date: 17-Aug-06

CLIENT: Environmental Energy Associates, Inc.
Lab Order: 0608139
Project: Arbor Hill Albany, N.Y.
Lab ID: 0608139-08A

Client Sample ID: MW-2 [8'-10']
Tag Number: 10871
Collection Date: 8/10/2006 10:30:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE-TARGET COMPOUND LIST		SW8260B		SW5030A		Analyst: MMR
1,1,1-Trichloroethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
1,1,2,2-Tetrachloroethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
1,1,2-Trichloroethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
1,1-Dichloroethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
1,1-Dichloroethene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
1,2-Dichloroethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
1,2-Dichloropropane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
2-Butanone	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
2-Hexanone	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
4-Methyl-2-pentanone	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Acetone	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Benzene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Bromodichloromethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Bromoform	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Bromomethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Carbon disulfide	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Carbon tetrachloride	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Chlorobenzene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Chloroethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Chloroform	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Chloromethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
cis-1,2-Dichloroethene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
cis-1,3-Dichloropropene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Dibromochloromethane	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Ethylbenzene	U	13		µg/Kg-dry	1	8/16/2006 2:18:00 AM
m,p-Xylene	25	6.5	B	µg/Kg-dry	1	8/16/2006 2:18:00 AM
Methylene chloride	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
o-Xylene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Styrene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Tetrachloroethene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Toluene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
trans-1,2-Dichloroethene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
trans-1,3-Dichloropropene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Trichloroethene	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM
Vinyl chloride	U	6.5		µg/Kg-dry	1	8/16/2006 2:18:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits
	U	Indicates the compound was analyzed for but not detected	X	Value exceeds Maximum Contaminant Level



Albany Community Development Agency
Remedial Investigation / Alternatives Analysis Report

APPENDIX

G

Soil Boring Logs



PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/12/06**

DRILL RIG TYPE **Truck**

TYPE

PVC

DATE FINISHED **6/12/06**

GROUND WATER DEPTH **7.5'**

DIA.

"

2

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/12/06**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1.0		0.0		Brown fine sand and gravel, gravel sub-round up to 1", coal, brick, glass, ash, moist, slightly cohesive.		0.5 1.5	
4					SAA, saturated at 7.5 bgs.	4.0		
6	2.0		0.0					
8					Brown clay, mottled, firm, moist. SAA.	7.5 8.0		Collect sample 6-8'
10	3.5		0.0					
12					Gray clay, firm, moist, some coal @ 11.5' bgs.	11.0		
14	2.5		0.0		SAA, no coal.	12.0	12.0	
16						16.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/12/06**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/12/06**

GROUND WATER DEPTH **10.0'**

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/12/06**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0.0		Brown fine sand and silt, trace clay, coal, ash, glass, brick, slightly cohesive, moist.			
4					SAA. More clay content.	4.0		
6	3		0.0		Brown/gray clay, mottled, firm, cohesive.	7.0		
8					Brown fine sand, silt and trace of clay, cohesive.	8.0		
10	3		0.0					▼ Collected sample 9-11'
12					Gray/brown fine sand and silt, some clay, saturated, brick fragments @ bottom of boring.	12.0		
14	2.5		0.0					
16						16.0		

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY		SHEET 1 OF 1	
CLIENT				PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.	
PURPOSE Remedial Investigation				GROUND ELEV.	
WELL MATERIAL				DATUM	
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	
DRILL RIG TYPE Truck	TYPE			DATE STARTED 6/12/06	
GROUND WATER DEPTH 7.5'	DIA.	"		DATE FINISHED 6/12/06	
MEASURING POINT	WEIGHT	#	DRILLER Chris		
DATE OF MEASUREMENT 6/12/06	FALL	"	PIRNIE STAFF J. Wyckoff		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0.0		Brick, coal, ash, brown fine sand.			
4					Brown fine sand, loose, moist.	3.0		
6	3.0		2.0		SAA.	4.0		
8					Brown/gray clay, some coal, firm.	5.0		
						8.0		Collected sample @ 6-8' bgs PID=2.0 @ 7.5 bgs

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **7.0'**

DIA.

"

MEASURING POINT

WEIGHT

#

DATE OF MEASUREMENT **6/12/06**

FALL

"

DRILLER **Chris**

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		2.0		Brown/tan fine-med sand and sub-round gravel up to 0.5", loose, dry to 3' bgs, brick and ash, coal.			
4					Brown silt and clay, moist, cohesive, some brick and coal.	3.0		PID=2.0 ppm @ 3.5'
6	3		570		Brown/gray clay, coal to 6.5' bgs, slightly sandy from 6.5'-8'.	4.0		Sample collected 6-8' bgs ▼ PID=570 ppm @ 7' bgs
8					Gray sandy silt w/some clay, gravel, coal @7' bgs, petro odors and sheen on water.	8.0		
10	3		520					PID= 520 ppm @ 10' bgs
12					Brown clay-silt, plastic, cohesive.	11.0		
						12.0		PID=20 ppm @ bottom of boring

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY		SHEET 1 OF 1	
CLIENT				PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.	
PURPOSE Remedial Investigation				GROUND ELEV.	
WELL MATERIAL				DATUM	
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	
DRILL RIG TYPE Truck	TYPE			DATE STARTED 6/12/06	
GROUND WATER DEPTH '	DIA.	"		DATE FINISHED 6/12/06	
MEASURING POINT	WEIGHT	#	DRILLER Chris		
DATE OF MEASUREMENT 6/12/06	FALL	"	PIRNIE STAFF J. Wyckoff		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1.5		0.0		Brownish/orange fine-med sand and subround gravel, loose, moist, 0-2" topsoil, dark brown med-fine sand, concrete, loose, moist.			
4					Brown/gray clay and silt, some brick, coal, moist, cohesive.	4.0		
6	1		0.0					
8					SAA.	8.0		
10	<.5'		10					
12					Brown/gray-black, fine-med sand and gravel, subrounded up to 0.5", trace silt, slightly cohesive, slight petro odors.	12.0		PID=10 ppm @ 12' bgs
14	4		1.5			14.0		Sample collected 12-14' bgs, PID=1.5 ppm @ 12'bgs
16								

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/12/06**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/12/06**

GROUND WATER DEPTH **8.0'**

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/12/06**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Tan/brown fine-med sand w/some silt, firm, dry.			
4					Brown clay, silt, coal, ash, brick, very firm, cohesive, moist.	3.0		
6	3		720		SAA.	4.0		
8					Gray clay, brick, coal, very firm, moist, sandy lense @ 7.9' bgs, sandy lense is grey-black med. sand, brick.	7.0		Sample collected 6-8' bgs
10	2		620		SAA Clay, with some sandy lenses. Gray clay below 10' bgs.	8.0		PID= 720 ppm @ 8' bgs
12						12.0		PID= 620 ppm @ 10' bgs

TEST BORING LOG

BORING No. SB-32

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/12/06**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/12/06**

GROUND WATER DEPTH **7.5'**

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/12/06**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3.5		12		Tan/brown fine-med sand, some concrete, loose, moist.			
4					SAA.	4.0		Collected sample 2-4' bgs PID= 12 ppm @ 3.5' bgs
6	2.5		3		Brown fine-med sand and subround gravel up to 1", trace of clay, coal, slightly cohesive, saturated @ 7.5 bgs.	6.0		
8						8.0		Collected sample 6-8' bgs PID= 3 ppm @ 7.5' bgs

MALCOLM PIRNIE				TEST BORING LOG			BORING No. SB-33	
PROJECT Henry Johnson Boulevard				LOCATION Albany, NY			SHEET 1 OF 1	
CLIENT				PROJECT No. 4279009				
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.				
PURPOSE Remedial Investigation				GROUND ELEV.				
WELL MATERIAL				DATUM				
DRILLING METHOD(S) Geoprobe			SAMPLE	CORE	CASING	DATE STARTED 6/12/06		
DRILL RIG TYPE Truck		TYPE				DATE FINISHED 6/12/06		
GROUND WATER DEPTH 7.5'		DIA.	"			DRILLER Chris		
MEASURING POINT		WEIGHT	#			PIRNIE STAFF J. Wyckoff		
DATE OF MEASUREMENT 6/12/06		FALL	"					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1.5		0		Brown fine-med sand, coal, brick, concrete, moist, trace clay, slightly cohesive.			
4					Brown clay, coal, ash, brick, cohesive, moist.	3.0		
6	2		1500		Gray/brown fine-med sand, clay, brick, coal, strong petro odors and black stain @ 7.5' bgs.	4.0		
8					SAA.	8.0		▼ PID= 1500 ppm @ 7.5' bgs Collected sample 6-8' bgs
10	3		1500					
12					Gray clay, wet, strong petro odors.	11.0		PID= 1500 ppm @ 11' bgs
						12.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/12/06**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/12/06**

GROUND WATER DEPTH

DIA.

"

MEASURING POINT

WEIGHT

#

DRILLER **Chris**

DATE OF MEASUREMENT **6/12/06**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Brown fine-med sand and silt, coal, brick, some clay, firm, moist.			
4					Brown clay and fine sand, coal, brick, cohesive, moist.	3.0		
6	3		0		SAA.	4.0		
8					Brown/gray med sand, ash, coal, brick, wet.	8.0		
10	3		0		Fine-med gray sand, silt, and clay. Clay content increases w/depth. Staining in soil, slight odors, base of boring is brown/gray clay, cohesive, moist.	10.0		
12						12.0		Collected sample 8-10' bgs

PROJECT Henry Johnson Boulevard	LOCATION Albany, NY	SHEET 1 OF 1
CLIENT		PROJECT No. 4279009
DRILLING CONTRACTOR Aztech		MEAS. PT. ELEV.
PURPOSE Remedial Investigation		GROUND ELEV.
WELL MATERIAL		DATUM
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE
DRILL RIG TYPE Truck	TYPE	
GROUND WATER DEPTH 10.0'	DIA.	"
MEASURING POINT	WEIGHT	#
DATE OF MEASUREMENT 6/12/06	FALL	"
		DRILLER Chris
		PIRNIE STAFF J. Wyckoff

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	* ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine-med sand, loose, moist.			
4					Brown fine-med sand, gravel, coal, glass, some clay, cohesive, firm, moist.	3.0		
					SAA.	4.0		
6	3		0		Brown fine-med sand, loose, moist.	6.0		
8					Brown clay, silt, mottled, very firm, cohesive.	7.0		
					SAA.	8.0		
10	2		0		Coal, ash, brick, glass, some brown-red fine-med sand. Gray sandy clay @ bottom of boring.	10.0		
12						12.0		Collected sample 10-12' bgs

MALCOLM PIRNIE				TEST BORING LOG			BORING No. SB-36	
PROJECT Henry Johnson Boulevard				LOCATION Albany, NY			SHEET 1 OF 1	
CLIENT				PROJECT No. 4279009				
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.				
PURPOSE Remedial Investigation				GROUND ELEV.				
WELL MATERIAL				DATUM				
DRILLING METHOD(S) Geoprobe			SAMPLE	CORE	CASING	DATE STARTED 6/13/06		
DRILL RIG TYPE Truck		TYPE				DATE FINISHED 6/13/06		
GROUND WATER DEPTH 10.0'		DIA.	"			DRILLER Chris		
MEASURING POINT		WEIGHT	#			PIRNIE STAFF J. Wyckoff		
DATE OF MEASUREMENT 6/13/06		FALL	"					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	0		0		No recovery-concrete in tube.			
4					Brown, firm, clay, moist, mottled, some fine sand, some coal.	4.0		
6	2		0		SAA.	8.0		
10	3		0		Tan/gray clay and some fine sand, coal, brick, concrete.	10.0		
12						12.0		Collected sample 9-11' bgs

PROJECT Henry Johnson Boulevard	LOCATION Albany, NY			SHEET 1 OF 1
CLIENT				PROJECT No. 4279009
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.
PURPOSE Remedial Investigation				GROUND ELEV.
WELL MATERIAL				DATUM
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE	CASING	DATE STARTED 6/13/06
DRILL RIG TYPE Truck	TYPE			DATE FINISHED 6/13/06
GROUND WATER DEPTH '	DIA.	"		DRILLER Chris
MEASURING POINT	WEIGHT	#		PIRNIE STAFF J. Wyckoff
DATE OF MEASUREMENT 6/13/06	FALL	"		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1		0		Dark brown med-fine sand and subround gravel up to .75", some brown clay, moist, S&G is loose, clay is cohesive.			
4								
6	2		0		Brown clay, mottled, coal, ash, brick, moist, cohesive, firm.	4.0		
8					SAA.	8.0		
10	3		0		Brown clay, mottled, firm, cohesive, moist.	9.0		
12					SAA.	12.0		
14	2.5		0		Brown/gray clay, mottled, plastic, cohesive, wet.	13.0		
16						16.0		Collected sample 13-15' bgs

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY		SHEET 1 OF 1	
CLIENT				PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.	
PURPOSE Remedial Investigation				GROUND ELEV.	
WELL MATERIAL				DATUM	
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	
DRILL RIG TYPE Truck	TYPE			DATE STARTED 6/13/06	
GROUND WATER DEPTH 7.5'	DIA.	"		DATE FINISHED 6/13/06	
MEASURING POINT	WEIGHT	#	DRILLER Chris		
DATE OF MEASUREMENT 6/13/06	FALL	"	PIRNIE STAFF J. Wyckoff		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine-med sand, loose, moist, top 0.5' dark brown fine sand and silt.			
4					Brick, ash, wood.	3.5		
6	3.8		0		Brown/gray clay, mottled, wet, cohesive.	4.0		
8						8.0		 Collected sample 7-8' bgs

MALCOLM PIRNIE				TEST BORING LOG			BORING No. SB-39	
PROJECT Henry Johnson Boulevard				LOCATION Albany, NY			SHEET 1 OF 1	
CLIENT				PROJECT No. 4279009				
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.				
PURPOSE Remedial Investigation				GROUND ELEV.				
WELL MATERIAL				DATUM				
DRILLING METHOD(S) Geoprobe			SAMPLE	CORE	CASING	DATE STARTED 6/13/06		
DRILL RIG TYPE Truck		TYPE				DATE FINISHED 6/13/06		
GROUND WATER DEPTH 3.0'		DIA.	"			DRILLER Chris		
MEASURING POINT		WEIGHT	#			PIRNIE STAFF J. Wyckoff		
DATE OF MEASUREMENT 6/13/06		FALL	"					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine-med sand, wood, moist, loose.			
4					Brown, firm, clay, moist, cohesive, mottled.	2.0		
6	3.8		0		SAA.	4.0		Collected sample 3-4' bgs
8					Gray and brown clay, mottled, firm, cohesive, wet.	6.0		
						8.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 2**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **2.0'**

DIA.

"

MEASURING POINT

WEIGHT

#

DATE OF MEASUREMENT **6/13/06**

FALL

"

DATE STARTED **6/13/06**

DATE FINISHED **6/13/06**

DRILLER **Chris**

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3.5		0		Brown fine sand & silt, some clay, coal, ash, moist, firm.			
					Brown clay, mottled, firm, cohesive.	1.0		
4					Gray/brown clay, mottled, firm, cohesive.	4.0		
6	3		0					
8					SAA.	8.0		
10	3		0					
12					SAA.	12.0		
14	3		0					
16					SAA.	16.0		
18	3		0					

▼

Collected sample 2-4' bgs - R.
Hough suggests to advance boring
to 20' bgs to see if chlorinated
components beneath water table.

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **2 OF 2**

CLIENT

PROJECT No. **4279009**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22	3		0		SAA.	20.0		
24					SAA.	24.0		
26	3.5		0					
28						28.0		

PROJECT Henry Johnson Boulevard	LOCATION Albany, NY	SHEET 1 OF 1
CLIENT		PROJECT No. 4279009
DRILLING CONTRACTOR Aztech		MEAS. PT. ELEV.
PURPOSE Remedial Investigation		GROUND ELEV.
WELL MATERIAL		DATUM
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE
DRILL RIG TYPE Truck	TYPE	
GROUND WATER DEPTH 7.0'	DIA.	"
MEASURING POINT	WEIGHT	#
DATE OF MEASUREMENT 6/13/06	FALL	"
		DRILLER Chris
		PIRNIE STAFF J. Wyckoff

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Brown fine-med sand, loose, moist.			
					Brick, concrete, moist.	1.5		
4					Brown/gray clay, firm, cohesive.	4.0		
6	3.5		0					
8					SAA.	8.0		
10	3		0					
12						12.0		

Collected sample 6-7' bgs

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY		SHEET 1 OF 1	
CLIENT				PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.	
PURPOSE Remedial Investigation				GROUND ELEV.	
WELL MATERIAL				DATUM	
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	
DRILL RIG TYPE Truck	TYPE			PVC	
GROUND WATER DEPTH 7.0'	DIA.	"		2	
MEASURING POINT	WEIGHT	#			
DATE OF MEASUREMENT 6/13/06	FALL	"			
				DRILLER Chris	
				PIRNIE STAFF J. Wyckoff	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2		0		Dark brown med-coarse sand, pea gravel, loose, moist.		0.5	
					Brick, brown clay, firm, moist, cohesive.	2.0	1.5	
4					Gray/brown clay, firm, cohesive.	4.0		
6	3.5		0					
8					SAA.	8.0		↓ Collected sample 6-7' bgs
10	3		0					
12						12.0	12.0	

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

DATE STARTED **6/13/06**

GROUND WATER DEPTH **7.0'**

DIA.

"

DATE FINISHED **6/13/06**

MEASURING POINT

WEIGHT

#

DRILLER **Chris**

DATE OF MEASUREMENT **6/13/06**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
21.5	possible void		0		Dark brown med sand, pea gravel, coal, brick, concrete at bottom of boring.			
4			0		Brown/gray clay, firm, moist, cohesive, some silt & fine sand.	4.0		
6	3		0					
8			0		Brown/gray clay, firm, wet, cohesive.	8.0		
10	3		0					
12						12.0		Collected sample 10-12' bgs

BORING No. SB44/MW9

SHEET 1 OF 1

PROJECT No. 4279009

MEAS. PT. ELEV.

GROUND ELEV.

DATUM

DATE STARTED 6/14/06

PVC

DATE FINISHED 6/14/06

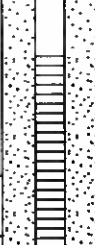
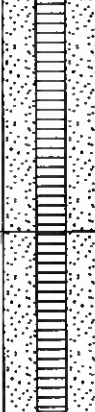
2

#

DRILLER	Chris

11

PIRNIE STAFF S. Bagnato

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3.5		0		Brown silt and fine sand, ash/coal layer @ bottom with increasing clay, moist.			
4					Light brown silt, clay & fine sand, ash, moist, wet.	4.0		
6	4		0			Light brown silt & clay, mottled, moist, wet.	7.0	
8				Light brown fine sand & silt, wet, bottom 2' light brown clay, moist, wet.		8.0		
10	3.5		0					Collected sample 8-10' bgs ▼
12								12.0

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY			SHEET 1 OF 1	
CLIENT					PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech					MEAS. PT. ELEV.	
PURPOSE Remedial Investigation					GROUND ELEV.	
WELL MATERIAL					DATUM	
DRILLING METHOD(S) Geoprobe			SAMPLE	CORE	CASING	
DRILL RIG TYPE Truck		TYPE			DATE STARTED 6/15/06	
GROUND WATER DEPTH 8.0'		DIA.	"		DATE FINISHED 6/15/06	
MEASURING POINT		WEIGHT	#	DRILLER Chris		
DATE OF MEASUREMENT 6/15/06		FALL	"	PIRNIE STAFF J. Wyckoff		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Wood, brown fine-med sand and 2.5" gravel, and clay-silt, very firm, moist, some concrete.			
4					SAA.	4.0		
6	2.		0		Gray clay, firm, moist, cohesive.	7.0		
8					Brown fine sand, moist.	7.9		
					Brown and gray clay, moist, cohesive, firm.	8.0		
10	2.5		0					
12						12.0		

Collected sample 7-9' bgs

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/15/06**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/15/06**

GROUND WATER DEPTH **9.0'**

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/15/06**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Brown fine-med sand and 0.5" gravel, some silt, clay, damp & loose to 2' bgs, moist & slightly cohesive 2-4' bgs, some coal.			PID=2.0 bgs only in wood fragment
4					SAA.	4.0		
6	2		2		Concrete, wood, some brown sand w/gravel, clay, silt, moist, cohesive.	7.0		
8					SAA.	8.0		
10	1.5		1.5		Gray clay, firm, moist.	11.0		PID=1.5 @ 11' bgs
12					Brown and gray clay, firm, cohesive, some silty zones, some organics.	12.0		PID=1.5 @ 11' bgs
14	2.5		0					Collected sample 11-12' bgs
16						16.0		

PROJECT Henry Johnson Boulevard			LOCATION Albany, NY			SHEET 1 OF 1	
CLIENT						PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech						MEAS. PT. ELEV.	
PURPOSE Remedial Investigation						GROUND ELEV.	
WELL MATERIAL						DATUM	
DRILLING METHOD(S) Geoprobe			SAMPLE	CORE	CASING	DATE STARTED 6/15/06	
DRILL RIG TYPE Truck		TYPE			PVC	DATE FINISHED 6/15/06	
GROUND WATER DEPTH 7.0'		DIA.	"		2	DRILLER Chris	
MEASURING POINT		WEIGHT	#			PIRNIE STAFF J. Wyckoff	
DATE OF MEASUREMENT 6/15/06		FALL	"				

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine-med sandy, gravel up to 0.5", concrete, loose, moist, some silt.		0.5 1.5	
4						4.0		
6	3		44		Brown/gray clay, some silty zones, moist, cohesive, firm, gray staining @ 6' bgs, some coal, brick.			PID=44 ppm @ 6' bgs ↓ Collected sample 6-7' bgs
8						8.0		
10	2		0		Brown/gray mottled clay, v. firm, moist, cohesive.			
12						12.0	12.0	

PROJECT Henry Johnson Boulevard	LOCATION Albany, NY	SHEET 1 OF 1
CLIENT	PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech	MEAS. PT. ELEV.	
PURPOSE Remedial Investigation	GROUND ELEV.	
WELL MATERIAL	DATUM	
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE
DRILL RIG TYPE Truck	TYPE	
GROUND WATER DEPTH 11.0'	DIA.	"
MEASURING POINT	WEIGHT	#
DATE OF MEASUREMENT 6/15/06	FALL	"
	DRILLER Chris	
	PIRNIE STAFF J. Wyckoff	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3.5		0		Brown fine-med sand, brick, loose, dry, coal.			
4					Brown clay, coal, some fine brown sandy zones, moist.	1.5		Collected sample 2-3' bgs
6	2		0		SAA, no coal below 6' bgs, clay is mottled @ 7' bgs.	4.0		
8					SAA, some silty zones.	8.0		
10	3		0					
12						12.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/15/06**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/15/06**

GROUND WATER DEPTH **7.0'**

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/15/06**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine sand and silt, brick, ashes, some brown clay, slightly cohesive.			Collected sample 2-3' bgs
4								
6	2.5		9		Brown sandy clay, w/some coal, brick, moist, cohesive, firm.	4.0		Collected sample 6-8' bgs PID=9 ppm @ 7.5' bgs
8								
10	2.5		97		Brown med-fine sand, interbedded between brown clay and silt, clay-silt is moist, sand is saturated.	8.0		PID=97 ppm @10' bgs Collected sample 10-11' bgs
12						12.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **7.5'**

DIA.

"

DATE STARTED **6/15/06**

DATE FINISHED **6/15/06**

MEASURING POINT

WEIGHT

#

DRILLER **Chris**

DATE OF MEASUREMENT **6/15/06**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Brown, fine sand, silt, clay, ashes, brick, coal, moist, soil is slightly cohesive.			
4								
6	2		20		Brown fine sand, silt and clay, some sandy zones, cohesive where clay is present.	4.0		
8								Collected sample 6-8' bgs PID=20 ppm @ 7.5' bgs
10	2		.5		SAA.	8.0		
12						12.0		PID=.5 ppm @ 12' bgs

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY		SHEET 1 OF 1	
CLIENT				PROJECT No. 4279009	
DRILLING CONTRACTOR				MEAS. PT. ELEV.	
PURPOSE Remedial Investigation				GROUND ELEV.	
WELL MATERIAL				DATUM	
DRILLING METHOD(S)		SAMPLE	CORE	DATE STARTED 6/15/06	
DRILL RIG TYPE Truck	TYPE			DATE FINISHED 6/15/06	
GROUND WATER DEPTH 6.0'	DIA.	"		DRILLER Chris	
MEASURING POINT	WEIGHT	#		PIRNIE STAFF J. Wyckoff	
DATE OF MEASUREMENT	FALL	"			

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine-med sand, little .25" gravel, loose, moist.			
4					Dark brown fine sand, silt, clay, concrete, cohesive, firm.	2.0		
6	3		0		Brown med-fine sand and silt, slightly cohesive.	4.0		
8					Brown clay, firm, moist, cohesive, brown med, sand and silt, slightly cohesive, some ash and leather pieces, dark grey and firm clay @ bottom of tube.	6.0		
10	2.5		0		Grey fine-sand, silt, ash, come clay, cohesive.	8.0		
12					Brown clay, mottled, firm, moist, cohesive.	10.5		
						12.0		

↓ Collected sample 5-7' bgs

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY			SHEET 1 OF 1	
CLIENT					PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech					MEAS. PT. ELEV.	
PURPOSE Remedial Investigation					GROUND ELEV.	
WELL MATERIAL					DATUM	
DRILLING METHOD(S) Geoprobe			SAMPLE	CORE	CASING	
DRILL RIG TYPE Truck		TYPE				
GROUND WATER DEPTH 7.0'		DIA.	"			
MEASURING POINT		WEIGHT	#			
DATE OF MEASUREMENT 6/15/06		FALL	"			
					DRILLER Chris	
					PIRNIE STAFF J. Wyckoff	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Brown med-fine sand, silt, clay, brick, concrete, ash.			
4								Collected sample 3-4' bgs
6	2.5		0		Brown silt and clay, small zones (2") of grey clay, dark grey firm clay at bottom of boring.	4.0		
8						8.0		Collected sample 6-8' bgs

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

DATE STARTED **6/15/06**

GROUND WATER DEPTH **7.0'**

DIA.

"

DATE FINISHED **6/15/06**

MEASURING POINT

WEIGHT

#

DRILLER **Chris**

DATE OF MEASUREMENT **6/15/06**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine sand, trace of silt, loose, dry.			
4					Brown-dark brown fine sand and silt, concrete, gravel upto 0.5", some brown-grey clay @ 3.5' bgs, asphalt @ 4.0 bgs.	1.0		
6	2		0		Wood, brick, concrete, ash.	4.0		
8					Brown/gray silt and clay, some brown sand @ 7.5-8 bgs.	6.0		Collected sample 6-8' bgs
10	0		0			8.0		Stop at boring, no recovery 8-12' bgs
12								

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY				SHEET 1 OF 1	
CLIENT						PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech						MEAS. PT. ELEV.	
PURPOSE Remedial Investigation						GROUND ELEV.	
WELL MATERIAL						DATUM	
DRILLING METHOD(S) Geoprobe		SAMPLE		CORE	CASING	DATE STARTED 6/15/06	
DRILL RIG TYPE Truck		TYPE			PVC	DATE FINISHED 6/15/06	
GROUND WATER DEPTH 6.0'		DIA.	"		2	DRILLER Chris	
MEASURING POINT		WEIGHT	#			PIRNIE STAFF J. Wyckoff	
DATE OF MEASUREMENT 6/15/06		FALL	"				

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
					Brown fine-med sand and silt, some clay, brick, slightly cohesive, moist.			
					Ash, asphalt, brick.	1.5		
2	3		0		Brown clay, mottled, firm, moist, cohesive, some organics.	3.0		
4					Brown silt and fine sand, slightly cohesive.	4.0		
6	3		0		Brown/gray clay, firm, moist, cohesive.	6.0		Collected sample 5-6' bgs
8					SAA.	8.0		
10	3		0					
12						12.0		Collected sample 11-12' bgs

PROJECT	Henry Johnson Boulevard	LOCATION	Albany, NY	SHEET	1 OF 1
CLIENT				PROJECT No.	4279009
DRILLING CONTRACTOR	Aztech	MEAS. PT. ELEV.			
PURPOSE	Remedial Investigation	GROUND ELEV.			
WELL MATERIAL				DATUM	
DRILLING METHOD(S)	Geoprobe	SAMPLE	CORE	CASING	DATE STARTED 6/15/06
DRILL RIG TYPE	Truck	TYPE			DATE FINISHED 6/15/06
GROUND WATER DEPTH	7.0'	DIA.	"		DRILLER Chris
MEASURING POINT		WEIGHT	#		PIRNIE STAFF J. Wyckoff
DATE OF MEASUREMENT	6/15/06	FALL	"		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Brown fine-med sand, loose, moist, some concrete.			
4					SAA.	4.0		
6	2.5		400		Brick, concrete.	6.0		
8					Brown/gray clay, moist, cohesive.	7.0		▼ PID=400 ppm @ 7' bgs
10	3.5		12		SAA.	8.0		PID=20 ppm @ 9' bgs
12					SAA, slightly silty @ 13-14' bgs.	12.0		PID=12 ppm @ 12' bgs
14	3		8					PID=8 ppm @ 13' bgs
16						16.0		PID=0.1 ppm @ 16' bgs

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/15/06**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/15/06**

GROUND WATER DEPTH **7.0'**

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/15/06**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1.5		0		Brown fine-med sand, brick, concrete, moist.			
4					SAA.	4.0		
6	1		0					
8					Brown/gray clay, moist, firm.	8.0		Collected sample 7-8' bgs-only enough matrix for VOC sample
10	3		0					Collected sample 11-12' bgs.
12						12.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **6.0'**

DIA.

"

MEASURING POINT

WEIGHT

#

DATE OF MEASUREMENT **6/16/06**

FALL

"

DATE STARTED **6/16/06**

DATE FINISHED **6/16/06**

DRILLER **Chris**

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1		0		Brown fine sand, loose, dry.			PID=2 ppm @ 9' bgs
4					Brick	3.5		
					Brown fine sand, brick, concrete.	4.0		
6	2.5		70		Gray clay, firm, moist, cohesive.	6.0		▼ PID=70 ppm @ 6' bgs
8						8.0		PID=20 ppm @ 8' bgs
10	3		0					
12								

PROJECT Henry Johnson Boulevard	LOCATION Albany, NY	SHEET 1 OF 1
CLIENT	PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech	MEAS. PT. ELEV.	
PURPOSE Remedial Investigation	GROUND ELEV.	
WELL MATERIAL	DATUM	
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE
DRILL RIG TYPE Truck	TYPE	
GROUND WATER DEPTH 7.0'	DIA.	"
MEASURING POINT	WEIGHT	#
DATE OF MEASUREMENT 6/16/06	FALL	"
	PIRNIE STAFF	J. Wyckoff

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3.5		0		Dark brown fine-med sand, glass, loose, moist.			
					Brown fine sand, loose, moist.	1.5		
4						2.0		
6	1.5		2		SAA.			
8					Brick, concrete, some sand.	7.0		▼ PID=2.0 @ 7' bgs
					Gray clay, moist, cohesive, firm.	8.0		Collected sample 7-8' bgs
10	3		0.5					PID=0.5 ppm @ 10' bgs
12						12.0		Collected sample 11-12' bgs

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/16/06**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/16/06**

GROUND WATER DEPTH **6.0'**

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/16/06**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine sand, loose, moist.			
4					SAA.	4.0		
6	3		208		Brick, concrete.	6.0		▼ PID=208 ppm @ 6' bgs, 20 ppm @ bottom
8					Gray clay, firm, moist, cohesive.	6.5		Collected sample 6-7' bgs-petro odors
10	3		7		SAA.	8.0		PID=7 ppm @9'bgs
12						12.0		Collected sample 11-12' bgs PID=0.7 ppm @ 12' bgs

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/16/06**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/16/06**

GROUND WATER DEPTH

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/16/06**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Concrete, tan fine sand, loose, dry.			
4					Brown fine sand, loose, moist.	3.0		
6	2.5		32		SAA.	4.0		
8					Wood, concrete.	6.5		
10	3		.07		Gray clay, moist, firm, cohesive.	7.0		PID=32 ppm @ 7' bgs
12					SAA.	8.0		Collected sample 6-8' bgs
						12.0		PID=0.7 ppm @ 9' bgs - 0.0 @ bottom
								Collected sample 11-12' bgs

PROJECT Henry Johnson Boulevard	LOCATION Albany, NY	SHEET 1 OF 1
CLIENT	PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech	MEAS. PT. ELEV.	
PURPOSE Remedial Investigation	GROUND ELEV.	
WELL MATERIAL	DATUM	
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE
DRILL RIG TYPE Truck	TYPE	PVC
GROUND WATER DEPTH 10.0'	DIA.	2
MEASURING POINT	WEIGHT	#
DATE OF MEASUREMENT 6/20/06	FALL	"
	DRILLER Chris	
	PIRNIE STAFF J. Wyckoff	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Dark brown/black, fine-med sand, silt, trace clay, moist.			
4			0		Brown silt and clay, mottled, moist, cohesive.	2.0		Collected sample 0-2' bgs
6	3		0		Brown clay, moist, firm, cohesive, mottled.	4.0		
8			0		SAA.	8.0		
10	2		0		Brown clay, some very fine brown-sand and silty zones.	10.0		Collected sample 9-11' bgs
12			0		Gray very fine sand and silt.	12.0		
14	2.5		0		Gray/brown clay, mottled, firm, cohesive.	13.0		
16						16.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/21/06**

DRILL RIG TYPE **Truck**

TYPE

PVC

DATE FINISHED **6/21/06**

GROUND WATER DEPTH **6.0'**

DIA.

"

2

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

DATE OF MEASUREMENT **6/21/06**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
					Refusal (Interval was removed with augers).		0.5 1.0	
2	2		0		Brown medium-coarse sand and pea gravel, loose, some brick.	2.0		
4					Brown fine sand and silt, some clay, moist, cohesive.	3.5		
					SAA, some brick, coal.	4.0		
6	3		0		SAA, with no brick or coal.	7.0		
8					SAA, with Increased clay content, less silt and sand.	8.0		
10	3		0		Brown clay, mottled, moist, firm, cohesive.	10.0		
12						12.0	12.0	Collected sample 5-7' bgs

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

PVC

GROUND WATER DEPTH **6.0'**

DIA.

"

2

MEASURING POINT

WEIGHT

#

DRILLER **Chris**

DATE OF MEASUREMENT **6/21/06**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2			0		Concrete @ surface (refusal)		0.5 1.5	
4			0		Brown clay, mottled, firm, moist, cohesive.	4.0		
6	2.5		0		Brown fine sand and silt, saturated, loose.	7.0		Collected sample 6-8' bgs
8			0		Brown clay, mottled, firm, cohesive, moist.	7.5		
10	3		0		SAA, occasional pea size gravel (drop stone?).	8.0		
12						12.0	12.0	

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY			SHEET 1 OF 1	
CLIENT					PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech					MEAS. PT. ELEV.	
PURPOSE Remedial Investigation					GROUND ELEV.	
WELL MATERIAL					DATUM	
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	DATE STARTED 6/22/06	
DRILL RIG TYPE Truck		TYPE		PVC	DATE FINISHED 6/22/06	
GROUND WATER DEPTH 6.0'		DIA.	"	2	DRILLER Chris	
MEASURING POINT		WEIGHT	#		PIRNIE STAFF J. Wyckoff	
DATE OF MEASUREMENT 6/22/06		FALL	"			

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1.3		0		Brown fine-med sand, concrete, gravel, coal, glass, loose, moist.		0.5 1.5	
4					SAA.	4.0		
6	3		0		Gray clay, mottled, some silty zones, firm, cohesive.	5.0		▼ Collected sample 5-7' bgs
8					SAA.	8.0		
10	3		0					
12						12.0	12.0	

PROJECT Henry Johnson Boulevard	LOCATION Albany, NY	SHEET 1 OF 1
CLIENT	PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech	MEAS. PT. ELEV.	
PURPOSE Remedial Investigation	GROUND ELEV.	
WELL MATERIAL	DATUM	
DRILLING METHOD(S) Geoprobe	SAMPLE	CORE
DRILL RIG TYPE Truck	TYPE	PVC
GROUND WATER DEPTH 6.0'	DIA.	2
MEASURING POINT	WEIGHT	#
DATE OF MEASUREMENT 7/12/06	FALL	"
	PIRNIE STAFF	J. Wyckoff

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1		0		Top 0.5' dark brown fine sand and silt, pea gravel, loose, moist, brick. Bottom 0.5' tan fine sand and silt, gravel, paint chips, glass, some gray/brown clay, moist, slightly cohesive.		0.5 1.5	
4					Tan/gray clay, mottled, firm, cohesive.	4.0		
6	3.5		0		Tan/gray clay and silt, cohesive, clay is mottled gray/tan, clay is more gray.	6.0		Collected sample 5-7' bs
8					Gray clay, some silty zones (brown silt), clay is cohesive, plastic.	8.0		
10	2.5		0					Collected sample 10-12' bgs
12						12.0	12.0	

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/18/07**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/18/07**

GROUND WATER DEPTH **7.0'**

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/18/07**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	0		-		No recovery.			
4								
6	2.5		70		Brown SILT & CLAY, mottled.	4.0		
8					Gray SILT & CLAY, wet.	6.5		
10	2.5		0		SAA.	8.0		
12					SAA.	12.0		
					Brown SILT & CLAY, mottled, cohesive, firm.	15.0		
						16.0		

▼

Petro odors. Collect sample 7'-8' bgs.

PROJECT	Henry Johnson Boulevard	LOCATION	Albany, NY	SHEET	1 OF 1
CLIENT				PROJECT No.	4279009
DRILLING CONTRACTOR	Aztech	MEAS. PT. ELEV.			
PURPOSE	Remedial Investigation	GROUND ELEV.			
WELL MATERIAL				DATUM	
DRILLING METHOD(S)	Geoprobe	SAMPLE	CORE	CASING	DATE STARTED 6/18/07
DRILL RIG TYPE	Truck	TYPE		PVC	DATE FINISHED 6/18/07
GROUND WATER DEPTH	7.5'	DIA.	"	2	DRILLER Chris
MEASURING POINT		WEIGHT	#		PIRNE STAFF J. Wyckoff
DATE OF MEASUREMENT	6/18/07	FALL	"		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1		0		FILL: Brick, Coal, Gravel & SAND, loose, dry.		1.0	
4					Dark Brown/Gray CLAY & SILT, mottled, firm, cohesive, wet @ 7.5'.	4.0	3.5	
6	3		103				5.0	
8					Brown/Tan fine SAND, trace silt, moist, slightly cohesive.	8.0		▼ Petro odors. Collect sample 7'-8' bgs.
10	1		0					
12					Brown/Tan SILT & CLAY, wet, cohesive.	12.0		
14	2.5		6				15.0	
16						16.0	16.0	PID=0 @ 16' bgs.

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/18/07**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/18/07**

GROUND WATER DEPTH **6.5'**

DIA.

"

DRILLER **Chris**

MEASURING POINT

WEIGHT

#

PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/18/07**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		FILL: Brick, Brown SAND, Coal, GRAVEL, SILT, & CLAY, loose, dry.			
					SAA, moist, slightly cohesive.	2.5		
4					SAA.	4.0		
6	2.5		0		SAA, Ash, Gravel & Clay, wet @ 6.5'.	6.0		Collect sample 6'-7' bgs.
8					Gray SILT & CLAY, firm, cohesive, wet, very firm @ 11.5.	8.0		
10	2.5		0					
12					SAA.	12.0		
14	2.5		0					
16						16.0		

PROJECT Henry Johnson Boulevard		LOCATION Albany, NY		SHEET 1 OF 1	
CLIENT				PROJECT No. 4279009	
DRILLING CONTRACTOR Aztech				MEAS. PT. ELEV.	
PURPOSE Remedial Investigation				GROUND ELEV.	
WELL MATERIAL				DATUM	
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	
DRILL RIG TYPE Truck	TYPE				
GROUND WATER DEPTH 7.0'	DIA.	"			
MEASURING POINT	WEIGHT	#			
DATE OF MEASUREMENT 6/18/07	FALL	"			
				DRILLER Chris	
				PIRNIE STAFF J. Wyckoff	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2		0		Brown/Orange fine SAND & GRAVEL, loose, moist.			
4					Brown/Orange fine SAND, loose, moist.	3.0		
6	2.5		0		SAA.	4.0		
8					FILL: Brick, Ash, Coal, Brown SAND, SILT & CLAY.	6.5		
10	2.5		0		SAA.	8.0		
12						12.0		

▼ Collect sample 6.5'-7.5' bgs.

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/18/07**

DRILL RIG TYPE **Truck**

TYPE

DATE FINISHED **6/18/07**

GROUND WATER DEPTH **9.0'**

DIA.

"

MEASURING POINT

WEIGHT

#

DRILLER **Chris**

DATE OF MEASUREMENT **6/18/07**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1.5		0		Light Brown v. fine SAND, Some Gravel, loose, moist.			
4					Brown mottled CLAY, Some Silt & v. fine Sand, moist, firm.	4.0		
6	1.5		0		Brown v. fine SAND, loose, moist.	7.5		
8					Brown/Gray CLAY, wet @ 9', plastic, cohesive.	8.0		
10	3		0		Black CLAY, Coal, Ash.	11.0		
12					Dark Gray CLAY, Some Silt, plastic, cohesive.	12.0		
14	3		0		Brown/Gray CLAY, mottled, firm, cohesive.	14.5		
16						16.0		

Collect sample 9.5'-10.5' bgs.

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **14.0'**

DIA.

"

MEASURING POINT

WEIGHT

#

DATE OF MEASUREMENT **6/18/07**

FALL

"

DRILLER **Chris**

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine SAND & GRAVEL, loose, moist. Some Gray Clay @ 4'.			
4					SAA, w/some wood, concrete.	4.0		
6	2		0		Brown & Gray CLAY, v. firm, moist, cohesive.	7.0		
8					Brown/Gray CLAY& SILT, plastic, moist, cohesive.	8.0		
10	2		0					
12					Brown/Gray CLAY, Some Silt. Some Brown v. fine SAND lenses, wet @ 14'.	12.0		
14	2.5		0					▼ Collect sample 13.5'-14.5' bgs.
16						16.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

DATE STARTED **6/18/07**

GROUND WATER DEPTH **7.5'**

DIA.

"

DATE FINISHED **6/18/07**

MEASURING POINT

WEIGHT

#

DRILLER **Chris**

DATE OF MEASUREMENT **6/18/07**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2		0		FILL: Brown v. fine SAND, Ash, GRAVEL, Some Brown/Gray Clay.			
4								
6	1.5		0		FILL: Brown/Gray CLAY, Ash, Brick, wet @ 7.5', cohesive, firm.	4.0		
8								
10	2		0		Brown/Gray CLAY, wet, cohesive.	8.0		
12								
14	2.5		0		Brown/Gray CLAY, trace silt. Some Brown v. fine SAND lenses, wet, plastic, cohesive.	12.0		
16						16.0		

▼ Collect sample 7'-8' bgs.

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

PVC

GROUND WATER DEPTH **6.5'**

DIA.

"

2

MEASURING POINT

WEIGHT

#

DRILLER **Chris**

DATE OF MEASUREMENT **6/18/07**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2		0		Brown v. fine-medium SAND & GRAVEL, trace silt, moist, slightly cohesive.			
4					SAA, w/ some concrete.	4.0		
6	2.5		0		Brown v. fine SAND & SILT, trace clay, coal, brick, firm, cohesive, wet.	6.5		Collect sample 6'-7' bgs.
8					SAA, more clay. Brick, wood @ bottom, plastic, cohesive.	8.0		
10	2		0					
12					Brown v. fine SAND & SILT, trace clay, wet, slightly cohesive.	12.0		
14	2.5		0		Brown & Gray CLAY, v. firm, cohesive.	14.0		
16						16.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

DATE STARTED **6/18/07**

GROUND WATER DEPTH **6.0'**

DIA.

"

DATE FINISHED **6/18/07**

MEASURING POINT

WEIGHT

#

DRILLER **Chris**

DATE OF MEASUREMENT **6/18/07**

FALL

"

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Brown fine-medium SAND & GRAVEL, loose, moist, Ash, coal.			
4					SAA.	4.0		
6	2		0		FILL: Ash, Coal, wet.	6.0		▼ Collect sample 6'-7' bgs.
8					Brown SILT & CLAY, plastic, cohesive.	7.0		
10	2		0		Gray CLAY, trace silt, cohesive, mottled.	8.0		
12						12.0		

PROJECT Henry Johnson Boulevard	LOCATION Albany, NY				SHEET 1 OF 1
CLIENT					PROJECT No. 4279009
DRILLING CONTRACTOR Aztech					MEAS. PT. ELEV.
PURPOSE Remedial Investigation					GROUND ELEV.
WELL MATERIAL					DATUM
DRILLING METHOD(S) Geoprobe		SAMPLE	CORE	CASING	DATE STARTED 6/18/07
DRILL RIG TYPE Truck	TYPE				DATE FINISHED 6/18/07
GROUND WATER DEPTH 6.0'	DIA.	"			DRILLER Chris
MEASURING POINT	WEIGHT	#	PIRNIE STAFF J. Wyckoff		
DATE OF MEASUREMENT 6/18/07	FALL	"			

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		FILL: Coal, Brick, Ash, Concrete, Brown v. fine SAND, loose, moist.			
4					SAA.	4.0		
6	2.5		0		Brown fine SAND, wet.	6.0		▼ Collect sample 6'-7' bgs.
8					Brown & Gray CLAY, wood, ash, concrete, firm, cohesive.	7.0		
					SAA, w/ some brick.	8.0		
10	2		0					
12						12.0		

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **6.5'**

DIA.

"

MEASURING POINT

WEIGHT

#

DATE OF MEASUREMENT **6/18/07**

FALL

"

DRILLER **Chris**

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2.5		0		Asphalt, Brick, Coal, Concrete, Brown fine SAND & SILT, Some Clay.			
4					Gray CLAY, plastic, cohesive.	3.0		
6	2		0		SAA.	4.0		
8					SAA, more firm, cohesive.	8.0		
10	3.5		0					
12					SAA, plastic, cohesive, Gray Silt & v. fine Sand lenses.	12.0		
14	3		0					
16						16.0		

↓ Collect sample 6'-7' bgs.

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **6.5'**

DIA.

"

MEASURING POINT

WEIGHT

#

DATE OF MEASUREMENT **6/18/07**

FALL

"

DRILLER **Chris**

PIRNIE STAFF **J. Wyckoff**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1.5		0		Brown fine-medium SAND & GRAVEL, loose, moist. Brown CLAY @ bottom of sampler.			
4					Brown SILT & CLAY, Some zones of v. fine Brown SAND, cohesive, wet.	4.0		
6	2.5		0		Gray CLAY, plastic, cohesive.	8.0		
10	2.5		0		Gray CLAY, Some Silt & v. fine Sand, firm, cohesive.	12.0		
14	2		0		Gray CLAY, Some Silt & v. fine Sand, firm, cohesive.	16.0		

Collect sample 6'-7' bgs.

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DATE STARTED **6/19/07**

DRILL RIG TYPE **Truck**

TYPE

PVC

DATE FINISHED **6/18/07**

GROUND WATER DEPTH **6.5'**

DIA.

"

2

DRILLER **Chris**

MEASURING POINT

WEIGHT

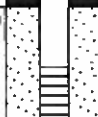
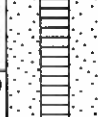
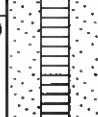
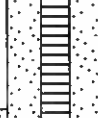
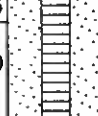
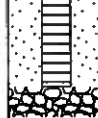
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PIRNIE STAFF **J. Wyckoff**

DATE OF MEASUREMENT **6/19/07**

FALL

"

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0		Brown v. fine SAND, Coal, Ash, Brick, Gravel.			
4					Brown SILT & CLAY, moist, firm, cohesive.	2.0		
6	1.5		0		Brick, Ash.	4.0		
8					Brown SILT & CLAY, v. firm, cohesive, wet @ 6.5'.	7.0		
10	2		0		SAA, more plastic.	8.0		
12					Brown/Green v. fine SAND.	11.5		
14	<1		0		Tan/Green CLAY, mottled, v. firm, cohesive.	12.0		
16						16.0		

Collect sample 6'-8' bgs.

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1 OF 1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **6.0'**

DIA.

"

MEASURING POINT

WEIGHT

#

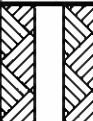
DATE OF MEASUREMENT **6/27/07**

FALL

"

DRILLER **Chris**

PIRNIE STAFF **S. Bagnato**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
					Asphalt, sub-base.			
2	2.5		0		FILL: Black Ash & GRAVEL.	1.0		
					Light Brown SILT & fine SAND, moist.	2.0		2.0
4					SAA, wet.	4.0		
					Light Brown CLAY, Some Silt, moist.	4.5		4.0
6	3		0.2		Gray CLAY, wet.	5.5		5.2 Collect sample 4'-6' bgs. ▼
8					Light Brown-Gray CLAY, wet.	8.0		
10	3		0					
12					Gray CLAY w/ Silt seams, wet.	12.0		
14	3		0					
16								15.2
						16.0		16.0

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **11.0'**

DIA.

"

MEASURING POINT

WEIGHT

#

DATE OF MEASUREMENT **6/27/07**

FALL

"

DRILLER **Chris**

PIRNIE STAFF **S. Bagnato**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	2		0.3		FILL: Black/Gray Ash, Charcoal, Brick w/ Light Brown SILT, damp-moist.			
4					SAA.	4.0		
6	1		0.2					
8					Gray CLAY, little fine sand, moist-wet.	8.0		
10	2.5		0					
12					Gray CLAY, wet.	12.0		
14	3		0.5					
16					Gray SILT, wet.	15.0		
						16.0		

Collect sample 12'-14' bgs.

PROJECT **Henry Johnson Boulevard**

LOCATION **Albany, NY**

SHEET **1** OF **1**

CLIENT

PROJECT No. **4279009**

DRILLING CONTRACTOR **Aztech**

MEAS. PT. ELEV.

PURPOSE **Remedial Investigation**

GROUND ELEV.

WELL MATERIAL

DATUM

DRILLING METHOD(S) **Geoprobe**

SAMPLE

CORE

CASING

DRILL RIG TYPE **Truck**

TYPE

GROUND WATER DEPTH **5.0'**

DIA.

"

DATE STARTED **6/27/07**

DATE FINISHED **6/18/07**

MEASURING POINT

WEIGHT

#

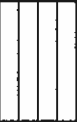
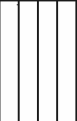
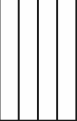
DRILLER **Chris**

DATE OF MEASUREMENT **6/27/07**

FALL

"

PIRNIE STAFF **S. Bagnato**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3		0.1		FILL: Black Cinders & Ash.			
4					Light Brown SILT w/ seams of fill, moist.	2.0		
6	2		0.1		Light Brown SILT, grading to CLAY w/ fill layers, moist-wet.	4.0		Collect sample 4'-5' bgs.
8					Gray SILT & fine-medium SAND, little clay, wet.	8.0		
10	4		0					
12					Gray CLAY, wet.	12.0		
14	3		0					
16						16.0		



Albany Community Development Agency
Remedial Investigation / Alternatives Analysis Report

APPENDIX

H

Groundwater Sampling Purge Logs





WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-1

DATE: 4/11/06

PROJECT NAME: HJB Properties Round 1

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: ~15

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: 7.59

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1415												
Gallons													
Depth to Water													
pH	6.86												
Conductivity (mohm/cm)	2.72												
Turbidity (ntu)	>999												
Dissolved Oxygen (mg/l)	3.63												
Temperature (°C)	13.3												
Salinity	0.01												
TDS	1.7												
REDOX (mV)	221												

Notes: 1415 - Begin Purging well dry after ~ 1/2 liter removed

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-3
DATE: 4/11/06
PROJECT NAME: HJB Properties Round 1
PROJECT NUMBER: 4279009
SAMPLERS: JW, SB
A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: 8.39
D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1420	1423											
Gallons	0												
Depth to Water	8.39												
pH	6.68	7.12											
Conductivity (mohm/cm)	3.68	2.3											
Turbidity (ntu)	<999	<999											
Dissolved Oxygen (mg/l)	11.43	4.31											
Temperature (°C)	11.83	14.39											
Salinity	0.1	0.1											
TDS	1.7	1.5											
REDOX (mV)	-24	-44											

Notes:
1420 - Initiated purge
1425 - Purged well dry, purged ~ 1 liter water.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-4

DATE: 4/11/06

PROJECT NAME: HJB Properties Round 1

PROJECT NUMBER: 4279009

SAMPLERS: JW, SB

A: Total Casing and Screen Length: ~ 13.30

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: 4.75

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1450	1500											
Gallons	0												
Depth to Water	4.75												
pH	7.64	7.45											
Conductivity (mohm/cm)	7.32	6.99											
Turbidity (ntu)	<999	<999											
Dissolved Oxygen (mg/l)	10.23	4.09											
Temperature (°C)	7.9	8.5											
Salinity	0.4	0.4											
TDS	4.5	4.3											
REDOX (mV)	171	51											

Notes:

1450 - Initiate Purge

1500 - Purged well dry, purged 1.5 liters.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-2R
DATE: 7/12/06
PROJECT NAME: HJB Properties Well Development
PROJECT NUMBER: 4279009
SAMPLERS: JW
A: Total Casing and Screen Length: 14.05
B: Casing Internal Diameter: 2"
C: Water Level Below Top of Casing: 8.24
D: Volume of Water in Casing: 0.99

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	12.05	1210	1215	1220	1225	1230	1235	1240	1245	1250			
Gallons													
Depth to Water	10.55	11.85	11.09	11.4	11.74	12.1	12.45	12.78	13.17	DRY			
pH	7.16	7.14	7.14	7.13	7.13	7.13	7.15	7.18	7.22	7.29			
Conductivity (mohm/cm)	1.91	1.94	1.94	1.95	1.96	1.98	2.02	2.03	2.03	1.97			
Turbidity (ntu)	28.5	12.6	12.1	10.1	10.6	9.5	7.3	7.8	10.5	32.3			
Dissolved Oxygen (mg/l)	6.14	2.83	4.15	4.04	4.04	3.74	3.6	3.5	3.43	3.38			
Temperature (°C)	13.67	13.39	13.33	13.37	13.29	13.32	13.16	13.06	12.87	12.64			
Salinity													
TDS	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3			
REDOX (mV)	19	-2	-8	-13	-15	-22	-29	-39	-44	-38			

Notes: 1145 - Begin well development with peristaltic pump

"- Remove sediment from bottom of well, purged ~ 1 gallon, very little sediment."

1205 - Begin Horiba measurements

1255 - Purge well dry, purged ~ 6 gallons



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-7

DATE: 7/12/06

PROJECT NAME: HJB Properties Well development

PROJECT NUMBER: 4279009

SAMPLERS: JW

A: Total Casing and Screen Length: 11.7

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 5.7

D: Volume of Water in Casing: 1.02

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1335	1345	1355	1405	1410	1415								
Gallons														
Depth to Water	5.87	6.38	7.18	-	-	-								
pH	7.45	7.28	7.2	7.18	7.17	7.16								
Conductivity (mohm/cm)	1.7	1.5	0.98	1.01	1.14	1.27								
Turbidity (ntu)	6.6	2.3	0	0	0	0								
Dissolved Oxygen (mg/l)	7.22	5.53	5.02	5.43	5.45	5.45								
Temperature (°C)	17.13	17.06	16.94	16.62	16.36	16.2								
Salinity														
TDS	1.1	1	0.6	0.6	0.7	0.8								
REDOX (mV)	96	50	36	24	20	12								

Notes: 1320 - Begin well development w/ peristaltic pump

"- Purged sediment from well, very little present"

1335 - Begin Horiba measurements.

1425 - Finish well development, purged ~ 5 gallons

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-8

DATE: 7/12/06

PROJECT NAME: HJB Properties Well development

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 11.92

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: 8.89

D: Volume of Water in Casing: 0.51

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1130	1140	1145	1150	1155	1200	1205							
Gallons	0													
Depth to Water		10.01		10.59	11.09	11.37								
pH	7.08	7.08	7.1	7.11	7.12	7.15	7.15							
Conductivity (mohm/cm)	4.78	4.92	4.92	4.86	4.86	4.72	4.69							
Turbidity (ntu)	75.5	38.8	30.6	20.1	17.4	16.5	16.7							
Dissolved Oxygen (mg/l)	5.64	3.77	2.86	2.98	2.97	3.16	3.33							
Temperature (°C)	13.61	13.8	13.41	13.41	13.22	13.02	13.51							
Salinity	0.2	0.3	0.3	0.3	0.3	0.2	0.2							
TDS	3.1	3.2	3.1	3.1	3.1	3	3							
REDOX (mV)	-10	-18	-82	-103	-111	-116	-119							

Notes: 1130 - Begin Development

1205 - Complete Development; Well dry



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-9

DATE: 7/12/06

PROJECT NAME: HJB Properties Well development

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 14.95

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 6.42

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1005	1015	1025	1035	1045	1050	1055	1100						
Gallons	0				3.5		4.5							
Depth to Water	6.42		8.72	9.9	10.51	11.11	11.33	11.81						
pH	6.99	6.82	6.9	6.97	6.99	7	7.01	7.02						
Conductivity (mohm/cm)	1.22	1.37	1.5	1.56	1.62	1.61	1.62	1.59						
Turbidity (ntu)	103	106	89.3	64.5	67.7	47.9	45.9	35						
Dissolved Oxygen (mg/l)	11.65	7.78	7.31	7.52	7.44	7.21	6.96	6.55						
Temperature (°C)	11.86	12.01	11.9	11.59	11.61	11.73	11.59	11.54						
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1						
TDS	0.8	0.9	1	1	1	1	1	1						
REDOX (mV)	256	250	242	239	241	242	243	244						

Notes: 1005 - Begin development

1100 - Finish development

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-10
DATE: 7/12/06
PROJECT NAME: HJB Properties
PROJECT NUMBER: 4279009
SAMPLERS: SB
A: Total Casing and Screen Length: 11.91
B: Casing Internal Diameter: 2"
C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1340	1350	1400	1410	1420									
Gallons	0				3.5									
Depth to Water		8.26	8.79	9.2	10.09									
pH	7.29	7.39	7.38	7.34	7.33									
Conductivity (mohm/cm)	1.96	1.9	2	2.09	2.14									
Turbidity (ntu)	389	109	44.1	36.2	27									
Dissolved Oxygen (mg/l)	10.99	9.58	9.39	8.88	8.3									
Temperature (°C)	15.05	14.57	14.34	13.76	13.52									
Salinity	0.1	0.1	0.1	0.1	0.1									
TDS	1.2	1.2	1.3	1.3	1.3									
REDOX (mV)	105	113	111	109	110									

Notes: -1340 Begin Development

1420 - Development Complete

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-11

DATE: 7/12/06

PROJECT NAME: HJB Properties Well development

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 12

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 6.22

D: Volume of Water in Casing: 0.98

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1225	1230	1235	1245	1300	1310	1315	1320						
Gallons	0													
Depth to Water	6.22			7.58	8.19	8.91	9.08							
pH	7.52	7.2	7.24	7.31	7.26	7.27	7.28	7.29						
Conductivity (mohm/cm)	2.25	1.79	1.35	1.17	1.86	1.84	1.81	1.72						
Turbidity (ntu)	44.1	28.7	22.8	20.3	27.8	21.2	22.6	25.2						
Dissolved Oxygen (mg/l)	15.78	8.33	7.44	6.05	6.15	5.23	4.81	4.39						
Temperature (°C)	13.18	14.28	14.38	14.09	13.53	13.07	13.09	13.24						
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1						
TDS	1.4	1.2	0.8	0.7	1.2	1.2	1.2	1.1						
REDOX (mV)	79	109	119	84	17	-17	-17	-12						

Notes: 1225 - Begin Development

1320 - Development Complete



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-12

DATE: 7/12/06

PROJECT NAME: HJB Properties Well development

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 14.85

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 5.15

D: Volume of Water in Casing: 1.65

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	855	905	915	920	925	930	935						
Gallons	1		2			3.5							
Depth to Water													
pH	7.07	6.86	6.9	6.92	6.92	6.92	6.92						
Conductivity (mohm/cm)	1.17	1.03	1.01	0.99	0.99	0.99	1						
Turbidity (ntu)	237	340	48.4	8.4	11.3	28.7	28.4						
Dissolved Oxygen (mg/l)	15.09	8.45	7.4	7.21	7.2	7.28	7.38						
Temperature (°C)	12.68	12.4	12.43	12.29	12.2	11.96	11.84						
Salinity	0.1	0	0	0	0	0	0						
TDS	0.7	0.7	0.6	0.6	0.6	0.6	0.6						
REDOX (mV)	241	233	236	237	238	239	239						

Notes: 0845 - Begin Development

0935 - Well Development Complete

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-13
DATE: 7/12/06
PROJECT NAME: HJB Properties Well development
PROJECT NUMBER: 4279009
SAMPLERS: SB
A: Total Casing and Screen Length: 11.95
B: Casing Internal Diameter: 2"
C: Water Level Below Top of Casing: 8.81
D: Volume of Water in Casing: 0.53

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1445	1500	1510	1520	1525									
Gallons	0		2	2.5										
Depth to Water	8.81	10.03	10.76	11.47	11.82									
pH	7.18	7.14	7.16	7.18	7.21									
Conductivity (mohm/cm)	7.96	8.55	8.9	8.97	9.03									
Turbidity (ntu)	60.5	35.4	41.5	26.6	26.9									
Dissolved Oxygen (mg/l)	11.41	5.72	4.89	3.83	4.86									
Temperature (°C)	15.79	16.19	15.58	15.65	16.19									
Salinity	0.4	0.5	0.5	0.5	0.5									
TDS	5	5.4	5.6	5.7	5.7									
REDOX (mV)	65	63	51	58	58									

Notes: 1445 - Begin development

1525 - Well dry - development complete

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-14
DATE: 7/12/06
PROJECT NAME: HJB Properties Well development
PROJECT NUMBER: 4279009
SAMPLERS: JW
A: Total Casing and Screen Length: 11.45
B: Casing Internal Diameter: 2"
C: Water Level Below Top of Casing: 9.4
D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1535	1545	1555										
Gallons													
Depth to Water	9.7	10.44	11.28										
pH	7.34	7.21	7.29										
Conductivity (mohm/cm)	5.27	5.44	5.54										
Turbidity (ntu)	19.4	13.1	17.7										
Dissolved Oxygen (mg/l)	10.9	10.62	10.68										
Temperature (°C)	15.62	15.42	15.54										
Salinity													
TDS	3.3	3.4	3.5										
REDOX (mV)	106	115	128										

Notes: 1530 -Begin Well development w/ paristaltic



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-15

DATE: 7/12/06

PROJECT NAME: HJB Properties Well development

PROJECT NUMBER: 4279009

SAMPLERS: JW

A: Total Casing and Screen Length: 11.97

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1455	1500	1505	1510									
Gallons													
Depth to Water				Dry									
pH	7.63	7.66	7.77	7.83									
Conductivity (mohm/cm)	2.08	2.51	2.42	2.35									
Turbidity (ntu)	49.1	9.1	18.2	52									
Dissolved Oxygen (mg/l)	8.31	6.71	5.85	7.68									
Temperature (°C)	15.66	15.4	15.16	16.56									
Salinity													
TDS	1.3	1.6	1.5	1.5									
REDOX (mV)	120	72	48	34									

Notes: 1450 - Begin well development w/ peristaltic pump

"-purged sediment from well very little present.

1455 - Begin, horiba measurements

1510 - Finish development, purged well dry, purged ~ 3 gallons

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-16

DATE: 7/14/06

PROJECT NAME: HJB Properties Well development

PROJECT NUMBER: 4279009

SAMPLERS: JW

A: Total Casing and Screen Length: 12.03

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 9.23

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	845	850	855	900	905	910	915							
Gallons														
Depth to Water	9.89	10.09	10.35	10.71	10.83	11.14	11.77							
pH	7.73	7.3	7.21	7.2	7.18	7.17	7.16							
Conductivity (mohm/cm)	1.18	1.14	1.16	1.15	1.11	1.08	0.13							
Turbidity (ntu)	362	253	80.5	5.1	2.6	0.4	11.3							
Dissolved Oxygen (mg/l)	16.65	14.9	14.55	14.15	13.96	13.76	13.53							
Temperature (°C)	13.3	12.79	12.6	12.47	12.33	12.25	12.15							
Salinity	0.1	0.1	0.1	0.1	0	0	0							
TDS	0.8	0.7	0.7	0.7	0.7	0.7	0.7							
REDOX (mV)	292	304	305	303	302	300	297							

Notes:



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-1 DATE: 7/26/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 7.04

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1438												
Gallons													
Depth to Water													
pH	7.21												
Conductivity (mohm/cm)	2.77												
Turbidity (ntu)	"-5.0"												
Dissolved Oxygen (mg/l)	14.71												
Temperature (°C)	19.73												
Salinity	0.1												
TDS	1.8												
REDOX (mV)	113												

Notes: 1435 - Initiated purge, purged dry less than 1/2 gallons at 1442

7/27/06 - 1130 - Sample collected, VOC & SVOC only.



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-2R

DATE: 7/26/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2" _____

C: Water Level Below Top of Casing: 8.5 _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1313	1318	1323	1328	1333	1338	1343	1348						
Gallons														
Depth to Water		9.01		9.75		10.31								
pH	7.35	6.99	6.95	6.91	6.91	6.92	6.94	6.94						
Conductivity (mohm/cm)	2.68	2.59	2.49	2.42	2.4	2.38	2.39	2.4						
Turbidity (ntu)	129	32.8	98.1	27.1	48.1	40.1	45.5	48.7						
Dissolved Oxygen (mg/l)	8.34	4.52	4.12	4.16	3.81	3.72	3.68	3.7						
Temperature (°C)	16.36	15.7	15.8	15.9	16.08	16.01	16.09	16.01						
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1						
TDS	1.7	1.7	1.6	1.5	1.5	1.5	1.5	1.5						
REDOX (mV)	40	7	-20	-19	-23	-26	-31	-36						

Notes: 1310 - Initiated purge

1348 - Finished purge, collected sample, collected duplicate HJB-MW-X

Purged ~ 3 gallons

No ferrous Iron sample collected, 7/27/06 1100 - purged ~1 gallon from well, collected ferrous iron sample and duplicate HJB-MW-X

W-X



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-3 DATE: 7/26/06

PROJECT NAME: HJB Properties -Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 8.41

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1454												
Gallons													
Depth to Water													
pH	7.06												
Conductivity (mohm/cm)	2.27												
Turbidity (ntu)	999												
Dissolved Oxygen (mg/l)	6.79												
Temperature (°C)	18.84												
Salinity	0.1												
TDS	1.5												
REDOX (mV)	-124												

Notes: 1452 - Initiated purge, Well purged dry at 1454, less than 0.25 gallons purged

7/27/06, 1150 - Collected VOC and SVOC samples



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-4

DATE: 7/27/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 5.01

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1325												
Gallons													
Depth to Water													
pH	6.56												
Conductivity (mohm/cm)	2.33												
Turbidity (ntu)	999												
Dissolved Oxygen (mg/l)	10.1												
Temperature (°C)	17.79												
Salinity	0.1												
TDS	1.5												
REDOX (mV)	138												

Notes: 1325 - Initiate purge

1330 - Well purged dry less than 0.25 gallons purged

7/28/06 - 1000 - Collect samples only enough for VOC and partial SVOC, will attempt to collect more sample at a later time



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-7

DATE: 7/26/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 5.23

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1000	1005	1010	1015	1020	1025	1030	1035						
Gallons	0													
Depth to Water	5.45		5.85		6.48		7.02	7.65						
pH	6.11	6.45	6.56	6.68	6.68	6.72	6.74	6.75						
Conductivity (mohm/cm)	2.1	2.01	1.97	1.83	1.83	1.75	1.74	1.68						
Turbidity (ntu)	39.5	0	0	0	0	0	0	0						
Dissolved Oxygen (mg/l)	7.89	6.13	5.44	5.82	6.1	5.99	5.99	5.84						
Temperature (°C)	16.7	16.52	16.55	16.99	17.19	17.53	17.53	17.53						
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1						
TDS	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1.1						
REDOX (mV)	77	86	102	107	109	105	103	98						

Notes: 1000 - Initiated purge, 1035 - Finish purge, collect samples

Purge ~ 2.5 gallons

7/27/06 - Collect Ferrous Iron Sample from well

1025 - purge ~ 1.0 gallons from well, collected sample

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-8 DATE: 7/26/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 8.89

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1115	1120	1125	1130	1135	1140	1145	1150	1155					
Gallons	0													
Depth to Water		9.64		10.48		10.94		11.42	11.75					
pH	7.18	6.85	6.86	6.85	6.86	6.86	6.91	6.95	6.99					
Conductivity (mohm/cm)	5.51	5.27	5.28	5.3	5.29	5.34	5.33	5.28	5.15					
Turbidity (ntu)	23.3	0	0	0	0	0	0	0	0					
Dissolved Oxygen (mg/l)	9.27	3.34	2.66	2.33	2.23	2.25	2.26	2.28	2.31					
Temperature (°C)	13.61	13.51	13.5	13.3	13.61	13.61	13.66	13.66	13.48					
Salinity	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3					
TDS	3.4	3.3	3.3	3.3	3.3	3.4	3.4	3.3	3.2					
REDOX (mV)	-23	-38	-92	-92	-97	-105	-111	-123	-140					

Notes: 1115 - Initiate Purge, 1155 purge well dry

- purged ~2.5 gallons

7/27/06 1045 - Collect samples

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-9 DATE: 7/26/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 7.07

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1510	1515	1520	1525	1530	1535	1540	1545						
Gallons														
Depth to Water		7.92		8.74		9.65		10.3						
pH	6.91	6.7	6.7	6.71	6.72	6.73	6.74	6.76						
Conductivity (mohm/cm)	1.85	1.8	1.79	1.76	1.76	1.75	1.74	1.74						
Turbidity (ntu)	219	51.3	39.9	43	42	38.5	28.8	25.5						
Dissolved Oxygen (mg/l)	11.92	6.63	6.02	5.62	5.29	5.16	5.06	5.02						
Temperature (°C)	13.61	12.43	12.49	12.64	12.67	12.65	12.46	12.37						
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1						
TDS	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1						
REDOX (mV)	133	156	161	161	160	159	159	158						

Notes: 1506 - Initiate purge, - 1545 Sample collected, purged ~ 2.5 gallons

7/27/06 - Collect Ferrous iron sample

- 1115 - Purged 1.0 gallons, collected sample



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-10

DATE: 7/27/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 7.63

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1310	1315	1320	1325	1330	1335	1340	1345	1350	1355			
Gallons													
Depth to Water	7.97		8.45		8.88		9.58		10.09				
pH	7	6.78	6.75	6.84	6.83	6.83	6.82	6.82	6.81	6.81			
Conductivity (mohm/cm)	2.93	2.82	2.78	2.78	2.8	2.79	2.86	2.82	2.82	2.82			
Turbidity (ntu)	402	352	286	78.5	77.5	76.9	48.8	42.1	49.5	48.5			
Dissolved Oxygen (mg/l)	5.82	4.92	5.93	5.03	4.71	4.23	5.78	6.78	4.06	3.72			
Temperature (°C)	16.15	16.64	15.45	15.64	15.48	16.08	14.92	15.34	15	15.08			
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
TDS	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8			
REDOX (mV)	143	136	136	140	141	143	143	146	146	147			

Notes: 1308 - Initiated Purge

1355 - Collected Samples



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-11

DATE: 7/27/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 6.53

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	940	945	950	955	1000	1005	1010	1015	1020	1025			
Gallons		>.25		>.5									
Depth to Water		7.1		7.52		8.22		8.88					
pH	6.67	6.65	6.75	6.79	6.81	6.88	6.91	6.93	6.93	6.94			
Conductivity (mohm/cm)	2.2	2.08	1.88	1.84	1.79	1.77	1.76	1.76	1.76	1.76			
Turbidity (ntu)	361	311	222	45	68.4	85.5	42	43.1	48.2	43.7			
Dissolved Oxygen (mg/l)	5.2	4.56	6.04	5.78	4.78	4.32	4.02	3.97	3.94	4.02			
Temperature (°C)	13.7	13.62	14.05	13.58	13.5	13.54	13.84	13.52	13.5	13.36			
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
TDS	1.4	1.3	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1			
REDOX (mV)	-2	-40	-60	-54	-65	-67	-64	-58	-53	-48			

Notes: 0935 - Initiated purge, Turbidity reads high but flow thru cell is very clear, Cleared flow thru cell @ 953

1025 - Collected Sample and MS/MSD collect, HJB-MW-11-MS, HJB-MW-11-MSD for VOC and SVOC

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-11

DATE: 7/27/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 6.53

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	940	945	950	955	1000	1005	1010	1015	1020	1025			
Gallons		>.25		>.5									
Depth to Water		7.1		7.52		8.22		8.88					
pH	6.67	6.65	6.75	6.79	6.81	6.88	6.91	6.93	6.93	6.94			
Conductivity (mohm/cm)	2.2	2.08	1.88	1.84	1.79	1.77	1.76	1.76	1.76	1.76			
Turbidity (ntu)	361	311	222	45	68.4	85.5	42	43.1	48.2	43.7			
Dissolved Oxygen (mg/l)	5.2	4.56	6.04	5.78	4.78	4.32	4.02	3.97	3.94	4.02			
Temperature (°C)	13.7	13.62	14.05	13.58	13.5	13.54	13.84	13.52	13.5	13.36			
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
TDS	1.4	1.3	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1			
REDOX (mV)	-2	-40	-60	-54	-65	-67	-64	-58	-53	-48			

Notes: 0935 - Initiated purge, Turbidity reads high but flow thru cell is very clear, Cleared flow thru cell @ 953

1025 - Collected Sample and MS/MSD collect, HJB-MW-11-MS, HJB-MW-11-MSD for VOC and SVOC

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-12

DATE: 7/27/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 7.03

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1355	1400	1405	1410	1415	1420	1425	1430	1435					
Gallons	0													
Depth to Water		7.8		8.28	8.75	9.17		10.13	10.48					
pH	6.72	6.72	6.67	6.67	6.7	6.72	6.73	6.74	6.74					
Conductivity (mohm/cm)	1.37	1.28	1.13	1.07	1.03	1.03	1.02	1.02	1.03					
Turbidity (ntu)	245	172	122	77.4	243	213	213	205	215					
Dissolved Oxygen (mg/l)	5.02	4.85	5.81	6.49	7.49	6.81	5.96	5.77	5.49					
Temperature (°C)	11.27	11.74	11.92	12.01	12.38	12.17	12.01	11.99	11.93					
Salinity	0.1	0.1	0.1	0	0	0	0	0	0					
TDS	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7					
REDOX (mV)	46	91	122	138	152	161	162	160	158					

Notes: 1355 - Initiate purge, turbidity meter is erroneous

1435 - Finish purge, collect samples

- purged ~ 4.0 gallons

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-13

DATE: 7/27/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, JW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 9.02

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1415	1420	1425	1430	1435	1440	1445	1450	1455	1500			
Gallons													
Depth to Water	9.3		9.7		10.1								
pH	6.65	6.63	6.66	6.67	6.65	6.65	6.65	6.65	6.66	6.71			
Conductivity (mohm/cm)	12.5	12.3	11.6	11.5	10.8	12.5	12.8	11.6	11.6	12.8			
Turbidity (ntu)	253	161	152	158	179	338	388	390	338	337			
Dissolved Oxygen (mg/l)	2.77	4.09	4.77	4.67	6.88	3.87	3.74	5.1	4.64	2.23			
Temperature (°C)	18.71	18.62	19.06	19.03	17.53	17.37	16.93	16.85	16.87	17.38			
Salinity	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7			
TDS	8	8	8	8	8	8	8	7	7	8			
REDOX (mV)	162	157	154	153	154	154	153	152	129	82			

Notes: 1415 - Initiated purge. Turbidity meter is erroneous because water is very clear

1500 - purge dry

7/28/06, 0940 - Collected samples

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-14

DATE: 7/28/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW, MRJ

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 9.46

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	805	810	815	820	825	830	835	840						
Gallons														
Depth to Water	9.89		10.95		11.02									
pH	6.17	6.67	6.67	6.81	6.82	6.82	6.82	6.83						
Conductivity (mohm/cm)	6.67	6.64	6.64	6.68	6.61	6.6	6.6	6.58						
Turbidity (ntu)	138	0	0	0	0	0	0	0						
Dissolved Oxygen (mg/l)	11.58	9.51	9.53	8.88	8.88	8.73	8.94	8.94						
Temperature (°C)	16.48	16.37	16.79	16.55	16.49	16.44	16.42	16.62						
Salinity	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4						
TDS	4.2	4.1	4.1	4.1	4.2	4.2	4.2	4.1						
REDOX (mV)	257	153	155	160	163	166	170	174						

Notes: 802 - Initiated purge, purge dry at 840

-1245 collected samples only enough volume to sample VOC and SVOC

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-15

DATE: 7/28/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 9.25

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	825	830	835	840	845	850	855						
Gallons													
Depth to Water		9.95			10.98	11.27	11.62						
pH	6.48	7.01	7.05	7.08	7.11	7.1	7.2						
Conductivity (mohm/cm)	3.59	3.48	3.46	3.42	3.42	3.4	3.27						
Turbidity (ntu)	75.7	37.8	95.8	78.4	98.7	10.6	39.7						
Dissolved Oxygen (mg/l)	12.52	9.36	9.18	9.05	8.86	8.02	8.8						
Temperature (°C)	17.51	17.32	17.18	16.97	16.93	16.61	16.75						
Salinity	0.2	0.2	0.2	0.2	0.2	0.2	0.2						
TDS	2.2	2.2	2.2	2.2	2.2	2.2	2.1						
REDOX (mV)	228	210	205	201	198	195	153						

Notes: 0825 - Initiate purge

0855 - Purged well dry ~ 2.5 gallons will sample later

1320 - collect samples - only enough to sample for VOC, SVOC, and metals

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-16

DATE: 7/27/06

PROJECT NAME: HJB Properties - Round 2

PROJECT NUMBER: 4279009

SAMPLERS: JW

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 7.41

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1530	1535	1540	1545	1550	1555	1600	1605	1610	1615		
Gallons												
Depth to Water		8.26	8.58	8.87		9.6	9.9	10.2	10.7	10.9		
pH	7.27	7.1	7.07	7.08	7.13	7.15	7.18	7.21	7.26	7.28		
Conductivity (mohm/cm)	1.28	1.23	1.24	1.24	1.23	1.22	1.21	1.19	1.16	1.15		
Turbidity (ntu)	73	62.8	39.9	22.7	10.7	10.9	10.3	13.37	13.13	14.1		
Dissolved Oxygen (mg/l)	13.07	8.4	8.26	8.02	7.72	7.7	7.42	7.25	7.12	7.11		
Temperature (°C)	13.83	13.61	13.65	13.6	13.63	13.63	13.59	13.36	13.2	13.12		
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
TDS	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7		
REDOX (mV)	208	185	181	176	171	170	168	166	165	166		

Notes: 1530 - Initiate purge.

1610 - Finish purge collected samples

- purged ~ 3.5 gallons

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-2R
DATE: 10/31/06
PROJECT NAME: HJB Properties - Round 3
PROJECT NUMBER: 4279009
SAMPLERS: MRJ, SB
A: Total Casing and Screen Length: 13.98
B: Casing Internal Diameter: 2"
C: Water Level Below Top of Casing: 9.66
D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1130	1135	1145	1155	1200									
Gallons	0													
Depth to Water	9.66	10.55	10.49	11.38	11.56									
pH	7.2	7.12	7.14	7.18	7.18									
Conductivity (mohm/cm)	2.85	2.76	2.76	2.78	2.78									
Turbidity (ntu)	67.5	36	21.9	17	16.3									
Dissolved Oxygen (mg/l)	1.68	0.28	0	0	0									
Temperature (°C)	16.12	15.77	15.64	15.54	15.5									
Salinity														
TDS														
REDOX (mV)	-127	-117	-120	-131	-135									

Notes:
1130 - Begin purging
1200 - Collect sample for all parameters

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-A
DATE: 10/31/06
PROJECT NAME: HJB Properties - Round 3
PROJECT NUMBER: 4279009
SAMPLERS: MRJ, SB
A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2
C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	825	830	835	840	845	850								
Gallons														
Depth to Water	5.94	6.28	6.68	7.23	7.46	7.75								
pH	6.58	6.95	6.94	6.93	6.98	6.99								
Conductivity (mohm/cm)	3.62	4.04	3.65	3.67	3.59	3.6								
Turbidity (ntu)	148	6.7	32.2	37.2	27.2	6.3								
Dissolved Oxygen (mg/l)	0.5	0	0	0	0	0								
Temperature (°C)	15.3	16.4	16.7	16.7	16.7	16.7								
Salinity	0.2	0.2	0.2	0.2	0.2	0.2								
TDS	2.3	2.6	2.3	2.3	2.3	2.3								
REDOX (mV)	-97	-115	-89	-90	-117	-120								

Notes:
823 - Started purge, purged ~ 3.5 gals.
910 - Sampled all parameters, performed MS/MSD on VOC, Metals, SVOC

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-B
DATE: 10/31/06
PROJECT NAME: HJB Properties - Round 3
PROJECT NUMBER: 4279009
SAMPLERS: MRJ, SB
A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2
C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1010	1015	1020	1025	1030	1035	1040						
Gallons	<.25	<0.5	<1.0	<1.5	<2.0	<2.5	<3.0						
Depth to Water	6.55	7.28	7.6	7.99	8.48	8.67	8.92						
pH	6.75	6.75	6.74	6.74	6.77	6.75	6.78						
Conductivity (mohm/cm)	3.03	2.94	2.96	2.96	2.96	2.97	2.97						
Turbidity (ntu)	837	0	0	0	0	0	0						
Dissolved Oxygen (mg/l)	0	0	0	0	0	0	0						
Temperature (°C)	16.6	17.4	17.4	17.4	17.3	17.3	17.3						
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1						
TDS	1.9	1.9	1.9	1.9	1.9	1.9	1.9						
REDOX (mV)	-109	-110	-113	-110	-117	-116	-116						

Notes:
1008 - Started purge, Cleared flow thru cell at 1012, Purged ~ 3.25 gals.
1043 - Started Sampling

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-C DATE: 10/31/06

PROJECT NAME: HJB Properties - Round 3

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, SB

A: Total Casing and Screen Length: 14.22

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 6.17

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1010	1015	1020	1025	1030	1035	1040	1045						
Gallons	0													
Depth to Water														
pH	7.21	7.2	7.21	7.2	7.19	7.18	7.18	7.19						
Conductivity (mohm/cm)	1.83	1.84	1.82	1.76	1.71	1.67	1.65	1.65						
Turbidity (ntu)	58.8	58.2	39.4	42.9	39.5	34.8	36.2	32.6						
Dissolved Oxygen (mg/l)	1.2	0.37	0	0	0	0	0	0						
Temperature (°C)	15.94	15.9	15.97	16.04	16.09	16.19	16.66	16.8						
Salinity														
TDS														
REDOX (mV)	-92	-100	-101	-95	-89	-82	-76	-71						

Notes:

1010 - Begin Purging

1045 - Collect Sample for all parameters

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-1
DATE: 10/30/06
PROJECT NAME: HJB Properties - Round 3
PROJECT NUMBER: 4279009
SAMPLERS: MRJ, SB
A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 1
C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1235	1237											
Gallons		DRY											
Depth to Water													
pH	6.76												
Conductivity (mohm/cm)	3.29												
Turbidity (ntu)	"-5.0"												
Dissolved Oxygen (mg/l)	2.48												
Temperature (°C)	17.6												
Salinity	0.2												
TDS	2.1												
REDOX (mV)	-70												

Notes: 1233 - Started purge, purge dry at 1337. Purged a horiba flow thru cell volume

1455 - Returned to Collect VOC sample

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-3
DATE: 10/30/06
PROJECT NAME: HJB Properties - Round 3
PROJECT NUMBER: 4279009
SAMPLERS: MRJ, SB
A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1240													
Gallons	0													
Depth to Water														
pH	7.33													
Conductivity (mohm/cm)	2.53													
Turbidity (ntu)	732													
Dissolved Oxygen (mg/l)	4.63													
Temperature (°C)	16.87													
Salinity														
TDS														
REDOX (mV)	-38													

Notes:
1240 - Begin purging
1245 - Well Dry ~ 1 flow thru cell volume purged
1510 - Returned to collect VOCs

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-4

DATE: 10/30/06

PROJECT NAME: HJB Properties - Round 3

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, SB

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 1

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1308	1313	1314										
Gallons		<0.25	DRY										
Depth to Water													
pH	7.44	7.26											
Conductivity (mohm/cm)	2.45	2.34											
Turbidity (ntu)	"-5.0"	"-5.0"											
Dissolved Oxygen (mg/l)	2.64	1.57											
Temperature (°C)	14.3	14.3											
Salinity	0.1	0.1											
TDS	1.6	1.5											
REDOX (mV)	45	41											

Notes:

1305 - Started Purge, 1314 - purged dry

10/31/06 - 0805 - Return to collect VOC samples



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-7 DATE: 10/31/06

PROJECT NAME: HJB Properties - Round 3

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, SB

A: Total Casing and Screen Length: 11.61

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: 4.55

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	815	820	825	835	840	850	855	900	905	910			
Gallons	0							3					
Depth to Water	4.55	5.02	5.25	5.56	5.83	6.19	6.6	6.88	7.16	7.29			
pH	7.01	7.13	7.25	7.32	7.33	7.33	7.34	7.34	7.33	7.33			
Conductivity (mohm/cm)	1.76	1.66	1.36	1.2	1.15	1.12	1.11	1.12	1.13	1.13			
Turbidity (ntu)	283	126	64.3	47.5	42.5	45.9	35.8	16.9	13.7	15.8			
Dissolved Oxygen (mg/l)	2.3	1.28	2.75	4.01	4.5	3.97	2.71	1.93	1.53	1.4			
Temperature (°C)	19.99	14.04	14.52	14.91	15.16	15.39	15.5	15.59	15.65	15.7			
Salinity													
TDS													
REDOX (mV)	5	5	22	39	56	68	75	65	60	60			

Notes:

0815 - Begin purge

0910 - Collect sample for all parameters + Duplicate MW-X

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-8

DATE: 10/31/06

PROJECT NAME: HJB Properties - Round 3

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, SB

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1120	1125	1130	1135	1140	1145								
Gallons		<1.0	<1.5	<2.0	<2.5	<3								
Depth to Water	9.3	9.63	9.89	10.12	10.98	11.16								
pH	6.82	6.82	6.82	6.83	6.85	6.87								
Conductivity (mohm/cm)	5.86	5.85	5.87	5.88	5.91	5.89								
Turbidity (ntu)	0	0	0	0	0	0								
Dissolved Oxygen (mg/l)	0	0	0	0	0	0								
Temperature (°C)	14.7	14.4	14.4	14.5	14.4	14.3								
Salinity	0.3	0.3	0.3	0.3	0.3	0.3								
TDS	3.7	3.7	3.7	3.7	3.7	3.7								
REDOX (mV)	-125	-121	-122	-123	-131	-133								

Notes:

1117 - Started purge, purged ~ 3 gals

1155 - sampled all paramters except SVOC, because well went dry

1425 - Returned to collect SVOCs

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-9
DATE: 10/30/06
PROJECT NAME: HJB Properties - Round 3
PROJECT NUMBER: 4279009
SAMPLERS: MRJ, SB
A: Total Casing and Screen Length: 14.85
B: Casing Internal Diameter: 2
C: Water Level Below Top of Casing: 10.2
D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1405	1410	1415	1420	1425	1430								
Gallons	0					1								
Depth to Water	10.2	10.58	10.86	11.05	11.19	11.28								
pH	6.9	6.88	6.88	6.89	6.9	6.9								
Conductivity (mohm/cm)	1.76	1.75	1.75	1.75	1.75	1.74								
Turbidity (ntu)	56.3	34.6	25.3	25.2	23.7	23.8								
Dissolved Oxygen (mg/l)	1.27	0.68	0.1	0.11	0	0								
Temperature (°C)	12.25	12.2	12.3	12.33	12.31	12.33								
Salinity														
TDS														
REDOX (mV)	55	38	58	68	72	73								

Notes:
1405 - Begin purging
1430 - Collect sample

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-10

DATE: 10/30/06

PROJECT NAME: HJB Properties - Round 3

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, SB

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1328	1338	1348	1353	1358									
Gallons	<0.25	<0.5	<1.0	<1.5	<2.0									
Depth to Water	6.2	6.45	7.16	7.51	7.88									
pH	6.97	6.98	7.01	7.01	7.01									
Conductivity (mohm/cm)	3.83	3.85	3.87	3.9	3.91									
Turbidity (ntu)	419	211	105	119	129									
Dissolved Oxygen (mg/l)	5.22	5.09	5.28	5.09	4.65									
Temperature (°C)	14.4	14.5	14.6	14.6	14.6									
Salinity	0.2	0.2	0.2	0.2	0.2									
TDS	2.4	2.5	2.5	2.5	2.5									
REDOX (mV)	79	80	84	86	89									

Notes:

1325- Started purge, Sample is unfiltered

1403 - Sampled all parameters

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-11 DATE: 10/30/06

PROJECT NAME: HJB Properties - Round 3

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, SB

A: Total Casing and Screen Length: 11.9

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1305	1310	1315	1320	1325	1330								
Gallons	0					2								
Depth to Water			5.84	6.2	6.41	6.58								
pH	7.22	7.32	7.4	7.48	7.52	7.53								
Conductivity (mohm/cm)	2.11	1.3	1.18	1.05	1	0.99								
Turbidity (ntu)	152	94.9	44.2	28.7	25.8	20.9								
Dissolved Oxygen (mg/l)	4.33	10.16	10.19	10.04	9.99	9.91								
Temperature (°C)	14.2	13.82	13.68	13.52	13.53	13.53								
Salinity														
TDS														
REDOX (mV)	61	80	97	97	109	112								

Notes:

1305 - Begin purging

1330 - Collect sample

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-12

DATE: 10/30/06

PROJECT NAME: HJB Properties - Round 3

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, SB

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1430	1435	1440	1445	1450	1455								
Gallons		<1.0	<1.5	<2.0	<2.5	<3.0								
Depth to Water	8	8.44	8.82	9.1	9.48	9.62								
pH	7.2	6.89	6.89	6.87	6.89	6.89								
Conductivity (mohm/cm)	1.35	1.29	1.12	1.08	1.03	1.04								
Turbidity (ntu)	572	311	201	166	171	172								
Dissolved Oxygen (mg/l)	0	0	0	0	0	0								
Temperature (°C)	12.3	12.5	12.7	12.8	12.8	12.8								
Salinity	0.1	0.1	0	0	0	0								
TDS	0.9	0.8	0.7	0.7	0.7	0.7								
REDOX (mV)	-102	-48	-22	-17	-10	-10								

Notes:

1428 - Started purge, purged ~ 3.25

1448 - Sampled

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-13

DATE: 10/31/06

PROJECT NAME: HJB Properties - Round 3

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, SB

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1310	1315	1320	1325	1330	1335	1340							
Gallons														
Depth to Water			<2.0	<2.5		<3.0	<3.5							
pH	6.88	6.87	6.87	6.87	6.86	6.86	6.85							
Conductivity (mohm/cm)	9.6	9.4	9.2	9.2	9.3	9.3	9.4							
Turbidity (ntu)	0	0	0	0	0	0	0							
Dissolved Oxygen (mg/l)	1.58	0.84	0.62	0.3	0	0	0							
Temperature (°C)	17.9	18	17.8	17.8	17.9	17.9	18							
Salinity	0.5	0.5	0.5	0.5	0.5	0.5	0.5							
TDS	6	6	6	6	6	6	6							
REDOX (mV)	30	51	58	60	61	58	54							

Notes:

1308 - Start purge

1345 - Sample

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-14
DATE: 10/31/06
PROJECT NAME: HJB Properties - Round 3
PROJECT NUMBER: 4279009
SAMPLERS: MRJ, SB
A: Total Casing and Screen Length: 11.35
B: Casing Internal Diameter: 2
C: Water Level Below Top of Casing: 9.3
D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1305	1310	1315	1320	1325	1330	1335	1340	1345					
Gallons	0													
Depth to Water	9.3	9.94	10.14	10.31	10.47	10.59	10.9	11.04	11.32					
pH	7.3	7.24	7.24	7.23	7.24	7.3	7.26	7.27	7.35					
Conductivity (mohm/cm)	6.25	6.13	6.11	6.16	6.21	6.16	6.54	6.53	6.54					
Turbidity (ntu)	53	27.3	16.7	13.7	14	24.9	21.3	21	19.7					
Dissolved Oxygen (mg/l)	6.25	4.67	4.27	3.94	3.67	6.66	7.69	7.54	7.34					
Temperature (°C)	18.1	17.65	17.59	17.57	17.53	17.62	17.42	17.5	17.4					
Salinity														
TDS														
REDOX (mV)	150	139	138	140	142	126	136	138	140					

Notes:
1305 - Begin purging
1345 - Well Dry
11/1/06 - Return to collect sample at 800



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-15

DATE: 10/31/06

PROJECT NAME: HJB Properties - Round 3

PROJECT NUMBER: 4279009

SAMPLERS: MRJ, SB

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____ 2 _____

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1422	1427	1432	1437	1442	1447								
Gallons														
Depth to Water	9.1	9.5	9.62	9.8	9.96	10.31								
pH	7.5	7.34	7.33	7.34	7.39	7.39								
Conductivity (mohm/cm)	3.96	3.86	3.62	3.36	3.25	3.22								
Turbidity (ntu)	159	15.2	0	0	0	0								
Dissolved Oxygen (mg/l)	4.12	2.33	3.02	3.02	3.06	3.02								
Temperature (°C)	19	18.5	18.4	18.4	18.4	18.3								
Salinity	0.2	0.2	0.2	0.2	0.2	0.2								
TDS	2.6	2.4	2.3	2.1	2.1	2.1								
REDOX (mV)	78	77	75	74	73	72								

Notes:

1420 - Started purge, Purged ~ 2 gals

1448 - Sample

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-4R

DATE: 6/28/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: 9D

A: Total Casing and Screen Length: 13.52'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 9.25'

D: Volume of Water in Casing: 0.73 GAL

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1030											
Gallons	0											
Well Volume												
pH												
Conductivity (mohm/cm)												
Dissolved Oxygen												
Temperature (°C)												
Turbidity												
Salinity												
TDS												
REDOX (mV)												

Notes: 1030- BEGIN DEVELOPMENT, WATER VERY TURBID

1050- WELL DRY, ~1 GAL REMOVED.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-6R

DATE: 6/28/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 14.80'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 6.35'

D: Volume of Water in Casing: 1.44 GAL

$$V = 0.0408 (B)^2 \times (A-C) = D$$

$$V = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0750	0755	0810	0835	1110	1125	1145	1200				
Gallons	0		3	7		8	9	10				
Well Volume												
pH		6.87	6.59	6.93	7.02	6.78	6.75	6.78				
Conductivity (mohm/cm)		1.88	1.89	1.84	2.05	1.99	1.98	1.90				
Dissolved Oxygen		9.15	8.32	9.01	11.72	7.35	7.06	7.07				
Temperature (°C)		12.65	11.25	11.99	15.03	13.06	13.32	13.44				
Turbidity		608	7999	655	238	92.3	67.6	82.6				
Salinity		0.1	0.1	0.1	0.1	0.1	0.1	0.1				
TDS		1.2	1.2	1.2	1.3	1.3	1.3	1.2				
REDOX (mV)		206	207	200	179	23	85	121				
<u>DTW</u>	<u>6.35</u>		<u>7.95</u>	<u>14.72</u>	<u>11.23</u>	<u>12.29</u>	<u>13.45</u>	<u>14.41</u>				

Notes: 0750- BEGIN WELL DEVELOPMENT.

0835- WELL DRY

1110- RETURN DTW = 11.23' CONTINUE PUMPING.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-11R

DATE: 6/26/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: 43

A: Total Casing and Screen Length: 13.96'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 6.94'

D: Volume of Water in Casing: 1.19 gal

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0945	1015	1025									
Gallons	0	5	6									
Well Volume												
pH		7.03	6.98									
Conductivity (mohm/cm)		3.21	3.19									
Dissolved Oxygen		6.41	5.12									
Temperature (°C)		16.52	15.09									
Turbidity		>999	7999									
Salinity		0.2	0.2									
TDS		2.0	2.0									
REDOX (mV)		155	161									
DTW	6.94	12.32	13.80									

Notes: 0945 - BEGIN DEVELOPMENT

1030 - WELL DRY

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-17

DATE: 6/27/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 14.50'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 5.41'

D: Volume of Water in Casing: 1.55 GAL

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED										
Time	1200	1230	1245	1250	0100	0120					
Gallons	0	4		6		10					
Well Volume											
pH		6.92	6.62	6.55	6.56	6.87					
Conductivity (mohm/cm)		1.79	1.53	1.56	1.60	1.57					
Dissolved Oxygen		9.19	7.64	6.15	3.48	7.18					
Temperature (°C)		19.86	16.32	15.26	15.05	14.46					
Turbidity		7449	980	540	42.5	574					
Salinity		0.1	0.1	0.1	0.1	0.1					
TDS		1.1	1.0	1.0	1.0	1.0					
REDOX (mV)		233	191	38	-5	83					

Notes: 1200 - BEGIN DEVELOPING MW-17 BY SURGING & PUMPING.

1250 - WELL DRY.

6/27/07 0100 - RETURN DRW: 7.30', CONTINUE DEVELOPING.

0130 - WELL DRY, 11 GAL REMOVED TOTAL.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-18

DATE: 6/27/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: 33

A: Total Casing and Screen Length: 14.50'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 5.46'

D: Volume of Water in Casing: 1.54 GAL.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED										
Time	1300	1320	1325	1335	1345	1355	1410	1420	1430	1445	
Gallons	0	2.5	4	5	6	8	10	12	13	16	
Well Volume											
pH		6.79	6.62	6.44	6.43	6.46	6.50	6.53	6.60	6.70	
Conductivity (mohm/cm)		1.34	1.33	1.35	1.33	1.33	1.32	1.33	1.32	1.31	
Dissolved Oxygen		5.65	2.33	1.09	0.54	0.08	0.01	0.00	0.00	0.00	
Temperature (°C)		18.53	16.25	15.83	15.52	15.39	15.34	15.10	15.21	15.30	
Turbidity		2999	850	419	240	64.9	40.7	32.6	33.2	35.2	
Salinity		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
TDS		0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	
REDOX (mV)		177	156	105	90	77	73	71	66	57	

Notes: 1300' BEGAN DEVELOPING MW-18 using pump.
1445 well development COMPLETE.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-19

DATE: 6/28/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 14.89'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 8.19'

D: Volume of Water in Casing: 1.14 GAL

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1215	1230	1300	1310	1315							
Gallons	0	1	4	5	6							
Well Volume												
pH		7.08	6.58	6.71	6.86							
Conductivity (mohm/cm)		4.17	5.51	6.02	6.17							
Dissolved Oxygen		11.74	10.07	9.90	9.38							
Temperature (°C)		18.00	16.48	16.78	16.01							
Turbidity		346	116	85.4	129							
Salinity		0.2	0.3	0.3	0.3							
TDS		2.7	3.5	3.8	3.9							
REDOX (mV)		143	135	148	139							
DTW	8.19	9.85	12.41	13.49	13.89							

Notes: 1215 - BEGIN DEVELOPMENT

1325 - WELL OK, ~6 GAL REMOVED

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW 4R

DATE: 7/5/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 13.54'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 8.94'

D: Volume of Water in Casing: 0.78 GAL

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1445	1455	1505	1510	1515	1520						
Gallons	0					2						
Well Volume												
pH	7.38	7.24	7.29	7.33	7.36	7.40						
Conductivity (mohm/cm)	2.04	2.10	2.10	2.07	2.04	2.05						
Dissolved Oxygen	9.08	5.90	5.05	4.82	4.73	4.69						
Temperature (°C)	18.69	17.76	17.52	17.37	17.29	17.23						
Turbidity	222	24.9	4.3	6.7	4.4	3.8						
Salinity	0.1	0.1	0.1	0.1	0.1	0.1						
TDS	-	-	-	-	-	-						
REDOX (mV)	159	149	134	123	122	119						
DTW	8.94	8.94	8.95	8.95	8.95							

Notes: 1445- BEGW PURGING

1520- COLLECT SAMPLE

DUP - MW-X

**MALCOLM
PIRNIE****WELL DEVELOPMENT/ PURGING LOG**WELL NUMBER: MW-6RDATE: 7/5/07PROJECT NAME: Henry Johnson Boulevard Properties ERPPROJECT NUMBER: 4279009SAMPLERS: SBA: Total Casing and Screen Length: 14.81'B: Casing Internal Diameter: 2"C: Water Level Below Top of Casing: 6.47'D: Volume of Water in Casing: 1.42 GAL

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0840	0850	0900	0905	0910	0915	0920	0925	0930			
Gallons	0			2					3			
Well Volume												
pH	6.79	6.64	6.87	6.90	6.91	6.92	6.94	6.93	6.94			
Conductivity (mohm/cm)	1.98	1.90	1.90	1.90	1.89	1.90	1.94	1.93	1.94			
Dissolved Oxygen	11.44	9.60	8.84	8.40	8.19	8.01	7.89	7.49	7.46			
Temperature (°C)	13.96	12.82	12.82	12.87	12.80	12.49	12.84	12.84	12.54			
Turbidity	9.6	7.6	7.7	8.5	9.7	10.6	15.7	15.3	15.1			
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
TDS	-	-	-	-	-	-	-	-	-			
REDOX (mV)	168	160	147	140	123	105	88	82	81			
DTW	6.47	7.48	8.04	8.39	8.63	8.89	9.10	9.31	9.46			

Notes: 0840- BEGIN PURGING0930- collect samples + DUP MW-X

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-112

DATE: 7/5/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 13.96'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 7.18'

D: Volume of Water in Casing: 1.15 gal

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1345	1355	1405	1410	1415	1420						
Gallons	0					2.5						
Well Volume												
pH	7.04	7.09	7.05	7.06	7.08	7.13						
Conductivity (mohm/cm)	3.45	3.37	3.37	3.32	3.34	3.29						
Dissolved Oxygen	9.57	5.94	5.51	5.28	5.13	4.84						
Temperature (°C)	17.16	17.74	17.00	16.87	16.30	16.51						
Turbidity	2.8	7.9	12.2	17.2	19.0	20.9						
Salinity	0.2	0.2	0.2	0.2	0.2	0.2						
TDS	-	-	-	-	-	-						
REDOX (mV)	172	152	153	155	154	150						
DW	7.18	8.01	8.70	8.98	9.26							

Notes: 1345- BEGIN PURGING
1420- COLLECT SAMPLES.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-18

DATE: 7/5/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 14.50'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 4.57'

D: Volume of Water in Casing: 1.69 GAL

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1010	1020	1030	1040	1045	1050	1055					
Gallons	0					2.5	3					
Well Volume												
pH	6.89	6.80	6.74	6.76	6.86	6.84	6.87					
Conductivity (mohm/cm)	1.28	1.24	1.23	1.23	1.22	1.23	1.21					
Dissolved Oxygen	9.23	7.72	6.59	6.28	5.91	5.85	5.81					
Temperature (°C)	16.89	16.31	15.35	15.23	15.32	15.40	15.53					
Turbidity	41.6	15.9	6.5	4.9	3.5	3.1	3.0					
Salinity	0.1	0.1	0.1	0.1	0.1	0.1	0.1					
TDS	-	-	-	-	-	-	-					
REDOX (mV)	54	39	44	41	29	24	24					
DTW	4.57	4.62	4.74	4.85	4.87	4.89	5.01					

Notes: 1010- BEGIN PURGING

1055- COLLECT SAMPLES + MS/MSD

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-17

DATE: 7/5/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: SB

A: Total Casing and Screen Length: 14.50'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 5.25'

D: Volume of Water in Casing: 1.57 GAL

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED										
Time	1140	1150	1155	1200	1205	1210					
Gallons	0					2					
Well Volume											
pH	6.97	6.75	6.71	6.80	6.91	6.93					
Conductivity (mohm/cm)	1.64	1.60	1.59	1.61	1.67	1.70					
Dissolved Oxygen	10.86	8.49	7.56	7.41	7.20	7.09					
Temperature (°C)	18.10	17.59	18.66	18.61	18.66	18.67					
Turbidity	13.4	9.0	9.7	8.4	8.1	8.5					
Salinity	0.1	0.1	0.1	0.1	0.1	0.1					
TDS	-	-	-	-	-	-					
REDOX (mV)	140	148	150	147	142	142					
DTW	5.25	5.93	6.31	6.59	6.97	7.02					

Notes: 1140- BEGIN PURGING.

1210- COLLECT SAMPLES.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW 19

DATE: 7/5/07

PROJECT NAME: Henry Johnson Boulevard Properties ERP

PROJECT NUMBER: 4279009

SAMPLERS: 48

A: Total Casing and Screen Length: 14.86'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 6.55'

D: Volume of Water in Casing: 1.41 gal

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1235	1245	1255	1300								
Gallons	0			2								
Well Volume												
pH	7.03	6.85	6.87	6.89								
Conductivity (mohm/cm)	5.07	4.27	4.21	4.34								
Dissolved Oxygen	11.20	7.52	7.03	6.97								
Temperature (°C)	19.00	18.97	18.94	18.28								
Turbidity	2.9	5.4	2.6	3.0								
Salinity	0.3	0.2	0.2	0.2								
TDS	-	-	-	-								
REDOX (mV)	170	159	160	161								
DTW	6.55	7.63	8.07	8.52								

Notes: 1235- BEGIN PURGING.

1300- COLLECT SAMPLE.



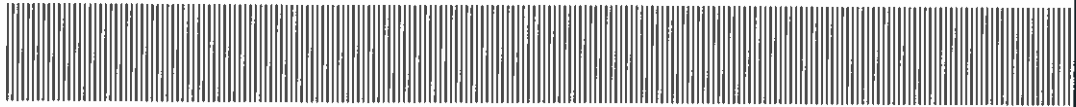
Albany Community Development Agency

Remedial Investigation / Alternatives Analysis Report

APPENDIX



IDW Documentation



NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on 6 1/2 (12 pitch) typewriter)

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <i>N/A</i>	Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address <i>Albany Community Development Agency 132 Henry Johnson Blvd. ALBANY, NY 12210</i>		200 Henry Johnson Blvd ALBANY, NY		
4. Generator's Phone <i>(518) 434-5240</i>				
5. Transporter 1 Company Name <i>MC ENIVISION Mental Services, Inc.</i>		6. US EPA ID Number <i>NYR000021071</i>	A. State Transporter's ID <i>22152 AG NY</i>	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter 1 Phone <i>(518) 45-0349</i>	
9. Designated Facility Name and Site Address <i>Bridgeport United Recycling 50 Cross Street Bridgeport, CT 06610</i>		10. US EPA ID Number <i>CTD002593887</i>	C. State Transporter's ID	
			D. Transporter 2 Phone	
			E. State Facility's ID	
			F. Facility's Phone <i>(203) 334-1666</i>	
11. WASTE DESCRIPTION		12. Containers	13. Total Quantity	14. Unit Wt/Vol.
a. <i>Non-Hazardous Non-Regulated None</i>		No. Type <i>10 DM</i>	<i>3500</i>	<i>P</i>
b.				
c. <i>SAN* 219276</i>				
d.				
G. Additional Descriptions for Materials Listed Above <i>Profile # 3123HN4 Drill Cuttings</i>		H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <i>Rec'd into Valite 11/14 @ 10:33 [Signature]</i>				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name <i>STEFAN BAGNAD</i>		Signature <i>[Signature]</i>	Date <i>11/14/05</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials		Date <i>11/14/05</i>		
Printed/Typed Name <i>FRANK A. WARE</i>		Signature <i>[Signature]</i>	Date <i>11/14/05</i>	
18. Transporter 2 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name		Signature	Date	
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.				
Printed/Typed Name		Signature	Date	

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
NON-HAZARDOUS

Manifest
Document No.
103116

2. Page 1
of 1

3. Generator's Name and Mailing Address
ALBANY COMMUNITY DEVELOPMENT AGENCY C/O
MALCOLM PERNIE, INC. 43 BRITISH AMERICAN BLVD. LATHAM, NY 12110

221 NORTHERN BLVD.
ALBANY, NY 12206

4. Generator's Phone (518) 782-2128

5. Transporter 1 Company Name
WEST CENTRAL ENVIRONMENTAL

6. US EPA ID Number
N.Y.D.0007.08.2.7.1

A. Transporter's Phone
518-272-8891

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMTRON CORP.
35850 SCHNEIDER COURT
AVON, OH 44011

10. US EPA ID Number
O.H.D.0808.08.0.8.0.8

C. Facility's Phone
440-937-5850

11. Waste Shipping Name and Description

12. Containers:

No. Type

13. Total
Quantity

14. Unit
Wt/Vol

a. USDOT NON-REGULATED MATERIAL
NON-HAZARDOUS DRILL CUTTINGS

08 DM

6400 P

b. USDOT NON-REGULATED MATERIAL
NON-HAZARDOUS PURGE WATER

01 DM

2.50 P

D. Additional Descriptions for Materials Listed Above

11.a. Approval: Q20060827A12

11.b. Approval: Q20060812A07

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

WCE JOB #: 35804-10-06

CONFIRMATION #: CT20447

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name
STEVEN BASNAT ON BEHALF OF
ALBANY COMMUNITY
DEVELOPMENT AGENCY

Signature
S. Basnat

Month Day Year
11/03/06

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name
DAVID B. LAWREY

Signature
D.B. Lawrey

Month Day Year
10/30/06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name
MARY E. MCGINNIS

Signature
Mary E. McGinnis

Month Day Year
11/07/06

TRANSPORTER # 1

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <i>NIA</i>		Manifest Document No.		2. Page 1 of <i>2</i>	
3. Generator's Name and Mailing Address <i>Albany Community Development 200 Henry Solomon Blvd. Albany NY</i>				4. Generator's Phone () <i>516 484 1111</i>			
5. Transporter 1 Company Name <i>ALBANY ENVIRONMENTAL SERVICES, INC.</i>		6. US EPA ID Number <i>NYK000021071</i>		A. State Transporter's ID <i>14-115</i>		B. Transporter 1 Phone <i>518-615-0749</i>	
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID		D. Transporter 2 Phone	
9. Designated Facility Name and Site Address <i>Sanderson United Recycling 30 Cross Street Bridgewater, CT 06610</i>				10. US EPA ID Number <i>CTD00293387</i>		E. State Facility's ID	
11. WASTE DESCRIPTION				12. Containers		13. Total Quantity	
				No.	Type	14. Unit Wt./Vol.	
a. <i>NON-HAZARDOUS NON-Regulated</i>				<i>2</i>	<i>DM</i>	<i>1000</i>	<i>P</i>
b.							
c.							
d.							
G. Additional Descriptions for Materials Listed Above				H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information <i>Profile = 2357124 SAN 112130040</i>							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name <i>Jeremy Wyckoff</i>				Signature <i>[Signature]</i>		Date Month <i>11</i> Day <i>2</i> Year <i>03</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature <i>[Signature]</i>		Date Month <i>11</i> Day <i>1</i> Year <i>03</i>	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date Month <i>11</i> Day <i>1</i> Year <i>03</i>	
19. Discrepancy Indication Space							
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name				Signature		Date Month <i>11</i> Day <i>1</i> Year <i>03</i>	



NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <i>N/A</i>		Manifest Document No.		2. Page 1 of <i>1</i>	
3. Generator's Name and Mailing Address <i>Albany Gas Company, 1000 1st Ave., 52 Albany, N.Y. 12210</i>				200 Albany, N.Y. 12210			
4. Generator's Phone (518) 434-1240		6. US EPA ID Number <i>NY 00021071</i>		A. State Transporter's ID <i>NY 12345</i>		B. Transporter 1 Phone <i>812-555-1234</i>	
5. Transporter 1 Company Name <i>ABC Environmental Services</i>		7. Transporter 2 Company Name		C. State Transporter's ID		D. Transporter 2 Phone	
9. Designated Facility Name and Site Address <i>Northside Corporation 100 South Saratoga Rd. Cohoes, NY 12144</i>		10. US EPA ID Number <i>NY 000464935</i>		E. State Facility's ID		F. Facility's Phone <i>(518) 235-0401</i>	
11. WASTE DESCRIPTION				12. Containers		13. Total Quantity	
				No.	Type		
a. <i>NON-HAZARDOUS</i> <i>Non-Regulated</i> <i>None</i> <i>None</i>				<i>2</i> <i>DM</i>		<i>110</i>	
b.							
c. <i>SAN # 219276</i>							
d.							
G. Additional Descriptions for Materials Listed Above <i>Profile # 0223-6N</i> <i>Purge Water</i>				H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name				Signature		Date Month Day Year	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature		Date Month Day Year	
Printed/Typed Name				Signature		Date Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date Month Day Year	
Printed/Typed Name				Signature		Date Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name				Signature		Date Month Day Year	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

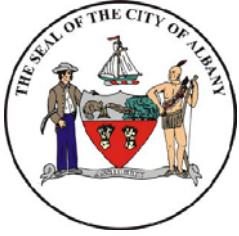
FACILITY



NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. N/A		Manifest Document No.	2. Page 1 of 1
3. Generator's Name and Mailing Address Albany Community Development Agency 200 Henry Johnson Blvd. Albany, NY 12110				124 Henry Johnson Blvd. Albany, NY	
4. Generator's Phone ()		6. US EPA ID Number NYR000021071		A. State Transporter's ID 27152AC NY	
5. Transporter 1 Company Name MC Environmental Services, Inc.		8. US EPA ID Number		B. Transporter 1 Phone 518-615-0349	
7. Transporter 2 Company Name		10. US EPA ID Number		C. State Transporter's ID	
9. Designated Facility Name and Site Address Bridgeport United Recycling 50 Cross St. Bridgeport, CT 06610		F. Facility's Phone 800-404-4406		D. Transporter 2 Phone	
E. State Facility's ID		11. WASTE DESCRIPTION			
		12. Containers		13. Total Quantity	14. Unit WL/Vol.
		No.	Type		
a. Non-Hazardous Non-Regulated		5	D	1500	P
b.					
c.					
d.					
G. Additional Descriptions for Materials Listed Above SAN 219573				H. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name MICHAEL A. ADA				Date Month Day Year 8 15 07	
Signature <i>[Signature]</i>					
17. Transporter 1 Acknowledgement of Receipt of Materials				Date	
Printed/Typed Name Tom Skene				Month Day Year 8 15 07	
Signature <i>[Signature]</i>					
18. Transporter 2 Acknowledgement of Receipt of Materials				Date	
Printed/Typed Name				Month Day Year	
Signature					
19. Discrepancy Indication Space					
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name				Date Month Day Year	
Signature					

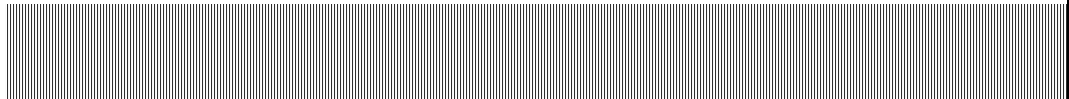


Albany Community Development Agency
Remedial Investigation / Alternatives Analysis Report

APPENDIX

J

Data Validation Reports



SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Volatile Organic Analyses
Samples Collected June 15th & 16th, 2006
Samples Received June 17, 2006
Sample Delivery Group: E0829
Laboratory Reference Numbers:

Collected 6/15

SB561112	E0829-01
TB061506	E0829-02
SB4823	E0829-03
SB57112	E0829-05

Collected 6/16

SB575575	E0829-04
SB575575 DL	E0829-04 DL
SB5878	E0829-06
SB581112	E0829-07
SB581112 MS	E0829-07 MS
SB581112 MSD	E0829-07 MSD
SB5967	E0829-08
SB591112	E0829-09
SB6068	E0829-10
SB6068 DL	E0829-10 DL
SB601112	E0829-11
TB061606	E0829-12

Soil samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- Data Completeness
- GC/MS Tuning
- Holding Times
- Calibrations
- Laboratory Blanks
- Trip Blank
- Storage Blank
- Equipment Blank
- * - System Monitoring Compound Recoveries
 - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
 - Instrument Detection Limits
- * - Compound Identification
 - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

Tetrachloroethene and trichloroethene were detected in sample SB5967 (E0829-08) at concentrations of 8,900E ug/kg and 2,100E ug/kg. These were over the linear range of the analysis, but this sample was not reanalyzed at a dilution as required by the NYS DEC ASP protocols. The data for these compounds are highly estimated.

The recoveries of several internal standards were less than the 50% quality assurance limit in some of the samples and many of these were not reanalyzed. The NYS DEC ASP protocols require that samples be reanalyzed when the internal standard recoveries are outside of the 50% - 150% quality assurance limits. This sample was not reanalyzed.

Instrument detection limits were not included in the analytical report.

The extensive problems with the holding times, internal standard recoveries, calibrations and laboratory control samples should be noted. These are discussed in detail below.

Holding Times

All of the soil samples were analyzed within 10 days of sample collection with the following exceptions:

		Days past holding time
SB561112	E0829-01	2
SB4823	E0829-03	2
SB57112	E0829-05	4
SB575575	E0829-04	1
SB575575 DL	E0829-04 DL	5
SB2878	E0829-06	2
SB581112	E0829-07	2
SB5967	E0829-08	4
SB591112	E0829-09	4
SB6068	E0829-10	4
SB6068 DL	E0829-10 DL	26
SB601112	E0829-11	4

The data for these samples were flagged with the "J" qualifier and should be considered estimated values. It is possible that low concentrations were overlooked and reported data underestimated.

Both of the trip blanks were preserved and analyzed within 14 days of the date of sample collection.

Tunes

The raw data for tune V6E3920 analyzed on 7/1 was not included in the copy of the analytical report submitted for validation. This has been requested from the laboratory.

No other problems were detected with the tunes associated with the samples of this delivery group.

System Monitoring Compound Recoveries

All system monitoring compound recoveries were within the required quality assurance limits.

Matrix Spike / Matrix Spike Duplicate

Sample SB581112 (E0829-07) of this sample delivery group was used for the matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Methyl tert-butyl ether	140%	139%	52 – 130%		40%
cis-1,3-Dichloropropene	72%	67%	78 – 120%		40%
trans-1,2-dichloropropene	60%	57%	73 – 123%		40%
Tetrachloroethene		140%	65 – 134%		40%
Dibromochloromethane	127%	130%	76 – 115%		40%
1,1,1,2-Tetrachloroethane	143%	148%	80 – 115%		40%
Styrene	76%	72%	83 – 122%		40%
1,1,2,2-Tetrachloroethane	209%	239%	70 – 117%		40%
Bromobenzene	125%	136%	79 – 119%		40%
1,2,3-Trichloropropane	164%	179%	0 – 154%		40%
n-Propylbenzene		142%	64 – 141%		40%
2-Chlorotoluene	148%	164%	70 – 132%		40%
1,3,5-Trimethylbenzene	149%	179%	72 – 133%		40%
4-Chlorotoluene		127%	77 – 122%		40%
tert-Butylbenzene	164%	194%	31 – 159%		40%
1,2,4-Trimethylbenzene	131%	143%	73 – 126%		40%
sec-Butylbenzene		149%	68 – 137%		40%
4-Isopropyltoluene		134%	66 – 131%		40%
1,2-Dibromo-3-chloropropane	139%	164%	52 – 128%		40%
1,2,4-Trichlorobenzene	31%	34%	49 – 126%		40%
Hexachlorobutadiene		142%	58 – 115%		40%
Naphthalene	37%	40%	45 – 130%		40%
1,2,3-Trichlorobenzene	33%	37%	44 – 131%		40%

The data for these samples were previously qualified for problems with holding times.

It is possible that low concentrations of the compounds with low recoveries were overlooked and reported concentrations underestimated.

The high recoveries do not affect the end use of undetected data.

Calibrations

No problems were detected with the three initial calibrations.

The percent difference of methylene chloride (27%) and naphthalene (36%) were above the 25% quality assurance limit in the 6/20 continuing calibration analysis of samples the two trip blanks -02 and -12.

The detected concentrations of methylene chloride were previously flagged with the "J" qualifier in these samples due to the low concentrations less than the CRDL.

Naphthalene was not detected in either of the samples and the data were not qualified since the %D was less than 50%.

The percent difference of dichlorodifluoromethane (41%), 1,2,3-trichloropropane (28%), hexachlorobutadiene (27%) and 1,2,3-trichlorobenzene (41%) were above the 25% quality assurance limit in the 7/1 continuing calibration analysis associated with the analyses of the dilution of sample -04.

None of these compounds were quantitated from the dilution and the data were not qualified since the high percent differences do not affect the end use of the data.

The percent difference of dichlorodifluoromethane (39%) and chloromethane (28%) were above the 25% quality assurance limit in the 7/12 continuing calibration analysis associated with the analyses of the dilution of sample -10.

None of these compounds were quantitated from the dilution and the data were not qualified since the high percent differences do not affect the end use of the data.

The percent difference of dichlorodifluoromethane (29%) and naphthalene (29%) were above the 25% quality assurance limit in the 6/27 continuing calibration analysis associated with the analyses of samples -07, -01, -03, -04 and -06.

Dichlorodifluoromethane was not detected in any of these samples and the data were not qualified since the percent difference was less than 50%.

Naphthalene was only detected in sample SB491011 (E0828-07) at a low concentration of 4 ug/kg. This was previously flagged with the "J" qualifier due to the low concentration. The naphthalene data for the remaining samples were not qualified since the percent difference was less than 50%.

The percent difference of 2,2-dichloropropane (30%) and tetrachloroethene (28%) were above the 25% quality assurance limit in the 6/29 continuing calibration analysis associated with the analyses of sample -05, -08 and -10.

2,2-Dichloropropane was not detected in any of these samples and the data were not qualified since the percent difference was less than 50%.

Tetrachloroethene was only detected in samples SB5967 (E0828-08) and SB6068 (E0828-10).

Tetrachloroethene was detected in sample SB5967 (E0828-08) at a concentration of 8,900E ug/kg. This was over the linear range of the

analysis, but this sample was not reanalyzed at a dilution as required by the NYS DEC ASP protocols. The data for this compound is highly estimated.

Tetrachloroethene in sample SB6068 (E0828-10) was above the linear range in this initial analysis. It was quantitated from the diluted analysis and the problem with the calibration does not affect the end use of the data.

The naphthalene data for sample SB57112 (E0829-05) was not qualified since it was not detected in the sample and the percent difference was less than 50%.

The percent difference of acetone (55%), 2-butanone (25.5%) and tetrachloroethene (28%) were above the 25% quality assurance limit in the 6/30 continuing calibration analysis associated with the analyses of samples -09 and -11.

All of the acetone data were flagged with the "J" qualifier since the percent difference was greater than 50%.

The data for 2-butanone and tetrachloroethene were only flagged with the "J" qualifier when they were detected in a sample since the percent differences were less than 50%.

No problems were detected with the other continuing calibrations.

All RRFs of the target compounds were greater than 0.05.

Laboratory Control Samples

The recovery of 1,4-dichlorobenzene (112%) was just above the 110% quality assurance limit in LCS V1FLCS. This laboratory control sample is associated with the analyses of samples -05, -08 and -10.

This compound was not detected in the samples and the high recovery does not affect the end use of the data.

The recoveries of all compounds in laboratory control sample V5KLCS were within the required limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
1,2-Dichloroethane	120%	124%	83 – 116%		40%
1,2-Dichloropropane	120%	122%	81 – 116%		40%
Bromodichloromethane	116%	118%	90 – 114%		40%

This laboratory control sample was associated with the analyses of the two trip blanks. None of the compounds were quantitated from the samples and the problems with the high LCS recoveries do not affect the end use of the data.

The recoveries of all compounds in laboratory control sample V6HLCS were within the required limits with the following exception:

Compound	MS %Rec	QC Limits
Dichlorodifluoromethane	52%	58 – 131%

This laboratory control sample was associated with the dilution of sample -10. This compound was not quantitated from the diluted analysis and the problems with the LCS recoveries do not affect the end use of the data.

No other problems were detected with any of the other laboratory control samples.

All of the target compounds were included in the laboratory control samples.

Method Blanks

A low concentration of naphthalene (2J ug/kg) was detected in method blank VBLK1F associated with the analyses of -05, -08 and -10.

Naphthalene was not detected in any of these samples and the blank contamination did not affect the end use of the data.

Low concentrations of naphthalene (1J ug/l) and tetrachloroethene (1J ug/l) were detected in method blank VBLK5K associated with the analyses of trip blanks -02 and -12.

Neither of these compounds were detected in the samples and the blank contamination did not affect the end use of the data.

A low concentration of 1,2,3-trichlorobenzene (55J ug/kg and two non-target compounds were detected in method blank VBLK6Z associated with the medium level analyses of sample -04.

Neither of these compounds were detected in the sample and the blank contamination did not affect the end use of the data.

No compounds were detected in any of the other method blanks.

Trip Blank

The 6/15 Trip Blank, TB061506 (E0829-02), contained low concentrations of methylene chloride (1J ug/l) and chloroform (4J ug/l).

The 6/16 Trip Blank, TB061606 (E0829-12), also contained low concentrations of methylene chloride (1J ug/l) and chloroform (3J ug/l).

Low concentrations of methylene chloride were detected in several samples at concentrations less than the CRDL and less than 10 times the concentration in the trip blank. These were reported at the quantitation limit with the "U" qualifier.

Low concentrations of chloroform were detected in several samples at concentrations less than the CRDL and less than 5 times the concentration in the trip blank. These were reported at the quantitation limit with the "U" qualifier.

Holding Blank

A holding blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

The recoveries of all internal standard were within the required 50% - 150% quality control limits with the following exceptions:

SB561112	E0829-01
SB575575	E0829-04
SB581112	E0829-07
SB6068	E0829-10
SB601112	E0829-11

The problems with the internal standard recoveries are summarized in the attached data validation internal standard recovery form.

Samples SB561112 (E0829-01) and SB601112 (E0829-11) were not reanalyzed.

The NYS DEC ASP protocols require that samples be reanalyzed when the internal standard recoveries are outside of the 50% - 150% quality assurance limits. This sample was not reanalyzed.

Samples SB575575 (E0829-04) and SB6068 (E0829-10) were reanalyzed at a dilution due to high concentrations of target compounds. All of the recoveries were within the required limits in the diluted analyses of these samples.

Sample SB581112 (E0829-07) was used as the matrix spike and matrix spike duplicate. Problems with the recoveries of the internal standards were present in all three analyses. The data for the sample was not required to be reanalyzed.

The compounds that were quantitated against the third internal standard in sample SB6068 (E0829-10) were flagged with the "R" qualifier since the recovery of this internal standard were less than 25% (24%). None of these compounds were detected in the sample.

The compounds that were quantitated against the affected internal standards were flagged with the "J" qualifier and are estimated values. The data for these samples were previously qualified due to the analyses being performed beyond the technical holding time.

Instrument Detection Limits

Instrument detection limits were not included in the analytical report.

Sample Results

Sample SB575575 (E0829-04)

Trichloroethene was reported in this sample at a concentration of 320E ug/kg. The was reanalyzed with a medium level analysis, but trichloroethene was not detected in this sample (510U ug/kg) due to the high dilution for the very high concentration of tetrachloroethene (19,000 ug/kg) present in the sample. The data for this compound should be reported from the original analysis and it is highly estimated.

Sample SB5967 (E0829-08)

Tetrachloroethene and trichloroethene were detected in at a concentrations of 8,900E ug/kg and 2,100E ug/kg. These were over the linear range of the analysis, but this sample was not reanalyzed at a dilution as required by the NYS DEC ASP protocols. The data for these compounds are highly estimated.

No other problems were found with the reported results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Volatile Organic Analyses
Samples Collected June 20th & 22nd, 2006
Samples Received June 22, 2006
Sample Delivery Group: E0859
Laboratory Reference Numbers:

Collected 6/20	
SB61911	E0859-01
SB6102	E0859-02
SB6102 MS	E0859-02 MS
SB6102 MSD	E0859-02 MSD
Collected 6/21	
SB6257	E0859-03
SB6368	E0859-04
Trip Blank	E0859-05
Collected 6/22	
SB6457	E0859-06

Soil samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- * - Data Completeness
- * - GC/MS Tuning
 - Holding Times
 - Calibrations
 - Laboratory Blanks
 - Trip Blank
 - Storage Blank
 - Equipment Blank
- * - System Monitoring Compound Recoveries
 - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
 - Instrument Detection Limits
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

Instrument detection limits were not included in the analytical report.

The problems with the holding times, internal standard recoveries, calibrations and laboratory control samples should be noted. These are discussed in detail below.

Holding Times

All of the soil samples were analyzed within 10 days of sample collection with the following exceptions:

		Days past holding time
SB61911	E0859-01	5
SB6102	E0859-02	5
SB6638	E0859-04	4

The data for these samples were flagged with the "J" qualifier and should be considered estimated values. It is possible that low concentrations were overlooked and reported data underestimated.

The trip blank was preserved and analyzed within 14 days of the date of sample collection.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

System Monitoring Compound Recoveries

All system monitoring compound recoveries were within the required quality assurance limits.

Matrix Spike / Matrix Spike Duplicate

Sample SB6102 (E0859-02) of this sample delivery group was used for the matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Methyl tert-butyl ether	148%	156%	52 – 130%		40%
2-Butanone		157%	14 – 154%		40%
Bromochloromethane		121%	70 – 119%		40%
1,2-Dichloroethane	128%	133%	65 – 126%		40%
4-Methyl-2-pentanone		151%	45 – 141%		40%
-1,3-Dichloropropane	133%	140%	78 – 120%		40%
Dibromochloromethane	127%	135%	76 – 115%		40%
1,2-Dibromoethane	127%	135%	72 – 117%		40%
1,1,1,2-Tetrachloroethane	125%	130%	80 – 115%		40%
Bromoform		132%	67 – 126%		40%
1,1,2,2-Tetrachloroethane	259%	175%	70 – 117%		40%
1,2,3-Trichloropropane		159%	0 – 154%		40%
1,2-Dibromo-3-chloropropane	141%	144%	52 – 128%		40%

None of these compounds were detected in any of the samples and the high recoveries do not affect the end use of undetected data.

Calibrations

The percent RSD of acetone (37%) was above the 30% quality control limit in the 7/06 initial calibration associated with the analysis of samples -04 and -01

This compound was not detected in either of the samples and the high %RSD did not affect the end use of the data.

No problems were detected with the other two initial calibrations.

The percent difference of acetone (55%), 2-butanone (25.5%) and tetrachloroethene (28%) were above the 25% quality assurance limit in the 6/30 continuing calibration analysis associated with the analyses of samples -03, -06 and -02.

All of the acetone data were flagged with the "J" qualifier since the percent difference was greater than 50%.

2-Butanone and tetrachloroethene were not detected in any of the associated samples and they were not qualified since the percent difference was less than 50%.

The percent difference of 1,2,3-trichlorobenzene (30%) was above the 25% quality assurance limit in the 7/5 continuing calibration, V6E4001, associated with the analysis of the trip blank.

This compound was not detected in the trip blank and the high percent difference does not affect the end use of the data.

The 7/05 continuing calibration, V1H6431, was only associated with the analyses of samples -02MS and -02MSD. This did not directly affect the end use of the data and the calibration was not reviewed during the validation.

No problems were detected with the other continuing calibrations.

All RRFs of the target compounds were greater than 0.05.

Laboratory Control Samples

The recoveries of all compounds in laboratory control sample V1LLCS were within the required limits with the following exception:

Compound	MS %Rec	QC Limits
1,1-Dichloroethane	120%	74 - 118%
1,2-Dichloropropane	118%	78 - 117%

This laboratory control sample was associated with the dilution of samples -04 and -01. Neither of these compounds were detected in either of the samples and the high recoveries do not affect the end use of the data.

No other problems were detected with any of the other laboratory control samples.

All of the target compounds were included in the laboratory control samples.

Method Blanks

A low concentration of naphthalene (3J ug/kg) was detected in method blank VBLK1K associated with the analyses of samples -02MS and -02MSD.

The presence of naphthalene in this method blank does not directly affect the end use of the data.

A low concentration of naphthalene (2J ug/kg) was detected in method blank VBLK1L associated with the analyses of samples -04 and -01.

Naphthalene was not detected in either of these sample and the presence in the method blank does not affect the end use of the data.

A low concentration of 1,2,3-trichlorobenzene (1J ug/l) was detected in method blank VBLK6B associated with the level analyses of the trip blank

This compound was not detected in the sample and the blank contamination did not affect the end use of the data.

No compounds were detected in any of the other method blanks.

Trip Blank

The Trip Blank contained low concentrations of chloroform (4J ug/l) and a low concentration of a non-target compound eluting at 7.95 minutes (0.5J ug/l).

Low concentrations of chloroform were detected only in sample SB6257 (E0859-03) at a concentration less than the CRDL and less than 5 times the concentration in the trip blank. This was reported at the quantitation limit with the "U" qualifier.

Holding Blank

A holding blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

The recoveries of all internal standard were within the required 50% - 150% quality control limits with the exceptions of the recoveries of the second and third internal standards in the matrix spike and matrix spike duplicate. The problems with the recoveries do not affect the end use of the data since the internal standard recoveries in the sample itself (SB6102) were within the required limits.

Instrument Detection Limits

Instrument detection limits were not included in the analytical report.

Sample Results

No other problems were found with the reported results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Water Volatile Organic Analyses
Samples Collected April 12, 2006
Samples Received April 13, 2006
Sample Delivery Group: E0454
Laboratory Reference Numbers:

HJB-MW-1	E0454-06
HJB-MW-3	E0454-07
HJB-MW-4	E0454-08
HJB-MW-4 DL	E0454-08 DL
TRIP BLANK	E0454-10
TRIP BLANK RE	E0454-10 RE

Water samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- * - Data Completeness
- * - GC/MS Tuning
- * - Holding Times
 - Calibrations
- * - Laboratory Blanks
 - Trip Blank
 - Storage Blank
 - Equipment Blank
- * - System Monitoring Compound Recoveries
- * - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Blank Spike
 - Laboratory Control Samples
 - Instrument Detection Limits
- * - Compound Identification
 - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

The trip blank contained several compounds:

Acetone	7 ug/l
Isopropylbenzene	6 ug/l
Sec-Butylbenzene	4J ug/l

It also contained 29 nontarget compounds.

Many of these compounds were also found in sample HJB-MW-3 (E0454-07). The target compounds were reported with the "U" qualifier and the non-targets were rejected and flagged with the "R" qualifier.

The trip blank was reanalyzed and no compounds were detected in the reanalysis. The laboratory did not reanalyze sample HJB-MW-3 (E0454-07). The initial analysis of the trip blank was used for the final reporting.

*Instrument detection limits were not included in the analytical report.

The problems with the calibrations and laboratory control samples should be noted.

No other significant problems were found with this sample delivery group, which would affect the usability of the data.

Holding Times

All samples were preserved and analyzed within 14 days of the date of collection.

The laboratory's case narrative states that the reanalysis of the trip blank was done beyond the holding time. The data from the original trip blank analysis was used for the final reporting, so this did not affect the end use of the data.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

System Monitoring Compound Recoveries

All system monitoring compound recoveries were within the required quality assurance limits.

Calibrations

The percent RSD of all compounds in the initial calibration were less than 30%.

The data for the 5/5 initial and 5/8 continuing calibration were not reviewed since these were only associated with the reanalysis of the Trip Blank. The initial analysis of the trip blank was used for the final reporting.

The percent difference for acetone (35%) was above the 25% quality assurance limit in the 4/25 continuing calibration analysis associated with the analyses of sample -07. Acetone was not detected in this sample and the data were not qualified since the percent difference was less than 50%.

The percent difference for acetone (29%) and 2-butanone (27%) were above the 25% quality assurance limit in the 4/26 continuing calibration analysis associated with the dilution of sample -08. Acetone and 2-butanone were not detected in this sample and the data were not qualified since the percent difference was less than 50%.

The percent difference for acetone (35%) and dichlorodifluoromethane (26%) were above the 25% quality assurance limit in the 4/21 continuing calibration associated with the analyses of samples -06, -10 and -08.

If acetone was detected in a sample, it was flagged with a "U" qualifier due to contamination from the trip blank. It was not qualified for the high percent difference since it was less than 50%.

Acetone in the Trip Blank (7 ug/l) was flagged with the "J" qualifier and should be considered an estimated value.

All RRFs of the target compounds were greater than 0.05.

Matrix Spike / Matrix Spike Duplicate

A matrix spike was not analyzed with this sample delivery group.

Blank Spike

A blank spike, distinct from the laboratory control samples, was not included in the data package.

Laboratory Control Sample

The recovery of methylene chloride (136%) was above the 132% quality assurance limit in LCS V5QLCS associated with the analyses of samples -06, -10 and -08.

Methylene chloride was not detected in any of these samples and the high recovery does not affect the end use of the data.

The recoveries of chloromethane (124%), vinyl chloride (122%), chloroethane (120%) and 1,1,2,2-tetrachloroethane (128%) were above the quality assurance limits (118%, 113% and 118%) in V6WLCSD associated with the analyses of sample-07.

None of these compounds were detected in this sample and the high recoveries do not affect the end use of the data.

No other problems were found with any of the other laboratory control samples.

All of the target compounds were included in the LCS.

Method Blanks

No compounds were detected in any of the method blanks.

Trip Blank

The trip blank contained several compounds:

Acetone	7 ug/l
Isopropylbenzene	6 ug/l
Sec-Butylbenzene	4J ug/l

It also contained 29 nontarget compounds.

Many of these compounds were also found in sample HJB-MW-3 (E0454-07). The target compounds were reported with the "U" qualifier and the non-targets were rejected and flagged with the "R" qualifier.

The trip blank was reanalyzed and no compounds were detected in the reanalysis. The laboratory did not reanalyze sample HJB-MW-3 (E0454-07). The initial analysis of the trip blank was used for the final reporting.

Holding Blank

A holding blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

The recoveries and retention times of all internal standards were within the required quality control limits.

Instrument Detection Limits

Instrument detection limits were not included in the analytical report.

Sample Results

Sample HJB-MW-4 (E0454-08)

This sample was reanalyzed at a 100X dilution due to high concentrations of trichloroethene (190 ug/l and tetrachloroethene (6,000 ug/l). The data for these two compounds should be reported from the diluted analysis. The data for all of the other compounds should be reported from the original analysis.

Sample HJB-MW-3 (E0454-07)

Many of the compounds detected in this sample were also detected in the original analysis of the trip blank. The trip blank was reanalyzed and no compounds were detected in the reanalysis.

The low concentrations of the target compounds were reported with the "U" qualifier and the non-targets were rejected and flagged with the "R" qualifier.

No other problems were found with the reported results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Volatile Organic Analyses
Samples Collected June 14th & 15th, 2006
Samples Received June 17, 2006
Sample Delivery Group: E0828
Laboratory Reference Numbers:

Collected 6/14	
SB44810	E0828-01
Collected 6/15	
SB4579	E0828-02
SB461112	E0828-03
SB4767	E0828-04
SB481112	E0828-05
SB4923	E0828-06
SB491011	E0828-07
SB5024	E0828-08
SB5068	E0828-09
SB5123	E0828-10
SBX	E0828-11
SB5157	E0828-12
SB5234	E0828-13
SB5268	E0828-14
SB5368	E0828-15
SB5456	E0828-16
SB541112	E0828-17
SB5578	E0828-18
SB5578 DL	E0828-18 DL
SB551516	E0828-19
SB5678	E0828-20

Soil samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- Data Completeness
- * - GC/MS Tuning
- Holding Times
- Calibrations
- Laboratory Blanks
- Trip Blank
- Storage Blank
- Equipment Blank
- * - System Monitoring Compound Recoveries
- Internal Standard Recoveries
- Matrix Spike / Matrix Spike Duplicate
- Laboratory Control Samples
- Instrument Detection Limits
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

Soil samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
 - Holding Times
 - Calibrations
 - Laboratory Blanks
 - Field Blank
 - Surrogate Compound Recoveries
 - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
 - Compound Identification
 - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The extensive problems with the holding times, matrix spikes, laboratory control samples and calibrations should be noted. These are described in detail below.

All of the data for these samples should be considered estimated values.

Holding Times

All of the samples were extracted after 7 days of collection (Region II Technical Holding Time). The number of days beyond the holding time the individual samples were extracted are noted below:

Sample		Days Extracted Beyond Holding Time
SB36911	E0796-01	6
SB371315	E0796-02	6
SB371315 RE	E0796-02 RE	25
SB3768	E0796-03	6
SB3878	E0796-04	6
SB3934	E0796-05	6
SB4024	E0796-06	6
SB4167	E0796-07	6
SB411314	E0796-08	6
SB411314 RE	E0796-08 RE	14
SB4257	E0796-09	6
SB4257 RE	E0796-09 RE	14
SB421012	E0796-10	6
SB4357	E0796-11	6
SB4357 RE	E0796-11 RE	25
SB4357 MS	E0796-11 MS	25
SB4357 MSD	E0796-11 MSD	25
SB431012	E0796-12	6

calibration is associated with the analyses of samples -01, -02, -03, -05, -06, -04, -07 and -08.

The data for these compounds were flagged with the "J" qualifier whenever they were detected in a sample and should be considered estimated values. Nondetects were not qualified since the percent RSDs were both less than 60%.

No problems were detected with the two other initial calibrations.

The percent difference of naphthalene (47%) and 1,2,3-trichlorobenzene (29%) were above the 25% quality assurance limit in the 6/20 continuing calibration analysis of samples -01, -02, -03, -05 and -06.

Detected concentrations of naphthalene were previously flagged with the "J" qualifier in these samples due to the high %RSD in the initial calibration.

1,2,3-Trichlorobenzene was not detected in any of the samples and the data were not qualified since the %D was less than 50%.

The percent difference of naphthalene (49%), 1,2,4-trichlorobenzene (28%) and 1,2,3-trichlorobenzene (32%) were above the 25% quality assurance limit in the 6/21 continuing calibration analysis of samples -04, -07 and -08.

Detected concentrations of naphthalene were previously flagged with the "J" qualifier in these samples due to the high %RSD in the initial calibration.

1,2,3-Trichlorobenzene and 1,2,4-trichlorobenzene were not detected in any of the samples and the data were not qualified since the %Ds were less than 50%.

The percent difference of dichlorodifluoromethane (29%) and naphthalene (29%) were above the 25% quality assurance limit in the 6/27 continuing calibration analysis associated with the analyses of samples -09, -10, -11, -12, -13, -14, -15, -16, -17, -18 and -20.

Dichlorodifluoromethane and naphthalene were not detected in any of these samples and the data were not qualified since the percent difference was less than 50%.

The percent difference of 2,2-dichloropropane (30%) and tetrachloroethene (28%) were above the 25% quality assurance limit in the 6/29 continuing calibration analysis associated with the analyses of sample -19.

Neither of these compounds were detected in the sample and the data were not qualified since the percent difference was less than 50%.

The percent difference of 1,2-dichloroethane (38%) and 1,2-dibromo-3-chloropropane (26%) were above the 25% quality assurance limit in the 7/17 continuing calibration analysis associated with the analyses of the dilution of sample 18.

Neither of these compounds were detected in the sample and the data were not qualified since the percent difference was less than 50%.

All RRFs of the target compounds were greater than 0.05.

Matrix Spike / Matrix Spike Duplicate

A matrix spike was not analyzed with this sample delivery group.

Laboratory Control Samples

The recovery of hexachlorobutadiene (116%) was just above the 115% quality assurance limit in LCS V1WLCS. This laboratory control sample is associated with the analyses of samples -04, -07 and -08.

This compound was not detected in any of the samples and the high recovery does not affect the end use of the data.

The recovery of 1,4-dichlorobenzene (112%) was just above the 110% quality assurance limit in LCS V1FLCS. This laboratory control sample is associated with the analyses of sample -19.

This compound was not detected in the sample and the high recovery does not affect the end use of the data.

The recoveries of all compounds in laboratory control sample V1XLCS were within the required limits with the following exceptions:

Compound	LCS %Rec	QC Limits
cis-1,2-Dichloroethene	120%	83-115%
1,2-Dichloroethane	64%	65-126%
Bromobenzene	120%	79-119%

This laboratory control sample was associated with the dilution of sample -18. None of the compounds were quantitated from the diluted analysis and the problems with the LCS recoveries do not affect the end use of the data.

All of the target compounds were included in the laboratory control samples.

Method Blanks

A low concentration of methylene chloride (3J ug/kg) was detected in method blank VBLK1V associated with the analyses of -01, -02, -03, -05 and -06.

Methylene chloride was not detected in any of these samples and the blank contamination did not affect the end use of the data.

A low concentration of naphthalene (2J ug/kg) was detected in method blank VBLK1W associated with the analyses of -04, -07 and -08.

Naphthalene was only detected in sample SB491011 (E0828-07) at a concentration of 9 ug/kg (8 ug/l in the raw data). This concentration was less than 5X the concentration in the method blank, so the data were reported as 9U ug/kg.

A low concentration of naphthalene (2J ug/kg) was detected in method blank VBLK1F associated with the analyses of sample -19.

Naphthalene was not detected in any of these samples and the blank contamination did not affect the end use of the data.

No compounds were detected in any of the other method blanks.

Trip Blank

A trip blank was not associated with this sample delivery group.

Holding Blank

A holding blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

The recoveries of the second, chlorobenzene-d5 (47%), and third internal standard, 1,4-dichlorobenzene-d4 (39%), were less than the 50% quality assurance limit in sample SB4257 (E0796-09).

The compounds that were quantitated against the affected internal standards were flagged with the "J" qualifier and are estimated values. The data for this sample were previously qualified due to the analyses being performed 2 days beyond the technical holding time.

The NYS DEC ASP protocols require that samples be reanalyzed when the internal standard recoveries are outside of the 50% - 150% quality assurance limits. This sample was not reanalyzed.

Instrument Detection Limits

Instrument detection limits were not included in the analytical report.

Sample Results

No other problems were found with the reported results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Volatile Organic Analyses
Samples Collected June 12th & 13th, 2006
Samples Received June 14, 2006
Sample Delivery Group: E0796
Laboratory Reference Numbers:

Collected 6/13

SB36911	E0796-01
SB371315	E0796-02
SB3768	E0796-03
SB3878	E0796-04
SB3934	E0796-05
SB4024	E0796-06
SB4167	E0796-07
SB411314	E0796-08
SB4257	E0796-09
SB421012	E0796-10
SB4357	E0796-11
SB431012	E0796-12

Collected 6/12

SB2668	E0796-13
SB27911	E0796-14
SB868	E0796-15
SB2968	E0796-16
SB2968 DL	E0796-16 DL
SB301214	E0796-17
SB3168	E0796-18
SB3168 DL	E0796-18 DL
SB3224	E0796-19
SB3268	E0796-20
SB3368	E0796-21
SB3368 DL	E0796-21 DL
SB34810	E0796-22
SB351012	E0796-23
Trip Blank	E0796-24

Soil samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- Data Completeness
- * - GC/MS Tuning
- Holding Times
- Calibrations
- Laboratory Blanks
- Trip Blank
- Storage Blank
- Equipment Blank
- System Monitoring Compound Recoveries
- Internal Standard Recoveries
- Matrix Spike / Matrix Spike Duplicate
- Laboratory Control Samples
- Instrument Detection Limits
- Compound Identification
- Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

The laboratory's case narrative states:

Surrogate recoveries were within the QC limits with the exception of elevated recoveries in the initial analyses of samples S2968 (E0796-16) and S3368 (E0796-21). Surrogate recoveries were within the QC limits in the medium level analyses of these samples.

Lab control samples recoveries were within the QC limits with the exception of xylenes and styrene in V1ULCS, and 1,1-dichloroethane and 1,2-dichloropropane in V5KLCS.

Due to elevated concentrations of target and non-target compounds, samples SB3168, SB2968 and SB3368 were re-analyzed at dilution using the medium level procedure. Please note that these medium level dilution analyses occurred beyond the method holding time.

Eleven samples had low recoveries of one or more internal standards. The NYS DEC ASP protocols require that samples be reanalyzed when the internal standard recoveries are outside of the 50% - 150% quality assurance limits. None of these samples were reanalyzed.

Ethylbenzene (37U ug/kg) was not reported in the original analysis of sample SB3368 (E0796-21), but 1,100 ug/kg was reported in the medium level analysis. The laboratory has been asked to explain this discrepancy.

Instrument detection limits were not included in the analytical report.

The problems with the holding times, surrogate recoveries, trip blank, internal standard recoveries, calibrations and laboratory control samples should be noted. These are discussed in detail below.

Holding Times

All of the soil samples were analyzed within 10 days of sample collection with the following exceptions:

		Days past holding time
SB2968 DL	E0796-16 DL	7
SB3168 DL	E0796-18 DL	5
SB3368	E0796-21	4
SB3368 DL	E0796-21 DL	7

The data for these samples were flagged with the "J" qualifier and should be considered estimated values. It is possible that low concentrations were overlooked and reported data underestimated.

The trip blank was preserved and analyzed within 14 days of the date of collection.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

System Monitoring Compound Recoveries

All system monitoring compound recoveries were within the required quality assurance limits with the following exceptions.

Sample	SMC1	SMC2	SMC3	SMC4
SB2968 (E0796-16)			183%	
SB3368 (E0796-21)			312%	191%

The data for the detected compounds were flagged with the "J" qualifier and should be considered estimated values.

The undetected data were not qualified since high recoveries do not affect undetected data.

Calibrations

The percent difference of all of the compounds in the 6/16 initial calibration were less than 30% with the exceptions of acetone (48%) and naphthalene (38%). This initial calibration is associated with the analyses of samples -01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -16, 14, -17, -18, -20, -22, and -23

The data for these compounds were flagged with the "J" qualifier whenever they were detected in a sample and should be considered estimated values.
Nondetects were not qualified since the percent RSDs were both less than 60%.

No problems were detected with the three other initial calibrations.

The percent difference of dichlorodifluoromethane (30%) acetone (29%) and naphthalene (32%) were above the 25% quality assurance limit in the 6/19

continuing calibration analysis associated with samples -01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, and -16.

Dichlorodifluoromethane was not detected in any of these samples and the data were not qualified since the percent difference was less than 50%.

Detected concentrations of acetone and naphthalene were previously flagged with the "J" qualifier in these samples due to the high %RSD in the initial calibration.

The percent difference of 1,2,3-trichlorobenzene (29%) and naphthalene (47%) were above the 25% quality assurance limit in the 6/20 continuing calibration analysis associated with the analyses of samples -14, -17, -18, -20, -22 and -23.

1,2,3-Trichlorobenzene was not detected in any of these samples and the data were not qualified since the percent difference was less than 50%.

Detected concentrations of naphthalene were previously flagged with the "J" qualifier in these samples due to the high %RSD in the initial calibration.

The percent difference of acetone (79%), 2-butanone (48%) and 2-hexanone (30%) were above the 25% quality assurance limit in the 6/26 continuing calibration analysis associated with the analyses of sample -21.

Acetone was detected in the sample (440 ug/kg) and this was flagged with the "J" qualifier.

2-Butanone and 2-hexanone not detected in this sample and the data were not qualified since the percent difference was less than 50%.

The percent difference of methylene chloride (27%) and naphthalene (36%) were above the 25% quality assurance limit in the 6/19 continuing calibration analysis associated with the analyses of the Trip Blank.

A low concentration of methylene chloride (1J ug/l) was detected in the trip blank. This was flagged with the "J" qualifier due to its low concentration less than the CRDL.

Naphthalene was not detected in this sample and the data were not qualified since the percent difference was less than 50%.

The percent difference of dichlorodifluoromethane (34%), acetone (28%) and 2-butanone (28%) were above the 25% quality assurance limit in the 6/29 continuing calibration analysis associated with the analyses of the medium level analyses of samples -16 and -21.

None of these compounds were quantitated from the medium level analysis and the high percent differences do not affect the end use of the data.

No other problems were detected with any of the continuing calibrations.

All RRFs of the target compounds were greater than 0.05.

Matrix Spike / Matrix Spike Duplicate

A matrix spike was not analyzed with this sample delivery group.

Laboratory Control Samples

The recoveries of xylene (80%) and styrene (82%) were less than the 83% quality assurance limit in LCS V1ULCS associated with the analyses of samples -01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13 and -16.

The data for these compounds were flagged with the "J" qualifier. It is possible that very low concentrations were overlooked and reported concentrations slightly underestimated.

The recoveries of 1,1-dichloroethane (120%) and 1,2-dichloropropane (120%) were above the 116% quality assurance limit in LCS V5KLCS associated with the analyses of the Trip Blank.

Neither of these compounds were detected in this sample and the high recoveries do not affect the end use of the data.

No other problems were found with any of the other laboratory control samples.

All of the target compounds were included in the LCS.

Method Blanks

A low concentration of naphthalene (3J ug/kg) was detected in method blank VBLK1U associated with the analyses of samples -01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13 and -16.

Naphthalene was only detected in sample SB2968 (E0796-16) at a concentration of 200 ug/kg (16 ug/l in the raw data). This concentration was greater than 5X the concentration in the method blank, so the data not qualified for the low concentration in the method blank.

A low concentration of naphthalene (4J ug/kg) and the non-target compound diethyl phthalate were detected in method blank VBLK1X associated with the analyses of samples SB868 (E0796-15) and SB3224 (E0796-19).

Only a low concentration of naphthalene (3 ug/kg) was detected in sample SB868 (E0796-15). The data were reported at the quantitation limit (6U ug/kg).

Naphthalene was detected at a concentration of 10 ug/kg in sample SB3224 (E0796-19). This was reported as 10U ug/kg due to the contamination in the method blank.

The non-target compound was not detected in either of the samples.

A low concentration of naphthalene (4J ug/kg) was detected in method blank VBLK1B associated with the analyses of sample -021.

Naphthalene detected in the sample at a concentration of 260 ug/kg (19.7 ug/l in the raw data). This concentration was just less than 5X the concentration in the method blank, so the data were flagged with the "U" qualifier.

Low concentrations of tetrachloroethene (1J ug/l) and naphthalene (1J ug/kg) were detected in method blank VBLK5K associated with the analyses of the trip blank.

Neither compound were detected in the sample and the data were not affected by the method blank contamination.

Trip Blank

The trip blank contained several compounds:

Methylene Chloride	1J ug/l
Chloroform	4J ug/l
4-Isopropyltoluene	2J ug/l

It also contained 2 nontarget compounds.

Methylene chloride and chloroform were not detected in any of the samples.

When 4-isopropylene was detected it was present in concentrations greater than 5X the concentration in the trip blank

Holding Blank

A holding blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

The third internal standard, 1,4-dichlorobenzene-d4, was less than the 50% quality assurance limit in the following samples:

SB3768	E0796-03
SB3878	E0796-04
SB3934	E0796-05
SB4024	E0796-06
SB4167	E0796-07
SB411314	E0796-08
SB421012	E0796-10
SB4357	E0796-11
SB431012	E0796-12
SB2668	E0796-13

The recoveries of the second, chlorobenzene-d5, and third internal standard, 1,4-dichlorobenzene-d4, were less than the 50% quality assurance limit in sample SB4257 (E0796-09).

The compounds that were quantitated against the affected internal standards were flagged with the "J" qualifier and are estimated values.

All of the recoveries were greater than 25%.

The NYS DEC ASP protocols require that samples be reanalyzed when the internal standard recoveries are outside of the 50% - 150% quality assurance limits. None of these samples were reanalyzed.

Instrument Detection Limits

Instrument detection limits were not included in the analytical report.

Sample Results

Sample SB3368 (E0796-21)

Ethylbenzene (37U ug/kg) was not reported in the original analysis of this sample, but 1,100 ug/kg was reported in the medium level analysis. The laboratory has been asked to explain this discrepancy.

No other problems were found with the reported results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Soil Semivolatile Organic Analyses
Samples Collected June 15th & 16th, 2006
Samples Received June 17, 2006
Sample Delivery Group: E0829
Laboratory Reference Numbers:

Collected 6/15

SB561112	E0829-01
SB4823	E0829-03
SB57112	E0829-05
SB57112 RE	E0829-05 RE

Collected 6/16

SB575575	E0829-04
SB5878	E0829-06
SB581112	E0829-07
SB5967	E0829-08
SB5967 RE	E0829-08 RE
SB591112	E0829-09
SB591112 RE	E0829-09 RE
SB6068	E0829-10
SB601112	E0829-11
SB601112 RE	E0829-11 RE

Soil samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
 - Holding Times
 - Calibrations
- * - Laboratory Blanks
 - Field Blank
 - Surrogate Compound Recoveries
 - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The extensive problems with the holding times, laboratory control samples, internal standards and calibrations should be noted. These are described in detail below.

The data from the original analyses should be reported for all of the samples that were reanalyzed with the one exception of sample SB601112 RE (E0829-11 RE). Since the samples were re-extracted 20 and 21 days past the required holding time, generally much lower concentrations were detected in all of the samples in the reanalyses.

All of the data for these samples should be considered estimated values.

Sample SB6068 (E0829-10) was not reanalyzed for low internal standard recovery. Re-extraction is required according to the NYS DEC ASP protocols.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Holding Times

All of the samples were extracted after 7 days of collection (Region II Technical Holding Time). The number of days beyond the holding time the individual samples were extracted is noted below:

Sample		Days Extracted Beyond Holding Time
SB561112	E0829-01	7
SB4823	E0829-03	7
SB57112	E0829-05	7
SB57112 RE	E0829-05 RE	21
SB575575	E0829-04	7
SB2878	E0829-06	6
SB581112	E0829-07	6
SB5967	E0829-08	6
SB5967 RE	E0829-08 RE	20
SB591112	E0829-09	6
SB591112 RE	E0829-09 RE	20
SB6068	E0829-10	6
SB601112	E0829-11	6
SB601112 RE	E0829-11 RE	20

The data for all of the samples were flagged with the "J" qualifier and should be considered estimated values.

All extracts were analyzed within 40 days of the date of extraction.

Surrogate Recoveries

All surrogate recoveries were within the required quality control limits with the following exceptions:

Sample	S1	S2	S3	S4	S5	S6
SB571112	32%	46%	59%	44%	40%	
SB571112 RE			58%			
SB601112	0%	5%		0%	0%	53%
SB601112 RE	(All OK)					
SB5967	41%	47%		43%		
SB5967 RE	(All OK)					
SB91112	42%	51%				
SB91112 RE	(All OK)					
SB75575	43%					
SBLK1Y	44%					

All of the samples which had more than two surrogate recoveries less than the quality assurance limit were reanalyzed according to the NYS DEC ASP requirements, but this was done 20 days beyond the required holding time.

All of the samples that were reanalyzed had all of the recoveries within quality assurance limits in the reanalysis.

The samples with only one base neutral or acid extractable surrogate outside of the quality assurance limits did not need to be reanalyzed. The data were not required to be qualified according to the NYS DEC ASP protocols.

The data for these samples were previously highly qualified due to problems with the holding times.

The data from the original analyses should be reported for all of the samples that were reanalyzed with the one exception of sample SB601112. Since the samples were re-extracted 20 and 21 days past the required holding time, much lower concentrations were detected in all of the samples in the reanalyses.

The recoveries of several of the surrogates were less than 10% in the original analysis of sample SB601112. The data for this sample were technically rejected. The data for this sample should be reported from the reanalysis. The data are highly estimated due to the re-extraction occurring 21 days after sample collection.

Method Blanks

A low concentration of bis(2-ethylhexyl)phthalate (48J ug/kg / 1.42 ug/l) was detected on SBLK1Y which was associated with the original extraction of all of the samples.

Concentrations of bis(2-ethylhexyl)phthalate less than 14.20 ug/l were flagged with the "U" and reported at the detection limit.

No compounds were detected in method blank SBLK1L associated with the re-extractions.

Matrix Spike / Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with this sample delivery group.

Laboratory Control Samples

All recoveries in LCS S1YLCS were within the required limits with the following exceptions.

Compound	MS %Rec	QC Limits
4-Nitroaniline	141%	35 - 141%
Di-n-octylphthalate	65%	69 - 137%

This laboratory control sample was associated with the original analysis of all of the samples.

4-Nitroaniline was not detected in any of the samples and the data were not affected by the high recovery.

Di-n-octylphthalate was not detected in any of the samples. The data were flagged with the "J" qualifier because low concentrations of this compound may have been overlooked.

All recoveries in LCS/LCSD S1LLCS were within the required limits with the following exceptions.

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
2,4-Dinitrophenol	10%	11%	15-136%	72%	40%
4,6-Dinitro-2-methylphenol	29%	30%	33-130%	55%	40%

This laboratory control sample was associated with the re-extractions of all of the samples. With the exception of sample SB601112 RE (E0829-11 RE) neither of these compounds were quantitated from the reanalyses and the low recoveries did not affect the end use of the data.

The data for sample SB601112 RE (E0829-11 RE) were previously qualified due to the problems with the holding time.

Calibrations

No problems were detected with the 6/22 initial calibration.

The %RSD of hexachlorocyclopentadiene (37%), 2,4-dinitrophenol (29%) and 4-nitroaniline (38%) were above the 30% quality assurance limit in the 7/12 initial calibration associated with the analyses of samples -05RE, -11RE, -08RE and -09RE.

The data for all of the reanalyzed samples were reported from the original analyses and the problems with this calibration do not affect the data.

The percent difference of hexachlorocyclopentadiene (25.7%), diethylphthalate (49.6%) and carbazole (43%) were above the 25% quality assurance limit in the 7/10 continuing calibration associated with the analyses of samples -10, -11, -08 and -09.

These compounds were not detected in any of the samples and the data were not qualified since the percent differences were less than 50%.

The percent difference of indeno(1,2,3-cd)pyrene (27%) and benzo(g,h,i)perylene (30%) were above the 25% quality assurance limit in the 7/11 continuing calibration associated with the analyses of sample -07.

These compounds were not detected in the sample and the data were not qualified since the percent differences were less than 50%.

The percent difference of 4-nitroaniline (29%) was above the 25% quality assurance limit in the 7/8 continuing calibration associated with the analyses of samples -01, -04, -05, -03 and -06.

4-Nitroaniline was not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

The 6/29 continuing calibration was only associated with the analysis of the laboratory control sample S1YLCS. This did not affect the end use of the data and the continuing calibration was not reviewed during the data validation.

The 7/4 continuing calibration was only associated with the analysis of the method blank SBLK1Y. This did not affect the end use of the data and the continuing calibration was not reviewed during the data validation.

The 7/13 continuing calibration was only associated with the analysis of the laboratory control sample S1LLCS and method blank SBLK1L. This did not affect the end use of the data and the continuing calibration was not reviewed during the data validation.

The percent difference of 2,4-dinitrophenol (60%), 4-nitroaniline (32%), 4,6-dinitro-2-methylphenol (39%) and carbazole (27%) were above the 25% quality assurance limit in the 7/14 continuing calibration associated with the reanalyses of samples -05, -11, -08 and -09.

With the exception of sample SB601112 RE (E0829-11 RE), none of these compounds were quantitated from the reanalyses and the high percent differences do not affect the end use of the data.

The data for sample SB601112 RE (E0829-11 RE) were previously qualified due to the problems with the holding time.

No other problems were detected with any of the continuing calibrations.

Field Blank

A field blank was not collected with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits with the following exceptions:

SB5967	E0829-08
SB591112	E0829-09
SB6068	E0829-10
SB601112	E0829-11

The recoveries of the individual internal standards are noted in the attached internal standard summary form. All recoveries were above 25%.

Sample SB6068 (E0829-10) was not re-extracted. Re-extraction is required according to the NYS DEC ASP protocols.

When the other samples were reanalyzed, all of the internal standard recoveries were within the required limits.

The data for these samples were previously qualified due to problems with the holding times.

Sample Results

With the exception of sample SB601112 (E0829-11), the data from the original analyses should be reported for all of the samples that were reanalyzed. Since the samples were re-extracted 23 days past the required holding time, generally much lower concentrations were detected in all of the samples in the reanalyses.

The recoveries of several of the surrogates were less than 10% in the original analysis of sample SB601112. The data for this sample were technically rejected. The data for this sample should be reported from the reanalysis. The data are highly estimated due to the re-extraction occurring 21 days after sample collection.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Soil Semivolatile Organic Analyses
Samples Collected June 20th through 22nd, 2006
Samples Received June 22, 2006
Sample Delivery Group: E0859
Laboratory Reference Numbers:

Collected 6/20

SB61911	E0859-01
SB61911 RE	E0859-01 RE
SB6102	E0859-02
SB6102 RE	E0859-02 RE
SB6102 MS	E0859-02 MS
SB6102 MS RE	E0859-02 MS RE
SB6102 MSD	E0859-02 MSD
SB6102 MSD RE	E0859-02 MSD RE

Collected 6/21

SB6257	E0859-03
SB6257 RE	E0859-03 RE
SB6368	E0859-04
SB6368 RE	E0859-04 RE

Collected 6/22

SB6457	E0859-06

Soil samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
 - Holding Times
 - Calibrations
 - Laboratory Blanks
 - Field Blank
 - Surrogate Compound Recoveries
 - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The extensive problems with the holding times, laboratory control samples, matrix spike and calibrations should be noted. These are described in detail below.

The laboratory's case narrative states that the internal standard recoveries of some of the samples were outside of the quality control limits. These samples were not part of this sample delivery group.

The data from the original analyses should be reported for all of the samples that were reanalyzed. All of the data for these samples should be considered estimated values due to problems with holding times and/or surrogate recoveries.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Holding Times

All of the samples were extracted after 7 days of collection (Region II Technical Holding Time). The number of days beyond the holding time the individual samples were extracted is noted below:

Sample		Days Extracted Beyond Holding Time
SB61911	E0859-01	3
SB61911 RE	E0859-01 RE	9
SB6102	E0859-02	3
SB6102 RE	E0859-02 RE	9
SB6102 MS	E0859-02 MS	3
SB6102 MS RE	E0859-02 MS RE	9
SB6102 MSD	E0859-02 MSD	3
SB6102 MSD RE	E0859-02 MSD RE	9
SB6257	E0859-03	2
SB6257 RE	E0859-03 RE	8
SB6368	E0859-04	2
SB6368 RE	E0859-04 RE	8
SB6457	E0859-06	7

The data for all of the samples were flagged with the "J" qualifier and should be considered estimated values.

All extracts were analyzed within 40 days of the date of extraction.

Surrogate Recoveries

All surrogate recoveries were within the required quality control limits with the following exceptions:

Sample		S1	S2	S3	S4	S5	S6
SB61911	E0859-01	27%	36%		34%	34%	
SB61911 RE	E0859-01 RE		(All OK)				
SB6102	E0859-02	41%	49%		45%	43%	
SB6102 RE	E0859-02 RE		(All OK)				
SB6102 MS	E0859-02 MS			57%			
SB6102 MS RE	E0859-02 MS RE		(All OK)				
SB6102 MSD	E0859-02 MSD	39%	45%	50%	40%	41%	
SB6102 MSD RE	E0859-02 MSD RE		(All OK)				
SB6257 RE	E0859-03 RE	41%	42%		43%	43%	
SB6368	E0859-04	41%					
SB6368 RE	E0859-04 RE	45%	45%				
SBLK1E		44%					
S1ELCS		45%					
S1ELCSD		25%	44%				

All of the samples which had more than two surrogate recoveries less than the quality assurance limit were reanalyzed according to the NYS DEC ASP requirements, but this was done eight and nine days beyond the required holding time.

All of the samples, with the exception of sample SB6368 RE (E0859-04 RE), that were reanalyzed had all of the recoveries within quality assurance limits in the reanalysis.

The samples with only one base neutral or acid extractable surrogate outside of the quality assurance limits did not need to be reanalyzed. The data were not required to be qualified according to the NYS DEC ASP protocols.

The data for these samples were previously highly qualified due to problems with the holding times.

The data from the original analyses should be reported for all of the samples that were reanalyzed. The data from the reanalyses were not significantly different and they were extracted even further beyond the required holding time.

There should not be a problem with surrogate recoveries in a method blank or a laboratory control sample. The low recoveries are not likely due to laboratory error.

Method Blanks

A low concentration of bis(2-ethylhexyl)phthalate (94J ug/kg / 2.83 ug/l) was detected on SBLK1E which was associated with the original extraction of all of the samples with the exception of sample SB6457 (E0859-06).

Concentrations of bis(2-ethylhexyl)phthalate less than the CRDL were flagged with the "U" and reported at the detection limit. Concentrations above the CRDL but less than 28.3 ug/l were flagged with the "U" qualifier.

No compounds were detected in method blank SBLK1L associated with the re-extractions and sample SB6457 (E0859-06).

Matrix Spike / Matrix Spike Duplicate

Sample SB6102 (E0859-02) of this sample delivery group was used for the matrix spike and matrix spike duplicate. A;; recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Phenol		36%	45-109%		40%
Bis(2-Chloroethyl) Ether		32%	43-104%		40%
2-Chlorophenol		42%	43-107%		40%
1,3-Dichlorobenzene		35%	40-101%		40%
1,4-Dichlorobenzene		35%	41-102%		40%
1,2-Dichlorobenzene		38%	41-105%		40%
2,2-oxybis(1-Chloropropane)		31%	41-105%		40%
4-Methylphenol		46%	48-109%		40%
N-Nitroso-di-n-propylamine		36%	44-111%		40%
Hexachloroethane		36%	40-102%		40%
Nitrobenzene		39%	44-108%		40%
Isophorone		38%	42-113%		40%
2-Nitrophenol		41%	42-111%		40%
bis(2-Chloroethoxy)methane		38%	46-108%		40%
4-Chloro-3-Methylphenol		52%	56-117%		40%
2,4,5-Trichlorophenol		57%	59-113%		40%
2-Chloronaphthalene		47%	52-112%		40%
2-Nitroaniline	57%	48%	63-117%		40%
Dimethylphthalate		52%	62-117%		40%
Acenaphthylene		48%	58-112%		40%
2,6-Dinitrotoluene	57%	48%	60-118%		40%
2,4-Dinitrotoluene	57%	48%	59-123%		40%
Acenaphthene		48%	53-116%		40%
Dibenzofuran		52%	61-112%		40%
Diethylphthalate	60%	50%	61-120%		40%
4-Chlorophenyl-phenylether	57%	52%	59-116%		40%
Fluorene	62%	48%	63-115%		40%
4,6-Dinitro-2-methylphenol	30%	26%	33-130%		40%
4-Bromophenyl-phenylether	62%	57%	66-110%		40%
Hexachlorobenzene	57%	57%	67-112%		40%
Phenanthrene	59%	54%	70-115%		40%
Anthracene	57%	52%	63-117%		40%
Carbazole	57%	57%	62-122%		40%
Di-n-butylphthalate	52%	48%	70-120%		40%
Fluoranthene	51%	51%	64-121%		40%
Pyrene	51%	47%	66-120%		40%
Butylbenzylphthalate	52%	48%	63-123%		40%
Bis(2-ethylhexyl)phthalate	31%	21%	61-115%		40%
Di-n-octylphthalate	57%	48%	69-137%		40%
Benzo(b)fluoranthene	57%	52%	61-129%		40%
Benzo(k)fluoranthene	61%	52%	62-130%		40%
Benzo(a)pyrene	59%	54%	66-119%		40%
Indeno(1,2,3-cd)pyrene	44%	37%	56-128%		40%
Dibenzo(a,h)anthracene	48%	42%	58-128%		40%

All of the data were previously qualified for problems with the holding times. All of the data should be considered estimated values. It is possible that reported concentrations were underestimated and low concentrations of these compounds overlooked.

The matrix spike and matrix spike duplicate were reanalyzed due to problems with surrogate recoveries. Slightly better recoveries were obtained in the reanalyses, but

these were extracted 9 days after the holding time limit. The reanalyses of the matrix spike and matrix spike duplicate do not significantly affect the end use of the data.

Laboratory Control Samples

All recoveries in LCS/LCSD S1ELCS were within the required limits with the following exceptions.

Compound	LCS %Rec	LCSD %Rec	QC Limits	RPD	Limits
Phenol		29%	45-109%	49%	40%
Bis(2-Chloroethyl) Ether		21%	43-104%	71%	40%
2-Chlorophenol		25%	43-107%	65%	40%
1,3-Dichlorobenzene		19%	40-101%	88%	40%
1,4-Dichlorobenzene		19%	41-102%	90%	40%
1,2-Dichlorobenzene		20%	41-105%	87%	40%
2-Methylphenol		34%	45-108%		40%
2,2-oxybis(1-Chloropropane)		19%	41-105%	73%	40%
4-Methylphenol		38%	48-109%		40%
N-Nitroso-di-n-propylamine		34%	44-111%		40%
Hexachloroethane		19%	40-102%	88%	40%
Nitrobenzene		27%	44-108%	56%	40%
Isophorone		35%	42-113%		40%
2-Nitrophenol		28%	42-111%	53%	40%
2,4-Dichlorophenol		40%	49-110%		40%
1,2,4-Trichlorobenzene		28%	42-107%	63%	40%
Naphthalene		30%	44-112%	52%	40%
Hexachlorobutadiene		25%	41-108%	67%	40%
bis(2-Chloroethoxy)methane		32%	46-108%		40%
4-Chloro-3-Methylphenol	55%	49%	56-117%		40%
2-Methylnaphthalene		36%	46-110%		40%
Hexachlorocyclopentadiene			10-118%	95%	40%
2,4,5-Trichlorophenol		57%	59-113%		40%
2-Chloronaphthalene		44%	52-112%		40%
2-Nitroaniline	54%	47%	63-117%		40%
Dimethylphthalate	59%	57%	62-117%		40%
Acenaphthylene		50%	58-112%		40%
2,6-Dinitrotoluene	59%	55%	60-118%		40%
Acenaphthene		50%	53-116%		40%
2,4-Dinitrophenol			15-136%	83%	40%
Dibenzofuran	59%	52%	61-112%		40%
Diethylphthalate	59%		61-120%		40%
4-Chlorophenyl-phenylether		53%	59-116%		40%
Fluorene	59%	52%	63-115%		40%
4,6-Dinitro-2-methylphenol	30%		33-130%		40%
4-Bromophenyl-phenylether	58%	51%	66-110%		40%
Hexachlorobenzene	56%	59%	67-112%		40%
Phenanthrene	65%	59%	70-115%		40%
Anthracene	59%		63-117%		40%
Di-n-butylphthalate	57%		70-120%		40%
Fluoranthene	59%		64-121%		40%
Pyrene	65%		66-120%		40%
Butylbenzylphthalate	59%		63-123%		40%
3,3'-Dichlorobenzidine		42%	8-124%		40%
Di-n-octylphthalate	52%		69-137%		40%
Benzo(b)fluoranthene	56%		61-129%		40%
Benzo(k)fluoranthene	59%		62-130%		40%
Benzo(a)pyrene	59%		66-119%		40%
Indeno(1,2,3-cd)pyrene	51%		56-128%		40%
Dibenzo(a,h)anthracene	52%		58-128%		40%

This LCS/LCSD was associated with the original extraction of all of the samples with the exception of sample SB6457 (E0859-06).

There should not be such extensive problems with the recoveries of a laboratory control sample. All of the data for these samples should be considered estimated values. They were previously qualified for problems with holding times.

All recoveries in LCS S4ELCS were within the required limits with the following exceptions.

Compound	MS %Rec	QC Limits
Bis(2-Chloroethyl) Ether	42%	43 – 104%
1,2-Dichlorobenzene	40%	43 – 105%
2,2-oxybis(1-Chloropropane)	34%	41 – 105%

This laboratory control sample was associated with the re-extractions and sample SB6457 (E0859-06). All of the data for these samples should be considered estimated values. They were previously qualified for problems with holding times.

Calibrations

No problems were detected with the 6/22 initial calibration.

The %RSD of hexachlorocyclopentadiene (38%) was above the 30% quality assurance limit in the 7/6 initial calibration associated with the analyses of samples - 03RE, -04RE, -06, -01RE, -02RE.

This compound was not detected in any of the samples and the data were not qualified since the percent difference was less than 60%.

The percent difference of hexachlorocyclopentadiene (25.7%), diethylphthalate (49.6%) and carbazole (43%) were above the 25% quality assurance limit in the 7/10 continuing calibration associated with the analyses of samples -01, -03, -04, and -02.

The percent difference of hexachlorocyclopentadiene (31%) and 2,4-dinitrophenol were above the 25% quality assurance limit in the 7/10 continuing calibration associated with the analyses of samples -03RE, -04RE, -06, -01RE and -02RE.

These compounds were not detected in any of the samples and the data were not qualified since the percent differences were less than 50%.

The 7/03 continuing calibration was only associated with the analysis of the laboratory control sample S1ELCS/S1ELCSD and method blank SBLK1E. This did not affect the end use of the data and the continuing calibration was not reviewed during the data validation.

No other problems were detected with any of the continuing calibrations.

All of the RRFs were greater than 0.05

Field Blank

A field blank was not collected with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits.

The laboratory's case narrative states that the internal standard recoveries of some of the samples were outside of the quality control limits. These samples were not part of this sample delivery group.

Sample Results

No other problems were detected with any of the sample results.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Soil Semivolatile Organic Analyses
Samples Collected June 14th & 15th, 2006
Samples Received June 17, 2006
Sample Delivery Group: E0828
Laboratory Reference Numbers:

Collected 6/14

SB44810

E0828-01

Collected 6/15

SB4579

E0828-02

SB461112

E0828-03

SB4767

E0828-04

SB481112

E0828-05

SB481112 RE

E0828-05 RE

SB4923

E0828-06

SB491011

E0828-07

SB491011 RE

E0828-07 RE

SB5024

E0828-08

SB5068

E0828-09

SB5068 MS

E0828-09 MS

SB5068 MSD

E0828-09 MSD

SB5123

E0828-10

SBX

E0828-11

SB5157

E0828-12

SB5234

E0828-13

SB5268

E0828-14

SB5268 RE

E0828-14 RE

SB5368

E0828-15

SB5456

E0828-16

SB541112

E0828-17

SB541112 RE

E0828-17 RE

SB5578

E0828-18

SB5578 DL

E0828-18 DL

SB5578 RE

E0828-18 RE

SB551516

E0828-19

SB551516 DL

E0828-19 DL

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Soil samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
 - Holding Times
 - Calibrations
- * - Laboratory Blanks
 - Field Blank
 - Surrogate Compound Recoveries
 - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The extensive problems with the holding times, matrix spikes, laboratory control samples, internal standards and calibrations should be noted. These are described in detail below.

The data from the original analyses should be reported for all of the samples that were reanalyzed. Since the samples were re-extracted 23 days past the required holding time, generally much lower concentrations were detected in all of the samples in the reanalyses.

All of the data for these samples should be considered estimated values.

None of these samples were reanalyzed for low internal standard recovery, with the one exception of sample SB541112 (E0828-17). Re-extraction is required according to the NYS DEC ASP protocols.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Holding Times

All of the samples were extracted after 7 days of collection (Region II Technical Holding Time). The number of days beyond the holding time the individual samples were extracted are noted below:

Sample		Days Extracted Beyond Holding Time
SB44810	E0828-01	9
SB4579	E0828-02	8
SB46112	E0828-03	8
SB4767	E0828-04	8
SB48112	E0828-05	8
SB48112RE	E0828-05RE	23
SB4923	E0828-06	8
SB491011	E0828-07	8
SB491011 RE	E0828-07 RE	23
SB5024	E0828-08	8
SB5068	E0828-09	8
SB5123	E0828-10	8
SBX	E0828-11	8
SB5157	E0828-12	8
SB5234	E0828-13	8
SB5268	E0828-14	8
SB5268 RE	E0828-14 RE	23
SB5368	E0828-15	8
SB5456	E0828-16	8
SB541112	E0828-17	8
SB541112 RE	E0828-17 RE	23
SB5578	E0828-18	8
SB5578 RE	E0828-18 RE	23
SB551516	E0828-19	8
SB5678	E0828-20	8

The data for all of the samples were flagged with the "J" qualifier and should be considered estimated values.

All extracts were analyzed within 40 days of the date of extraction.

Surrogate Recoveries

All surrogate recoveries were within the required quality control limits with the following exceptions:

Sample	S1	S2	S3	S4	S5	S6
SB481112	37%	37%		42%	42%	
SB481112 RE	(All OK)					
SB491011	34%	38%		36%	34%	
SB491011 RE	(All OK)					
SB5268	31%	36%		35%	33%	
SB5268	(All OK)					
SB541112	33%	35%		41%	38%	
SB541112 RE	(All OK)					
SB5578	42%	50%			36%	32%
SB5578 RE	(All OK)					
SB5578 DL	(All OK)					
SB461112	44%					20%
SB5234						43%
SBLK4C	40%	43%				
SBLK1I	41%	48%				
SBLK1Q			59%			

All of the samples which had more than two surrogate recoveries less than the quality assurance limit were reanalyzed according to the NYS DEC ASP requirements, but this was done 23 days beyond the required holding time.

All of the samples that were reanalyzed had all of the recoveries within quality assurance limits in the reanalysis.

The samples with only one base neutral or acid extractable surrogate outside of the quality assurance limits did not need to be reanalyzed. The data were not required to be qualified according to the NYS DEC ASP protocols.

The data for these samples were previously highly qualified due to problems with the holding times.

The data from the original analyses should be reported for all of the samples that were reanalyzed. Since the samples were re-extracted 23 days past the required holding time, much lower concentrations were detected in all of the samples in the reanalyses.

Method Blanks

No compounds were detected in any of the method blanks.

Matrix Spike / Matrix Spike Duplicate

Sample SB5068 (E0828-09) was used as the first matrix spike / matrix spike duplicate. All recoveries and RPDs were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
2,2-oxybis(1-Chloropropane)	39%		41-105%		40%
4-Chloro-3-Methylphenol		50%	56-117%		40%
2,4,5-Trichlorophenol		55%	59-113%		40%
2-Nitroaniline		55%	63-117%		40%
Dimethylphthalate		60%	62-117%		40%
Acenaphthylene		55%	58-112%		40%
Acenaphthene		50%	53-116%		40%
2,4-Dinitrophenol		8%	15-136%	77%	40%
Dibenzofuran		55%	61-112%		40%
Diethylphthalate		60%	61-120%		40%
4-Chlorophenyl-phenylether		55%	59-116%		40%
Fluorene		55%	63-115%		40%
4,6-Dinitro-2-methylphenol		25%	33-130%	55%	40%
4-Bromophenyl-phenylether		60%	66-110%		40%
Hexachlorobenzene		60%	67-112%		40%
Pentachlorophenol		50%	19-130%		40%
Phenanthrene		60%	70-115%		40%
Anthracene		55%	63-117%		40%
Di-n-butylphthalate		65%	70-120%		40%
Bis(2-Ethylhexyl)phthalate	58%	198%	64-115%	109%	40%

The data for 2,4-dinitrophenol were flagged with the "R" qualifier due to recoveries less than 10%. This compound was not detected in any of the samples and it is possible that significant concentrations were overlooked.

All of the data were previously qualified (J) for holding time problems.

Laboratory Control Samples

All recoveries in LCS/LCSD S2DLCS were within the required limits with the following exceptions.

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
2,4-Dinitrophenol			15-136%	72%	40%
4-Nitroaniline		129%	35-124%		40%
Diethylphthalate		60%	61-120%		40%
4-Chlorophenyl-phenylether		55%	59-116%		40%
Fluorene		55%	63-115%		40%
4,6-Dinitro-2-methylphenol		25%	33-130%	55%	40%
4-Bromophenyl-phenylether		60%	66-110%		40%
Hexachlorobenzene		60%	67-112%		40%
Pentachlorophenol		50%	19-130%		40%
Phenanthrene		60%	70-115%		40%
Anthracene		55%	63-117%		40%
Di-n-butylphthalate		65%	70-120%		40%
Bis(2-Ethylhexyl)phthalate	58%	198%	64-115%	109%	40%

This laboratory control sample was only associated with the reanalyses of sample -05. The data for these samples were previously highly qualified due to problems with the holding times.

All of the recoveries for S4CLCS were within the required limits. This laboratory control sample is associated with the analyses of samples -01, -02, -04, -05, -07, -09, -14, -15, -16, -17, -18, -19 and -12.

A laboratory control sample was not extracted with samples -03, -06, -13, -11, -10, -08, -07RE, -14RE, -17RE and -18RE

Calibrations

No problems were detected with the 6/22 initial calibration.

The %RSD of hexachlorocyclopentadiene (37%), 2,4-dinitrophenol (29%) and 4-nitroaniline (38%) were above the 30% quality assurance limit in the 7/12 initial calibration associated with the analyses of samples -07RE, -14RE, -17RE, -18RE, -18DL and -19DL.

The data for all of the reanalyzed samples were reported from the original analyses and the problems with this calibration do not affect the data.

None of these compounds were detected in the diluted analyses and the high %RSDs do not affect the end use of the data.

The %RSD of hexachlorocyclopentadiene (39%) and 2,4-dinitrophenol (37%) were above the 30% quality assurance limit in the 7/13 initial calibration associated with the analyses of sample -05RE.

The data for all of the reanalyzed samples were reported from the original analyses and the problems with this calibration do not affect the data.

The %RSD of hexachlorocyclopentadiene (38%) was above the 30% quality assurance limit in the 7/6 initial calibration associated with the analyses of samples -01, -02, -04, -05, -07, -09, -14, -15, -16, -17, -18, -19, -12

This compound was detected in any of the samples and the data were not qualified since the %RSD was less than 60%.

The percent difference of indeno(1,2,3-cd)pyrene (27%) and benzo(g,h,i)perylene (30%) were above the 25% quality assurance limit in the 7/11 continuing calibration associated with the analyses of samples -03, -06, -13, -11, -10 and -08.

These compounds were flagged with the "J" qualifier whenever they were detected in a sample. Nondetects were not qualified since the percent difference was less than 50%.

The percent difference of 2,4-dinitrophenol (43% & 37%) were above the 25% quality assurance limit in the 7/07 and 7/8 continuing calibrations associated with the analyses of samples -01, -02, -04, -05, -07, -09, -14, -15, -16, -17, -18, -19 and -12.

2,4-Dinitrophenol was not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

No other problems were detected with any of the continuing calibrations.

Field Blank

A field blank was not collected with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits with the following exceptions:

SB5024	E0828-08
SB5123	E0828-10
SBX	E0828-11
SB5157	E0828-12
SB5234	E0828-13
SB5268	E0828-14
SB5456	E0828-16
SB541112	E0828-17

The recoveries of the individual internal standards are noted in the attached internal standard summary form. All recoveries were above 25%.

None of these samples were reanalyzed, with the one exception of sample SB541112 (E0828-17). Re-extraction is required according to the NYS DEC ASP protocols.

When sample SB541112 (the E0828-17) was reanalyzed, all of the internal standard recoveries were within the required limits.

The data for these samples were previously qualified due to problems with the holding times.

Sample Results

The data from the original analyses should be reported for all of the samples that were reanalyzed. Since the samples were re-extracted 23 days past the required holding time, generally much lower concentrations were detected in all of the samples in the reanalyses.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Soil and Water Semivolatile Organic Analyses

Samples Collected April 12, 2006

Samples Received April 13, 2006

Sample Delivery Group: E0454

Laboratory Reference Numbers:

HJB-SS-1A	E0454-01
HJB-SS-3A	E0454-02
HJB-SS-4A	E0454-03
HJB-SS-8A	E0454-04
HJB-SS-09	E0454-05
HJB-MW-1	E0454-06
HJB-MW-3	E0454-07
HJB-MW-4	E0454-08
HJB-MW-4 MS	E0454-08 MS
HJB-MW-4 MSD	E0454-08 MSD
HJB-SS-X	E0454-09

Soil and water samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
 - Holding Times
 - Calibrations
- * - Laboratory Blanks
 - Field Blank
- * - Surrogate Compound Recoveries
- * - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

Note: All of the following are observations and comments. The laboratory is not required to provide a written response to any of the following comments.

The problems with the holding times, matrix spike, laboratory control samples and calibrations should be noted. These are described in detail below.

No other problems were found that would affect the end use of the data.

Holding Times

All samples were extracted within 7 days of collection with the exception of samples HJB-SS-1A (E0454-01) and HJB-SS-09 (E0454-05) which were extracted 6 days beyond the required holding time.

The data for these compounds were flagged with the "J" qualifier. It is possible that reported concentrations were underestimated and reported concentrations significantly underestimated.

All extracts were analyzed within 40 days of the date of extraction.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Surrogate Recoveries

All surrogate recoveries were within the required limits.

Matrix Spike / Matrix Spike Duplicate

Soil Sample HJB-MW-4 (E0454-08) was used as the matrix spike / matrix spike duplicate.

All recoveries and RPDs were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
2-Methylphenol		13%	45-108%	137%	40%
4-Methylphenol		37%	48-109%	76%	40%
2,4-Dimethylphenol	14%	10%	37-107%		40%
4-Chloro-3-methylphenol			56-117%	56%	40%
3,3-Dichlorobenzidine			8-124%	73%	40%

The data for 2-methylphenol, 4-methylphenol and 2,4-dimethylphenol were flagged with the "J" qualifier due to the low recoveries. None of these compounds were detected in any of the samples and it is possible that low concentrations were overlooked.

Data for 4-chloro-3-methylphenol and 3,3-dichlorobenzidine were not qualified since they were not detected in any of the samples. The high RPD does not affect the end use of undetected data.

Laboratory Control Samples

All recoveries in the 4/20 laboratory control sample were within the required limits with the exception of 2,4-dimethylphenol (8%) which was less than the 14% quality assurance limit.

This LCS is associated with the analyses of samples -06, -07 and -08.

The data for 2,4-dimethylphenol were previously qualified for the low matrix spike recoveries. This compound was not detected in any of the samples and it is possible that low recoveries were overlooked.

Calibrations

No problems were detected with the 4/20 initial calibration.

The %RSD of 2,4-dinitrophenol (36%) was above the 30% quality assurance limit in the 4/27 initial calibration associated with the analyses of samples -05 and -01.

This compound was not detected in any of the samples and the data were not qualified since the %RSD was less than 60%.

The percent difference of 2,4-dimethylphenol (41%) and hexachlorocyclopentadiene (59%) were above the 25% quality assurance limit in the 4/20 continuing calibration associated with the analyses of samples -06, -07 and -08.

2,4-Dimethylphenol was not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

Hexachlorocyclopentadiene was not detected in any of the associated samples, but the data were flagged with the "J" qualifier since the percent difference was greater than 50%. The RRF had decreased from 0.192 to 0.079 and it is possible that low concentrations were overlooked.

The percent difference of 2,4-dimethylphenol (42%) and hexachlorocyclopentadiene (60%) were above the 25% quality assurance limit in the 4/21 continuing calibration associated with the analyses of samples -02 and -09.

2,4-Dimethylphenol was not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

Hexachlorocyclopentadiene was not detected in any of the associated samples, but the data were flagged with the "J" qualifier since the percent difference was greater than 50%. The RRF had decreased from 0.192 to 0.076 and it is possible that low concentrations were overlooked.

The percent difference of 2,4-dimethylphenol (44%) and hexachlorocyclopentadiene (65%) were above the 25% quality assurance limit in the 4/22 continuing calibration associated with the analyses of samples -03 and -04.

2,4-Dimethylphenol was not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

Hexachlorocyclopentadiene was not detected in any of the associated samples, but the data were flagged with the "J" qualifier since the percent difference was greater than 50%. The RRF had decreased from 0.192 to 0.068 and it is possible that low concentrations were overlooked.

No problems were detected with the 4/28 continuing calibration associated with the analyses of samples -05 and -01.

Method Blanks

No compounds were detected in any of the three method blanks.

Field Blank

A field blank was not collected with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits.

Sample Results

No problems were found with the results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Soil Semivolatile Organic Analyses
Samples Collected June 12th & 13th, 2006
Samples Received June 14, 2006
Sample Delivery Group: E0796
Laboratory Reference Numbers:

Collected 6/13

SB36911	E0796-01
SB371315	E0796-02
SB371315 RE	E0796-02 RE
SB3768	E0796-03
SB3878	E0796-04
SB3934	E0796-05
SB4024	E0796-06
SB4167	E0796-07
SB411314	E0796-08
SB411314 RE	E0796-08 RE
SB4257	E0796-09
SB4257 RE	E0796-09 RE
SB421012	E0796-10
SB4357	E0796-11
SB4357 RE	E0796-11 RE
SB4357 MS	E0796-11 MS
SB4357 MSD	E0796-11 MSD
SB431012	E0796-12

Collected 6/12

SB2668	E0796-13
SB27911	E0796-14
SB868	E0796-15
SB2968	E0796-16
SB2968 RE	E0796-16 RE
SB2968 MS	E0796-16 MS
SB2968 MSD	E0796-16 MSD
SB301214	E0796-17
SB301214 RE	E0796-17 RE
SB3168	E0796-18
SB3224	E0796-19
SB3268	E0796-20
SB3368	E0796-21
SB34810	E0796-22
SB351012	E0796-23

Soil and samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
 - Holding Times
 - Calibrations
 - Laboratory Blanks
 - Field Blank
 - Surrogate Compound Recoveries
 - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
 - Compound Identification
 - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The extensive problems with the holding times, matrix spikes, laboratory control samples and calibrations should be noted. These are described in detail below.

All of the data for these samples should be considered estimated values.

Holding Times

All of the samples were extracted after 7 days of collection (Region II Technical Holding Time). The number of days beyond the holding time the individual samples were extracted are noted below:

Sample		Days Extracted Beyond Holding Time
SB36911	E0796-01	6
SB371315	E0796-02	6
SB371315 RE	E0796-02 RE	25
SB3768	E0796-03	6
SB3878	E0796-04	6
SB3934	E0796-05	6
SB4024	E0796-06	6
SB4167	E0796-07	6
SB411314	E0796-08	6
SB411314 RE	E0796-08 RE	14
SB4257	E0796-09	6
SB4257 RE	E0796-09 RE	14
SB421012	E0796-10	6
SB4357	E0796-11	6
SB4357 RE	E0796-11 RE	25
SB4357 MS	E0796-11 MS	25
SB4357 MSD	E0796-11 MSD	25
SB431012	E0796-12	6

Collected 6/12

SB2668	E0796-13	7
SB27911	E0796-14	7
SB868	E0796-15	7
SB2968	E0796-16	7
SB2968 RE	E0796-16 RE	24
SB2968 MS	E0796-16 MS	7
SB2968 MSD	E0796-16 MSD	7
SB301214	E0796-17	7
SB301214 RE	E0796-17 RE	24
SB3168	E0796-18	7
SB3224	E0796-19	7
SB3268	E0796-20	7
SB3368	E0796-21	8
SB34810	E0796-22	8
SB351012	E0796-23	8

The data for all of the samples were flagged with the "J" qualifier and should be considered estimated values.

All extracts were analyzed within 40 days of the date of extraction.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Surrogate Recoveries

All surrogate recoveries were within the required quality control limits with the following exceptions:

Sample	S1	S2	S3	S4	S5	S6
SB371315 (E0796-02)	38%	49%	57%		44%	
SB371315 (E0796-02) RE	(All OK)					
SB411314 (E0796-08)	31%	34%		34%	35%	
SB411314 (E0796-08) RE	22%	23%	39%	23%	23%	36%
SB4257 (E0796-09)	34%	43%		42%	40%	
SB4257 (E0796-09) RE	45%					
SB4357 (E0796-11)	26%	36%		30%	29%	
SB4357 (E0796-11)	All OK					
SB2968 (E0796-16)	38%	45%		40%	38%	
SB2968 (E0796-16) RE	(All OK)					
SB2968 (E0796-16) MS	38%			40%	33%	
SB2968 (E0796-16) MSD	(All OK)					

SB301214 (E0796-17)	4%	22%	18%	10%
SB301214 (E0796-17) RE	(All OK)			
SB3368 (E0796-21)	38%			44%
SB4167 (E0796-07)	45%			
SB3268 (E0796-20)			117%	
SB431012 (E0796-12)	43%			
SB27911 (E0796-14)	41%			
S1HLCS			59%	

All of the samples which had more than two surrogate recoveries less than the quality assurance limit were reanalyzed according to the NYS DEC ASP requirements.

With the one exception of sample SB411314 (E0796-08), all of the samples that were reanalyzed had no more than one surrogate outside of the quality assurance limit.

The samples with only one base neutral or acid extractable surrogate outside of the quality assurance limits did not need to be reanalyzed. The data were not required to be qualified according to the NYS DEC ASP protocols.

The data for these samples were previously highly qualified due to problems with the holding times. The specific analysis which should be used for the final reporting is noted in the section on sample analyses

Matrix Spike / Matrix Spike Duplicate

Two sets of matrix spikes and matrix spike duplicates were analyzed with this sample delivery group.

Sample SB2968 (E0796-16) was used as the first matrix spike / matrix spike duplicate. All recoveries and RPDs were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Phenol	40%		45-109%		40%
Bis(2-Chloroethyl)Ether	25%	36%	43-104%		40%
2-Chlorophenol	38%		43-107%		40%
1,3-Dichlorobenzene	23%	36%	40-101%	44%	40%
1,4-Dichlorobenzene	25%	35%	41-102%		40%
1,2-Dichlorobenzene	28%		41-105%		40%
2,2-oxybis(1-Chloropropane)	25%	35%	45-108%		40%
Nitrobenzene	38%		44-108%		40%
Isophorone	40%		42-113%		40%
2-Nitrophenol	38%		42-111%		40%
Hexachlorobutadiene	38%		41-108%		40%
Bis(2-Chloroethoxy)methane	43%		46-108%		40%
Hexachlorocyclopentadiene	0%	0%	10-118%		40%
4-Nitroaniline		130%	35-124%		40%
Bis(2-Ethylhexyl)phthalate	158%	62%	64-115%		40%
Indeno(1,2,3-cd)pyrene	50%	55%	56-128%		40%
Dibenzo(a,h)anthracene	55%	55%	58-128%		40%

The data for hexachlorocyclopentadiene were flagged with the "R" qualifier due to recoveries less than 10%. This compound was not detected in any of the samples and it is possible that significant concentrations were overlooked.

The reanalysis of sample SB4357 (E0796-11) was used for the second matrix spike / matrix spike duplicate. All recoveries and RPDs were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Hexachlorocyclopentadiene		7%	10-118%	44%	40%
2,4-Dinitrophenol	4%	6%	15-136%		40%
4,6-Dinitro-2-methylphenol	15%	18%	33-130%		40%

The data for hexachlorocyclopentadiene and 2,4-dinitrophenol were flagged with the "R" qualifier due to recoveries less than 10%. None of these compounds were detected in any of the samples and it is possible that significant concentrations were overlooked.

The data for 4,6-dinitro-2-methylphenol were previously qualified (J) for holding time problems. This compound was not detected in any of the samples.

Method Blanks

A low concentration of bis(2-ethylhexyl)phthalate (140J ug/kg) was detected in SBLK1G associated with the analyses of samples SB411314 RE (E0796-08 RE) and SB4257RE (E0796-09RE).

This compound was not detected in either of these samples and the data were not affected by the blank contamination.

No compounds were detected in any of the other method blanks.

Laboratory Control Samples

All recoveries in the S1ZLCS laboratory control sample were within the required limits with the exception of 4-nitroaniline (129%) which was above the 124% quality assurance limit. This LCS was associated with samples -01 through -20. 4-Nitroaniline was not detected in any of the samples and the data were not affected by the high recovery.

All recoveries in the S1GLCS laboratory control sample were within the required limits with the exception of 2,2'-oxybis(1-chloropropane) (38%) and di-n-octylphthalate (65%) which were less than the 41% and 69% quality assurance limits. This LCS is associated with the analyses of samples -08RE and -09RE.

The data for these compounds were previously flagged with the "J" qualifier due to problems with holding times and should be considered estimated values.

All recoveries in the S1HLCS laboratory control sample were within the required limits with the following exceptions:

Compound	MS %Rec	QC Limits
Phenol	44%	45-109%
Bis(2-Chloroethyl)Ether	40%	43-104%
2,2'-oxybis(1-chloropropane)	39%	41-105%
2-Nitroaniline	55%	63-117%
Dimethylphthalate	59%	62-117%
Acenaphthylene	55%	58-112%
2,6-Dinitrotoluene	57%	60-118%
2,4-Dinitrotoluene	59%	61-112%
4-Nitroaniline	56%	63-115%
4-bromophenyl-phenylether	59%	66-110%
Hexachlorobenzene	59%	67-112%
Phenanthrene	55%	70-115%
Anthracene	55%	63-117%
Di-n-butylphthalate	57%	70-120%
Fluoranthene	59%	64-121%
Pyrene	65%	66-120%
Butylbenzylphthalate	55%	63-123%
Bis(2-ethylhexyl)phthalate	55%	64-115%
Di-n-octylphthalate	49%	69-137%
Benzo(b)fluoranthene	55%	61-129%
Benzo(k)fluoranthene	59%	62-130%
Benzo(a)pyrene	59%	66-119%
Indeno(1,2,3-cd)pyrene	51%	56-128%
Dibenzo(a,h)anthracene	50%	58-128%

This LCS is associated with the analyses of samples -21, -22, -23 and -20.

The data for these samples were previously highly qualified due to problems with the holding times.

All recoveries in LCS/LCSD S1LLCS were within the required limits with the exceptions of 2,4-dinitrophenol (10% & 11%) and 4,6-dinitro-2-methylphenol (29% & 30%). These recoveries were less than the 15% and 33% quality control limits. The reanalysis of samples -02, -11, -16 and -17 were associated with this laboratory control sample.

The data for these samples were previously highly qualified due to problems with the holding times.

Calibrations

No problems were detected with the 6/22 initial calibration.

The %RSD of hexachlorocyclopentadiene (37%) and 4-nitroaniline (38%) were above the 30% quality assurance limit in the 7/12 initial calibration associated with the analyses of samples -02RE, -17RE, -11RE, -16RE.

Neither of these compounds was detected in any of the samples and the data were not qualified since the %RSD was less than 60%.

The percent difference of 2,4-dimethylphenol (37%), hexachlorocyclopentadiene (41%) and 2,4-dinitrophenol (29%) were above the 25% quality assurance limit in the 6/29 continuing calibration associated with the analyses of samples -03, -04, -05, -06, -07, -08 and -09.

None of these compounds were detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

The percent difference of 2,4-dimethylphenol (49%) and hexachlorocyclopentadiene (74%) were above the 25% quality assurance limit in the 7/06 continuing calibration associated with the analyses of samples -10, -12 and -13.

2,4-Dimethylphenol was not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

Hexachlorocyclopentadiene was not detected in any of the associated samples, but the data were flagged with the "J" qualifier since the percent difference was greater than 50%. The RRF had decreased from 0.218 to 0.057 and it is possible that low concentrations were overlooked.

The percent difference of 2,4-dimethylphenol (50.5%), hexachlorocyclopentadiene (74%), 4-nitroaniline (26%) and carbazole (30%) were above the 25% quality assurance limit in the 7/7 continuing calibration associated with the analyses of samples -08RE and -09RE.

Neither 2,4-dimethylphenol nor hexachlorocyclopentadiene were detected in either of the associated samples, but the data were flagged with the "J" qualifier since the percent difference was greater than 50%.

4-Nitroaniline and carbazole were not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

The percent difference of 4-nitroaniline (29%) was above the 25% quality assurance limit in the 7/8 continuing calibration associated with the analyses of samples -01, -02, -11, -15, -18, -14, -16, -17 and -19.

This compound was not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

The percent difference of hexachlorocyclopentadiene (25.7%), diethylphthalate (49.6%) and carbazole (43%) were above the 25% quality assurance limit in the 7/10 continuing calibration associated with the analyses of samples -21, -22, -23 and -20.

These compounds were not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

The percent difference of 2,4-dinitrophenol (60%), 4-nitroaniline (32%), 4,6-dinitro-2-methylphenol (39%) and carbazole (27%) were above the 25% quality assurance limit in the 7/14 continuing calibration associated with the analyses of samples -02RE, -17RE and -11RE.

4-Nitroaniline, 4,6-dinitro-2-methylphenol and carbazole were not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

2,4-Dinitrophenol was not detected in any of the associated samples, but the data were flagged with the "J" qualifier since the percent difference was greater than 50%.

The percent difference of 2,4-dinitrophenol (28%) and benzo(g,h,i)perylene (28%) were above the 25% quality assurance limit in the 7/17 continuing calibration associated with the analyses of sample-16RE

These compounds were not detected in any of the samples and the data were not qualified since the percent difference was less than 50%.

The continuing calibrations analyzed on 7/5 and 7/13 were only associated with the analyses of laboratory control samples and did not affect the data. They were not reviewed during the validation.

Field Blank

A field blank was not collected with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits with the exception of the 5th (48%) and 6th (24%) internal standards in sample SB3268 (E0796-20).

This sample should have been reanalyzed according to the NYS DEC ASP protocols. This was not done.

Di-n-octylphthalate was the only compound not detected in this sample that was quantitated against the 6th internal standard. This was flagged with the "R" qualifier since the recovery was less than 25%.

The other compounds in this sample were previously qualified due to problems with the holding times.

Sample Results

Samples SB371315 (E0796-02) and SB4357 (E0796-11)

These samples were re-extracted 25 days beyond the technical holding time due to low surrogate recoveries.

The data from the original analysis should be used for the final reporting. That was also qualified due to problems with the holding times.

Samples SB411314 (E0796-08) and SB4257 (E0796-09)

These samples were re-extracted 14 days beyond the technical holding time due to low surrogate recoveries.

The data from the original analyses should be used for the final reporting. That was also qualified due to problems with the holding times.

Samples SB2968 (E0796-16) and SB301214 (E0796-17)

These samples were re-extracted 24 days beyond the technical holding time due to low surrogate recoveries.

The data from the original analysis should be used for the final reporting. That was also qualified due to problems with the holding times.

Sample SB27911 (E0796-14)

Benzo(k)fluoranthene was reported in this sample at a low concentration of 38J ug/kg, but the compound was not found on the laboratory's quant report in the raw data. A spectrum was included for this compound.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Inorganic Analyses
Samples Collected June 15th & 16th, 2006
Samples Received June 17, 2006
Sample Delivery Group: E0829
Laboratory Reference Numbers:

Collected 6/15

SB561112	E0829-01
SB561112 MS	E0829-01 MS
SB561112 MD	E0829-01 MD
SB4823	E0829-03
SB57112	E0829-05

Collected 6/16

SB575575	E0829-04
SB5878	E0829-06
SB581112	E0829-07
SB5967	E0829-08
SB591112	E0829-09
SB6068	E0829-10
SB601112	E0829-11

Soil samples were received for total metals analyses by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibration Verification
 - CRDL Standard
- * - Laboratory Control Sample
 - Serial Dilutions
- * - Calibration Blanks
 - Field Blank
 - Equipment Blank
- * - Preparation Blanks
 - Matrix Spike
- * - Duplicate Analyses
- * - ICP Interference Check Sample
- * - Detection Limit Results
- * - Linear Range
- * - Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The problems with the serial dilutions, duplicate and matrix spike recoveries should be noted. These are described in detail below.

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times.

CRDL Standards

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

No compounds were detected in the soil and water preparation blanks associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

A field blank was not analyzed with this sample delivery group.

ICP Interference Check Sample

No problems were detected with the reported ICP Interference Check Sample recoveries. All recoveries were within the 80% - 120% quality assurance limits.

Matrix Spike Recovery

Sample SB561112 (E0829-01) was used for the ICP matrix spike. All recoveries were within the 75% - 125% quality assurance limits with the following exception:

Analyte	%Rec.
Antimony	13%

The data for antimony should be considered estimated values. Reported concentrations may be underestimated and low concentrations may have been overlooked. The data were flagged with the "J" qualifier.

The post digestion spike recovery was within the required limits.

Duplicate Analysis

Sample SB561112 (E0829-01) was used for the ICP matrix duplicate. All RPDs, which could be accurately calculated, were less than 20%.

Laboratory Control Sample

No problems were detected with the recoveries of the soil and water laboratory control standards.

Serial Dilutions

Sample SB561112 (E0829-01) was used for the serial dilution. All of the percent differences that could be accurately calculated were less than 10% with the following exceptions:

Analyte	% Difference.
Barium	17%
Beryllium	16%
Cadmium	77%
Calcium	12%
Chromium	17%
Cobalt	23%
Iron	26%
Lead	18%
Magnesium	19%
Manganese	21%
Nickel	24%
Selenium	15%
Thallium	32%
Vanadium	14%
Zinc	23%

The data for these compounds were flagged with the "J" qualifier and should be considered estimated values.

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

No problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Inorganic Analyses
Samples Collected June 20th through 22nd, 2006
Samples Received June 22, 2006
Sample Delivery Group: E0859
Laboratory Reference Numbers:

Collected 6/20	
SB61911	E0859-01
SB6102	E0859-02
SB6102 MS	E0859-02 MS
SB6102 MSD	E0859-02 MSD
Collected 6/21	
SB6257	E0859-03
SB6368	E0859-04
Collected 6/22	
SB6457	E0859-06

Soil samples were received for total metals analyses by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibration Verification
 - CRDL Standard
- * - Laboratory Control Sample
 - Serial Dilutions
- * - Calibration Blanks
 - Field Blank
 - Equipment Blank
- * - Preparation Blanks
 - Matrix Spike
 - Duplicate Analyses
- * - ICP Interference Check Sample
- * - Detection Limit Results
- * - Linear Range
- * - Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The problems with the serial dilutions, duplicate and matrix spike recoveries should be noted. These are described in detail below.

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times.

CRDL Standards

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

No compounds were detected in the soil and water preparation blanks associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

A field blank was not analyzed with this sample delivery group.

ICP Interference Check Sample

No problems were detected with the reported ICP Interference Check Sample recoveries. All recoveries were within the 80% - 120% quality assurance limits.

Matrix Spike Recovery

Sample SB6102 (E0859-02) was used for the ICP matrix spike. All recoveries were within the 75% - 125% quality assurance limits with the following exception:

Analyte	%Rec.
Antimony	25%
Mercury	57%

The data for antimony and mercury should be considered estimated values. Reported concentrations may be underestimated and low concentrations may have been overlooked. The data were flagged with the "J" qualifier.

The post digestion spike recovery for antimony was within the required limits.

HG post digestions spike?

Duplicate Analysis

Sample SB6102 (E0859-02) was used for the ICP matrix duplicate. All RPDs, which could be accurately calculated were less than 20% with the following exceptions:

Analyte	RPD.
Manganese	40%
Thallium	68%

The data for these two analytes should be considered estimated values and were flagged with the "J" qualifier.

Laboratory Control Sample

No problems were detected with the recoveries of the soil and water laboratory control standards.

Serial Dilutions

Sample SB6102 (E0859-02) was used for the serial dilution. All of the percent differences that could be accurately calculated were less than 10% with the following exceptions:

Analyte	% Difference.
Aluminum	14%
Arsenic	20%
Barium	20%
Beryllium	22%
Cadmium	14%
Chromium	15%
Cobalt	24%
Lead	26%
Magnesium	21%
Manganese	26%
Nickel	25%
Selenium	42%
Vanadium	18%
Zinc	30%

The data for these compounds were flagged with the "J" qualifier and should be considered estimated values.

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

No problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Inorganic Analyses

Samples Collected June 14th & 15th, 2006

Samples Received June 17, 2006

Sample Delivery Group: E0828

Laboratory Reference Numbers:

Collected 6/14

SB44810	E0828-01
SB44810 MS	E0828-01 MS
SB44810 MD	E0828-01 MD

Collected 6/15

SB4579	E0828-02
SB461112	E0828-03
SB4767	E0828-04
SB481112	E0828-05
SB4923	E0828-06
SB491011	E0828-07
SB5024	E0828-08
SB5068	E0828-09
SB5123	E0828-10
SBX	E0828-11
SB5157	E0828-12
SB5234	E0828-13
SB5268	E0828-14
SB5368	E0828-15
SB5456	E0828-16
SB541112	E0828-17
SB5578	E0828-18
SB551516	E0828-19

Soil samples were received for total metals analyses by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibration Verification
 - CRDL Standard
- * - Laboratory Control Sample
 - Serial Dilutions
- * - Calibration Blanks
 - Field Blank
 - Equipment Blank
- * - Preparation Blanks
 - Matrix Spike
 - Duplicate Analyses
- * - ICP Interference Check Sample
- * - Detection Limit Results
- * - Linear Range
- * - Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The problems with the serial dilutions, duplicate and matrix spike recoveries should be noted. These are described in detail below.

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times.

CRDL Standards

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

No compounds were detected in the soil and water preparation blanks associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

A field blank was not analyzed with this sample delivery group.

ICP Interference Check Sample

*No problems were detected with the reported ICP Interference Check Sample recoveries. All recoveries were within the 80% - 120% quality assurance limits.

Matrix Spike Recovery

Sample SB44810 (E0828-01) was used for the ICP matrix spike. All recoveries were within the 75% - 125% quality assurance limits with the following exceptions:

Analyte	%Rec.
Antimony	20%

The data for antimony should be considered estimated values. Reported concentrations may be underestimated and low concentrations may have been overlooked. The data were flagged with the "J" qualifier.

The post digestion spike recovery was within the required limits.

Duplicate Analysis

Sample SB44810 (E0828-01) was used for the ICP matrix duplicate. All RPDs, which could be accurately calculated, were less than 20% with exception of potassium (20.2%).

The data for potassium should be considered estimated values. The data were flagged with the "J" qualifier.

Laboratory Control Sample

No problems were detected with the recoveries of the soil and water laboratory control standards.

Serial Dilutions

Sample SB44810 (E0828-01) was used for the serial dilution. All of the percent differences that could be accurately calculated were less than 10% with the following exceptions:

Analyte	% Difference.
Aluminum	11%
Arsenic	30%
Barium	19%
Beryllium	19%
Cadmium	37%
Chromium	19%
Lead	23%
Magnesium	23%
Manganese	23%
Nickel	28%
Selenium	14%
Vanadium	17%
Zinc	26%

The data for these compounds were flagged with the "J" qualifier and should be considered estimated values.

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

No problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Inorganic Analyses

Samples Collected June 12th & 13th, 2006

Samples Received June 14, 2006

Sample Delivery Group: E0796

Laboratory Reference Numbers:

Collected 6/13

SB36911	E0796-01
SB36911 MS	E0796-01 MS Hg
SB36911 MD	E0796-01 MD Hg
SB371315	E0796-02
SB3768	E0796-03
SB3878	E0796-04
SB3934	E0796-05
SB4024	E0796-06
SB4167	E0796-07
SB411314	E0796-08
SB4257	E0796-09
SB421012	E0796-10
SB4357	E0796-11
SB431012	E0796-12

Collected 6/12

SB2668	E0796-13
SB27911	E0796-14
SB868	E0796-15
SB2968	E0796-16
SB2968 MS	E0796-16 MS
SB2968 MD	E0796-16 MD
SB301214	E0796-17
SB3168	E0796-18
SB3224	E0796-19
SB3268	E0796-20
SB3268 MS	E0796-20 MS ICP
SB3268 MD	E0796-20 MD ICP
SB3368	E0796-21
SB3368 MS	E0796-21 MS Hg
SB3368 MD	E0796-21 MD Hg
SB34810	E0796-22
SB351012	E0796-23

Soil samples were received for total metals and cyanide analyses by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibration Verification
 - CRDL Standard
- * - Laboratory Control Sample
 - Serial Dilutions
- * - Calibration Blanks
 - Field Blank
 - Equipment Blank
- * - Preparation Blanks
 - Matrix Spike
 - Duplicate Analyses
- * - ICP Interference Check Sample
- * - Detection Limit Results
- * - Linear Range
- * - Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The problems with the serial dilutions, duplicate and matrix spike recoveries should be noted. These are described in detail below.

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Samples SB3368 (E0796-21), SB34810 (E0796-22) and SB351012 (E0796-23) were analyzed in a separate digestion batch without a matrix spike, duplicate or serial dilution. The data were not flagged with any qualifiers by the laboratory. The qualifiers for the site specific quality assurance data were added to these samples during the validation.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times.

CRDL Standards

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

No compounds were detected in the soil and water preparation blanks associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

A field blank was not analyzed with this sample delivery group.

ICP Interference Check Sample

No problems were detected with the reported ICP Interference Check Sample recoveries. All recoveries were within the 80% - 120% quality assurance limits.

Matrix Spike Recovery

Sample SB3268 (E0796-20) was used for the ICP matrix spike. All recoveries were within the 75% - 125% quality assurance limits with the following exceptions:

Analyte	%Rec.
Antimony	27%
Nickel	74%
Zinc	36%

The data for these three analytes should be considered estimated values. Reported concentrations may be underestimated and low concentrations may have been overlooked. The data were flagged with the "J" qualifier.

The post digestion spike recovery was within the required limits.

Soil sample SB3368 (E0796-21) was used for the mercury matrix spike. The recovery (86%) was within the required quality control limits.

Duplicate Analysis

Sample SB3268 (E0796-20) was used for the ICP matrix duplicate. All RPDs, which could be accurately calculated, were less than 20% with the following exceptions.

Analyte	RPD
Arsenic	20%
Calcium	54%
Lead	44%
Magnesium	22%

Sample SB3268 (E0796-20) was used for the mercury matrix duplicate. The RPD was 35% which was great than the 20% quality assurance limit.

The data for these three analytes should be considered estimated values. The data were flagged with the "J" qualifier.

Laboratory Control Sample

No problems were detected with the recoveries of the soil and water laboratory control standards.

Serial Dilutions

Sample SB3268 (E0796-20) was used for the serial dilution. All of the percent differences that could be accurately calculated were less than 10% with the following exceptions:

Analyte	% Difference.
Arsenic	26%
Barium	15%
Beryllium	7%
Cadmium	16%
Chromium	18%
Cobalt	22%
Iron	22%
Lead	23%
Magnesium	20%
Manganese	24%
Nickel	25%
Selenium	26%
Vanadium	15%
Zinc	27%

The data for these compounds were flagged with the "J" qualifier and should be considered estimated values.

Instrument Detection Limit

The date of the determination of the instrument detection limits was not noted.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

Samples SB3368 (E0796-21), SB34810 (E0796-22) and SB351012 (E0796-23) were analyzed in a separate digestion batch without a matrix spike, duplicate or serial dilution. The data were not flagged with any qualifiers by the laboratory. The qualifiers for the site specific quality assurance data were added to these samples during the validation.

No other problems were detected with any of these samples.

12/7/2006

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil PCB Analyses

Samples Collected April 12, 2006

Samples Received April 13, 2006

Sample Delivery Group: E0454

Laboratory Reference Numbers:

HJB-SS-1A	E0454-01
HJB-SS-3A	E0454-02
HJB-SS-4A	E0454-03
HJB-SS-8A	E0454-04
HJB-SS-09	E0454-05
HJB-SS-X	E0454-09
HJB-SS-X MS	E0454-09 MS
HJB-SS-X MSD	E0454-09 MSD

Soil samples were received for analyses of the PCB analyte list by the NYS DEC ASP protocols. A complete analytical validation was performed based upon the US EPA Region II data validation protocols and following parameters:

- Data Completeness
- * - Holding Times
- Field Blanks
- * - Surrogate Recoveries
- * - Surrogate Retention Times
- * - Matrix Spike / Matrix Spike Duplicate
- * - Laboratory Control Sample
- * - Initial Calibration
- * - Continuing Calibrations
- * - Method Blanks
- * - Compound Identification
- Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The laboratory's raw data only includes peaks that the lab has identified as matches for an Aroclor. All of the peaks should be reported in the raw data.

Samples HJB-SS-8A (E0454-04) and HJB-SS-X (E0454-09) each had one Aroclor-1260 peak on column #1 that was at least 4X larger than the other peaks on that column. When this one peak was removed from the quantitations the percent difference was greatly reduced, eliminating the need for the "P" qualifier. The data reported during the validation were slightly less, but not significantly different from those reported by the laboratory.

The data would be much more accurate if the laboratory used 5 peaks to quantitate each of the Aroclors instead of 3.

Holding Times

The data were validated against the EPA Region II Technical Holding Times: Water and soil samples for PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date extraction.

All extractions and analyses were performed within the required holding times.

Surrogate Recoveries

All surrogate recoveries were within the required quality control limits.

Matrix Spike

Sample HJB-SS-X (E0454-09) was used as the matrix spike and matrix spike duplicate.

The recoveries and RPDs of Aroclor 1016 and Aroclor-1260 were within the required quality control limits.

Aroclor 1016 and Aroclor 1260 were added at a concentration of 350 ug/kg.

Laboratory Control Sample

All laboratory control sample recoveries were within the required limits.

Initial Calibrations

Only 3 peaks were used for the initial calibration of each PCB. Generally 5 peaks per PCB are used for the initial calibration.

Aroclor 1221 and Aroclor-1232 were quantitated from one concentration.

No other problems were found with the initial calibration. All %RSDs were less than 30%.

Continuing Calibrations

All of the percent differences in the continuing calibrations were less than or equal to 25% with the following exceptions:

Surrogate Retention Times

All surrogate retention times were within the required limits for both surrogates and on both columns.

Method Blanks

No problems were detected with the method blank.

Field Blank

A field blank was not collected with this sample delivery group.

Sample Results

Many of the data were quantitated on the basis of a linear regression. The data were checked during the validation by means of the calibration factors. NO significant differences were found between the two quantitation methods.

Sample HJB-SS-8A (E0454-04)

Aroclor 1260 was reported by the laboratory as 430 P ug/kg. The percent difference was 65% with concentrations from the three peaks quantitated on column #1 as 2,200 ug/kg, 420 ug/kg and 440 ug/kg.

The concentrations from column #2 were 470 ug/kg, 460 ug/kg and 590 ug/kg.

During the data validation the largest concentration from column #1, (2,200 ug/kg) was rejected since it was 5X the concentration of the other two peaks and likely due to interference.

A mean of 430 ug/kg was used for the validation for the column 1 concentration. This was reported on FORM I since it was lower than the 510 ug/kg average from column #2.

The percent difference between the concentrations on the two columns was reduced to 18%, eliminating the need for the "P" qualifier.

The data would be much more accurate if the laboratory used 5 peaks to quantitate the Aroclors instead of 3.

Sample HJB-SS-X (E0454-09)

Aroclor 1260 was reported by the laboratory as 490 P ug/kg. The percent difference was 47% with concentrations from the three peaks quantitated on column #1 as 1,600 ug/kg, 380 ug/kg and 450 ug/kg.

The concentrations from column #2 were 400 ug/kg, 520 ug/kg and 560 ug/kg.

During the data validation the largest concentration from column #1, (1,600 ug/kg) was rejected since it was 4X the concentration of the other two peaks and likely due to interference.

A mean of 415 ug/kg was used for the validation for the column 1 concentration. This was reported on FORM I since it was lower than the 490 ug/kg average from column #2.

The percent difference between the concentrations on the two columns was reduced to 18%, eliminating the need for the "P" qualifier.

The data would be much more accurate if the laboratory used 5 peaks to quantitate the Aroclors instead of 3.

No other problems were detected with the sample data.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Inorganic Analyses

Samples Collected July 12, 2006

Samples Received July 14, 2006

Sample Delivery Group: E1005

Laboratory Reference Numbers:

HJB-SB-65-5-7	E1005-01
HJB-SB-65-10-12	E1005-02
HJB-SB-65-10-12 MS	E1005-02 MS
HJB-SB-65-10-12 MD	E1005-02 MD

Soil samples were received for total metals analyses by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibration Verification
 - CRDL Standard
- * - Laboratory Control Sample
 - Serial Dilutions
- * - Calibration Blanks
 - Field Blank
 - Equipment Blank
- * - Preparation Blanks
 - Matrix Spike
 - Duplicate Analyses
- * - ICP Interference Check Sample
- * - Detection Limit Results
- * - Linear Range
- * - Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The problems with the serial dilutions and matrix spike recoveries should be noted. These are described in detail below.

A matrix spike and matrix duplicate were not analyzed for mercury,

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times.

CRDL Standards

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

No compounds were detected in the soil and water preparation blanks associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

A field blank was not analyzed with this sample delivery group.

ICP Interference Check Sample

No problems were detected with the reported ICP Interference Check Sample recoveries. All recoveries were within the 80% - 120% quality assurance limits.

Matrix Spike Recovery

Sample HJB-SB-65-10-12 (E1005-02) was used for the ICP matrix spike. All recoveries were within the 75% - 125% quality assurance limits with the following exceptions:

Analyte	%Rec.
Antimony	29%
Arsenic	70%
Barium	69%
Beryllium	72%
Cadmium	61%
Chromium	70%
Cobalt	66%
Lead	68%

Nickel	66%
Selenium	61%
Thallium	62%
Vanadium	69%
Zinc	68%

The data these analytes should be considered estimated values. Reported concentrations may be underestimated and low concentrations may have been overlooked. The data were flagged with the "J" qualifier.

A matrix spike was not analyzed for mercury,

Matrix Duplicate Analysis

Sample HJB-SB-65-10-12 (E1005-02) was used for the ICP matrix duplicate. All RPDs, which could be accurately calculated were less than 20%.

A matrix duplicate was not analyzed for mercury,

Laboratory Control Sample

No problems were detected with the recoveries of the laboratory control samples.

Serial Dilutions

Sample HJB-SB-65-10-12 (E1005-02) was used for the serial dilution. All of the percent differences that could be accurately calculated were less than 10% with the following exceptions:

Analyte	% Difference.
Aluminum	10.4%
Barium	10.9%
Beryllium	18%
Chromium	20%
Cobalt	25%
Magnesium	21%
Manganese	24%
Nickel	27%
Vanadium	16%
Zinc	27%

The data for these compounds were flagged with the "J" qualifier and should be considered estimated values.

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

No other problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Inorganic Analyses
Samples Collected July 28, 2006
Samples Received July 29, 2006
Sample Delivery Group: E1145
Laboratory Reference Numbers:

HJB-MW-13
HJB-MW-15
HJB-MW-FB

E1145-01
E1145-03
E1145-05

Soil samples were received for total metals analyses by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibration Verification
 - CRDL Standard
- * - Laboratory Control Sample
 - Serial Dilutions
- * - Calibration Blanks
 - Field Blank
 - Equipment Blank
- * - Preparation Blanks
 - Matrix Spike
 - Duplicate Analyses
- * - ICP Interference Check Sample
- * - Detection Limit Results
- * - Linear Range
- * - Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times.

CRDL Standards

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

No compounds were detected in the soil and water preparation blanks associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

Sodium was detected at a concentration greater than the CRDL in the field blank (1,810 ug/l). The sodium concentrations in all of the samples were much too high to be affected by the field blank.

ICP Interference Check Sample

No problems were detected with the reported ICP Interference Check Sample recoveries. All recoveries were within the 80% - 120% quality assurance limits.

Matrix Spike Recovery

A matrix spike was not analyzed with this sample delivery group.

Matrix Duplicate Analysis

A matrix duplicate was not analyzed with this sample delivery group.

Laboratory Control Sample

No problems were detected with the recoveries of the laboratory control samples.

Serial Dilutions

A serial dilution was not analyzed with this sample delivery group.

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

No other problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Inorganic Analyses
Samples Collected July 26th & 27th, 2006
Samples Received July 27th & 28th, 2006
Sample Delivery Group: E1108
Laboratory Reference Numbers:

HJB-MW-7	E1108-01
HJB-MW-2R	E1108-02
HJB-MW-9	E1108-03
HJB-MW-X	E1108-04
HJB-MW-11	E1108-07
HJB-MW-8	E1108-08
HJB-MW-12	E1108-12
HJB-MW-16	E1108-13
HJB-MW-10	E1108-16

Soil samples were received for total metals analyses by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibration Verification
 - CRDL Standard
- * - Laboratory Control Sample
 - Serial Dilutions
- * - Calibration Blanks
 - Field Blank
 - Equipment Blank
- * - Preparation Blanks
 - Matrix Spike
 - Duplicate Analyses
- * - ICP Interference Check Sample
- * - Detection Limit Results
- * - Linear Range
- * - Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times.

CRDL Standards

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

No compounds were detected in the soil and water preparation blanks associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

A field blank was not analyzed with this sample delivery group.

ICP Interference Check Sample

No problems were detected with the reported ICP Interference Check Sample recoveries. All recoveries were within the 80% - 120% quality assurance limits.

Matrix Spike Recovery

A matrix spike was not analyzed with this sample delivery group.

Matrix Duplicate Analysis

A matrix duplicate was not analyzed with this sample delivery group.

Laboratory Control Sample

No problems were detected with the recoveries of the laboratory control samples.

Serial Dilutions

A serial dilution was not analyzed with this sample delivery group.

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

No other problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil and Water Inorganic Analyses
Samples Collected April 12, 2006
Samples Received April 13, 2006
Sample Delivery Group: E0454
Laboratory Reference Numbers:

HJB-SS-1A
HJB-SS-3A
HJB-SS-4A
HJB-SS-8A
HJB-SS-09
HJB-SS-09 MS
HJB-SS-09 MD
HJB-MW-4 Total
HJB-MW-4 Dissolved
HJB-SS-X

E0454-01
E0454-02
E0454-03
E0454-04
E0454-05
E0454-05 MS
E0454-05 MD
E0454-08 Total
E0454-08 Dissolved
E0454-09

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Soil and water samples were received for total metals analyses by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- Data Completeness
- * - Holding Times
- * - Calibration Verification
- CRDL Standard
- * - Laboratory Control Sample
- Serial Dilutions
- * - Calibration Blanks
- Field Blank
- Equipment Blank
- * - Preparation Blanks
- Matrix Spike
- * - Duplicate Analyses
- * - ICP Interference Check Sample
- * - Detection Limit Results
- * - Linear Range
- Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The data for the total and dissolved metals for sample HJB-MW-4 Total (E0454-08) do not agree. The data for these analyses have been technically rejected. It is possible that the data for these two fractions were reversed by the laboratory. The data should be carefully examined to determine if it is usable for this project.

The problems with the serial dilutions and matrix spike recoveries should be noted. These are described in detail below.

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

A matrix spike, matrix duplicate and serial dilution were not analyzed for the one water sample.

Holding Times

All parameters were analyzed within the required holding times.

CRDL Standards

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

No compounds were detected in the soil and water preparation blanks associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

A field blank was not analyzed with this sample delivery group.

ICP Interference Check Sample

No problems were detected with the reported ICP Interference Check Sample recoveries. All recoveries were within the 80% - 120% quality assurance limits.

Matrix Spike Recovery

Soil sample HJB-SS-09 (E0454-05) was used for the matrix spike. All recoveries were within the 75% - 125% quality assurance limits with the following exceptions:

Analyte	%Rec.
Antimony	21%

The data for antimony should be considered estimated. Reported concentrations may be underestimated and low concentrations may have been overlooked. The data for antimony was flagged with the "J" qualifier.

The post digestion spike recovery was within the required limits.

Duplicate Analysis

Soil sample HJB-SS-09 (E0454-05) was used for the matrix duplicate. All RPDs, which could be accurately calculated, were less than 20%.

Laboratory Control Sample

No problems were detected with the recoveries of the soil and water laboratory control standards.

Serial Dilutions

Soil sample HJB-SS-09 (E0454-05) was used for the serial dilution. All of the percent differences that could be accurately calculated were less than 10% with the following exceptions:

Analyte	% Difference.
Aluminum	12%
Barium	20%
Beryllium	18%
Calcium	23%
Chromium	17%
Cobalt	20%
Iron	15%
Lead	20%
Magnesium	17%
Manganese	21%
Nickel	19%
Potassium	10.1%
Vanadium	18%
Zinc	20%

The data for these compounds were flagged with the "J" qualifier and should be considered estimated values.

Instrument Detection Limit

The date of the determination of the instrument detection limits was not noted.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

The data for the total and dissolved metals for sample HJB-MW-4 Total (E0454-08) do not agree. The data for these analyses have been technically rejected. It is possible that the data for these two fractions were reversed by the laboratory. The data should be carefully examined to determine if it is usable for this project.

No other problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Water Inorganic Analyses

Samples Collected October 30th through November 1st, 2006

Samples Received October 31st through November 2nd, 2006

Sample Delivery Group: E1686

Laboratory Reference Numbers:

Collected October 30

MW-11	E1686-01
MW-10	E1686-02
MW-9	E1686-03
MW-12	E1686-04

Collected October 31

MW-A	E1686-09
MW-A MS	E1686-09 MS
MW-A MSD	E1686-09 MSD
MW-7	E1686-10
MW-X	E1686-11
MW-B	E1686-12
MW-C	E1686-13
MW-8	E1686-15
MW-2R	E1686-16
MW-13	E1686-17
MW-15	E1686-18

Collected November 1

MW-14	E1686-19

Water samples were received for total metals analyses by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibration Verification
 - CRDL Standard
- * - Laboratory Control Sample
 - Serial Dilutions
- * - Calibration Blanks
 - Field Blank
 - Equipment Blank
- * - Preparation Blanks
- * - Matrix Spike
- * - Duplicate Analyses
- * - ICP Interference Check Sample
- * - Detection Limit Results
- * - Linear Range
- * - Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

This sample was analyzed with three ICP digestions based upon the date of sample receipt. Sample MW-A (E1686-09) was the designated QC sample for the sample delivery group. All of the QC criteria were within the required limits with the one exception of the iron serial dilution (11%). Only the samples collected on 10/31 were flagged with the "E" qualifier.

All of the sodium data, with the one exception of sample MW-14 (E1686-19), were flagged with the "E" qualifier during the data validation.

Sample MW-14 (E1686-19) was used as a serial dilution in a separate digestion. All of the percent differences in this analysis were within the required limits with the one exception of sodium (11%).

The laboratory did not flag the data for sample MW-14 (E1686-19) with the "E" qualifier, but did flag the sodium data for the samples collected on 10/30. This qualifier was removed during the data validation.

The "E" qualifier was removed from the samples collected on 10/30 during the data validation and it was added to the sodium data for sample MW-14 (E1686-19)

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times.

CRDL Standards

CRDL standards were not analyzed with this sample delivery group. This is required under the NYS DEC ASP protocols.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

No compounds were detected in the soil and water preparation blanks associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL

and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

A field blank was not collected with this sample delivery group.

ICP Interference Check Sample

No problems were detected with the reported ICP Interference Check Sample recoveries. All recoveries were within the 80% - 120% quality assurance limits.

Matrix Spike Recovery

Sample MW-A (E1686-09) of this delivery group was used as the matrix spike.

All recoveries were within the 75% - 125% quality assurance limits.

Matrix Duplicate Analysis

Sample MW-A (E1686-09) of this delivery group was used as the matrix duplicate.

All RPDs that would be accurately calculated were less than 20%.

Laboratory Control Sample

No problems were detected with the recoveries of the laboratory control samples.

Serial Dilution

This sample was analyzed with three ICP digestions based upon the date of sample receipt. Sample MW-A (E1686-09) was the designated QC sample for the sample delivery group. All of the QC criteria were within the required limits with the one exception of the iron serial dilution (11%). Only the samples collected on 10/31 were flagged with the "E" qualifier.

All of the sodium data, with the one exception of sample MW-14 (E1686-19), were flagged with the "E" qualifier during the data validation.

Sample MW-14 (E1686-19) was used as a serial dilution in a separate digestion. All of the percent differences in this analysis were within the required limits with the one exception of sodium (11%).

The laboratory did not flag the data for sample MW-14 (E1686-19) with the "E" qualifier, but did flag the sodium data for the samples collected on 10/30. This qualifier was removed during the data validation.

The "E" qualifier was removed from the samples collected on 10/30 during the data validation and it was added to the sodium data for sample MW-14 (E1686-19)

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

Sample MW-10 (E1686-02)

The run log on page 859 notes that both sodium and potassium were reported from the 5X dilution. Potassium was actually reported from the undiluted analysis.

No other problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Soil Volatile Organic Analyses
Samples Collected July 12, 2006
Samples Received July 14, 2006
Sample Delivery Group: E1005
Laboratory Reference Numbers:

HJB-SB-65-5-7
HJB-SB-65-10-12

E1005-01
E1005-02

Soil samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- * - Data Completeness
- * - GC/MS Tuning
- * - Holding Times
 - Calibrations
 - Laboratory Blanks
 - Trip Blank
 - Storage Blank
 - Equipment Blank
- * - System Monitoring Compound Recoveries
- * - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
 - Instrument Detection Limits
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

The minor problems with the calibrations and laboratory control samples should be noted. These are discussed in detail below.

Holding Times

All of the soil samples were analyzed within 10 days of sample collection.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

System Monitoring Compound Recoveries

All system monitoring compound recoveries were within the required quality assurance limits.

Matrix Spike / Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with this sample delivery group.

Calibrations

The percent RSD of acetone (37%) was above the 30% quality control limit in the one initial calibration associated with the analyses of all of the samples of this delivery group.

Acetone was detected in sample HJB-SB-65-10-12 (E1005-02) at a concentration of 9 ug/kg. This was flagged with the "J" qualifier.

Acetone was not detected in the other sample and the data were not qualified since the %RSD was less than 60%.

The percent difference of trichlorofluoromethane (27%), 1,2-dichloroethane (34%) and 1,2-dibromo-3-chloropropane (36%) were above the 25% quality assurance limit in the 8/15 continuing calibration analysis of both of the samples.

None of these compounds were detected in either of the samples and the data were not qualified since the %D was less than 50%.

Laboratory Control Samples

The recoveries of all compounds in laboratory control sample V1VLCS were within the required limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Bromochloromeethane	132%	128%	70 - 119%		40%
1,1,2-Trichloroethene	134%	130%	66 - 125%		40%
1,1,2,2-Tetrachloroethane		120%	70 - 117%		40%

None of these compounds were detected in any of the samples and the high recoveries did not affect the end use of the data.

All of the target compounds were included in the laboratory control samples.

Method Blanks

A low concentration of methylene chloride (2J ug/kg) was detected in method blank VBLK1V associated with the analyses of both samples.

Methylene chloride was not detected in any of these samples and the blank contamination did not affect the end use of the data.

Trip Blank

A trip blank was not analyzed with this sample delivery group.

Holding Blank

A holding blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

The recoveries of all internal standard were within the required 50% - 150% quality control limits.

Instrument Detection Limits

Instrument detection limits were not included in the analytical report.

Sample Results

No problems were found with the reported results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Water Volatile Organic Analyses
Samples Collected July 28, 2006
Samples Received July 29, 2006
Sample Delivery Group: E1145
Laboratory Reference Numbers:

HJB-MW-13	E1145-01
HJB-MW-14	E1145-02
HJB-MW-15	E1145-03
HJB-MW-4	E1145-04
HJB-MW-4 DL	E1145-04 DL
HJB-MW-FB	E1145-05
HJB-MW-FB RE	E1145-05 RE
HJB-MW-TB	E1145-06

Water samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- * - Data Completeness
- * - GC/MS Tuning
- * - Holding Times
- Calibrations
- * - Laboratory Blanks
 - Trip Blank
 - Field Blank
 - Storage Blank
 - Equipment Blank
 - System Monitoring Compound Recoveries
 - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
- * - Laboratory Control Samples
 - Instrument Detection Limits
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

The minor problems with the internal standards, system monitoring compound recoveries and calibrations should be noted. These are discussed in detail below.

Holding Times

All of the water samples were preserved and analyzed within 14 days of sample collection.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

System Monitoring Compound Recoveries

All system monitoring compound recoveries were within the required quality assurance limits with the following exceptions:

The recovery of the bromofluorobenzene (68%) was less than the 74% quality assurance limit in the initial analyses of sample HJB-MW-4 (E1145-04). This was reanalyzed at a dilution and all of the system monitoring compounds were within the required limits.

The data for the compounds reported from the undiluted analysis were flagged with the "J" qualifier and should be considered estimated values. It is possible that low concentrations were overlooked and reported concentrations underestimated.

The recovery of the dibromofluoromethane system monitoring compound (128%) was above the 117% quality assurance limit in the reanalysis of the field blank.

The data for this sample was reported from the original analysis and the high surrogate recovery in the reanalysis did not affect the end use of the data.

Matrix Spike / Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with this sample delivery group.

Calibrations

The percent RSD of bromomethane (32%) was above the 30% quality control limit in the 7/24 initial calibration associated with the analyses samples MW-13, MW-14 and MW-4.

This compound was not detected in any of these samples and the data were not qualified since the percent RSD was less than 60%.

The percent difference of 4-methyl-2-pentanone (27%), 2-hexanone (27%) and naphthalene (37%) were greater than 25% in the 8/8 continuing calibration associated with the analyses of samples MW-13, MW-14 and MW-4.

None of these compounds were detected in the samples and the data were not qualified since the percent differences were less than 25%.

No problems were detected with the 8/5 initial calibrations associated with the analyses of samples -15, FB, TB, FB RE and MW-4DL

The percent difference of acetone (43%) and 2,2-dichloropropane (34%) were above the 25% quality assurance limit in the 8/09 continuing calibration analysis of samples MW-15, FB and TB.

None of these compounds were detected in the samples and the data were not qualified since the %D was less than 50%.

The percent difference of acetone (45%) and 2,2-dichloropropane (28%) were above the 25% quality assurance limit in the 8/10 continuing calibration analysis of samples FB RE and MW-4DL.

None of these compounds were detected in the samples and the data were not qualified since the %D was less than 50%.

Laboratory Control Samples

The recoveries of all compounds in laboratory control samples were within the required limits.

Method Blanks

No compounds were found in any of the method blanks.

Trip Blank

Low concentrations of chloroform (15 ug/l), bromodichloromethane (6 ug/l) and tetrachloroethene (2 ug/l) were detected in the trip blank.

A low concentration of chloroform (1J ug/l) was detected in the original analysis of sample HJB-MW-4 (E1145-04). This was reported as 5U due to the contamination from the field and trip blanks.

No compounds were detected in any of the other samples and the data were not affected by the field and trip blank contamination.

Field Blank

Low concentrations of chloroform (14 ug/l), bromodichloromethane (5 ug/l) and tetrachloroethene (8 ug/l) were detected in the original analyses of the field blank.

A low concentration of chloroform (1J ug/l) was detected in the original analysis of sample HJB-MW-4 (E1145-04). This was reported as 5U due to the contamination from the field and trip blanks.

No compounds were detected in any of the other samples and the data were not affected by the field and trip blank contamination.

Holding Blank

A holding blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

The recoveries of all internal standard were within the required 50% - 150% quality control limits with the following two exceptions.

The recovery of the 1,2-dichlorobenzene-d4 internal standard in sample HJB-MW-4 (E1145-04), 46%, and HJB-MW-FB (E1145-05), 39% were less than the 50% quality assurance limit.

Sample HJB-MW-4 (E1145-04) was reanalyzed at a 160X dilution and all recoveries were within the required limits.

The compounds that were quantitated against the 1,2-dichlorobenzene-d4 internal standard were flagged with the "J" qualifier and should be considered estimated values.

Sample HJB-MW-FB (E1145-05), was reanalyzed at a without a dilution and the recovery of the 1,2-dichlorobenzene-d4 was again less than the 50% required limit (40%).

It is recommended that the data from the original analysis be used for the final reporting since the internal standard recoveries were not significantly different and the recovery of one of the system monitoring compounds was outside of the quality assurance limit in the reanalysis.

A low concentration of tetrachloroethene (8 ug/l) was detected in the original analysis that was undetected in the reanalysis. A low concentration of naphthalene (3 ug/l) was also detected in the reanalysis that was not found in the initial analysis.

The compounds that were quantitated against the 1,2-dichlorobenzene-d4 internal standard were flagged with the "J" qualifier and should be considered estimated values.

Instrument Detection Limits

Instrument detection limits were not included in the analytical report.

Sample Results

Sample HJB-MW-4 (E1145-04)

This sample was reanalyzed at a 160X dilution due to concentrations of cis-1,2-dichloroethene (340E ug/l), trichloroethene (680 ug/l) and tetrachloroethene (15,000 ug/l).

cis-1,2-Dichloroethene was not detected in the diluted analysis and should be reported as an estimated value from the original analysis.

No other problems were found with the reported results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Water Volatile Organic Analyses
Samples Collected July 26th & 27th, 2006
Samples Received July 27th & 28th, 2006
Sample Delivery Group: E1108
Laboratory Reference Numbers:

HJB-MW-7	E1108-01
HJB-MW-2R	E1108-02
HJB-MW-9	E1108-03
HJB-MW-X	E1108-04
TB0726	E1108-05
HJB-MW-11	E1108-07
HJB-MW-11 MS	E1108-07 MS
HJB-MW-11 MSD	E1108-07 MSD
HJB-MW-8	E1108-08
HJB-MW-3	E1108-10
HJB-MW-1	E1108-11
HJB-MW-12	E1108-12
HJB-MW-16	E1108-13
HJB-MW-10	E1108-16
TB0727	E1108-17

Water samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- * - Data Completeness
- * - GC/MS Tuning
- * - Holding Times
 - Calibrations
- * - Laboratory Blanks
 - Trip Blank
 - Field Blank
 - Storage Blank
 - Equipment Blank
- * - System Monitoring Compound Recoveries
- * - Internal Standard Recoveries
- * - Matrix Spike / Matrix Spike Duplicate
- * - Laboratory Control Samples
 - Instrument Detection Limits
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

No problems were detected that would affect the end use of the data.

Holding Times

All of the water samples were preserved and analyzed within 14 days of sample collection.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

System Monitoring Compound Recoveries

All system monitoring compound recoveries were within the required quality assurance limits.

Matrix Spike / Matrix Spike Duplicate

Sample HJB-MW-11 (E1108-07) was used as the matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits.

Calibrations

No problems were detected with the one initial calibration associated with the analyses of this sample delivery group.

The percent difference of acetone (30%) was above the 25% quality assurance limit in the 8/06 continuing calibration analysis of sample -07

This compound was not detected in the sample and the data were not qualified since the %D was less than 50%.

The percent difference of 2,2-dichloropropane (32%) was above the 25% quality assurance limit in the 8/05 continuing calibration analysis of samples -01, -02, -03, -04, -05, -08, -10, -11, -12, -13, -16 and -17.

This compound was not detected in the samples and the data were not qualified since the %D was less than 50%.

Laboratory Control Samples

The recoveries of all compounds in laboratory control samples were within the required limits with the one exception of 1,2-dibromo-3-chloropropane (130%): This was just above the 126% quality assurance limit. It was associated with the analyses of samples -01, -02, -03, -04, -05, -08, -10, -11, -12, -13, -16 and -17.

This compound was not detected in any of the samples and the data were not qualified since the high recovery does not affect the end use of undetected data.

Method Blanks

No compounds were found in any of the method blanks.

Trip Blank

Low concentrations of chloroform (14 & 12ug/l) and bromodichloromethane (5 ug/l) were detected in both trip blanks.

Neither compound was detected in any of the samples and the data were not affected by the field and trip blank contamination.

Field Blank

A field blank was not analyzed with this sample delivery group.

Holding Blank

A holding blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

All of the recoveries of all internal standard were within the required 50% - 150% quality control limits.

Instrument Detection Limits

Instrument detection limits were not included in the analytical report.

Sample Results

No problems were found with the reported results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Water Volatile Organic Analyses

Samples Collected October 30th through November 1st, 2006

Samples Received October 31st through November 2nd, 2006

Sample Delivery Group: E1686

Laboratory Reference Numbers:

Collected October 30

MW-11	E1686-01
MW-10	E1686-02
MW-9	E1686-03
MW-12	E1686-04
MW-1	E1686-05
MW-3	E1686-06
TB103006	E1686-07

Collected October 31

MW-4	E1686-08
MW-4 DL	E1686-08 DL
MW-A	E1686-09
MW-A MS	E1686-09 MS
MW-A MSD	E1686-09 MSD
MW-7	E1686-10
MW-X	E1686-11
MW-B	E1686-12
MW-C	E1686-13
TB103106	E1686-14
MW-8	E1686-15
MW-2R	E1686-16
MW-13	E1686-17
MW-15	E1686-18

Collected November 1

MW-14	E1686-19
TB110106	E1686-20

Water samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- * - Data Completeness
- * - GC/MS Tuning
- * - Holding Times
 - Calibrations
 - Laboratory Blanks
- * - Trip Blank
 - Field Blank
 - Storage Blank
 - Equipment Blank
- * - System Monitoring Compound Recoveries
- * - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
 - Instrument Detection Limits
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

The minor problems with the method blank, matrix spike and laboratory control samples should be noted. These are discussed in detail below.

Holding Times

All of the water samples were preserved and analyzed within 14 days of sample collection.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

System Monitoring Compound Recoveries

All system monitoring compound recoveries were within the required quality assurance limits.

Calibrations

The percent RSD of 2-hexanone (49%) was above the 30% quality control limit in the 10/21 initial calibration associated with the analyses sample -10.

This compound was not detected in the sample and the data were not qualified since the percent RSD was less than 60%.

No problems were detected with either of the other two initial calibration.

The percent difference of dichlorodifluoromethane (30%) greater than 25% in the 11/8 continuing calibration associated with the analyses of samples -08DL, -11, -12, -13, -17, -18, -19 and -20.

This compound was not detected in the samples and the data were not qualified since the percent difference was less than 25%.

The percent difference of dichlorodifluoromethane (36%), chloromethane (27%) and acetone (40%) were above the 25% quality assurance limit in the 11/02 continuing calibration analysis of sample-10.

None of these compounds were detected in the sample and the data were not qualified since the %D was less than 50%.

Matrix Spike / Matrix Spike Duplicate

Sample MW-A (E1686-09) was used as the matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD Limits
Bromomethane	126%		73-122%	40%

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This compound was not detected in any of the samples and the high recovery does not affect the use of undetected data.

Laboratory Control Samples

The recoveries of all compounds in laboratory control sample V2XLCS were within the required limits with the exception of hexachlorobutadiene (116%). This laboratory control sample was associated with the analyses of samples -01, -02, -03, -04, -05, -06, -07 and -08.

This compound was not detected in any of the samples and the high recovery does not affect the use of undetected data.

This laboratory control sample was not analyzed in duplicate.

The recoveries of all compounds in laboratory control sample V2LLCS/ V2LLCS were within the required limits with the exception of hexachlorobutadiene (116%). This laboratory control sample was associated with the analyses of samples -08DL, -11, -12, -13, -17, -18, -19 and -20.

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Dichlorodifluoromethane			48 - 135%	49	40%
Chloromethane		126%	60 - 118%		40%
Vinyl Chloride		118%	65 - 113%		40%

These compounds were not detected in any of the samples and the high recoveries and RPD do not affect the use of undetected data.

The recoveries of all compounds in laboratory control sample V6ILCS were within the required limits with the exception of acetone (164%). This laboratory control sample was associated with the analyses of sample -10

This compound was not detected in the sample and the high recovery does not affect the use of undetected data.

This laboratory control sample was not analyzed in duplicate.

Method Blanks

Low concentrations of methylene chloride (1J ug/l), m,p-xylene (1J ug/l), 1,2,4-trimethylbenzene (1J ug/l), n-butylbenzene (1J ug/l), 1,2,4-trichlorobenzene (1J ug/l), hexachlorobutadiene (2J ug/l) naphthalene (1J ug/l) and 1,2,3-trichlorobenzene 1J ug/l) were detected in method blank BVLK2L associated with the analyses of samples -08DL, -11, -12, -13, -17, -18, -19 and -20.

When a blank contaminant was detected in an associated sample at a concentration less than the CRDL it was reported at the CDRL and flagged with the "U" qualifier.

When a blank contaminant was detected in an associated sample at a concentration above the CRDL, but less than 5X the concentration in the method blank, it was flagged with the "U" qualifier.

Data were not qualified if the concentration of the blank contaminant in the samples was greater than 5X the concentration of the compound in the method blank.

A factor of 10X the concentration in the blank was used to qualify methylene chloride.

No compounds were detected in any of the other method blanks.

Trip Blank

No compounds were detected in any of the three trip blanks.

Field Blank

A field blank was not collected with this sample delivery group.

Holding Blank

A holding blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

The recoveries of all internal standards were within the required 50% - 150% quality control limits.

Instrument Detection Limits

Instrument detection limits were not included in the analytical report.

Sample Results

Sample MW-4 (E1686-08)

This sample was reanalyzed at an 800X dilution due to concentrations of cis-1,2-dichloroethene (460EJ ug/l), trichloroethene (1,600 ug/l) and tetrachloroethene (19,000 ug/l).

cis-1,2-Dichloroethene was not detected in the diluted analysis and should be reported as an estimated value from the original analysis.

No other problems were found with the reported results of any of the samples of this delivery group.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Soil Semivolatile Organic Analyses
Samples Collected July 12, 2006
Samples Received July 14, 2006
Sample Delivery Group: E1005
Laboratory Reference Numbers:

HJB-SB-65-5-7
HJB-SB-65-10-12

E1005-01
E1005-02

Soil samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
 - Holding Times
 - Calibrations
- * - Laboratory Blanks
 - Field Blank
- * - Surrogate Compound Recoveries
- * - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
- * - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The problems with the holding times and calibrations should be noted. These are described in detail below.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Holding Times

Both samples were extracted 7 days after the 7 day holding time from date of collection (Region II Technical Holding Time).

The data for all of the samples were flagged with the "J" qualifier and should be considered estimated values.

All extracts were analyzed within 40 days of the date of extraction.

Surrogate Recoveries

All surrogate recoveries were within the required quality control limits.

Method Blanks

No compounds were detected in the method blank associated with the analyses of the two samples.

Matrix Spike / Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with this sample delivery group.

Laboratory Control Samples

All recoveries in LCS/LCSD S1ELCS were within the required limits.

Calibrations

No problems were detected with the 7/25 initial calibration.

The percent difference of 2,4-dinitrophenol (54%) and 4,6-dinitro-2-methylphenol (33%) were above the 25% quality assurance limit in the 7/27 continuing calibration associated with the analyses of both samples.

The data for 2,4-dinitrophenol were flagged with the "J" qualifier since the percent difference was greater than 50%. Since the relative response factor had decreased, it is possible that low concentrations of this compound may have been overlooked. It was not detected in either of the samples.

4,6-Dinitro-2-methylphenol was not detected in either of the samples and the data were not qualified since the percent difference was less than 50%.

The Semivolatile Continuing Calibration Check summary form (FORM VII) was not included for the 7/28 continuing calibration associated with the analyses of the method blank and laboratory control sample.

This does not affect the end use of the data.

All of the RRFs were greater than 0.05

Field Blank

A field blank was not collected with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits.

Sample Results

No other problems were detected with any of the sample results.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Water Semivolatile Organic Analyses
Samples Collected July 28, 2006
Samples Received July 29, 2006
Sample Delivery Group: E1145
Laboratory Reference Numbers:

HJB-MW-13	E1145-01
HJB-MW-14	E1145-02
HJB-MW-15	E1145-03
HJB-MW-4	E1145-04
HJB-MW-FB	E1145-05

Water samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
- * - Holding Times
 - Calibrations
- * - Laboratory Blanks
 - Field Blank
- * - Surrogate Compound Recoveries
- * - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The minor problems with the laboratory control samples, field blank and calibrations should be noted. These are described in detail below.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Holding Times

All samples were extracted before the 7 day holding time from date of collection (Region II Technical Holding Time). All extracts were analyzed within 40 days of the date of extraction.

Surrogate Recoveries

All surrogate recoveries were within the required quality control limits.

Method Blanks

No compounds were detected in the method blank associated with the analyses of the two samples.

Matrix Spike / Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with this sample delivery group.

Laboratory Control Samples

All recoveries in LCS/LCSD S3OLCS were within the required limits with the following exceptions:

Compound	LCS %Rec	LCSD %Rec	QC Limits	RPD	Limits
2,4-Dimethylphenol		12%	14-109%		40%
N-Nitroso-di-n-propylamine		124%	48-121%		40%
2,4-Dinitrophenol			0-144%	61%	40%
Chrysene	140%	136%	53-123%		40%
Dibenzo(a,h)anthracene	146%	138%	60-122%		40%

The data for 2,4-dimethylphenol were flagged with the "J" qualifier in all of the samples. This compound was not detected in any of the samples and it is possible that low concentrations were overlooked.

Calibrations

The percent RSD of 2,4-dinitrophenol (32%) was above the 30% quality assurance limit in the one initial calibration associated with the analyses of these samples.

This compound was not detected in any of the samples and the data were not qualified since the %RSD was less than 60%.

No problems were detected with the one continuing calibration associated with the analyses of these samples.

All of the RRFs were greater than 0.05

Field Blank

A low concentration of an unknown non-target compound (5J ug/l) eluting at 17.23 minutes was detected in the field blank.

A low concentration of this compound (5J ug/l) was detected in sample HJB-MW-4. It was flagged with the "R" qualifier due to its presence in the field blank.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits.

Sample Results

No other problems were detected with any of the sample results.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Water Semivolatile Organic Analyses
Samples Collected July 26th & 27th, 2006
Samples Received July 27th & 28th, 2006
Sample Delivery Group: E1108
Laboratory Reference Numbers:

HJB-MW-7	E1108-01
HJB-MW-2R	E1108-02
HJB-MW-9	E1108-03
HJB-MW-X	E1108-04
HJB-MW-11	E1108-07
HJB-MW-11 MS	E1108-07 MS
HJB-MW-11 MSD	E1108-07 MSD
HJB-MW-8	E1108-08
HJB-MW-3	E1108-10
HJB-MW-1	E1108-11
HJB-MW-12	E1108-12
HJB-MW-16	E1108-13
HJB-MW-10	E1108-16

Water samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
- * - Holding Times
- * - Calibrations
 - Laboratory Blanks
 - Field Blank
- * - Surrogate Compound Recoveries
- * - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The minor problems with the matrix spike and laboratory control samples should be noted. These are described in detail below.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Holding Times

All samples were extracted before the 7 day holding time from date of collection (Region II Technical Holding Time). All extracts were analyzed within 40 days of the date of extraction.

Surrogate Recoveries

All surrogate recoveries were within the required quality control limits.

Method Blanks

No target compounds were detected in the method blank associated with the analyses of the samples.

An low concentration (6J ug/l) of an unknown nontarget compound eluting at 21.03 minutes was detected in method blank SBLK3N. This was not found in any of the associated samples.

Matrix Spike / Matrix Spike Duplicate

Sample HJB-MW-11 (E1108-07) was used as the matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
2,4-Dimethylphenol			14-109%	52%	40%
Hexachlorocyclopentadiene	104%		34-103%		40%
Chrysene	136%	128%	53-123%		40%
Dibenzo(a,h)anthracene	142%	134%	60-122%		40%

The data for 2,4-dimethylphenol were not qualified for the high RPD since the compound was not detected in any of the samples.

None of the other compounds with high recoveries were detected in the samples and the data were not qualified since the high recoveries do not affect the end use of the data.

Laboratory Control Samples

All recoveries in LCS/LCSD S3ILCS were within the required limits with the following exceptions:

Compound	LCS %Rec	LCSD %Rec	QC Limits	RPD	Limits
Hexachlorocyclopentadiene	108%		34-105%		40%
N-Nitrosodiphenylamine	128%	126%	48-121%		40%
Chrysene	138%	136%	53-123%		40%
Dibenzo(a,h)anthracene	132%	130%	60-122%		40%

All recoveries in LCS3NLCS were within the required limits with the following exceptions:

Compound	LCS %Rec	QC Limits
Chrysene	134%	53-123%
Dibenzo(a,h)anthracene	138%	60-122%

This laboratory control sample was not analyzed in duplicate.

None of the compounds with high recoveries were detected in the samples and the data were not qualified since the high recoveries do not affect the end use of the data.

Calibrations

The percent RSD of 2,4-dinitrophenol (32%) was above the 30% quality assurance limit in the one initial calibration associated with the analyses of these samples.

This compound was not detected in any of the samples and the data were not qualified since the %RSD was less than 60%.

No problems were detected with the one continuing calibration associated with the analyses of these samples.

All of the RRFs were greater than 0.05

Field Blank

A field blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits.

Sample Results

No other problems were detected with any of the sample results.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Water Semivolatile Organic Analyses

Samples Collected October 30th through November 1st, 2006

Samples Received October 31st through November 2nd, 2006

Sample Delivery Group: E1686

Laboratory Reference Numbers:

Collected October 30

MW-11	E1686-01
MW-10	E1686-02
MW-9	E1686-03
MW-12	E1686-04

Collected October 31

MW-A	E1686-09
MW-A MS	E1686-09 MS
MW-A MSD	E1686-09 MSD
MW-7	E1686-10
MW-X	E1686-11
MW-B	E1686-12
MW-C	E1686-13
MW-8	E1686-15
MW-2R	E1686-16
MW-13	E1686-17
MW-15	E1686-18

Collected November 1

MW-14	E1686-19

Water samples were validated for analyses of the semivolatile organic TCL analyte list by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - GC/MS Tuning
- * - Holding Times
 - Calibrations
- * - Laboratory Blanks
 - Field Blank
- * - Surrogate Compound Recoveries
- * - Internal Standard Recoveries
 - Matrix Spike / Matrix Spike Duplicate
- * - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The minor problems with the matrix spike and calibrations should be noted. These are described in detail below.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Holding Times

All samples were extracted before the 7 day holding time from date of collection (Region II Technical Holding Time). All extracts were analyzed within 40 days of the date of extraction.

Surrogate Recoveries

All surrogate recoveries were within the required quality control limits.

Method Blanks

No compounds were detected in the method blank associated with the analyses of the two samples.

Matrix Spike / Matrix Spike Duplicate

Sample MW-A (E1686-09) was used as the matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Hexachlorocyclopentadiene	26%	32%	34-103%		40%
2,4-Dinitrophenol				127%	40%
4,5-Dinitro-2-methylphenol				60%	40%
Pentachlorophenol				41%	40%

The data for hexachlorocyclopentadiene were flagged with the "J" qualifier. This compound was not detected in any of the samples and it is possible that low concentrations were overlooked.

None of the compounds with the high RPDs were detected in any of the samples and the high RPDs did not affect the end use of the data. The data were not qualified for the high RPDs.

Laboratory Control Samples

All recoveries in LCS were within the required limits.

A laboratory control sample duplicate was not analyzed.

Calibrations

No problems were detected with the one initial calibration associated with the analyses of these samples.

No problems were found with the 1/20 continuing calibration.

The percent difference of hexachlorocyclopentadiene (56%) and 2,4-dinitrophenol (32%) were above the 25% quality assurance limit in the 11/21 continuing calibration associated with the analyses of sample -19.

The data for hexachlorocyclopentadiene was flagged with the "J" qualifier since the percent difference was greater than 50%. This compound was not detected in the sample.

2,4-Dinitrophenol was not detected in any of the samples and the data were not qualified since the %D was less than 50%.

All of the RRFs were greater than 0.05

Field Blank

A field blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits.

Sample Results

No other problems were detected with any of the sample results.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Water Wet Chemistry Analyses
Samples Collected July 28, 2006
Samples Received July 29, 2006
Sample Delivery Group: E1145
Laboratory Reference Numbers:

HJB-MW-13	E1145-01
HJB-MW-13 MS	E1145-01 MS
HJB-MW-13 MSD	E1145-01 MSD

Water samples were received for wet chemistry analyses by NYS DEC ASP protocols.
A complete analytical validation was performed based upon the following parameters:

- Hardness, by calculation
- Chloride
- * - Nitrogen, Nitrate (as N)
- Nitrogen, Nitrite (as N)
- * - Sulfate
- Organic Carbon, Total - Dissolved
- * - Alkalinity, Total (as CaCO₃)
- * - Total Dissolved Solids
- Carbon Dioxide, Free
- * - pH
- * - Nitrogen (TKN)
- Ferrous Iron

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The laboratory's case narrative notes:

Please note that dissolved organic carbon was detected in sample HJB-MW-13, but no total organic carbon was detected. The sample was reanalyzed with similar findings.

The problems with the matrix spike recoveries for chloride, nitrite and ferrous iron should be noted. These are described in detail below.

Raw data for the free carbon dioxide and hardness calculations were not found in the copy of the report submitted for validation.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times with the one exception of ferrous iron which was analyzed 1 hour beyond the 24 hour holding time. The one hour excursion does not significantly affect the end use of the data..

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

None of the analytes were detected in any of the preparation blanks at concentrations above the reporting limits.

Calibration Blanks

None of the analytes were detected in any of the calibration blanks at concentrations above the reporting limits.

Field Blank

A field blank was not analyzed with this sample delivery group.

Matrix Spike and Matrix Spike Duplicate

Sample HJB-MW-13 (E1145-01) of this delivery group was used as the matrix spike and matrix spike duplicate for the sample collected 7/26. All recoveries were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Nitrite	0%	NA	80-120%		20%
Chloride	0%	213%	80-120%		20%
Ferrous Iron	67%	%	75-125%		20%

The chloride matrix spike was not recovered since the concentration of chloride in the sample was 1,085 mg/l yet only 16 mg/l was added to the spike. The laboratory should have spiked this analyte with a much higher chloride concentration.

The chloride data were not qualified for the lack of matrix spike recovery.

The data for nitrite and ferrous iron were flagged with the "NJ" qualifiers. It is possible that low concentrations may have been overlooked. Neither analytes was detected in the sample.

Laboratory Control Sample

No problems were detected with the recoveries of the laboratory control samples.

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

The laboratory's case narrative notes:

Please note that dissolved organic carbon was detected in sample HJB-MW-13, but no total organic carbon was detected. The sample was reanalyzed with similar findings.

No other problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Water Wet Chemistry Analyses
Samples Collected July 26th & 27th, 2006
Samples Received July 27th & 28th, 2006
Sample Delivery Group: E1108
Laboratory Reference Numbers:

HJB-MW-7	E1108-01
HJB-MW-2R	E1108-02
HJB-MW-9	E1108-03
HJB-MW-X	E1108-04
HJB-MW-X MS	E1108-04 MS
HJB-MW-XMSD	E1108-04 MSD
HJB-MW-7	E1108-06 (ferrous Fe only)
HJB-MW-11	E1108-07
HJB-MW-8	E1108-08
HJB-MW-7	E1108-06 (ferrous Fe only)
HJB-MW-2R	E1108-09
HJB-MW-16	E1108-13
HJB-MW-14	E1108-14 (ferrous Fe only)
HJB-MW-X	E1108-15 (ferrous Fe only)
HJB-MW-10	E1108-16

Water samples were received for wet chemistry analyses by NYS DEC ASP protocols.
A complete analytical validation was performed based upon the following parameters:

- Hardness, by calculation
- Chloride
- * - Nitrogen, Nitrate (as N)
- Nitrogen, Nitrite (as N)
- * - Sulfate
- * - Organic Carbon, Total - Dissolved
- * - Alkalinity, Total (as CaCO₃)
- * - Total Dissolved Solids
- Carbon Dioxide, Free
- * - pH
- * - Nitrogen (TKN)
- Ferrous Iron

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The problems with the matrix spike recoveries for chloride, nitrite and ferrous iron should be noted. These are described in detail below.

Raw data for the free carbon dioxide and hardness calculations were not found in the copy of the report submitted for validation.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

None of the analytes were detected in any of the preparation blanks at concentrations above the reporting limits.

Calibration Blanks

None of the analytes were detected in any of the calibration blanks at concentrations above the reporting limits.

Field Blank

A field blank was not analyzed with this sample delivery group.

Matrix Spike and Matrix Spike Duplicate

Sample HJB-MW-X (E1108-04) of this delivery group was used as the matrix spike and matrix spike duplicate for the sample collected 7/26. All recoveries were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Nitrite	55%	66%	80-120%		20%
Chloride	227%	242%	80-120%		20%

Sample HJB-MW-7 (E1108-06) of this delivery group was used as the matrix spike and matrix spike duplicate for the sample collected 7/27. All recoveries were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Ferrous Iron	47%	26%	75-125%		20%

Note: Ferrous iron was the only parameter analyzed for QC for this sample.

The data for chloride, nitrite and ferrous iron were flagged with the "NJ" qualifiers. It is possible that low concentrations may have been overlooked and reported concentrations underestimated.

A matrix spike was not analyzed for TKN

Laboratory Control Sample

No problems were detected with the recoveries of the laboratory control samples.

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Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

No problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
Henry Johnson Boulevard Properties

Water Wet Chemistry Analyses

Samples Collected October 30th through November 1st, 2006

Samples Received October 31st through November 2nd, 2006

Sample Delivery Group: E1686

Laboratory Reference Numbers:

Collected October 30

MW-11	E1686-01
MW-10	E1686-02
MW-9	E1686-03
MW-12	E1686-04

Collected October 31

MW-A	E1686-09
MW-A MS	E1686-09 MS
MW-A MSD	E1686-09 MSD
MW-7	E1686-10
MW-X	E1686-11
MW-B	E1686-12
MW-C	E1686-13
MW-8	E1686-15
MW-2R	E1686-16
MW-13	E1686-17
MW-15	E1686-18

Collected November 1

MW-14	E1686-19

Water samples were received for wet chemistry analyses by NYS DEC ASP protocols.
A complete analytical validation was performed based upon the following parameters:

- Chloride
- * - Nitrogen, Nitrate (as N)
- Nitrogen, Nitrite (as N)
- * - Sulfate
- * - Organic Carbon, Total - Dissolved
- * - Alkalinity, Total (as CaCO₃)
- Ferrous Iron
- Carbon Dioxide, Free
- * - pH

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The laboratory's case narrative states:

For samples MW-8 and MW-14, nitrite was detected above the instrument calibration range. The samples were re-analyzed at dilution with no nitrite detected. The nitrite in the initial analysis is due to high concentration of the chloride.

The problems with the ferrous iron holding times and matrix spike recoveries for chloride and ferrous iron should be noted. These are described in detail below.

Raw data for the free carbon dioxide calculations was not found in the copy of the report submitted for validation.

No other problems were found that would significantly affect the end use of the data. Minor issues that affect the data are noted below.

Holding Times

All parameters were analyzed within the required holding times with the one exception of ferrous iron which has a 24 hour holding time.

The samples collected on 10/30 and 11/1 were analyzed one day beyond holding time for ferrous iron. The data for these analyses were flagged with the "J" qualifier. It is possible that very low concentrations were overlooked and reported concentrations underestimated.

Initial and Continuing Calibrations

No problems were detected with any of the calibrations associated with this sample delivery group.

Preparation Blank

None of the analytes were detected in any of the preparation blanks at concentrations above the reporting limits.

Calibration Blanks

None of the analytes were detected in any of the calibration blanks at concentrations above the reporting limits.

Field Blank

A field blank was not analyzed with this sample delivery group.

Matrix Spike and Matrix Spike Duplicate

Sample MW-11 (E1686-01) of this delivery group was used as the matrix spike and matrix spike duplicate for samples collected 10/30. All recoveries were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Ferrous Iron	61%	60%	75-125%		20%

Note: Ferrous iron was the only parameter analyzed for QC for this sample.

Sample MW-A (E1686-09) of this delivery group was used as the matrix spike and matrix spike duplicate for the sample collected 10/31. All recoveries were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Nitrite	162%	163%	80-120%		20%
Chloride	8%	3%	80-120%		20%
Ferrous Iron	13%	10%	75-125%		20%

Sample MW-14 (E1686-19) of this delivery group was used as the matrix spike and matrix spike duplicate for the sample collected 1/11. All recoveries were within the quality assurance limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
Ferrous Iron	28%	27%	75-125%		20%

Note: Ferrous iron was the only parameter analyzed for QC for this sample.

Nitrite was not detected in any of the samples and the high recovery does not affect the end use of the data.

The data for chloride and ferrous iron were flagged with the "NJ" qualifiers. It is possible that low concentrations may have been overlooked and reported concentrations underestimated.

Laboratory Control Sample

No problems were detected with the recoveries of the laboratory control samples.

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were found with the linear ranges.

Sample Results

No problems were detected with any of these samples.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Water Dissolved Gas Analyses – RSK-175
Samples Collected July 28, 2006
Samples Received July 29, 2006
Sample Delivery Group: E1145
Laboratory Reference Numbers:

HJB-MW-13

E1145-01

Water samples were validated for analyses of methane, ethane and ethene by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibrations
 - Matrix Spike / Matrix Spike Duplicate
- * - Laboratory Blanks
 - Field Blank
- * - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

No problems were detected with the analyses of these samples.

Holding Times

All samples were extracted before the 14 day holding time from date of collection.

Method Blanks

No target compounds were detected in the method blanks associated with the analyses of the samples.

Laboratory Control Samples

All recoveries were within the required limits (75% - 125%)

Matrix Spike / Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed for this sample delivery group.

Calibrations

All percent RSDs and percent differences in the initial and continuing calibrations were less than 25%.

Sample Results

No other problems were detected with any of the sample results.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Water Dissolved Gas Analyses – RSK-175
Samples Collected July 26th & 27th, 2006
Samples Received July 27th & 28th, 2006
Sample Delivery Group: E1108
Laboratory Reference Numbers:

HJB-MW-7	E1108-01
HJB-MW-2R	E1108-02
HJB-MW-9	E1108-03
HJB-MW-X	E1108-04
HJB-MW-11	E1108-07
HJB-MW-8	E1108-08
HJB-MW-3	E1108-10
HJB-MW-1	E1108-11
HJB-MW-12	E1108-12
HJB-MW-16	E1108-13
HJB-MW-10	E1108-16

Water samples were validated for analyses of methane, ethane and ethene by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibrations
 - Matrix Spike / Matrix Spike Duplicate
- * - Laboratory Blanks
 - Field Blank
- * - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

No problems were detected with the analyses of these samples.

Holding Times

All samples were extracted before the 14 day holding time from date of collection.

Method Blanks

No target compounds were detected in the method blanks associated with the analyses of the samples.

Matrix Spike / Matrix Spike Duplicate

A matrix spike and matrix spike duplicate was not analyzed with this sample delivery group.

Laboratory Control Samples

All recoveries were within the required limits (75% - 125%)

Calibrations

All percent RSDs and percent differences in the initial and continuing calibrations were less than 25%.

Sample Results

No other problems were detected with any of the sample results.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Henry Johnson Boulevard Properties

Water Dissolved Gas Analyses – RSK-175

Samples Collected October 30th through November 1st, 2006

Samples Received October 31st through November 2nd, 2006

Sample Delivery Group: E1686

Laboratory Reference Numbers:

Collected October 30

MW-11	E1686-01
MW-10	E1686-02
MW-9	E1686-03
MW-12	E1686-04

Collected October 31

MW-A	E1686-09
MW-A MS	E1686-09 MS
MW-A MSD	E1686-09 MSD
MW-7	E1686-10
MW-X	E1686-11
MW-B	E1686-12
MW-C	E1686-13
MW-8	E1686-15
MW-2R	E1686-16
MW-13	E1686-17
MW-15	E1686-18

Collected November 1

MW-14	E1686-19

Water samples were validated for analyses of methane, ethane and ethene by the US EPA Region II checklist. A complete analytical validation was performed based upon the following parameters:

- * - Data Completeness
- * - Holding Times
- * - Calibrations
- * - Matrix Spike / Matrix Spike Duplicate
 - Laboratory Blanks
 - Field Blank
- * - Laboratory Control Samples
- * - Compound Identification
- * - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

No problems were detected with the analyses of these samples.

Holding Times

All samples were analyzed before the 14 day holding time from date of collection.

Method Blanks

No target compounds were detected in the method blanks associated with the analyses of the samples.

Laboratory Control Samples

All recoveries were within the required limits (75% - 125%)

Matrix Spike / Matrix Spike Duplicate

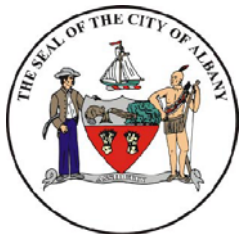
Sample MW-A (E1686-09) was used as the matrix spike and matrix spike duplicate. All recoveries were within the 70% - 130% quality control limits.

Calibrations

All percent RSDs and percent differences in the initial and continuing calibrations were less than 25%.

Sample Results

No problems were detected with any of the sample results.



Albany Community Development Agency
Remedial Investigation / Alternatives Analysis Report

APPENDIX

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Analytical Reporting Forms

