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Contaminant Removal Report
Lehigh Valley Railroad Site
NYSDEC Site No. 915071

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SECTION 1 INTRODUCTION

1.1 Project Background

The Lehigh Valley Railroad Site is comprised of three parcels of land located in South Buffalo, Erie County, New York (refer to Figure 1). The Lehigh Valley Railroad Company is the current owner of the property. Parcel 1 of the Lehigh Valley Railroad (LVRR) Site is classified as a Class 2 Hazardous Waste Site due to the presence of waste material found by the New York State Department of Transportation (NYSDOT) in 1996 during realignment of Tifft Street Bridge and construction of a wetland. The contaminated material was covered by an HDPE liner and several feet of clean soil.

The suspected area of concern where NYSDOT identified contaminated material was estimated to be approximately 37 feet wide by 40 feet long in the central northern portion of the site. To confirm the suspected location of contamination at Parcel 1 (the site), Honeywell International, Inc. (Honeywell) contracted Parsons in March 1998 to complete test excavations at five locations around the perimeter of the HDPE covered area (Figure 2). Based on discussions with personnel from the NYSDOT, the greatest concentration of contamination was encountered in the central northern portion of the covered area. Test pits were excavated perpendicular to the covered area to a depth of 5 feet or until native soil or visibly uncontaminated material was identified. Test excavations extended away from the covered area until the presence of contamination could not be visibly identified. No measurable volumes of contaminated material were encountered during the test pit excavation. At each of the test pits locations, soil samples were collected of the visibly clean material and the most visibly contaminated zones. Samples were analyzed for the presence of volatile organic compounds (VOCs) by EPA Method 8260, and semi-volatile organic compounds (SVOCs) by EPA Method 8270.

Additional direct-push soil sampling and chemical analysis was conducted in September 2000. Analytical data was collected and used to define the limits of the area to be excavated. In general, direct-push borings were advanced, as needed, until the visual limits of the contamination were established. Based on the screening criteria, the area defined as impacted was approximately 1,800 square feet, with an approximate depth range of four to eight feet below ground surface (bgs).

A secondary objective of the September 2000 sampling was to evaluate the effectiveness of using visual observation as a guide in excavating the contaminated material from the area of concern. Of the 28 samples collected in September 2000, analytical results generally correlated to the visual definition of contamination based on field screening and techniques and observations. Sample location 18A was selected for TCLP analysis, based upon the photoionization detector (PID) readings and visual observation of the sample, which appeared to have small amounts of green coloration. TCLP analysis for sample 18A indicated that the material in that area of the proposed excavation would likely be considered hazardous. In March 2001, further characterization was conducted to estimate the extent of hazardous contamination found in the vicinity of Sample 18A (the sample location is depicted on Figure 2). The analytical results indicated no detections of the analytes in any of the samples submitted. This sampling refined the limits of the proposed area of excavation.

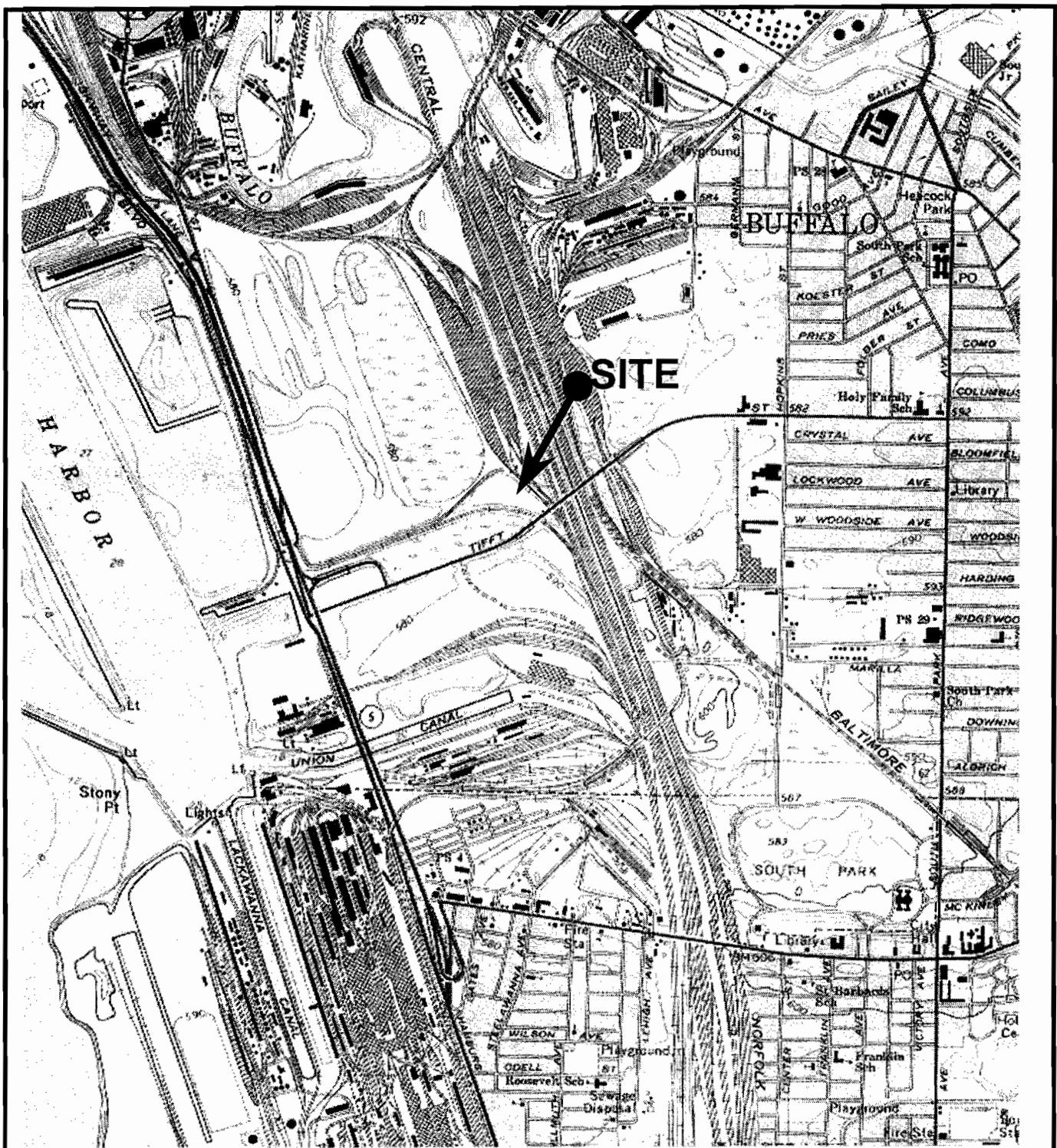


Figure 1



QUADRANGLE LOCATION
LONGITUDE: 78° 43' 00"
LATITUDE: 42° 53' 30"

SOURCE: U.S.G.S. 7.5 SERIES LANCASTER, NEW YORK
(TOPOGRAPHIC), 1965

Lehigh Valley Railroad Site SITE LOCATION MAP

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DESIGN * RESEARCH * PLANNING
180 LAWRENCE BELL DRIVE - SUITE 104 * WILLIAMSVILLE, N.Y. 14221 * 716/633-7074
OFFICES IN PRINCIPAL CITIES

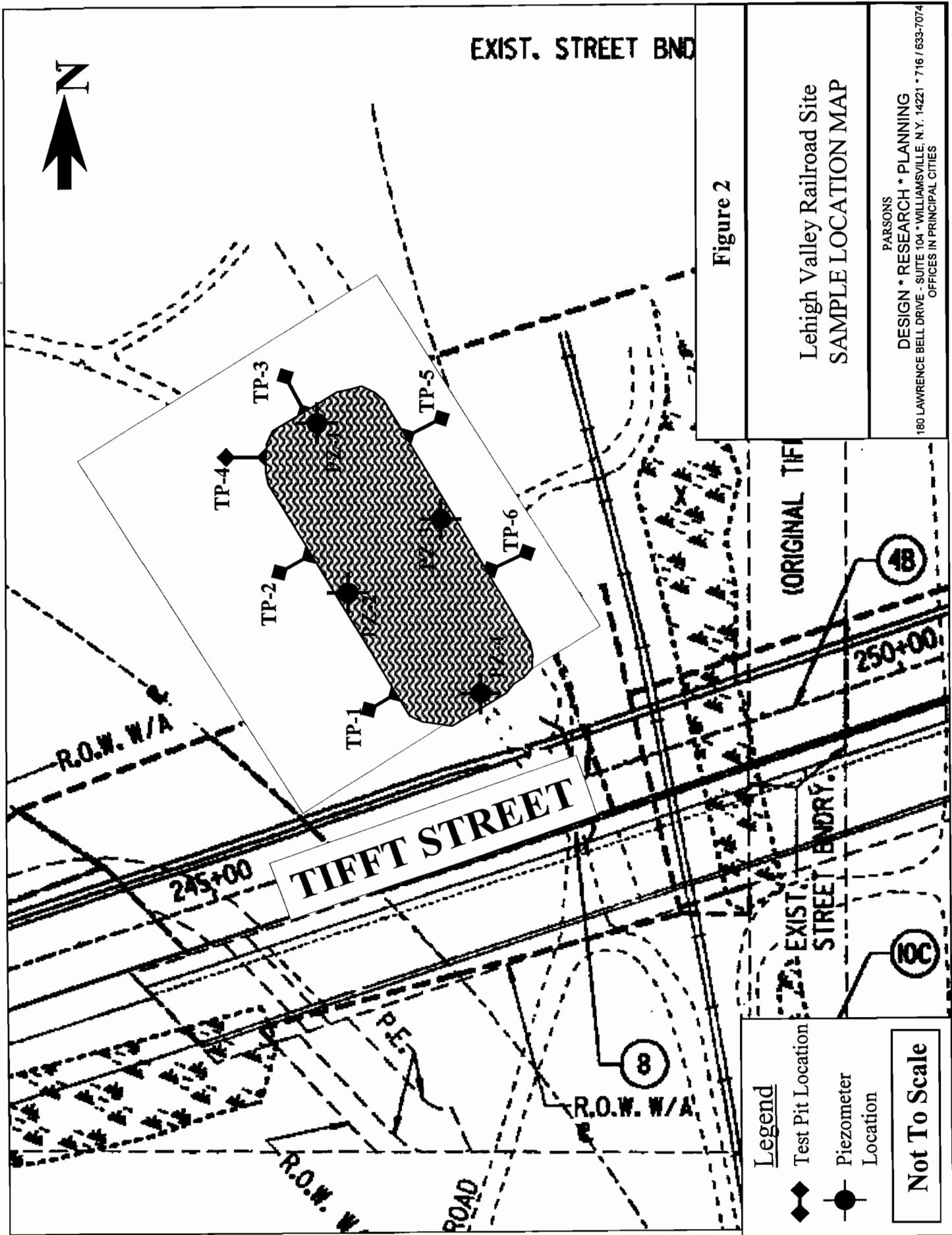


Figure 2

A work plan for contaminant removal (Attachment A to this report) was developed based on the proposed limits of excavation. New York State Department of Environmental Conservation (NYSDEC) approved the work plan in November 2000, and incorporated it into an Order on Consent with Honeywell (B9-0383-91-09).

The work plan identified excavation and off site disposal of the contaminated material as the IRM to be implemented, with subsequent limited groundwater monitoring. The contaminant removal effort was undertaken in separate phases in June and October of 2001. Groundwater monitoring wells were installed at the site and sampled January 2002. During the installation of one of the groundwater monitoring wells, additional contaminated material was discovered at the site.

This report describes the contaminant removal effort, monitoring well installation, groundwater sampling, laboratory analysis conducted following contaminant removal, and a removal action plan for the contamination encountered during the installation of one of the monitoring wells.

1.2 Project Objectives

In accordance with the NYSDEC- approved November 2000 Work Plan (Appendix A), the stated objectives of this project were to:

- Remove and dispose of the identified contamination as delineated in the Work Plan;
- Provide a positive impact on the quality of localized contaminated groundwater by removing the identified contaminated material; and
- Facilitate the reclassification of the Site from a Class 2 to a Class 5 hazardous waste site.

1.3 Contaminant Removal Scope of Work and Responsibilities

Honeywell competitively procured SLC Environmental Services, Inc. (SLC) to remove the contaminated materials and restore the area. SLC performed the work under oversight by Parsons and NYSDEC. The contaminated material was removed to native materials, based upon visual identification during the excavation, and in accordance with the extent of the excavation defined in the November 2000 Work Plan.

The contractor segregated the excavated materials that were obviously contaminated from the apparently lesser-contaminated materials. Visual observations, and screening of the excavated material with a photoionization detector (PID), were used by Parsons during the contaminated material removal to appropriately segregate the excavated materials.

Representative samples of material from each stockpile were collected and analyzed prior to disposal at an offsite facility. After the material was removed from the ground, it was managed as a waste and was characterized for disposal purposes. Onyx Environmental Services coordinated the disposal of the waste following excavation by SLC. Wastewater generated during the IRM was shipped off site and disposed of by Dupont Chamber Works.

After the contaminated material was removed, samples were taken from the sidewalls and bottom of the excavation to document the conditions at the site following implementation of the IRM. The excavation was backfilled with stockpiled cover soil and imported wetland soils from the Buckhorn Marsh on Grand Island, New York. Restoration primarily involved grading of the excavated area to limit steep drops in grade. As part of the reconstruction of the Tifft Street Bridge over the railroad tracks, the NYSDOT originally envisioned that the area would be converted to a wetland habitat. Imported soils capable of supporting wetland vegetation were used for the site restoration. NYSDEC assisted the contractor in reseeding the local wetland soils as part of the site restoration.

Parsons provided fulltime construction oversight for the excavation, waste disposal, and site restoration. Parsons photographically documented the conditions at the completion of the contaminated material removal (Appendix B).

1.4 Organization of Report

The following information is included in this report:

- Section 1 provides the background of the project, objectives and overview of the work that was conducted.
- Section 2 describes the field activities that took place to remove the contaminated material, restore the area, and to assess groundwater quality at the site.
- Section 3 includes an action plan for removal of the additional contaminated material that was discovered during the installation of groundwater monitoring wells.
- Appendices include the Work Plan that appended the order on consent; field photographs documenting the contaminated material removal effort; the analytical data from the samples that were collected from the excavation following contaminated material removal; the drilling records associated with the groundwater monitoring well installation; and the groundwater monitoring well sampling records and analytical data.

SECTION 2 CONTAMINATED MATERIAL REMOVAL NARRATIVE

2.1 Introduction

The contaminated material removal effort included excavation of materials within the predefined limits of the site. Minor deviations from the defined excavation limits occurred by expanding the removal of material on the south end and removing less material on the north end, as a result of observations during field activities. The excavation was conducted in two phases; the first phase in June 2001 and the second in October 2001. A total approximately 500 cubic yard of material was removed from the site. Perimeter air monitoring was performed by SLC during excavation activities to ensure that no airborne contamination was migrating off site. Additional activities included removal of groundwater that entered the excavation, sampling of the sidewalls and bottom of the excavation, restoration of the area, characterization of the wastes for disposal purposes, offsite disposal of the excavated materials and groundwater, and installation and sampling of groundwater monitoring wells. A description of each of these activities is provided in the following sections.

2.2 June 2001 Contaminated Material Excavation Effort

Excavation of the identified area began in June of 2001. Prior to excavating material, approximately the top four feet of clean cover soil was removed. Cover soils were removed to approximately the top of the HDPE liner. The excavated cover soil was stockpiled on site for use as backfill following material excavation.

The initial strategy for material excavation was to first remove the areas believed to be most contaminated. After removing cover soils, excavation commenced in the vicinity of boring 18A, believed to be the most impacted area as a result of the initial site investigation. Using this location as a center point for the excavation, an area approximately 10 feet by 10 feet was excavated to a depth of eight feet bgs. At this depth a layer of brown peat was encountered. Groundwater began to seep into the excavation through the peat layer, and had to be pumped into a temporary accumulation tank on site. Contaminated materials excavated from the hotspots were placed in roll-off boxes.

The next hot spot to be excavated was the area surrounding boring 24. Within the limits of excavation, using boring location 24 as a counterpoint, an area approximately 10 feet by 10 feet was excavated to a depth of nine feet. At this depth the brown peat layer was encountered. Groundwater seepage was encountered in this excavation.

Due to greater than anticipated groundwater seepage into both areas where material had been removed, the excavations were not immediately backfilled. Each was used as a sump to collect construction water which could be diverted from other areas as excavation continued.

Samples were taken to document the characteristics of material that was left in place at the following the excavation activities. A description of the sample locations and analytical results are presented in Table 1.

Table 1

Lehigh Valley Railroad Site
Post-Excavation Analytical Sampling Results

Compound	Sample ID: Lab Sample ID: Source: SDG: Matrix: Sampled: Units:	SW-1 A1544501 STL Buffalo A01-5445 Soil 6/7/2001	SW-2 A1964701 STL Buffalo A01-9647 Soil 10/3/2001	SW-3 A1963201 STL Buffalo A01-9632 Soil 10/3/2001	SW-4 A1964703 STL Buffalo A01-9647 Soil 10/4/2001	BOT-1 A1952001 STL Buffalo A01-9520 Soil 10/2/2001	BOT-2 A1952002 STL Buffalo A01-9520 Soil 10/2/2001	BOT-3 A1964702 STL Buffalo A01-9647 Soil 10/4/2001	BOT-4 A1964704 STL Buffalo A01-9647 Soil 10/4/2001
VOLATILES									
Benzene	ug/Kg	ND	68	ND	ND	ND	ND	ND	ND
Toluene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/Kg	ND	18	ND	ND	16	ND	ND	ND
Chlorobenzene	ug/Kg	ND	300	ND	ND	13000 D	4 J	36	4 J
SEMI/VOLATILES									
1,4-Dichlorobenzene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ug/Kg	ND	13,000	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
3,3-Dichlorobenzidine	ug/Kg	ND	ND	ND	ND	ND	ND	ND	ND
Sample Location	northeast corner sidewall of excavation	northeast corner sidewall of excavation	south sidewall of excavation	south sidewall of excavation	west sidewall of excavation	bottom of excavation on east end	bottom of excavation on north end	bottom of excavation on northwest end	bottom of excavation on southwest end

"ND"= Compound was analyzed for, but not detected

"J" or "B"= Indicates an estimated value

"E"= Concentration exceeded the calibration range

"D"= Compound was identified in an analysis at the secondary dilution factor

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As a result of excessive groundwater seepage in the open excavation, excavation ceased until engineering, contracting and management issues pertaining to construction water could be resolved. When work was suspended, the open areas of the excavation were fenced off. Areas where contaminated material had been excavated were backfilled using the stockpiled cover soil. Areas backfilled with stockpiled cover soil were marked within the excavation using yellow tape and polyethylene sheeting.

2.3 October 2001 Contaminated Material Excavation Effort

Following resolution of issues pertaining to groundwater management, and development of an alternate approach to the contaminated material removal, excavation activities resumed in October of 2001. To manage groundwater seepage, a sump was excavated within the contaminated material removal limits in the northeastern corner, to allow for groundwater drainage and accumulation. The groundwater was pumped from the excavation and accumulated on site in temporary storage tanks.

At the onset of work, the eastern portion within the limits of excavation was excavated to approximately eight feet bgs. The brown peat layer was encountered at this depth. Moving west, excavation continued to the western boundary, also to the depth of the brown peat layer. The excavation continued in a southerly direction to completion. The materials that were assumed to require disposal as hazardous waste (based on visual observation and PID screening) were placed into roll-off boxes for disposal off site.

Based upon initial site work and visual observation areas within the limits of excavation that were assumed to be non-hazardous were marked with yellow tape. Soils excavated from these areas were either stockpiled on site for subsequent sampling and disposal, or directly loaded into trucks for immediate delivery and disposal at CID Landfill in Chaffee, New York.

Samples were taken from the three sides walls (samples SW-2 through SW-4), and four samples were taken from the bottom of the excavation in respective quadrants (Samples BOT-1 through BOT-4). Sampling results are summarized in Table 1. Analytical data is provided in Appendix C.

Following the completion of excavation activities the site was restored. The excavation was backfilled and graded such that a slight depression remained to merge with the adjacent wetland topography. The areas was backfilled with soils from other areas of the site that were not in the vicinity of the waste removal, as well as imported marshy soils that had been approved by NYSDEC for use as backfill. This area was seeded with *typha latifolia* in the low-lying area and with *turf grass* in the elevated surrounding portions.

2.4 Disposition of Wastes

Historical soil sampling (September 2000 and March 2001) largely determined which of the excavated materials would be disposed as hazardous or non-hazardous waste. However, sampling was limited in purpose and scope to defining the excavation limits, which left some of the material without a classification for disposal purposes. During excavation, material excavated from areas previously determined to contain hazardous waste was placed in the roll-

offs for testing and subsequent proper disposal. Excavated material that appeared to be heavily contaminated when excavated was also placed in roll boxes.

Excavated material that was known to be non-hazardous was either staged on site or direct-loaded into trucks for disposal as non-hazardous material. Significant areas of the excavation included materials that were not previously classified. These materials were either placed in roll boxes or staged on site for subsequent sampling and analysis to determine appropriate disposal methods. The chemical analyses of the samples included Target Compound List (TCL) Volatile Organic Compounds (VOCs), TCL semivolatile organic compounds (SVOCs), toxicity characteristic leaching procedure (TCLP) VOCs and SVOCs.

After testing to determine the characteristics of the waste, the material was approved and disposed of at appropriate disposal facilities. Excavated hazardous waste that did not meet soil treatment standards for land disposal was disposed by incineration at the Onyx Environmental Services facility in Sauget, Illinois (USEPA ID Number ILD098642424). Excavated hazardous waste that did meet land disposal treatment standards was disposed of at the CWM Chemical Services, L.L.C. facility in Model City, New York (USEPA ID Number NYD049836679). Stockpiled non-hazardous waste, and waste placed in roll boxes determined to be non-hazardous was disposed of at the C. I. D. Landfill, Inc. in Chaffee, New York (USEPA ID Number – Not required).

Sampling and testing of the staged construction water indicated it was a hazardous waste. Construction water collected during waste excavation activity was disposed of at the E. I. DuPont facility in Deepwater, N.J. (USEPA ID Number NJD0002385730).

SECTION 3 WELL INSTALLATION AND GROUNDWATER SAMPLING

3.1 Introduction

Subsequent to removal activities, five monitoring wells were installed around the perimeter of the excavation in native soil. The locations of the wells were strategically placed with NYSDEC approval in an attempt to monitor groundwater quality near the excavated area.

3.2 Well Installation

The monitoring wells (MW-1 through MW-5) were installed using 4.25-inch inside diameter (ID), hollow-stem augers (HSAs). The locations of the monitoring wells are depicted in Figure 3. Each well was advanced to depths ranging from 10 to 12 feet below ground surface (bgs). After the total depth of the boring was reached, a two-inch ID, schedule-40 PVC well screen with a 0.010-inch slot size was installed in the well. Well screen lengths were decided upon based on the observed presence of water at each location. Well screen intervals ranged from 3.0 to 12.0 feet bgs. Each well was then completed with two-inch ID, schedule-40 PVC well riser. Observations made during drilling and monitoring well construction diagrams are included on the drilling records provided in Appendix D.

The annulus around the outside of the screen was backfilled with sand to approximately two feet above the screen, followed by a bentonite seal above the sand pack. The seal was allowed to hydrate, prior to the placement of grout above it. Each well was completed with a locking, stick-up protective casing, grouted in place.

The initial boring for MW-5 was abandoned due to the visual observation of contamination in the boring. The material observed was green-blue in color with a distinct odor, and appeared to be similar to the contamination that was removed from the completed excavation. A description of the material is provided on the drilling records in Appendix D. NYSDEC provided oversight of the well installation. With NYSDEC concurrence, the boring for MW-5 was moved approximately 12 feet northeast of the initial location. No contamination was observed at the second boring location where MW-5 was installed.

Once the wells were installed, water level readings were taken with a clean, weighted measuring tape. The depth to water was measured from the top edge of the permanent PVC well casing. These reference points were surveyed, and elevations determined relative to a fixed datum to establish groundwater elevations. The water table elevation data from the wells indicates that the water table may be mounded through the excavated area. The mounding of the water table may be the result of excess infiltration from the ponded water in the former excavation area.

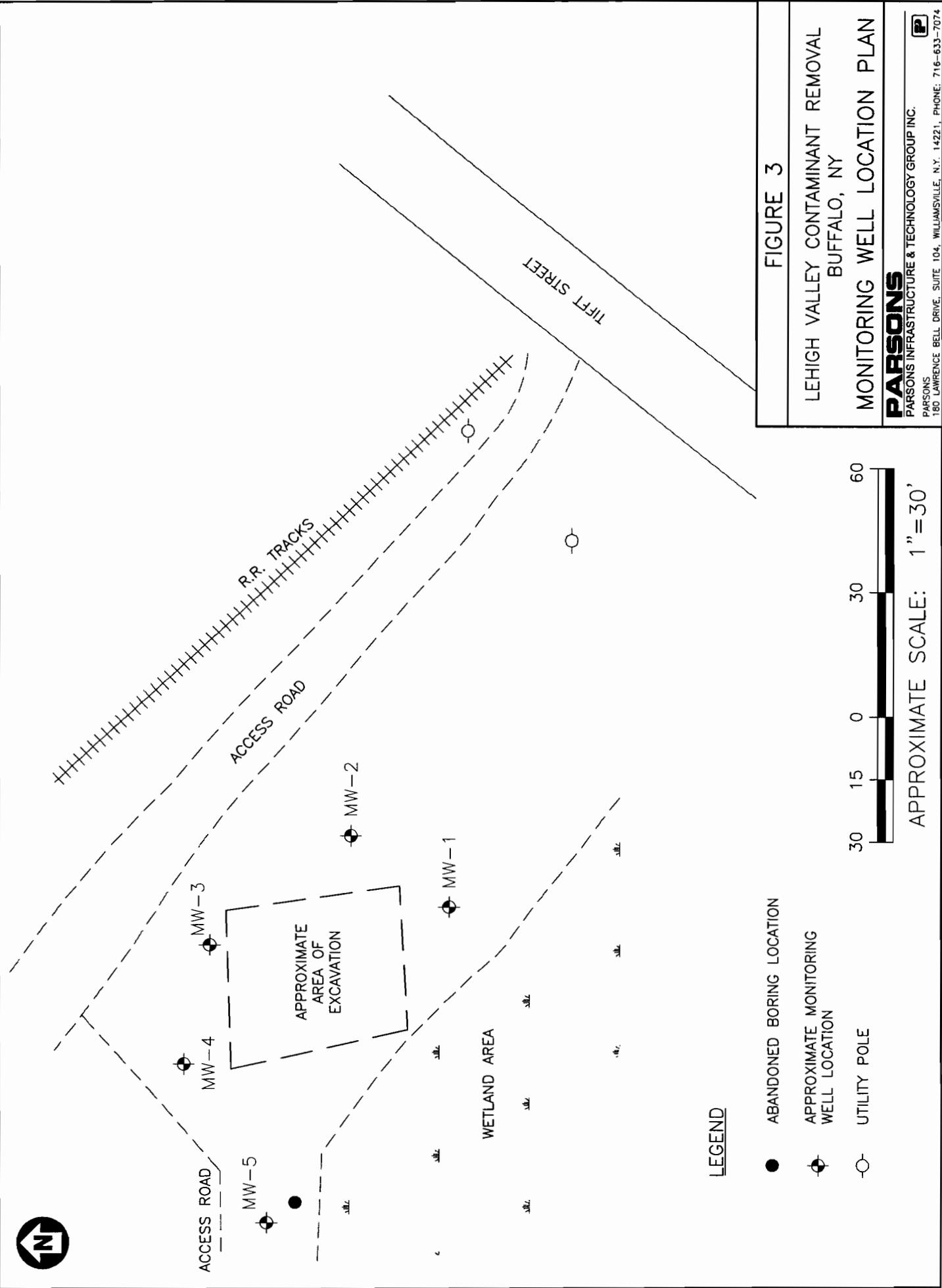
All investigation-derived waste (IDW), including excess soils, decontamination rinsates, and personal protective equipment, were placed in Department of Transportation-(DOT) approved 55-gallon 17-H type drums. Each drum was labeled and securely staged on site for subsequent disposal. A total of four 55-gallon drums were generated during the well installation activities.

3.3 Groundwater Sampling

Prior to sampling the groundwater monitoring wells, each well was purged with a bailer. During purging, measurements of pH, temperature, and specific conductivity were taken and

recorded on the well sampling records (Appendix E). Observations of turbidity were recorded on the sampling records. Well purging continued until measurements of pH, temperature, and specific conductivity had stabilized, or the well was purged to "dry" condition. A minimum of three volumes of water was purged from each well prior to sampling using a dedicated, disposable bailer. Sampling records are provided in Appendix E.

A total of five groundwater samples were submitted for laboratory analysis. In accordance with the November 2000 Work Plan, analytical parameters included TCL VOCs by Method 8260, TCL SVOCs by Method 8270, and RCRA Metals by Method 6010.



3.4 Groundwater Analytical Results

Laboratory analytical results for the groundwater collected are summarized in Table 2. The laboratory analytical data package is provided in Appendix E.

The groundwater analytical results indicated the presence of several volatile organic compounds (VOCs). For a number of these VOCs, concentrations were below the laboratory quantification limit. Several of the detected compounds are common laboratory contaminants (including acetone, 2-butanone, and methylene chloride), and may have been present as a result of laboratory contamination. The low concentrations of VOCs indicates little impact to groundwater was observed in the vicinity of the excavation.

The semi-volatile organic compounds (SVOC) detected in the groundwater samples are summarized on Table 2. In well MW-5 (located adjacent to the isolated area of contamination that was encountered during well installation), 4-chloronalanine (72 µg/L), 2-chloronaphthalene (11 µg/L), 1,2-dichlorobenzene (32 µg/L), and naphthalene (150 µg/L) were detected above the quantification limit. These concentrations exceeded typical groundwater standards and guidance values, but were within approximately one order of magnitude of the standards. Several of the detected SVOC compounds are common laboratory contaminants (including bis (2-ethylhexyl) phthalate, di-n-butyl phthalate, and di-n-octyl phthalate), and may have been present as a result of laboratory contamination. All other SVOCs, including the polycyclic aromatic hydrocarbons (PAHs) were either not detected, or detected at low concentrations (below the laboratory quantification limit) and qualified with a "J".

Several metals were detected in the groundwater samples. Arsenic was detected in four of the five wells sampled (MW-1, 2, 4, and 5). Barium, chromium and lead were detected in all five groundwater samples. Cadmium, silver, and mercury were detected in two wells (MW-2 and 5). The analytical results for the metals parameters are summarized in Table 2. The impacts to groundwater from metals are limited, and typical in concentration for an active railroad property with historical industrial use.

Based on the groundwater analytical results, it appears that the potential impacts to groundwater are limited. The groundwater quality is typical given the historical and current use of the site as a railroad yard, which would account for the presence of most, if not all of the detected compounds, particularly PAHs and metals.

Although impacts to local groundwater are limited, additional groundwater monitoring is planned to confirm the results of the contaminant removal effort. Additional groundwater samples will be collected semiannually for a period of two years from the five wells that have been installed on site. The next round of groundwater samples will be collected in June 2002, and samples will be analyzed for VOC and SVOC.

Table 2
Honeywell
Lehigh Valley Railroad Site
Groundwater Analytical Summary of Detected Parameters

		Sample ID: Lab Sample ID: Source: SDG: Matrix: Sampled:	MW-1 A2065601	MW-2 A2065602	MW-3 A2065603	MW-4 A2065604	MW-5 A2065605
CAS No	Compound	Units:					
67-64-1	Acetone	ug/L	5.7 J	8.8 J	8.9 J	6.5 J	
78-93-3	2-Butanone	ug/L	ND	ND	1.4 J	ND	
108-90-7	Chlorobenzene	ug/L	ND	ND	ND	ND	
75-09-2	Methylene chloride	ug/L	ND	ND	ND	ND	
1330-20-7	Total Xylenes	ug/L	ND	ND	1.2 J	ND	
SEMICARBOHYDRATES							
120-12-7	Anthracene	ug/L	ND	0.6 J	ND	ND	
56-55-3	Benz(a)anthracene	ug/L	ND	2 J	ND	ND	
205-99-2	Benz(b)fluoranthene	ug/L	ND	1 J	ND	ND	
207-08-9	Benz(k)fluoranthene	ug/L	ND	1 J	ND	ND	
191-24-2	Benzo(ghi)perylene	ug/L	ND	0.6 J	ND	ND	
50-32-8	Benzo(a)pyrene	ug/L	ND	2 J	ND	ND	
117-81-7	Bis(2-ethylhexyl) phthalate	ug/L	3 J	0.8 J	0.6 J	1 J	
106-47-8	4-Chloroaniline	ug/L	ND	ND	ND	72	
91-58-7	2-Chloronaphthalene	ug/L	ND	ND	ND	ND	
218-01-9	Chrysene	ug/L	ND	2 J	ND	ND	
84-74-2	Di-n-butyl phthalate	ug/L	1 J	0.9 J	5 J	5 J	
95-50-1	1,2-Dichlorobenzene	ug/L	ND	ND	ND	32	
106-46-7	1,4-Dichlorobenzene	ug/L	ND	ND	ND	2 J	
117-84-0	Di-n-octyl phthalate	ug/L	0.8 J	ND	ND	ND	
206-44-0	Fluoranthene	ug/L	ND	4 J	ND	ND	
193-39-5	Indeno(1,2,3-cd)pyrene	ug/L	ND	0.6 J	ND	ND	
91-57-6	2-Methylnaphthalene	ug/L	ND	ND	1 J	ND	
91-20-3	Naphthalene	ug/L	ND	ND	9 J	5 J	
85-01-8	Phenanthrene	ug/L	ND	2 J	ND	0.7 J	
129-00-0	Pyrene	ug/L	ND	3 J	ND	ND	
120-82-1	1,2,4-Trichlorobenzene	ug/L	ND	ND	ND	4 J	
INORGANIC ANALYSIS							
	Arsenic	mg/L	0.029	0.10	ND	0.084	0.10
	Barium	mg/L	0.39	1.5	0.32	0.60	1.1
	Cadmium	mg/L	ND	0.0078	ND	ND	0.0056
	Chromium	mg/L	0.034	0.15	0.011	0.11	0.47
	Lead	mg/L	0.037	8.2	0.063	0.18	3.4
	Mercury	mg/L	ND	0.031	ND	ND	0.0099
	Selenium	mg/L	ND	ND	ND	ND	ND
	Silver	mg/L	ND	0.0080	ND	ND	0.0031

"ND"= Compound was analyzed for, but not detected

"J"= Indicates an estimated value

SECTION 4 ACTION PLAN FOR ADDITIONAL CONTAMINATED MATERIAL REMOVAL

Additional contaminated materials were encountered during the installation of groundwater monitoring well MW-5, which was originally advanced on the west side of the excavation area. Correspondence from the NYSDEC, dated January 28, 2002, requested that this report contain an action plan to address the removal of the additional contamination that was encountered.

The material was first encountered approximately four feet below grade. The area of additional contamination is believed to be limited in size, because a second boring advanced during the installation of MW-5, within 12 feet of the initial boring, showed no contamination. Therefore, Honeywell intends to excavate the limited area where contamination was encountered, and dispose of material off site. This will be accomplished by:

- Mobilizing a contractor with a backhoe;
- Removing the material in an approximate five-foot by five-foot area in the vicinity of the abandoned MW-5 boring (refer to Figure 3). Continuous visual inspection and monitoring with a PID will be performed to determine the appropriate limits of the excavation;
- Placing the excavated material in a roll-off;
- Obtaining a representative sample of the material and performing laboratory analysis to determine appropriate disposal requirements; and
- Providing for off site disposal of the excavated soils/waste.

The excavated area will be backfilled with clean soils and seeded immediately following the excavation effort, to reduce the groundwater infiltration. No groundwater will be collected. The contractor will be required to begin the excavation work, complete the contaminant removal effort, and backfill the area within one day, in an effort to reduce potential groundwater management issues.

This work will be completed during April 2002. A second round of groundwater samples will be collected in June 2002 from the five wells that were installed on site, including MW-5 which is believed to be downgradient from this area. The groundwater samples will be analyzed for VOC and SVOC to evaluate the groundwater quality.

APPENDIX A
NOVEMBER 2000 WORK PLAN

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PARSONS ENGINEERING SCIENCE, INC.

corres. sent.

180 Lawrence Bell Drive, Suite 100 • Williamsville, New York 14221 • (716) 633-7074 • Fax: (716) 633-7195

November 28, 2000

Mr. Maurice Moore
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

RE: Lehigh Valley Railroad Site

Dear Mr. Moore:

This submittal is in response to the NYSDEC's letter dated November 13, 2000, which provided comments on the October 24, 2000 Work Plan for the referenced site. We are also submitting a revised Work Plan that incorporates Honeywell's response to the issues described in NYSDEC's comment letter.

1. *Pg. 1, Project Objective: One of the primary goals of the project is to provide a positive impact on the quality of localized contaminated groundwater by removing identified waste material.*

The goal of providing a positive impact on the quality of localized contaminated groundwater by removing identified waste material is an object of the Interim Remedial Measure, and stated as such in the enclosed Work Plan.

2. *Pg. 4 Analytical Results: Please refer to enclosed figure. The NYSDEC does not necessarily agree with the limits of excavation as shown on Figure 2. Sample numbers 19, 24 and 25 indicate levels of contamination requiring excavation. I have prepared a figure (see attachment) that more accurately defines the likely areas of excavation. It is noted that the revised figure increased the limits by approximately 116 cubic yards. Of course, post excavation confirmatory sampling and analysis by Honeywell will still be required before the actual limits of excavation are known.*

Honeywell agrees to expand the limits of the excavation as proposed by the NYSDEC. The revised excavation limits, and corresponding volume estimate, will be incorporated into the bid documents. Additionally, the bid documents will be revised to require the contractor to segregate excavated materials that is obviously grossly contaminated from the apparently lesser contaminated materials. Visual observations, and screening of the excavated material with a photoionization detector, will be used by Parsons during the waste removal to decide how to segregate the excavated materials. By segregating materials into separate stockpiles, it may be possible to dispose of the lesser contaminated materials as non-hazardous. Representative samples of material from each stockpile will be collected and analyzed prior to disposal at an off site facility.

3. *Task 5, Groundwater Sampling: Several rounds of sampling will be required to determine whether attenuation of the localized groundwater contamination is occurring. Since more than a single round of groundwater sampling is anticipated, a more permanent monitoring point is recommended. Permanent monitoring wells are preferred by NYSDEC.*

PARSONS ENGINEERING SCIENCE, INC.

Mr. Maurice Moore
NYSDEC
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Permanent monitoring wells will be installed for the purposes of conducting post-excavation sampling.

4. *Task 5, Groundwater Sampling: Analysis of groundwater for RCRA metals will be required for at least the initial round of post-excavation groundwater monitoring.*
The initial round of groundwater sampling will include analysis for RCRA metals.
5. *General Comment: Confirmatory analytical results will determine the success of failure of this removal action. Samples will be collected from the sidewalls and bottom of the excavation. Backfilling of the excavation before receiving confirmatory results is done at the risk of Honeywell. NYSDEC suggests that confirmatory sampling be evaluated before declaring the work element to be complete.*

Parsons will collect confirmatory samples from the sidewalls and bottom of the excavation following removal of the soils/waste materials. The expansion of the excavation limits, as described in comment No. 2 (above) will most likely result in adequate removal of the materials of concern. Honeywell intends to instruct the contractor to restore the site immediately following the sample collection. Restoration will include removal of groundwater that may enter the excavation, and backfilling with clean soils from an offsite source. The locations where post-excavation samples were collected will be clearly marked with wooden posts, and measured from a fixed point on site. In this way, the limits of the excavation can be easily identified if the sample results indicate that additional excavation is needed. Should this occur, additional excavation in the area of concern could be conducted cost-effectively during the remedial construction at the Alltift landfill site.

The changes described herein have been incorporated into the enclosed Work Plan, and will be incorporated into the bid documents for the work. Please contact Mr. David Paley at (973) 455-3302, or Ms. Theresa Benson at (716) 633-7074 with any questions.

Very truly yours,

PARSONS ENGINEERING SCIENCE, INC.



Theresa L. Benson, P.E.
Project Manager

cc: Mr. David Paley - Honeywell

PARSONS ENGINEERING SCIENCE INC.

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November 28, 2000

Mr. Martin Doster, P.E.
Regional Hazardous Waste Remediation Engineer
NYSDEC, Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

RE: Lehigh Valley Railroad Site
NYSDEC Site No 915071
Work Plan for Waste Removal

Dear Mr. Doster:

This Work Plan describes the scope of the work to be conducted at the Lehigh Valley Railroad Site (NYSDEC Site No. 915071), including the following information:

- Site Location
- Background;
- Project Objective;
- Scope of Work;
- Health and Safety Requirements;
- Project Execution; and
- Project Schedule.

SITE LOCATION

The Lehigh Valley Railroad Site is comprised of three parcels of land located in South Buffalo, Erie County, New York. The site is north of the Tifft Street Bridge between the railroad corridor and the Tifft Farm Nature Preserve. Parcel 1 of the Lehigh Valley Railroad Site is classified as a Class 2 Hazardous Waste Site due to the presence of waste material found during realignment of Tifft Street Bridge and construction of a wetland during 1996. The Lehigh Valley Railroad Company is the current owner of the property.

PROJECT OBJECTIVES

The objective of this project is to remove and dispose of the identified waste on Parcel 1 (Site) during the year 2000. The waste situated at the Site was destined for disposal at the Alltift Landfill Site. However, remedial construction at the Alltift Landfill Site will not be conducted during 2000. Thus, Honeywell intends to remove the waste material found on Parcel 1 and dispose of the material off site. Additional objectives of the project are:

- To provide a positive impact on the quality of localized contaminated groundwater by removing the identified waste material, and

PARSONS ENGINEERING SCIENCE, INC.

Mr. Marty Doster
NYSDEC, Region 9
November 28, 2000
Page 3

of defined waste in the field is approximately 1,500 square feet, with an approximate depth range of four to eight feet below ground surface (Figure 2).

After the approximate limits of waste were defined using the screening criteria, representative samples of the waste material were collected. The first sample (18A) was analyzed for waste disposal purposes using the Toxicity Characteristic Leaching Procedure (TCLP) followed by analysis for volatile organic compounds (VOCs) by method 8260, semivolatile organic compounds (SVOCs) by method 8270, pesticides by method 8081, polychlorinated biphenyls (PCBs) by method 8082, and total metals. A second sample (18B) was collected at the same location from within the waste material and analyzed for VOCs, SVOCs, Pesticides, PCBs, and metals without performing the TCLP extraction, using the same methods. The purpose of this sample was to determine the chemical nature of the material.

In addition to the samples from inside the limits of waste, one sample was collected from each of six boring locations outside the limits of waste as delineated in the field. These samples, noted as Tier 1, were collected to assist in the identification of the limits of waste. A second tier of four samples was collected radial to the Tier 1 borings, outside the identified limits of waste. A total of nine samples (six Tier 1 - sample numbers 19, 20, 21, 22, 24, 27; and three Tier 2 - sample numbers 25, 27, 28) were analyzed for the following contaminants of concern:

Organics	Metals
Benzene	Arsenic
Toluene	Barium
Ethylbenzene	Cadmium
Chlorobenzene	Chromium
1,4-chlorobenzene	Lead
1,2-dichlorobenzene	Mercury
Nitrobenzene	
1,2,4-trichlorobenzene	
Naphthalene	
4-chloroanaline	
2-chloronaphthalene	
2-nitroanaline	
3-nitroanaline	
2,6-dinitrotoluene	
2,4-dinitrotoluene	
Phenanthrene	
3,3'-dichlorobenzidine	

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Mr. Marty Doster
NYSDEC, Region 9
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One Tier 2 sample (sample no. 23) was analyzed for the full TCL VOCs, SVOCs, pesticides, PCBs, and metals suite of parameters.

Analytical Results

To confirm that the delineated limits of waste were accurate, the laboratory analytical results for the waste (sample number 18B) was compared to the analytical results for the Tier 1 and Tier 2 samples collected outside the limits of waste (see Table 1 for results). Table 1 provides a summary of the analytical results, and shows the detected parameters only.

The analytical results for Sample 18B, taken within the waste limits, showed elevated levels of the organic compounds, 4-chloroaniline, 2-chloronaphthalene, 1,2-dichlorobenzene, naphthalene, nitrobenzene, and 1,2,4-trichlorobenzene. Elevated metal detections of lead, chromium, and barium were also indicated.

To refine the waste limits defined by the field screening, the results from sample 18B were compared to the Tier 1 and Tier 2 samples. Two of the six Tier 1 samples (19 and 24) showed elevated detections of the organic compounds, 4-chloroaniline, 2-chloronaphthalene, 1,2-dichlorobenzene, and naphthalene. Sample 24 also contained concentrations of metals, including chromium, that were within the same order of magnitude as Sample 18B. Of the four Tier 2 samples, Sample 25 showed elevated detections of 4-chloroaniline. Naphthalene was detected in almost all Tier 1 and Tier 2 samples, except Sample 21, and is considered background for the purposes of this project.

The analytical results for these samples generally correlated with the visual definition of the waste limits using field screening techniques and observations. The waste limits were slightly modified from the field observations based on the analytical results of Samples 19, 24, and 25. The modified limits of waste are shown on Figure 2. The limits of the excavation extend beyond the identified waste material. The purpose of the over-excavation is to ensure the success of the waste removal effort.

The results of the TCLP analysis for Sample 18A indicated a value of 96.0 mg/L of nitrobenzene, which exceeds the TCLP regulatory level of 2.0 mg/L (40 CFR Part 261). Also exceeding the regulatory limit in Sample 18A was lead, with a value of 12.9 mg/L, having a regulatory level of 5.0 mg/L (See Table 2). Therefore, the waste material was assumed to be hazardous for the purposes of disposal.

Task 2 – Bid Document Preparation

Parsons will prepare Bid Documents in accordance with Honeywell standard format to competitively procure a Contractor for the removal and disposal of the wastes. The Bid Documents will summarize the results of the field investigation; describe the estimated volume of waste; and define the scope of work including removal of the waste, proper disposal methods, limited restoration (regrading of the area), health and safety requirements, and specifications for

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the removal and disposal of the wastes. Figures showing the site location and delineation results will be included in the Bid Documents.

Task 3 – Waste Removal

Honeywell will competitively procure a Contractor to remove and dispose of the chemical waste at the Site, and restore the area. The waste will be removed to native materials, based upon visual identification during the excavation, and in accordance with the delineation that was conducted under Task 1. This approach will eliminate the need for the limits of waste excavation to be dependent upon the results of confirmatory sampling.

The contractor will be required to segregate excavated materials that is obviously grossly contaminated from the apparently lesser contaminated materials. Visual observations, and screening of the excavated material with a photoionization detector, will be used by Parsons during the waste removal to decide how to segregate the excavated materials. By segregating materials into separate stockpiles, it may be possible to dispose of the lesser contaminated materials as non-hazardous. Representative samples of material from each stockpile will be collected and analyzed prior to disposal at an off site facility.

After the waste is removed, samples will be taken from the side walls and bottom of the excavation for record purposes. Restoration will primarily involve grading of the excavated area so as to limit steep drops in grade. As part of the reconstruction of the Tifft Street bridge over the railroad tracks, the NYSDOT originally envisioned that the area would be converted to a wetland type habitat. Imported soils capable of supporting wetland vegetation will be used for the site restoration. NYSDEC has agreed to assist the contractor in potential identification of local wetland soils for use in the site restoration.

Parsons will provide fulltime construction oversight of waste removal and restoration. Successful completion of the waste removal will be achieved when there is no visible sign of waste remaining in the excavation area. Parsons will photographically document the conditions at the completion of the waste removal. It is assumed that the work will be completed within a one-week period.

Task 4 – Waste Removal Report

Parsons will prepare a Waste Removal Certification Report upon completion of the work. This letter report will describe the work performed, the disposition of wastes, variations from the contract documents, and will provide Honeywell and the NYSDEC with a certification that the waste removal was completed in accordance with the contract documents. Applicable documents, such as daily reports and photographs, will be included as appendices.

Mr. Marty Doster
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Task 5 – Groundwater Sampling

During the limited site assessment conducted by Parsons in 1998, temporary piezometers were installed and groundwater samples were collected. The analytical results revealed groundwater standards/guidance values were exceeded for VOCs in three wells. Because groundwater standards were exceeded at that time, it was proposed to complete the source removal, and then conduct subsequent groundwater sampling and analysis to determine if there are any residual groundwater contaminants. To assess groundwater at the Site, Parsons will collect five groundwater samples from outside the excavation after the waste has been removed. Permanent monitoring wells will be installed to a depth of approximately four feet below the observed water table. Monitoring wells will be installed using hollow stem auger and casing drilling techniques. The well screen will be 2-inch ID, flush joint, threaded, schedule 40 PVC with a threaded PVC bottom plug.

Parsons will collect a groundwater sample from each of the wells. Parsons will send the samples to a subcontract laboratory for analysis by EPA method 8260 for VOCs and EPA method 8270 for SVOCs. The initial round of sampling will also include analysis for RCRA metals. After receipt of the analytical results, Parsons will prepare a letter report that will summarize the sampling methods and results. Analytical results will also be compared to NYSDEC Ambient Water Quality Standards and Guidance Values. Recommendations for no further action, site closure, or additional monitoring will be made in the report.

*VOCs
SVOCs
RCRA-metals*

HEALTH AND SAFETY REQUIREMENTS

The waste delineation (Task 1) will be conducted in accordance with the Health and Safety Plan (HASP) that has been prepared for the predesign investigations at the Alltift Landfill site. The waste removal at the Site will be conducted in accordance with the Health and Safety Specification Section 01105 that was prepared for the Alltift Landfill Remedial Action. A copy of the specification will be included in the Bid Documents.

PROJECT EXECUTION

Honeywell has selected Parsons Engineering Science, Inc. (Parsons) to oversee this effort. Parsons will be responsible for:

- Coordinating and conducting the waste delineation (Task 1 - complete);
- Preparing Bid Documents for the work (Task 2);
- Soliciting contractor bids (Task 2);
- Providing full-time oversight during the waste removal (Task 3);
- Preparing the Waste Removal Report (Task 4);

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Mr. Marty Doster
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- Conducting the post-excavation groundwater sampling, obtaining groundwater analytical data, and preparing the groundwater summary report (Task 5).

Parsons will also be responsible for verifying that waste removal contractor has adequate Health and Safety Plans. Parsons will enforce all health and safety requirements during the fieldwork, and will stop work if unsafe conditions are observed.

Subcontractors will be required to perform the laboratory analytical work for soil and groundwater samples. The laboratory must use deliverable formats specified in the NYSDEC Analytical Services Protocols (ASP), September 1989 (revised 1991), and be a New York State Department of Health Environmental Laboratory Approval Program-approved laboratory in all categories of solid and hazardous by-products.

SCHEDULE

Task 1: Completed September 2000.

Task 2: Preparation of Bid Documents can proceed concurrently with the waste limit and waste characterization task. Bid Documents will be issued for Honeywell, and subsequent NYSDEC review. Revisions to the Bid Documents, and release for bid will be completed within one week of receipt of final comments.

Tasks 2 and 3: Following release of bid documents, approximately three weeks will be required for bid preparation by bidding Contractors. Within one week upon receipt of bids, Parsons will review bids and present a recommendation to Honeywell. It is assumed that a contractor will be prepared to mobilize within three weeks of award and contract execution. It is anticipated that waste removal will be completed within a week after mobilization.

Task 4: Approximately four weeks will be required for confirmatory sampling analytical results to be generated. The Waste Removal Report will be prepared for Honeywell's review within two weeks following receipt of laboratory analytical results. The report will be issued to NYSDEC within one week of receipt of Honeywell's comments.

Task 5: Within 2 weeks following removal of waste, piezometers will be installed and sampled. Groundwater samples will be sent for lab analysis. Parsons assumes that up to four weeks will be required for analysis and an additional two weeks to prepare the letter report. The letter report will be provided to Honeywell for review. Revisions to the letter report and submittal to NYSDEC will be completed within one week of receipt of comments from Honeywell.

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Page 8

Please contact Dave Paley at (973) 455-3302 or Theresa Benson at (716) 633-7074 with questions regarding this Work Plan.

Very truly yours,

PARSONS ENGINEERING SCIENCE, INC.

Theresa Benson

Theresa Benson, P.E.
Project Manager

cc: David Paley, Honeywell
Andrew English, NYSDEC
Parsons file 736645

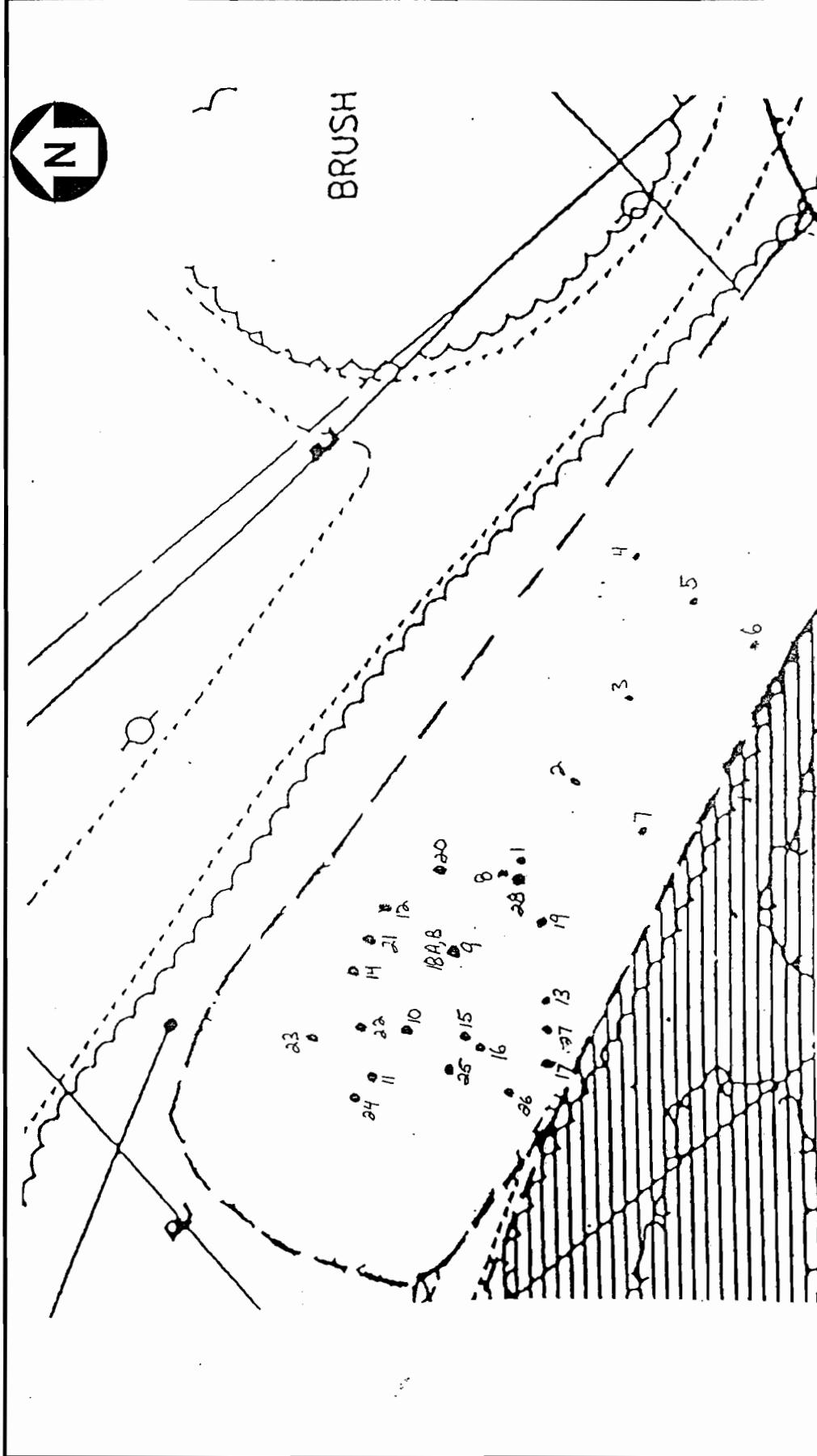


Figure 1

Honeywell, Inc.
Lehigh Valley Boring Location Plan
Buffalo, NY

Approximate Scale 1"=25'

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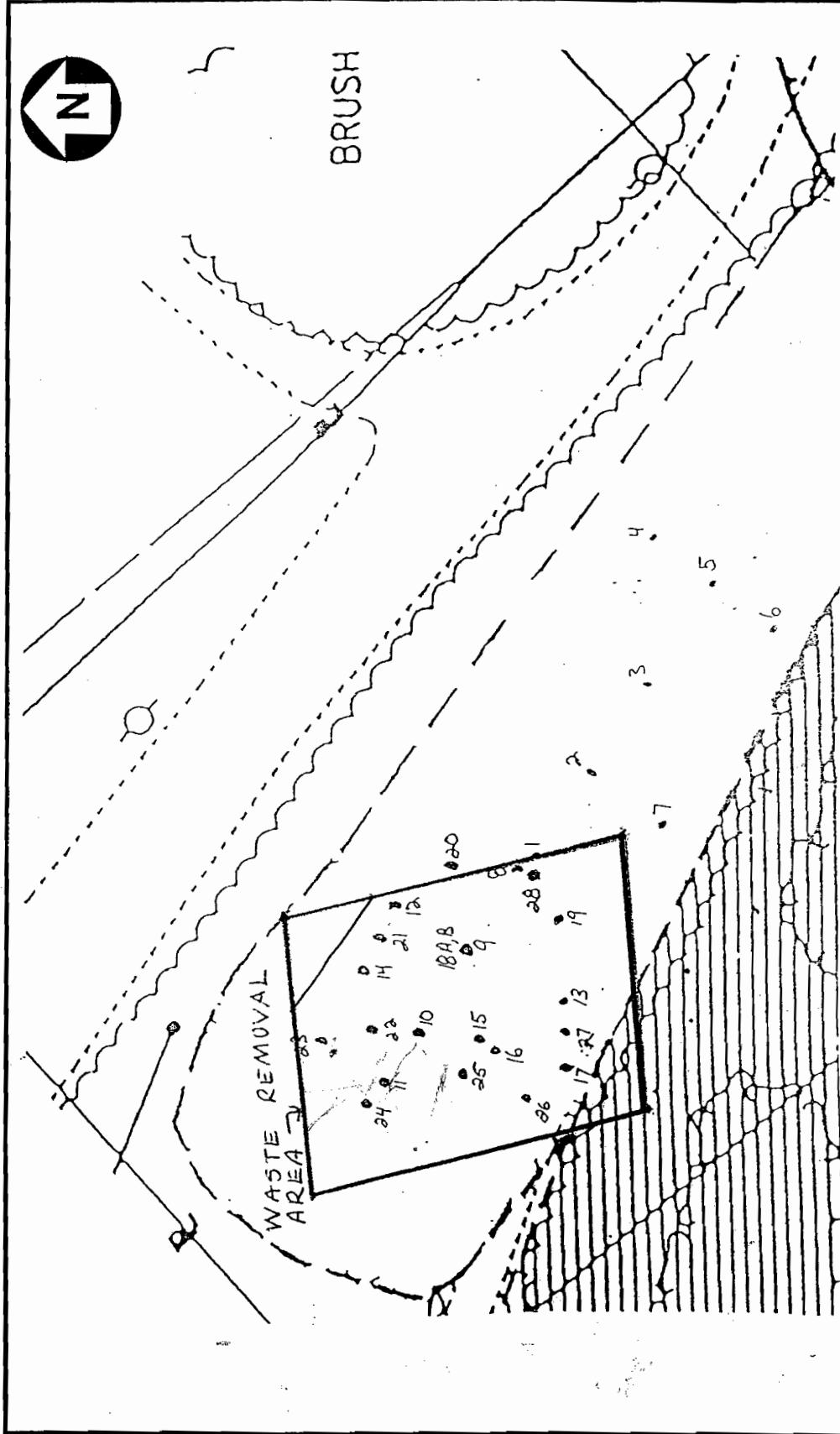


Figure 2

Honeywell, Inc.
Lehigh Valley Site Waste Removal Plan
Buffalo, NY

Approximate Scale 1"=25'

PARSONS ENGINEERING SCIENCE, INC.

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Table 1
Lehigh Valley Waste Delineation Analytical Results

Lehigh Valley Waste Delineation Soil Boring Analytical Data	SAMPLE ID: LAB ID: SOURCE: MATRIX: SAMPLED:	18B A0669902 Lehigh Valley Soil 9/20/00	23 (Tier 2) A0669903 Lehigh Valley Soil 9/20/00
COMPOUND	UNITS:		
TOTAL VOLATILES			
Acetone	ug/kg	ND	240
Benzene	ug/kg	440 E	ND
Chlorobenzene	ug/kg	100000 D	ND
Ethylbenzene	ug/kg	3200 D	ND
Methylene chloride	ug/kg	6	15
Toluene	ug/kg	97000 D	ND
Trichloroethene	ug/kg	3 J	50 B
Total Xylenes	ug/kg	45	ND
TOTAL SEMIVOLATILES			
Acenaphthene	ug/kg	71000	180 J
Acenaphthylene	ug/kg	1600 J	ND
Anthracene	ug/kg	130000	610 J
Benzo(a)anthracene	ug/kg	5600	1600
Benzo(b)fluoranthene	ug/kg	4700	1800
Benzo(k)fluoranthene	ug/kg	2400 J	800 J
Benzo(ghi)perylene	ug/kg	900 J	820 J
Benzo(a)pyrene	ug/kg	4000 J	1400
bis(2-Ethylhexyl) phthalate	ug/kg	2700 J	260 J
4-Chloroaniline	ug/kg	440000	ND
2-Chloronaphthalene	ug/kg	220000	160 J
Chrysene	ug/kg	5100	1600
Dibenz(a,h)anthracene	ug/kg	ND	180 J
Dibenzofuran	ug/kg	14000	ND
1,2-Dichlorobenzene	ug/kg	590000	ND
1,3-Dichlorobenzene	ug/kg	2300 J	ND
1,4-Dichlorobenzene	ug/kg	46000	ND
3,3'-Dichlorobenzidine	ug/kg	17000	ND
2,4-Dinitrotoluene	ug/kg	8200	ND
2,6-Dinitrotoluene	ug/kg	7700	ND
Fluoranthene	ug/kg	11000	2600
Fluorene	ug/kg	8500	220 J
Hexachlorobenzene	ug/kg	72000	ND
Indeno(1,2,3-cd)pyrene	ug/kg	1000 J	830 J
2-Methylnaphthalene	ug/kg	9200	ND
4-Methylphenol	ug/kg	1600 J	ND
Naphthalene	ug/kg	1400000 B	510 BJ
2-Nitroaniline	ug/kg	1900 J	ND
3-Nitroaniline	ug/kg	1600 J	ND
4-Nitroaniline	ug/kg	14000	ND
Nitrobenzene	ug/kg	800000	ND
N-Nitrosodiphenylamine	ug/kg	3700	ND
Phenanthrene	ug/kg	320000	2000
Pyrene	ug/kg	10000	2400
1,2,4-Trichlorobenzene	ug/kg	130000	ND
2,4,5-Trichlorophenol	ug/kg	2400 J	ND
TOTAL PESTICIDES			
Dieldrin	ug/kg	4400	ND
Endrin	ug/kg	3800	ND

Table 1 -CONTINUED
Lehigh Valley Waste Delineation Analytical Results

Lehigh Valley Waste Delineation Soil Boring Analytical Data	SAMPLE ID: LAB ID: SOURCE: MATRIX: SAMPLED:	18B A0669902 Lehigh Valley Soil 9/20/00	23 (Tier 2) A0669903 Lehigh Valley Soil 9/20/00
COMPOUND	UNITS:		
ICL METALS			
Aluminum	mg/kg	2980	5590
Antimony	mg/kg	9700	ND
Arsenic	mg/kg	43	33
Barium	mg/kg	102	67.5
Calcium	mg/kg	43200	7460
Chromium	mg/kg	1410	15.6
Cobalt	mg/kg	6.7	ND
Copper	mg/kg	8080	47.8
Iron	mg/kg	38600	62300
Lead	mg/kg	25800	84.4
Magnesium	mg/kg	5780	25.6
Manganese	mg/kg	302	208
Mercury	mg/kg	3.2	ND
Nickel	mg/kg	60.8	13.2
Potassium	mg/kg	550	620
Selenium	mg/kg	ND	8.4
Sodium	mg/kg	333	288
Thallium	mg/kg	5.6	10.1
Vanadium	mg/kg	16.5	28.9
Zinc	mg/kg	451	260

Table 1 – CONTINUED
Lehigh Valley Waste Delineation Analytical Results

Lehigh Valley Waste Delineation Soil Boring Analytical Data	SAMPLE ID: LAB ID: SOURCE: MATRIX: SAMPLED:	19 (Tier 1) A0669904 Lehigh Valley Soil 9/20/00	20 (Tier 1) A0669905 Lehigh Valley Soil 9/20/00	21 (Tier 1) A0669906 Lehigh Valley Soil 9/20/00	22 (Tier 1) A0669907 Lehigh Valley Soil 9/20/00	24 (Tier 1) A0669908 Lehigh Valley Soil 9/20/00	25 (Tier 2) A0669909 Lehigh Valley Soil 9/20/00	26 (Tier 1) A0669910 Lehigh Valley Soil 9/20/00	27 (Tier 2) A0669911 Lehigh Valley Soil 9/20/00	28 (Tier 2) A0669912 Lehigh Valley Soil 9/20/00
COMPOUND	UNITS:									
TICL VOLATILES										
Toluene	ug/kg	12	2 J	ND	ND	1200 D	ND	ND	ND	ND
Ethylbenzene	ug/kg	39	ND	ND	ND	3400 D	47	ND	ND	ND
Benzene	ug/kg	92	12	ND	ND	78	ND	ND	ND	ND
Chlorobenzene	ug/kg	5900 D	370 D	39	ND	15000 D	1200	100	93	3 J
TICLS SEMIVOLATILES										
4-Chloroaniline	ug/kg	24000	ND	ND	ND	110000	42000	3700 J	ND	400
2-Chloronaphthalene	ug/kg	2200 J	1700 J	ND	ND	120000	ND	ND	ND	940 J
1,2-Dichlorobenzene	ug/kg	2300 J	ND	ND	ND	210000	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	19000	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	63000	ND	ND	ND	ND
Naphthalene	ug/kg	49000 B	9100 B	ND	ND	420 BJ	560000 B	13000 BJ	2500 BJ	1900 B
Nitrobenzene	ug/kg	ND	ND	ND	ND	240000	ND	ND	ND	ND
Phenanthrene	ug/kg	ND	33000	2900 J	ND	40000	ND	1900 J	4800	ND
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	41000	ND	ND	ND	ND
MICROELEMENTS										
Arsenic	mg/kg	ND	ND	15.6	16.4	ND	ND	ND	ND	ND
Barium	mg/kg	68.9	75.3	183	76	118	85.2	57.6	48.2	148
Chromium	mg/kg	15.3	12.1	15.8	13.6	343	43.1	18	12.6	15.8
Lead	mg/kg	147	71.9	622	277	2030	348	260	111	19.6
Mercury	mg/kg	0.54	0.67	1.2	3.9	4	ND	0.9	ND	ND

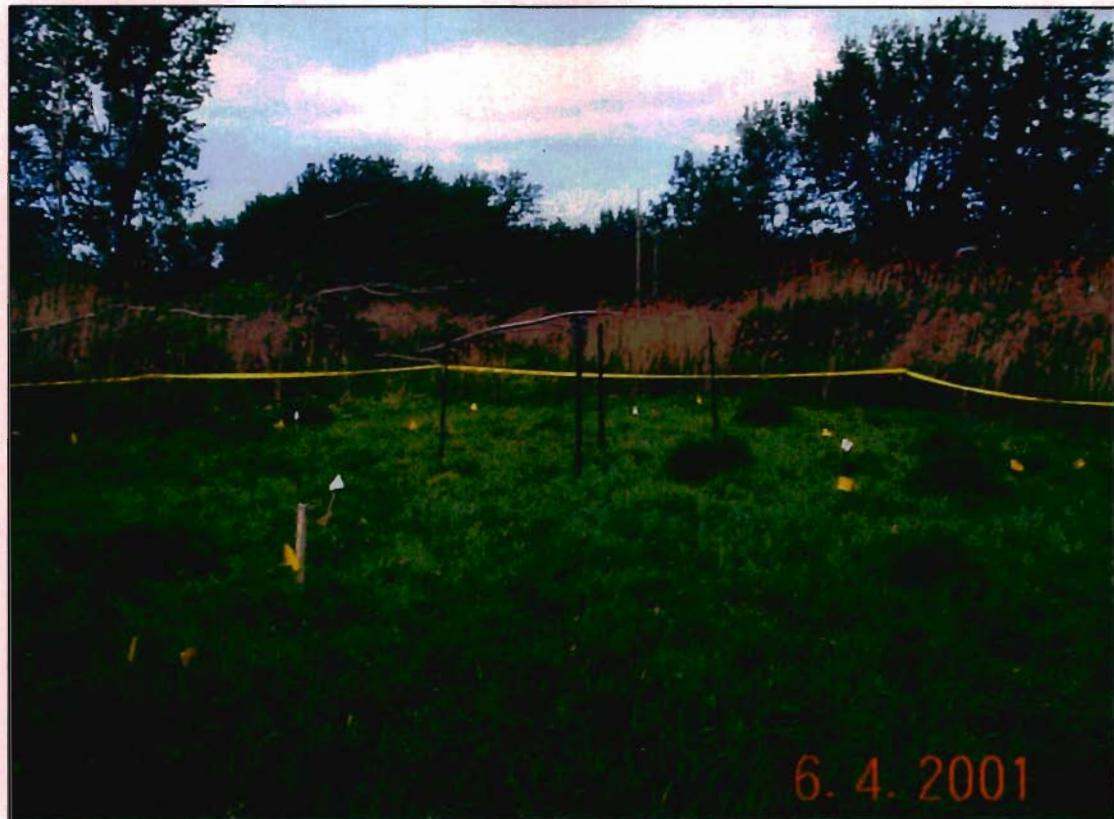
Table 2
Lehigh Valley Waste Delineation Analytical Results

Lehigh Valley Waste Delineation Soil Boring Analytical Data	SAMPLE ID: DEPTH: LAB ID: SOURCE: MATRIX: SAMPLED:	18A 4.0'-8.0' A00-669901 Lehigh Valley SOIL 9/20/00
COMPOUND	UNITS:	
TCLP VOLATILES		
Benzene	mg/L	0.041 D
Chlorobenzene	mg/L	2.4 D
TCLP SEMIVOLATILES		
Nitrobenzene	mg/L	96
TCLP METALS		
Barium	mg/L	0.48
Cadmium	mg/L	0.0057
Chromium	mg/L	0.0013
Lead	mg/L	12.9
TCLP PESTICIDES		
Endrin	mg/L	0.001

APPENDIX B

FIELD PHOTOGRAPHS

PARSONS



6. 4. 2001

Boring locations and defined limits of excavation.



6. 4. 2001

Excavation of cover soil.



Stockpiling of cover soil for use as backfill material.



Contaminated Soil.



Groundwater seepage into excavation.



Groundwater seepage into excavation.



Excavation of sump for groundwater removal.



Transporting of backfill to site (October 5, 2001).



Grading restoration of excavated area (October 5, 2001).



Seeding of site (Ocotber 5, 2001).



Completed site restoration (October 5, 2001).

APPENDIX C

ANALYTICAL RESULTS FROM POST-EXCAVATION SAMPLING

PARSONS

S E V E R N
T R E N T
S E R V I C E S

October 17, 2001

Mr. George Hermance
Parsons Engineering Science, Inc.
180 Lawrence Bell Drive
Williamsville, NY 14221

STL Buffalo
10 Hazelwood Drive
Suite 106
Amherst, NY 14228

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

RE: Analytical Results (A01-9520)

Dear Mr. Hermance:

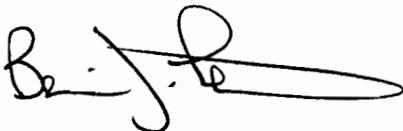
Please find enclosed analytical results concerning the samples recently submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY00-178
Project: Lehigh Valley Waste Delineation - Buffalo, NY
Matrix: Soil
Samples Received: 10/02-04/01
Sample Dates: 10/02-04/01

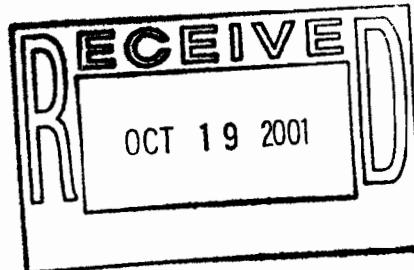
If you have any questions concerning these data, please contact the Program Manager at (716) 691-2600 and refer to the I.D. number listed below. It has been our pleasure to provide Parsons Engineering Science, Inc. with environmental testing services. We look forward to serving you in the future.

Sincerely,

STL Buffalo



Brian J. Fischer
Program Manager



BJF/jdk
Enclosure

I.D. #A01-9520, A01-9632, A01-9647
#NY0A8578

This report contains 34 pages which are individually numbered.

METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results is indicated on the specific data tables. The method number presented refers to the following U.S. Environmental Protection Agency reference:

- "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), Third Edition, Update III, December 1996, United States Environmental Protection Agency Office of Solid Waste.

COMMENTS

The enclosed data have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Sample dilutions were performed for Method 8270 as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Two coolers were received at temperatures of 4° and 6°C.

Deviations from protocol were encountered for the following:

METHOD 8260

Sample BOT-1 contained one or more target compounds in amounts exceeding the instrument calibration range ("E" qualifiers) and was reanalyzed by medium level soil extraction. Both sets of data are reported. Variability in reported results may be attributable to partial saturation of the column in the low level analysis and extraction efficiency differences between low level and medium level.

METHOD 8270

The Method Blank, SBLANK (A1B0880903), exhibited results below the reporting limit for Naphthalene. All affected samples will be indicated with a "B" qualifier.

Sample SW-2 was analyzed at a dilution factor of 20 due to sample matrix. Surrogates 2-Fluorophenol and 2,4,6-Tribromophenol were diluted out.

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

Date: 10/17/2001
Time: 09:20:33

Dilution Log w/Code Information
For Project NY0A8578, Task 1, SDG BOT-1

000003

Page: 1
Rept: AN1266R

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Parameter (Inorganic)/Method (Organic)</u>	<u>Dilution</u>	<u>Code</u>
BOT-1	A1952001	8270	10.00	012
BOT-2	A1952002	8270	5.00	012
SW-3	A1963201	8270	5.00	012
SW-2	A1964701	8270	20.00	012
BOT-3	A1964702	8270	5.00	012
BOT-3 MS	A1964702MS	8270	5.00	012
BOT-3 SD	A1964702SD	8270	5.00	012
SW-4	A1964703	8270	5.00	012
SW-4 RI	A1964703RI	8270	5.00	012

Dilution Code Definition:

- 002 - sample matrix effects
- 003 - excessive foaming
- 004 - non-target compounds (TICS) exceeded 5X the total response of one of the Internal Standards
- 005 - sample matrix resulted in method non-compliance for an Internal Standard
- 006 - sample matrix resulted in method non-compliance for Surrogate
- 007 - nature of the TCLP matrix
- 008 - high concentration of target analyte(s)
- 009 - sample turbidity
- 010 - sample color
- 011 - insufficient volume for lower dilution
- 012 - sample viscosity
- 013 - other

DATA COMMENT PAGE

ORGANIC DATA QUALIFIERS

- ND or U Indicates compound was analyzed for, but not detected.
- J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B This flag is used when the analyte is found in the associated blank, as well as in the sample.
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D This flag identifies all compounds identified in an analysis at the secondary dilution factor.
- N Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
- P This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the data page and flagged with a "P".
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- 1 Indicates coelution.
- * Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

- ND or U Indicates element was analyzed for, but not detected. Report with the detection limit value.
- J or B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
- N Indicates spike sample recovery is not within the quality control limits.
- K Indicates the post digestion spike recovery is not within the quality control limits.
- S Indicates value determined by the Method of Standard Addition.
- M Indicates duplicate injection results exceeded quality control limits.
- W Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.
- E Indicates a value estimated or not reported due to the presence of interferences.
- H Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
- * Indicates analysis is not within the quality control limits.
- + Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

000005

Sample Data Package

Date: 10/17/2001
Time: 09:20:42

Rept: AN0326

Parsons Engineering Science, Inc.
Lehigh Valley Waste Delineation - Buffalo, NY
METHOD 8250 - TCL VOLATILE ORGANICS

Client ID	Lab ID	BOT-1 A01-9520 10/02/2001	A1952001	BOT-1 A01-9520 10/02/2001	A1952001DL	BOT-2 A01-9520 10/02/2001	A1952002	BOT-3 A01-9647 10/04/2001	A1964702
Analyte	Units	Sample Value	Reporting Limit						
Benzene	UG/KG	130	5	570 DJ	625	ND	5	ND	5
Toluene	UG/KG	79	5	820 D	625	ND	5	ND	5
Ethylbenzene	UG/KG	16	5	270 DJ	625	ND	5	ND	5
Chlorobenzene	UG/KG	720 E	5	13000 D	625	4 J	5	36	5
1S/SURROGATE(S)	%								
Chlorobenzene-D5	%	94	50-200	97	50-200	91	50-200	88	50-200
1,4-Difluorobenzene	%	95	50-200	97	50-200	92	50-200	86	50-200
1,4-Dichlorobenzene-D4	%	88	50-200	97	50-200	77	50-200	76	50-200
Toluene-D8	%	92	77-117	108	77-117	92	77-117	91	77-117
p-Bromofluorobenzene	%	94	62-126	93	62-126	90	62-126	88	62-126
1,2-Dichloroethane-D4	%	93	69-130	104	69-130	95	69-130	97	69-130

Client ID	Lab ID	BOT-4 A01-9647 10/04/2001	A1964704	SH-2 A01-9647 10/03/2001	A1964701	SH-3 A01-9632 10/03/2001	A1963201	SH-4 A01-9647 10/04/2001	A1964703
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Benzene	UG/KG	7	5	68	ND	ND	5	ND	5
Toluene	UG/KG	ND	5	ND	5	ND	5	ND	5
Ethylbenzene	UG/KG	ND	5	ND	5	ND	5	ND	5
Chlorobenzene	UG/KG	4 J	5	300	5	ND	5	ND	5
1S/SURROGATE(S)	%								
Chlorobenzene-D5	%	86	50-200	92	50-200	92	50-200	92	50-200
1,4-Difluorobenzene	%	85	50-200	92	50-200	94	50-200	91	50-200
1,4-Dichlorobenzene-D4	%	73	50-200	89	50-200	85	50-200	87	50-200
Toluene-D8	%	92	77-117	90	77-117	93	77-117	92	77-117
p-Bromofluorobenzene	%	88	62-126	91	62-126	90	62-126	91	62-126
1,2-Dichloroethane-D4	%	98	69-130	91	69-130	90	69-130	91	69-130

000006

Date: 10/18/2001
Time: 09:10:52

Rept: AN0326

Parsons Engineering Science, Inc.
Lehigh Valley Waste Delineation - Buffalo, NY
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

000007

Client ID/ Job No Sample Date	Lab ID	BOT-1 A01-9520 10/02/2001		BOT-2 A01-9520 10/02/2001		BOT-3 A01-9647 10/04/2001		BOT-4 A01-9647 10/04/2001	
		Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,4-Dichlorobenzene	UG/KG	ND		660	ND	440	ND	390	ND
1,2-Dichlorobenzene	UG/KG	ND		660	ND	440	ND	390	ND
Nitrobenzene	UG/KG	ND		660	ND	330	ND	330	ND
1,2,4-Trichlorobenzene	UG/KG	4.60		660	ND	440	ND	390	ND
Naphthalene	UG/KG	3300 B		660	ND	330	ND	330	ND
4-Chloroaniline	UG/KG	4.000		330	ND	330	ND	330	ND
2-Chloronaphthalene	UG/KG	ND		660	ND	440	ND	390	ND
2-Nitroaniline	UG/KG	ND		1600	ND	1600	ND	1600	ND
3-Nitroaniline	UG/KG	ND		1600	ND	1600	ND	1600	ND
2,6-Dinitrotoluene	UG/KG	ND		660	ND	440	ND	390	ND
2,4-Dinitrotoluene	UG/KG	ND		660	ND	440	ND	390	ND
Phenanthrene	UG/KG	ND		660	ND	660	ND	660	ND
3,3'-Dichlorobenzidine 13 SURROGATES)	%	96		100	50-200	96	50-200	89	50-200
1,4-Dichlorobenzene-D4	%	96		100	50-200	93	50-200	88	50-200
Naphthalene-D8	%	100		103	50-200	96	50-200	93	50-200
Aceanaphthene-D10	%	100		104	50-200	98	50-200	96	50-200
Phenanthrene-D10	%	104		107	50-200	101	50-200	92	50-200
Chrysene-D12	%	91		95	50-200	82	50-200	66	50-200
Perylene-D12	%	52		53	16-120	67	16-120	98	16-120
Nitrobenzene-D5	%	75		74	32-120	87	32-120	90	32-120
2-Fluorobiphenyl	%	73		70	35-133	87	35-133	87	35-133
p-Terphenyl-d14	%	51		52	29-120	64	29-120	89	29-120
Phenol-D5	%	49		52	23-120	59	23-120	88	23-120
2-Fluorophenol	%	52		51	37-135	68	37-135	91	37-135
2,4,6-Tribromophenol	%								

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 10/18/2001
Time: 09:10:52

Rept: AN0326

Parsons Engineering Science, Inc.
Lehigh Valley Waste Delineation - Buffalo, NY
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

000008

Client ID Job No Sample Date	Lab ID	SW-2 A01-9647 10/03/2001		SW-3 A01-9632 10/03/2001		SW-4 A01-9647 10/04/2001		A1964703	
		Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,4-Dichlorobenzene	UG/KG	ND	820	ND	330	ND	330	NA	NA
1,2-Dichlorobenzene	UG/KG	ND	820	ND	340	ND	330	NA	NA
Nitrobenzene	UG/KG	ND	580	ND	330	ND	330	NA	NA
1,2,4-Trichlorobenzene	UG/KG	ND	820	ND	330	ND	330	NA	NA
Naphthalene	UG/KG	13000	410	ND	330	ND	330	NA	NA
4-Chloroaniline	UG/KG	ND	820	ND	330	ND	330	NA	NA
2-Chloronaphthalene	UG/KG	ND	1600	ND	1600	ND	1600	NA	NA
2-Nitroaniline	UG/KG	ND	1600	ND	1600	ND	1600	NA	NA
3-Nitroaniline	UG/KG	ND	820	ND	330	ND	330	NA	NA
2,6-Dinitrotoluene	UG/KG	ND	820	ND	330	ND	330	NA	NA
2,4-Dinitrotoluene	UG/KG	ND	820	ND	330	ND	330	NA	NA
Phenanthrene	UG/KG	ND	820	ND	280	J	330	NA	NA
3,3'-Dichlorobenzidine	UG/KG	ND	660	ND	660	ND	660	NA	NA
<u>IS/SURROGATE (\$)</u>									
1,4-Dichlorobenzene-D4	%	98	50-200	98	50-200	101	50-200	NA	NA
Naphthalene-D8	%	97	50-200	96	50-200	96	50-200	NA	NA
Acenaphthene-D10	%	98	50-200	94	50-200	98	50-200	NA	NA
Phenanthrene-D10	%	96	50-200	98	50-200	98	50-200	NA	NA
Chrysene-D12	%	97	50-200	101	50-200	98	50-200	NA	NA
Perylene-D12	%	93	50-200	94	50-200	94	50-200	NA	NA
Nitrobenzene-D5	%	41	16-120	73	16-120	66	16-120	NA	NA
2-Fluorobiphenyl	%	84	32-120	91	32-120	94	32-120	NA	NA
p-Terphenyl-d14	%	82	35-133	89	35-133	99	35-133	NA	NA
Phenol-D5	%	53	29-120	77	29-120	65	29-120	NA	NA
2-Fluorophenol	%	0 D	23-120	71	23-120	65	23-120	NA	NA
2,4,6-Tribromophenol	%	0 D	37-135	76	37-135	69	37-135	NA	NA

NA = Not Applicable ND = Not Detected

STL Buffalo

000009

Chronology and QC Summary Package

000010

Date: 10/17/2001
Time: 09:21:02

Rept: AN0326

Parsons Engineering Science, Inc.
Lehigh Valley Waste Delineation - Buffalo, NY
METHOD 8260 - TCL VOLATILE ORGANICS

Client ID Job No Sample Date	Lab ID	VBLK45 A01-9632	A1963202	VBLK05 A01-9520	A1952005	VBLK45 A01-9520	A1952003	VBLK47 A01-9647	A1964705
Analyte	Units	Sample Value	Reporting Limit						
Benzene	UG/KG	ND	5	ND	625	ND	5	ND	5
Toluene	UG/KG	ND	5	ND	625	ND	5	ND	5
Ethylbenzene	UG/KG	ND	5	ND	625	ND	5	ND	5
Chlorobenzene	UG/KG	ND	5	ND	625	ND	5	ND	5
IS/SURROGATE(S)	%	96	50-200	84	50-200	96	50-200	98	50-200
Chlorobenzene-D5	%	97	50-200	86	50-200	97	50-200	99	50-200
1,4-Difluorobenzene	%	89	50-200	78	50-200	89	50-200	92	50-200
1,4-Dichlorobenzene-D4	%	91	77-117	109	77-117	91	77-117	91	77-117
Toluene-D8	%	92	62-126	91	62-126	92	62-126	91	62-126
p-Bromofluorobenzene	%	87	69-130	108	69-130	87	69-130	82	69-130
1,2-Dichloroethane-D4	%								

NA = Not Applicable

ND = Not Detected

STL Buffalo

000011

Date: 10/17/2001
 Time: 09:21:02
 Sample Date

Rept: AN0326
 Parsons Engineering Science, Inc.
 Lehigh Valley Waste Delineation - Buffalo, NY
 METHOD 8260 - TCL VOLATILE ORGANICS

Client ID	Lab ID	MSB A01-9632	A1963203	msb A01-9520	A1952004	msb A01-9520	A1952006	msb A01-9647	A1964706
Analyte	Units	Sample Value	Reporting Limit						
Benzene	UG/KG	43	5	43	5	5800	625	59	5
Toluene	UG/KG	42	5	42	5	5800	625	53	5
Ethylbenzene	UG/KG	44	5	44	5	6100	625	54	5
Chlorobenzene	UG/KG	45	5	45	5	6200	625	52	5
<u>IS/SURROGATE(S)</u>									
Chlorobenzene-D5	%	101	50-200	101	50-200	102	50-200	100	50-200
1,4-Difluorobenzene	%	103	50-200	103	50-200	102	50-200	99	50-200
1,4-Dichlorobenzene-D4	%	99	50-200	99	50-200	104	50-200	103	50-200
Toluene-D8	%	93	77-117	93	77-117	109	77-117	91	77-117
p-BromoFluorobenzene	%	95	62-126	95	62-126	98	62-126	96	62-126
1,2-Dichloroethane-D4	%	86	69-130	86	69-130	103	69-130	85	69-130

NA = Not Applicable ND = Not Detected

STL Buffalo

000012

Date: 10/17/2001
 Time: 09:21:13

Parsons Engineering Science, Inc.
 Lehigh Valley Waste Delineation - Buffalo, NY
 METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN0326

Client ID	Job No	Lab ID	Method Blank A01-9647	A1B0899502	S BLANK A01-9520	A1B0880903	S BLANK A01-9632	A1B0886403	
Analyte	Units		Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value
1,4-Dichlorobenzene	UG/KG	ND	330	ND	330	ND	330	ND	NA
1,2-Dichlorobenzene	UG/KG	ND	330	ND	330	ND	330	ND	NA
Nitrobenzene	UG/KG	ND	330	ND	330	ND	330	ND	NA
1,2,4-Trichlorobenzene	UG/KG	ND	330	ND	330	ND	330	ND	NA
Naphthalene	UG/KG	ND	330	ND	190 J	ND	330	ND	NA
4-Chloroaniline	UG/KG	ND	330	ND	330	ND	330	ND	NA
2-Chloronaphthalene	UG/KG	ND	330	ND	330	ND	330	ND	NA
2-Nitroaniline	UG/KG	ND	1600	ND	1600	ND	1600	ND	1600
3-Nitroaniline	UG/KG	ND	1600	ND	1600	ND	1600	ND	NA
2,6-Dinitrotoluene	UG/KG	ND	330	ND	330	ND	330	ND	NA
2,4-Dinitrotoluene	UG/KG	ND	330	ND	330	ND	330	ND	NA
Phenanthrene	UG/KG	ND	330	ND	330	ND	330	ND	NA
3,3'-Dichlorobenzidine	UG/KG	ND	660	ND	660	ND	660	ND	NA
1S(SURROGATE(S))	%	87	50-200	98	50-200	110	50-200	111	50-200
1,4-Dichlorobenzene-D4	%	88	50-200	98	50-200	102	50-200	108	50-200
Naphthalene-D8	%	90	50-200	100	50-200	102	50-200	106	50-200
Acenaphthene-D10	%	90	50-200	102	50-200	102	50-200	108	50-200
Phenanthrene-D10	%	90	50-200	100	50-200	102	50-200	108	50-200
Chrysene-D12	%	80	50-200	93	50-200	93	50-200	99	50-200
Perylene-D12	%	88	16-120	71	16-120	71	16-120	77	16-120
Nitrobenzene-D5	%	87	32-120	73	32-120	73	32-120	82	32-120
2-Fluorobiphenyl	%	86	35-133	78	35-133	83	35-133	83	35-133
p-Terphenyl-d14	%	83	29-120	68	29-120	79	29-120	79	29-120
Phenol-D5	%	85	23-120	71	23-120	78	23-120	77	23-120
2-Fluorophenol	%	74	37-135	72	37-135	72	37-135	77	37-135

NA = Not Applicable

ND = Not Detected

STL Buffalo

Date: 10/17/2001
Time: 09:21:13

Parsons Engineering Science, Inc.
Lehigh Valley Waste Delineation - Buffalo, NY
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN0326

000013

Client ID Job No Sample Date	Lab ID	BOT-3 MS A01-9647 10/04/2001		BOT-3 SD A01-9647 10/04/2001		A1964702SD		Matrix Spike Blank A01-9520		Matrix Spike Blank A1B0880901		Matrix Spike Blank A01-9632		Matrix Spike Blank A1B0886401	
		Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,4-Dichlorobenzene	UG/KG	6000	390	6000	400	2400	330	2300	ND	ND	330	330	330	330	330
1,2-Dichlorobenzene	UG/KG	ND	390	ND	400	ND	330	ND	ND	ND	330	ND	ND	ND	330
Nitrobenzene	UG/KG	6800	330	6600	330	2400	330	2400	ND	ND	330	330	330	330	330
1,2,4-Trichlorobenzene	UG/KG	ND	390	ND	400	ND	330	ND	ND	ND	330	ND	ND	ND	330
Naphthalene	UG/KG	ND	330	ND	330	ND	330	ND	ND	ND	330	ND	ND	ND	330
4-Chloroaniline	UG/KG	ND	330	ND	400	ND	330	ND	ND	ND	330	ND	ND	ND	330
2-Chloronaphthalene	UG/KG	ND	390	ND	400	ND	330	ND	ND	ND	330	ND	ND	ND	330
2-Nitroaniline	UG/KG	ND	1600	ND	1600	ND	1600	ND	ND	ND	1600	ND	ND	ND	1600
3-Nitroaniline	UG/KG	ND	1600	ND	1600	ND	1600	ND	ND	ND	1600	ND	ND	ND	1600
2,6-Dinitrotoluene	UG/KG	5200	390	4200	400	3300	330	3300	ND	ND	3300	ND	ND	ND	3300
2,4-Dinitrotoluene	UG/KG	ND	390	ND	400	ND	330	ND	ND	ND	3300	ND	ND	ND	3300
Phenanthrene	UG/KG	ND	660	ND	660	ND	660	ND	ND	ND	660	ND	ND	ND	660
3,3'-Dichlorobenzidine (1S SURROGATE(S))	%	94	50-200	95	50-200	82	50-200	106	50-200	106	50-200	108	50-200	105	50-200
1,4-Dichlorobenzene-D ₄	%	93	50-200	94	50-200	84	50-200	108	50-200	108	50-200	105	50-200	105	50-200
Naphthalene-D ₈	%	97	50-200	98	50-200	86	50-200	105	50-200	105	50-200	105	50-200	105	50-200
Acenaphthene-D ₁₀	%	98	50-200	99	50-200	85	50-200	106	50-200	106	50-200	106	50-200	106	50-200
Phenanthrene-D ₁₀	%	101	50-200	103	50-200	89	50-200	106	50-200	106	50-200	98	50-200	98	50-200
Chrysene-D ₁₂	%	77	50-200	79	50-200	79	50-200	79	50-200	79	50-200	78	50-200	78	50-200
Perylene-D ₁₂	%	77	16-120	69	16-120	75	16-120	75	16-120	75	16-120	78	16-120	78	16-120
Nitrobenzene-D ₅	%	100	32-120	90	32-120	86	32-120	86	32-120	86	32-120	86	32-120	86	32-120
2-Fluorobiphenyl	%	101	35-133	89	35-133	88	35-133	85	35-133	85	35-133	85	35-133	85	35-133
p-Terphenyl -d ₁₄	%	75	29-120	70	29-120	70	29-120	78	29-120	78	29-120	78	29-120	78	29-120
Phenol-D ₅	%	66	23-120	65	23-120	73	23-120	75	23-120	75	23-120	75	23-120	75	23-120
2-Fluorophenol	%	86	37-135	74	37-135	93	37-135	82	37-135	82	37-135	82	37-135	82	37-135

NA = Not Applicable

ND = Not Detected

STL Buffalo

000014

Date: 10/17/2001
Time: 09:21:13

Rept: AN0326

Parsons Engineering Science, Inc.
Lehigh Valley Waste Delineation - Buffalo, NY
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client ID Job No Sample Date	Lab ID	Matrix Spike Blank A01-9647		Matrix Spike Blk Dup A01-9520		Matrix Spike Blk Dup A01-9632		Matrix Spike Blk Dup A1B0880902		Matrix Spike Blk Dup A1B0886402	
		Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,4-Dichlorobenzene	%	UG/KG	3000	330	2700	330	2000	330	330	NA	NA
1,1,2-Dichlorobenzene	%	UG/KG	ND	330	ND	330	ND	330	ND	NA	NA
Nitrobenzene	%	UG/KG	3000	330	2700	330	2100	330	330	NA	NA
1,2,4-Trichlorobenzene	%	UG/KG	ND	330	110 BJ	330	ND	330	ND	330	NA
Naphthalene	%	UG/KG	ND	330	ND	330	ND	330	ND	330	NA
4-Chloroaniline	%	UG/KG	ND	330	ND	330	ND	330	ND	330	NA
2-Chloronaphthalene	%	UG/KG	ND	330	ND	330	ND	330	ND	330	NA
2-Nitroaniline	%	UG/KG	ND	1600	ND	1600	ND	1600	ND	1600	NA
3-Nitroaniline	%	UG/KG	ND	1600	ND	1600	ND	1600	ND	1600	NA
2,6-Dinitrotoluene	%	UG/KG	3600	330	ND	330	ND	330	ND	330	NA
2,4-Dinitrotoluene	%	UG/KG	ND	330	3200	330	2600	330	330	NA	NA
Phenanthrene	%	UG/KG	ND	660	ND	330	ND	330	ND	330	NA
3,3'-Dichlorobenzidine IS/SURROGATE(S)	%	UG/KG	ND	660	ND	660	ND	660	ND	660	NA
1,4-Dichlorobenzene-D4	%	78	50-200	90	50-200	116	50-200	116	50-200	NA	NA
Naphthalene-D8	%	78	50-200	94	50-200	116	50-200	116	50-200	NA	NA
Acenaphthene-D10	%	82	50-200	95	50-200	114	50-200	114	50-200	NA	NA
Phenanthrene-D10	%	82	50-200	96	50-200	111	50-200	111	50-200	NA	NA
Chrysene-D12	%	83	50-200	98	50-200	114	50-200	114	50-200	NA	NA
Perylene-D12	%	75	50-200	87	50-200	103	50-200	103	50-200	NA	NA
Nitrobenzene-D5	%	99	16-120	83	16-120	69	16-120	69	16-120	NA	NA
2-Fluorobiphenyl	%	98	32-120	87	32-120	74	32-120	74	32-120	NA	NA
p-Terphenyl-d14	%	97	35-133	83	35-133	82	35-133	82	35-133	NA	NA
Phenol-D5	%	90	29-120	78	29-120	68	29-120	68	29-120	NA	NA
2-Fluorophenol	%	95	23-120	78	23-120	66	23-120	66	23-120	NA	NA
2,4,6-Tribromophenol	%	95	37-135	89	37-135	76	37-135	76	37-135	NA	NA

NA = Not Applicable

ND = Not Detected

STL Buffalo

Date : 10/17/2001 09:21:22

Rept: AN0364

000015

SDG: BOT-1
Client Sample ID: VBLK45
Lab Sample ID: A1963202

MSB
A1963203

Analyte	Units of Measure	Blank Spike	Concentration Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8260 - TCL VOLATILE ORGANICS					
Benzene	UG/KG	43.3	49.9	87	71-120
Toluene	UG/KG	42.0	49.9	84	68-117
Chlorobenzene	UG/KG	45.1	49.9	90	72-120

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 10/17/2001 09:21:22

Rept: AN0364

SDG: BOT-1
Client Sample ID: vblk05
Lab Sample ID: A1952005

msb
A1952006

Analyte	Units of Measure	Blank Spike	Concentration Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8260 - TCL VOLATILE ORGANICS					
Benzene	UG/KG	5847	6250	94	71-120
Toluene	UG/KG	5775	6250	92	68-117
Chlorobenzene	UG./KG	6180	6250	99	72-120

000016

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 10/17/2001 09:21:22

Rept: AN0364

000017

SDG: BOT⁻¹
Client Sample ID: vbl45
Lab Sample ID: A192003

msb
A192004

Analyte	Units of Measure	Concentration Blank Spike Amount	Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8260 - TCL VOLATILE ORGANICS					
Benzene	UG/KG	43.3	49.9	87	71-120
Toluene	UG/KG	42.0	49.9	84	68-117
Chlorobenzene	UG/KG	45.1	49.9	90	72-120

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 10/17/2001 09:21:22

Rept: AN0364

SDG: BOT-1
Client Sample ID: vblk47
Lab Sample ID: A1964705

msb
A1964706

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8260 - TCL VOLATILE ORGANICS					
Benzene	UG/KG	59.2	49.5	120	71-120
Toluene	UG/KG	53.3	49.5	108	68-117
Chlorobenzene	UG/KG	51.9	49.5	105	72-120

000018

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 10/17/2001 09:21:36

SAMPLE DATE 10/04/2001

Rept: AN0364

SDG: BOT-1
Client Sample ID: BOT-3
Lab Sample ID: A1964702

BOT-3 MS
A1964702MS

BOT-3 SD
A1964702SD

Analyte	Units of Measure	Sample	Concentration		Spike Amount	MS	MSD	% Recovery		% RPD	QC LIMITS RPD REC.
			Matrix Spike	Spike Duplicate				MS	MSD		
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	UG/KG	0	6008	6014	7827	8017	77	75	76	3	35.0
1,4-Dichlorobenzene	UG/KG	0	6801	6550	7827	8017	87	82	85	6	35.0
1,2,4-Trichlorobenzene	UG/KG	0	5213	4221	7827	8017	67	53	60	23	35.0
2,4-Dinitrotoluene	UG/KG										40-120

000019

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 10/17/2001 09:21:36

Rept: AN0364

SDG: BOT-1
Client Sample ID: Method Blank
Lab Sample ID: A1B0899502

Matrix Spike Blank
A1B0899501

Analyte	Units of Measure	Blank Spike	Concentration Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	UG/KG	3059	3321	92	31-120
1,4-Dichlorobenzene	UG/KG	3033	3321	91	32-120
1,2,4-Trichlorobenzene	UG/KG	3586	3321	108	40-120
2,4-Dinitrotoluene					

000020

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 10/17/2001 09:21:36

Rept: AN0364

SDG: BOT-1
Client Sample ID: S BLANK
Lab Sample ID: A1B0880903

Matrix Spike Blank
A1B0880901

Matrix Spike Blk Dup
A1B0880902

Analyte	Units of Measure	Concentration			% Recovery			% RPD	QC LIMITS RPD REC.
		Spike Blank	Spike Blank Dup	SB	Spike Amount	SB	Avg		
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	UG/KG	2365	2675	3265	3312	72	81	77	35.0 31-120
1,4-Dichlorobenzene	UG/KG	2441	2692	3265	3312	75	81	78	35.0 32-120
1,2,4-Trichlorobenzene	UG/KG	3302	3244	3265	3312	101	98	100	35.0 40-120
2,4-Dinitrotoluene									

000021

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 10/17/2001 09:21:36

Rept: AN0364

000022

SDG: BOT-1
 Client Sample ID: S BLANK
 Lab Sample ID: A1B0886403

Matrix Spike Blank
 A1B0886401
 Matrix Spike Blk Dup
 A1B0886402

Analyte	Units of Measure	Concentration		Spike Amount	SBD	SB	% Recovery		% RPD	QC LIMITS RPD REC.
		Spike Blank	Blank Dup				SB	SBD Avg		
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	UG/KG	2338	2057	3309	3293	71	62	67	14	35.0
1,4-Dichlorobenzene	UG/KG	2351	2074	3309	3293	71	63	67	12	35.0
1,2,4-Trichlorobenzene	UG/KG	2899	2657	3309	3293	88	81	85	8	35.0
2,4-Dinitrotoluene										40-120

* Indicates Result is outside QC Limits
 NC = Not Calculated ND = Not Calculated

STL Buffalo

Date: 10/17/2001
Time: 09:22:05

PARSON'S ENGINEERING SCIENCE INC.
SAMPLE CHRONOLOGY

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METHOD 8260 - TCL VOLATILE ORGANICS

Client Sample ID	BOT-1 A01-9520	A1952001	BOT-1 A01-9520	A1952001DL	BOT-2 A01-9520	A1952002	BOT-3 A01-9647	A1964702	BOT-4 A01-9647	A1964704
Sample Date	10/02/2001	09:45	10/02/2001	09:45	10/02/2001	11:55	10/04/2001	09:25	10/04/2001	13:00
Received Date	10/02/2001	15:00	10/02/2001	15:00	10/02/2001	15:00	10/04/2001	14:50	10/04/2001	14:50
Extraction Date	-									
Extraction HT Met?	10/05/2001	15:26	10/10/2001	21:02	-	10/05/2001	15:58	-	10/09/2001	21:13
Analytical HT Met?	YES		YES		YES		YES		-	10/09/2001
Sample Matrix	SOIL	LOW	SOIL	MED	SOIL	LOW	SOIL	LOW	YES	20:41
Dilution Factor	1.0	5.03	1.0	4.09	1.0	5.09	1.0	5.03	SOIL	1.0
Sample wt/vol % Dry	49.67	GRAMS	49.67	GRAMS	37.13	GRAMS	41.81	GRAMS	LOW	5.09
										42.30

NA = Not Applicable

STL Buffalo

Date: 10/17/2001
Time: 09:22:05

PARSON'S ENGINEERING SCIENCE INC.
SAMPLE CHRONOLOGY

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METHOD 8260 - TCL VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	SW-2 A01-9647 A1964701	SW-3 A01-9632 A1963201	SW-4 A01-9647 A1964703
Sample Date Received Date	10/03/2001 15:05 10/04/2001 14:50	10/03/2001 16:07 10/04/2001 14:50	10/04/2001 11:05 10/04/2001 14:50
Extraction Date Analysis Date	10/09/2001 19:07	10/05/2001 14:55	10/09/2001 20:10
Extraction HT Met? Analytical HT Met?	- YES	YES SOIL LOW	- YES SOIL LOW
Sample Matrix Dilution Factor Sample wt/vol % Dry	SOIL LOW 1.0 5.04 55.11	1.0 5.06 77.36	1.0 5.11 87.16
	GRAMS	GRAMS	GRAMS

NA = Not Applicable

STL Buffalo

Date: 10/17/2001
Time: 09:22:05

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

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METHOD 8260 - TCL VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	vblk45 A01-9632 A1963202	vblk05 A01-9520 A1952005	vblk45 A01-9520 A1952003	vblk47 A01-9647 A1964705
Sample Date Received Date	10/05/2001 11:20	-	10/10/2001 20:17	-
Extraction Date Analysis Date	-	-	10/05/2001 11:20	10/09/2001 13:20
Extraction HT Met? Analytical HT Met?	SOIL 1.0 5.09 100.00	LOW 4.0 GRAMS	SOIL 1.0 5.09 100.00	SOIL 1.0 5.0 GRAMS
Sample Matrix Dilution Factor Sample wt/vol % Dry				100.00

NA = Not Applicable

STL Buffalo

Date: 10/17/2001
Time: 09:22:05

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

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METHOD 8260 - TCL VOLATILE ORGANICS

	Client Sample ID	msb		msb		msb	
Job No & Lab Sample ID	A01-9632	A1963203		A01-9520	A1952004	A01-9520	A1952006
Sample Date Received Date							
Extraction Date	10/05/2001	10:48		10/05/2001	10:48	10/10/2001	19:04
Extraction HT Met?	-			-		-	10/09/2001 12:41
Analytical HT Met?							
Sample Matrix	SOIL	LOW		SOIL	LOW	SOIL	LOW
Dilution Factor	1.0			1.0		1.0	
Sample wt/vol	5.01	GRAMS		5.01	GRAMS	5.05	GRAMS
% Dry	100.00			100.00		100.00	

NA = Not Applicable

STL Buffalo

Date: 10/18/2001
Time: 09:11:52

PARSON'S ENGINEERING SCIENCE INC.
SAMPLE CHRONOLOGY

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METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	BOT-1 A01-9520	A1952001	BOT-2 A01-9520	A1952002	BOT-3 A01-9647	A1964702	BOT-4 A01-9647	A1964704	SM-2 A01-9647	A1964701
Sample Date	10/02/2001	09:45	10/02/2001	11:55	10/04/2001	09:25	10/04/2001	13:00	10/03/2001	15:05
Received Date	10/02/2001	15:00	10/02/2001	15:00	10/04/2001	14:50	10/04/2001	14:50	10/04/2001	14:50
Extraction Date	10/04/2001	07:00	10/04/2001	07:00	10/10/2001	07:00	10/10/2001	07:00	10/10/2001	07:00
Analysis Date	10/05/2001	18:30	10/05/2001	19:15	10/11/2001	17:28	10/11/2001	20:27	10/12/2001	10:48
Extraction HT Met?	YES		YES		YES		YES		YES	
Analytical HT Met?	YES		YES		YES		YES		YES	
Sample Matrix	SOIL	LOW	SOIL	LOW	SOIL	LOW	SOIL	LOW	SOIL	LOW
Dilution Factor	10.0	GRAMS	5.0	GRAMS	5.0	GRAMS	1.0	GRAMS	20.0	GRAMS
Sample wt/vol	30.65		30.81		30.7		30.6		30.95	
% Dry	49.67		37.13		41.48		42.44		78.52	

NA = Not Applicable

STL Buffalo

Date: 10/18/2001
Time: 09:11:52

PARSON'S ENGINEERING SCIENCE INC.
SAMPLE CHRONOLOGY

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METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	SW-3 A01-9632 A1963201	SW-4 A01-9647 A1964703	
Sample Date	10/03/2001	16:07	10/04/2001 11:05
Received Date	10/04/2001	14:50	10/04/2001 14:50
Extraction Date	10/05/2001	07:00	10/10/2001 07:00
Analysis Date	10/05/2001	11:52	10/12/2001 11:32
Extraction HT Met?	YES		YES
Analytical HT Met?	YES		YES
Sample Matrix	SOIL	LOW	SOIL
Dilution Factor	5.0		5.0
Sample wt/vol	30.32	GRAMS	30.4
% Dry	86.93		GRAMS
			86.25

NA = Not Applicable

STL Buffalo

Date: 10/18/2001
Time: 09:11:52

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

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METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID	Method Blank	S BLANK	S BLANK
Job No & Lab Sample ID	A01-9647 A1B0899502	A01-9520	A1B0880903
Sample Date			
Received Date	10/10/2001 07:00	10/04/2001 07:00	10/05/2001 07:00
Extraction Date	10/11/2001 15:59	10/05/2001 16:16	10/05/2001 12:35
Analysis Date	-	-	-
Extraction HT Met?	-	-	-
Analytical HT Met?	-	-	-
Sample Matrix	SOIL LOW	SOIL LOW	SOIL LOW
Dilution Factor	1.0	1.0	1.0
Sample wt/vol % Dry	30.42 GRAMS 100.00	30.75 GRAMS 100.00	30.3 GRAMS 100.00

NA = Not Applicable

STL Buffalo

Date: 10/18/2001
Time: 09:11:52

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

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METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	BOT-3 MS A01-9647 A1964702MS	BOT-3 SD A01-9647 A1964702SD	Matrix Spike Blank A01-9520 A1B0880901	Matrix Spike Blank A01-9632 A1B0886401	Matrix Spike Blank A01-9647 A1B0899201
Sample Date	10/04/2001 09:25	10/04/2001 09:25	10/04/2001 07:00	10/04/2001 07:00	10/10/2001 07:00
Received Date	10/04/2001 14:50	10/04/2001 14:50	10/10/2001 07:00	10/05/2001 07:00	10/10/2001 07:00
Extraction Date	10/10/2001 07:00	10/10/2001 07:00	10/11/2001 18:58	10/05/2001 14:47	10/11/2001 13:18
Analysis Date	10/11/2001 18:13	YES	-	-	-
Extraction HT Met?	YES	YES	-	-	-
Analytical HT Met?	YES	SOIL	SOIL	SOIL	SOIL
Sample Matrix	SOIL	LOW	LOW	LOW	LOW
Dilution Factor	5.0	5.0	1.0	1.0	1.0
Sample wt/vol	30.8	30.07	30.62	30.22	30.11
% Dry	41.48	41.48	100.00	100.00	100.00

000030

NA = Not Applicable

STL Buffalo

Date: 10/18/2001
Time: 09:11:52

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

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METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

	Client Sample ID Job No & Lab Sample ID	Matrix Spike Blk Dup A01-9520 A1B0880902	Matrix Spike Blk Dup A01-9632 A1B08864.02
Sample Date		10/04/2001 07:00	10/05/2001 07:00
Received Date		10/05/2001 15:32	10/05/2001 14:02
Extraction Date		-	-
Extraction HT Met?		-	-
Analytical HT Met?		SOIL LOW	SOIL LOW
Sample Matrix		1.0	1.0
Dilution Factor		30.19	30.36
Sample wt/vol		GRAMS	GRAMS
% Dry		100.00	100.00

NA = Not Applicable

STL Buffalo

000032

Chain of Custody

CHAIN OF CUSTODY RECORD

NO: 3047

CHAIN OF CUSTODY RECORD

- 3048

APPENDIX D
WELL DRILLING RECORDS

PARSONS

Contractor: SJB Services, Inc.					PARSONS DRILLING RECORD		BORING NO. MW-1
Driller: Mike Kukoleca, Andy Morris					PROJECT NAME Lehigh Valley Railroad	Sheet 1 of 1	
Inspector: Andy Janik					PROJECT NUMBER 736645	Location: Southwest of Excavation Area	
Rig Type: Track mounted drill rig					Elevation:		
Method: 4.25-inch HSA/SS							
Observations	1/16/02			Weather	Sunny 30 F	N	
Depth of Water	~7 bgs			Date/Time Start	1/16/02 1040	X	
				Date/Time Finish	1/16/02 1140	Area of Excavation	
PID Reading	Sample Code	Sample Depth (ft)	Rec. (ft)	SPT	FIELD IDENTIFICATION OF MATERIAL		WELL CONSTRUCTION DIAGRAM
		0					
1.1	1		3-3		Black, Silty Clay, some organics and f-Gravel		<p>Stick-up protective casing Grout Bentonite seal 2" SCH 40 PVC well riser Sand 5' to 12' screen interval 2" SCH 40 PVC well screen, 0.010" slot size</p> <p>Well depth @ 12'</p>
	SS-1	2	0.5	3-3	Black/brown, Silty, Sandy, Clay, brick fragments, m-Gravel		
1.2		3		7-6	Thin, wet, f-Sand layer at 2.5' bgs		
	SS-2	4	1.5	5-3	Brown, Sandy Clay, brick fragments, moist		
1.3		5		1-1	Black/brown, peat layer at 5.7' bgs		
	SS-3	6	0.7	2-1	Black/brown, peat layer, some wet, gray, Silty Clay and f-Sand until		
1.4		7		1-2	7.5' bgs, then gray, Silty Clay with wood chips		
	SS-4	8	1.5	2-2	Wet, gray, f-Sand, some brown, Silty Clay, trace of organics		
1.5		9		6-9			
	SS-5	10	0.3	18-10			
2.1		11		3-3	Wet, gray, f-Sand to 11' bgs, then moist, gray, Silty Clay		
	SS-6	12	1.5	3-4			
STANDARD PENETRATION WOR= WEIGHT OF RODS SS = SPLIT SPOON ST = SHELBY TUBE					SUMMARY: _____ _____ _____		

<p>Contractor: SJB Services, Inc.</p> <p>Driller: Mike Kukoteka, Andy Morris</p> <p>Inspector: Andy Janik</p> <p>Rig Type: Track mounted drill rig</p> <p>Method: 4.25-inch HSA/SS</p>					<p align="center">PARSONS DRILLING RECORD</p> <p>PROJECT NAME <u>Lehigh Valley Railroad</u></p> <p>PROJECT NUMBER <u>736645</u></p> <p>Weather <u>Snow 20 F</u></p> <p>Date/Time Start <u>1/17/02 1040</u></p> <p>Date/Time Finish <u>1/17/02 1220</u></p>					<p align="center">BORING NO. MW-5A</p> <p>Sheet 1 of 1</p> <p>Location: Southeast of Excavation Area</p> <p>Elevation:</p>				
PID Reading	Sample Code	Sample Depth	Rec. (ft)	SPT	FIELD IDENTIFICATION OF MATERIAL					WELL CONSTRUCTION DIAGRAM				
0					Brown, Silty Clay, some organics with black/red discoloration									
1.7	1		3-5		SS refusal at 2', augered down to 4' and continued									
NR	2	1.2	43-50/.3		Brown, Silty Clay, black reed layer at 5', wet									
SS-2	4	NR	NR		Brown, Silty Clay, m-Gravel, into wet, black reed layer, to brown peat layer at 6.5'									
1.7	5		13-4		Wet, Sandy, m-Gravel, into gray, f-Sand									
SS-3	6	1.1	2-1		Wet, gray, f-Sand									
1.2	7		1-2											
SS-4	8	2.0	3-1											
0.9	9		13-4											
SS-5	10	1.0	4-4											
1.3	11		WOR-1											
SS-6	12	1.0	2-1											
STANDARD PENETRATION WOR= WEIGHT OF RODS SUMMARY: SS = SPLIT SPOON ST = SHELBY TUBE														

Contractor: SJB Services, Inc.					PARSONS DRILLING RECORD		BORING NO. MW-5		
					PROJECT NAME Lehigh Valley Railroad PROJECT NUMBER 736645		Sheet 1 of 1		
							Location: Northwest of Excavation Area		
							Elevation:		
Observations		1/17/02			Weather Snow 20 F				
Depth of Water		-7 bgs			Date/Time Start 1/17/02 0915				
					Date/Time Finish 1/17/02 1000				
PID Reading	Sample Code	Sample Depth	Rec. (ft)	SPT	FIELD IDENTIFICATION OF MATERIAL		WELL CONSTRUCTION DIAGRAM		
		0							
1.8	SS-1	1	2-3		Brown/black, Silty Gravel, some organics and concrete				
2.0		2	1.2	3-37	Wet/moist, brown, Silty Sandy Clay, brick fragments, m-Gravel, blue/green discoloration of material at 3.8'				
5.3	SS-2	3		8-32	Sheen on spoon, black, oily, Silty Clay, m-Gravel, some organics				
8.4	SS-3	4	1.6	11-7	Sheen on spoon, black, oily, Silty Clay, m-Gravel, some organics,				
		5		9-4					
		6	0.7	3-16					
		7		3-2					
	SS-4	8	1.8	2-3	to black/brown peat layer at 7.5'				
Borehole abandoned due to material encountered									
STANDARD PENETRATION WOR = WEIGHT OF RODS SS = SPLIT SPOON ST = SHELBY TUBE					SUMMARY: <hr/> <hr/> <hr/> <hr/>				

APPENDIX E

WELL SAMPLING RECORDS

PARSONS

WELL SAMPLING RECORD

Site Name Lehigh Valley Railroad Well MW-5

Samplers Andy Janik Date 1/22/02
Dan Lipp Time 1040

Total Well Depth (TOC) 13.4 feet
Initial Static Water Level (TOC) 5.62 feet
Well Diameter (inches) 2"

Purging Data

Method Dedicated Bailer

$$\begin{array}{rcl} \text{Water Volume} = (\text{Total Depth of Well} - \text{Depth To Water}) \times \text{Casing Volume per Foot} \\ = & 13.4 - & 5.62 \times \\ = & 1.2 \text{ gallons} & 0.16 \end{array}$$

Casing Volumes (gal/ft.):

1-inch	0.041	1.5-inch	0.092	2-inch	0.16
3-inch	0.36	4-inch	0.64	6-inch	1.4
8-inch	2.5			10 inch	4

Volume of Purge Water Removed 4 gallons

Sampling Data

Method Dedicated Bailer

Parameters	Bottle	Pres.	Method
TCL VOAs	2-40ml vials	HCl	8260
TCL SVOAs	2-1L amber bottles	-	8270
RCRA Metals	1- 8oz. Plastic bottle	HNO ₃	6010

Field Parameters

	1 Volume	2 Volume	3 Volume	Sample
pH	6.62	6.66	6.62	5.11
Temp. (F)	44.5	45.6	46.3	46.5
Spec. Cond. (uS/cm)	1.08	1.20	1.22	1.28
Turbidity (NTU)	-	-	-	-

Comments: Water was black in color, turbid. Sample was taken from well at 1400.

WELL SAMPLING RECORD

Site Name Lehigh Valley Railroad Well MW-4

Samplers Andy Janik
Dan Lipp Date 1/22/02
Time 1020

Total Well Depth (TOC) 14.1 feet
Initial Static Water Level (TOC) 3.3 feet
Well Diameter (inches) 2"

Purging Data

Method Dedicated Bailer

$$\begin{array}{r} \text{Water Volume} = (\text{Total Depth of Well} - \text{Depth To Water}) \times \text{Casing Volume per Foot} \\ = \frac{14.1 - 3.3}{0.16} \\ = 1.7 \text{ gallons} \end{array}$$

Casing Volumes (gal/ft.):

1-inch	0.041	1.5-inch	0.092	2-inch	0.16
3-inch	0.36	4-inch	0.64	6-inch	1.4
8-inch	2.5			10 inch	4

Volume of Purge Water Removed 5.5 gallons

Sampling Data

Method Dedicated Bailer

Parameters	Bottle	Pres.	Method
TCL VOAs	2-40ml vials	HCl	8260
TCL SVOAs	2-1L amber bottles	-	8270
RCRA Metals	1- 8oz. Plastic bottle	HNO ₃	6010

Field Parameters

pH
Temp. (F)
Spec. Cond. (uS/cm)
Turbidity (NTU)

1 Volume	2 Volume	3 Volume	Sample
6.45	6.43	6.50	5.20
44.8	46.7	46.6	47.7
1.38	1.21	1.19	1.31
-	-	-	-

Comments: Water was brown in color, turbid. Sample was taken from well at 1345.

WELL SAMPLING RECORD

Site Name Lehigh Valley Railroad Well MW-3

Samplers Andy Janik Date 1/22/02
Dan Lipp Time 1015

Total Well Depth (TOC) 11.8 feet
Initial Static Water Level (TOC) 6.82 feet
Well Diameter (inches) 2"

Purging Data

Method Dedicated Bailer

$$\begin{array}{rcl} \text{Water Volume} = (\text{Total Depth of Well} - \text{Depth To Water}) \times \text{Casing Volume per Foot} \\ = & 11.8 - & 6.82 \times \\ = & & 0.8 \text{ gallons} \end{array}$$

Casing Volumes (gal/ft.):

1-inch	0.041	1.5-inch	0.092	2-inch	0.16
3-inch	0.36	4-inch	0.64	6-inch	1.4
8-inch	2.5			10 inch	4

Volume of Purge Water Removed 3 gallons

Sampling Data

Method Dedicated Bailer

Parameters	Bottle	Pres.	Method
TCL VOAs	2-40ml vials	HCl	8260
TCL SVOAs	2-1L amber bottles	-	8270
RCRA Metals	1- 8oz. Plastic bottle	HNO ₃	6010

Field Parameters

pH
Temp. (F)
Spec. Cond. (uS/cm)
Turbidity (NTU)

	1 Volume	2 Volume	3 Volume	Sample
pH	6.54	6.68	6.55	5.06
Temp. (F)	43.0	43.4	42.5	45.3
Spec. Cond. (uS/cm)	1.01	1.02	0.98	1.01
Turbidity (NTU)	-	-	-	-

Comments: Water was brown in color, turbid. Sample was taken from well at 1330.

WELL SAMPLING RECORD

Site Name Lehigh Valley Railroad Well MW-2

Samplers Andy Janik Date 1/22/02
Dan Lipp Time 0935

Total Well Depth (TOC) 12.4 feet
Initial Static Water Level (TOC) 4.56 feet
Well Diameter (inches) 2"

Purging Data

Method Dedicated Bailer

$$\begin{array}{rcl} \text{Water Volume} = (\text{Total Depth of Well} - \text{Depth To Water}) \times \text{Casing Volume per Foot} \\ = & 12.4 - & 4.56 \times \\ = & & 0.16 \\ & & 1.3 \text{ gallons} \end{array}$$

Casing Volumes (gal/ft.):

1-inch	0.041	1.5-inch	0.092	2-inch	0.16
3-inch	0.36	4-inch	0.64	6-inch	1.4
8-inch	2.5			10 inch	4

Volume of Purge Water Removed 4.5 gallons

Sampling Data

Method Dedicated Bailer

Parameters	Bottle	Pres.	Method
TCL VOAs	2-40ml vials	HCl	8260
TCL SVOAs	2-1L amber bottles	-	8270
RCRA Metals	1- 8oz. Plastic bottle	HNO ₃	6010

Field Parameters

pH
Temp. (F)
Spec. Cond. (uS/cm)
Turbidity (NTU)

	1 Volume	2 Volume	3 Volume	Sample
6.64	6.71	6.60	5.06	
43.3	43.9	43.5	44.5	
1.23	1.20	1.25	1.29	
-	-	-	-	

Comments: Water was black in color, turbid. Sample was taken from well at 1315.

WELL SAMPLING RECORD

Site Name *Lehigh Valley Railroad*

Well MW-1

Samplers *Andy Janik*
Dan Lipp

Date 1/22/02
Time 1000

Total Well Depth (TOC)	13.9 feet
Initial Static Water Level (TOC)	2.58 feet
Well Diameter (inches)	2"

Purging Data

Method Dedicated Bailer

$$\text{Volume} = (\text{Total Depth of Well} - \text{Depth To Water}) \times \text{Casing Volume per Foot}$$

$$= 13.9 - 2.58 \times 0.16$$

$$= 1.8 \text{ gallons}$$

Casing Volumes (gal/ft.):					
1-inch	0.041	1.5-inch	0.092	2-inch	0.16
3-inch	0.36	4-inch	0.64	6-inch	1.4
8-inch	2.5			10 inch	4

Volume of Purge Water Removed 6 gallons

Sampling Data

Method *Dedicated Bailer*

Parameters	Bottle	Pres.	Method
TCL VOAs	2-40ml vials	HCl	8260
TCL SVOAs	2-1L amber bottles	-	8270
RCRA Metals	1- 8oz. Plastic bottle	HNO ₃	6010

<u>Field Parameters</u>	<u>1 Volume</u>	<u>2 Volume</u>	<u>3 Volume</u>	<u>Sample</u>
pH	6.34	6.62	6.48	5.41
Temp. (F)	42.8	45.8	47.0	45.1
Spec. Cond. (uS/cm)	1.19	1.25	1.27	1.14
Turbidity (NTU)	-	-	-	-

Comments: Water was brown in color, turbid. Sample was taken from well at 1300.

S E V E R N
T R E N T
S E R V I C E S

February 7, 2002

Ms. Terri Benson
Parsons Engineering Science, Inc.
180 Lawrence Bell Drive
Williamsville, NY 14221

STL Buffalo
10 Hazelwood Drive
Suite 106
Amherst, NY 14228

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

RE: Analytical Results A02-0656

Dear Ms. Benson:

Please find enclosed analytical results concerning the samples recently submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY00-178
Project: Lehigh Valley - Groundwater
Matrix: Water
Samples Received: 01/22/02
Sample Dates: 01/22/02

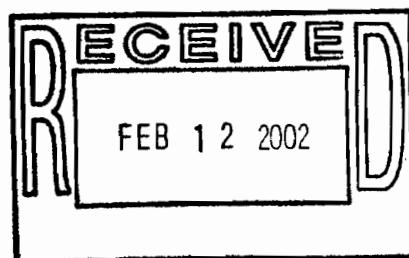
If you have any questions concerning these data, please contact the Program Manager at (716) 691-2600 and refer to the I.D. number listed below. It has been our pleasure to provide Parsons Engineering Science, Inc. with environmental testing services. We look forward to serving you in the future.

Sincerely,

STL Buffalo



Brian J. Fischer
Program Manager



BJF/klk
Enclosure

I.D. #A02-0656
#NY0A8578

This report contains 40 pages which are individually numbered.

000001

METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results is indicated on the specific data tables. The method number presented refers to the following U.S. Environmental Protection Agency reference:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), Third Edition, Update III, December 1996, United States Environmental Protection Agency Office of Solid Waste.

COMMENTS

The enclosed data have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

The cooler was received at a temperature of 6°C.

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

Deviations from protocol were encountered for the following:

METHOD 8260

Sample TRIP BLANK exhibited results below the reporting limits for Methylene chloride. However, all sample results were non-detect or below the reporting limit.

METHOD 8270

Sample MW-1 MS exhibited surrogate recovery results below quality control limits for Phenol-D5, 2-Fluorophenol, and 2,4,6-Tribromophenol due to poor extraction in organic preparation. All associated samples, MW-1 SD and the matrix spike blank surrogate recoveries were compliant.

Sample MW-1 MS exhibited spike recovery results below quality control limits for Phenol, 2-Chlorophenol, 4-Chloro-3-methylphenol, 4-Nitrophenol, and Pentachlorophenol due to poor extraction efficiency. The relative percent difference (RPD) for spike recovery between samples MW-1 MS and MW-1 SD was outside quality control limits for Phenol, 2-Chlorophenol, 4-Chloro-3-methylphenol, 4-Nitrophenol, and Pentachlorophenol. However, sample MW-1 SD recoveries were compliant.

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

Date: 02/07/2002

Dilution Log w/Code Information

Page: 1

Time: 18:40:57

For Job A02-0656

Rept: AN1266R

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Parameter (Inorganic)/Method (Organic)</u>	<u>Dilution</u>	<u>Code</u>	
MW-2	A2065602	Mercury - Total	10.00	008	000002

dilution Code Definition:

- 002 - sample matrix effects
- 003 - excessive foaming
- 004 - non-target compounds (TICS) exceeded 5X the total response of one of the Internal Standards
- 005 - sample matrix resulted in method non-compliance for an Internal Standard
- 006 - sample matrix resulted in method non-compliance for Surrogate
- 007 - nature of the TCLP matrix
- 008 - high concentration of target analyte(s)
- 009 - sample turbidity
- 010 - sample color
- 011 - insufficient volume for lower dilution
- 012 - sample viscosity
- 013 - other

ORGANIC DATA QUALIFIERS

- ND or U Indicates compound was analyzed for, but not detected.
- J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B This flag is used when the analyte is found in the associated blank, as well as in the sample.
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D This flag identifies all compounds identified in an analysis at the secondary dilution factor.
- N Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
- P This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the data page and flagged with a "P".
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- 1 Indicates coelution.
- Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

- ND or U Indicates element was analyzed for, but not detected. Report with the detection limit value.
- J or B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
- N Indicates spike sample recovery is not within the quality control limits.
- K Indicates the post digestion spike recovery is not within the quality control limits.
- S Indicates value determined by the Method of Standard Addition.
- M Indicates duplicate injection results exceeded quality control limits.
- W Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.
- E Indicates a value estimated or not reported due to the presence of interferences.
- H Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
- Indicates analysis is not within the quality control limits.
- + Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

000004

Sample Data Package

Date: 02/07/2002
Time: 18:41:15

Rept: AN0326

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - METHOD 8260 - TCL VOLATILE ORGANICS

Client ID Job No Sample Date	Lab ID	MW-1 A02-0656 01/22/2002	A2065601	MW-2 A02-0656 01/22/2002	A2065602	MW-3 A02-0656 01/22/2002	A2065603	MW-4 A02-0656 01/22/2002	A2065604
Analyte	Units	Sample Value	Reporting Limit						
Acetone	UG/L	5.7 J	25	8.8 J	25	8.9 J	25	6.5 J	25
Benzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Bromodichloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Bromoform	UG/L	ND	10	ND	10	ND	10	ND	10
Bromomethane	UG/L	ND	10	ND	10	ND	10	ND	10
2-Butanone	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Carbon Tetrachloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chloroethane	UG/L	ND	10	ND	10	ND	10	ND	10
Chloroform	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chloromethane	UG/L	ND	10	ND	10	ND	10	ND	10
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichloroethene (Total)	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,2-Trichloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Ethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
2-Hexanone	UG/L	ND	10	ND	10	ND	10	ND	10
Methylene chloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
4-Methyl-2-pentanone	UG/L	ND	10	ND	10	ND	10	ND	10
Sterene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Tetrachloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Toluene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Trichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Vinyl acetate	UG/L	ND	10	ND	10	ND	10	ND	10
Vinyl chloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Total Xylenes	UG/L	ND	15	ND	15	ND	15	ND	15
IS/SURROGATE(S)	%	81	50-200	78	50-200	87	50-200	85	50-200
Chlorobenzene-D5	%	74	50-200	74	50-200	80	50-200	78	50-200
1,4-Difluorobenzene	%	68	50-200	62	50-200	75	50-200	66	50-200
Toluene-D8	%	100	77-115	102	77-115	100	77-115	99	77-115
P-Bromofluorobenzene	%	90	77-112	96	77-112	91	77-112	95	77-112
1,2-Dichloroethane-D4	%	119	84-126	118	84-126	115	84-126	117	84-126

NA = Not Applicable ND = Not Detected

STL Buffalo

100005

Date: 02/07/2002
Time: 18:41:15

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - METHOD 8260 - TCL VOLATILE ORGANICS

Rept: AN0326

Client ID Job No Sample Date	Lab ID	MW-5 A02-0656 01/22/2002	A2065605	Sample Value	Reporting Limit						
Acetone		UG/L	ND	25	NA	NA	NA	NA	NA	NA	NA
Benzene		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Bromomethane		UG/L	ND	10	NA	NA	NA	NA	NA	NA	NA
2-Butanone		UG/L	ND	10	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene		UG/L	ND	3.0	J	5.0	NA	NA	NA	NA	NA
Chloroethane		UG/L	ND	10	NA	NA	NA	NA	NA	NA	NA
Chloroform		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Chloromethane		UG/L	ND	10	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (Total)		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
2-Hexanone		UG/L	ND	10	NA	NA	NA	NA	NA	NA	NA
Methylene chloride		UG/L	2.6	J	5.0	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone		UG/L	ND	10	NA	NA	NA	NA	NA	NA	NA
Styrene		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Toluene		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Trichloroethene		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Vinyl acetate		UG/L	ND	10	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride		UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
Total Xylenes		UG/L	ND	15	NA	NA	NA	NA	NA	NA	NA
1S/SURROGATE(S)		%	101	50-200	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene-D5		%	100	50-200	NA	NA	NA	NA	NA	NA	NA
1,4-Difluorobenzene		%	100	50-200	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene-D4		%	100	77-115	NA	NA	NA	NA	NA	NA	NA
Toluene-D8		%	104	77-112	NA	NA	NA	NA	NA	NA	NA
P-Bromofluorobenzene		%	96	84-126	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane-D4		%									000006

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 02/07/2002
Time: 18:41:44

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Rept: AN0326

Client ID Job No Sample Date	Lab ID	MW-1 A02-0656 01/22/2002		MW-2 A02-0656 01/22/2002		MW-3 A02-0656 01/22/2002		MW-4 A02-0656 01/22/2002	
		Sample Value	Reporting Limit						
Acenaphthene	UG/L	ND	10	ND	10	ND	10	ND	10
Acenaphthylene	UG/L	ND	10	ND	10	ND	10	ND	10
Anthracene	UG/L	ND	10	0.6 J	2 J	ND	10	ND	10
Benzo(a)anthracene	UG/L	ND	10	1 J	1 J	ND	10	ND	10
Benzo(b)fluoranthene	UG/L	ND	10	1 J	1 J	ND	10	ND	10
Benzo(k)fluoranthene	UG/L	ND	10	0.6 J	1 J	ND	10	ND	10
Benzog(hi)perylene	UG/L	ND	10	0.6 J	1 J	ND	10	ND	10
Benz(a)pyrene	UG/L	ND	10	0.6 J	2 J	ND	10	ND	10
Benzoic acid	UG/L	ND	50	ND	49	ND	48	ND	48
Benzyl alcohol	UG/L	ND	20	ND	20	ND	19	ND	19
Bis(2-chloroethoxy) methane	UG/L	ND	10	ND	10	ND	10	ND	10
Bis(2-chloroethyl) ether	UG/L	ND	10	ND	10	ND	10	ND	10
2,2'-Oxybis(1-Chloropropane)	UG/L	ND	10	ND	10	ND	10	ND	10
Bis(2-ethylhexyl) phthalate	UG/L	ND	3 J	ND	0.8 J	ND	0.6 J	ND	0.6 J
4-Bromophenyl phenyl ether	UG/L	ND	10	ND	10	ND	10	ND	10
Butyl benzyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
4-Chloroaniline	UG/L	ND	10	ND	10	ND	10	ND	10
4-Chloro-3-methylphenol	UG/L	ND	10	ND	10	ND	10	ND	10
2-Chloronaphthalene	UG/L	ND	10	ND	10	ND	10	ND	10
2-Chlorophenol	UG/L	ND	10	ND	10	ND	10	ND	10
4-Chlorophenyl phenyl ether	UG/L	ND	10	ND	10	ND	10	ND	10
Chrysene	UG/L	ND	10	2 J	10	ND	10	ND	10
Dibenzo(a,h)anthracene	UG/L	ND	10	ND	10	ND	10	ND	10
Dibenzofuran	UG/L	ND	10	ND	10	ND	10	ND	10
Di-n-butyl phthalate	UG/L	ND	1 J	ND	0.9 J	ND	0.9 J	ND	0.9 J
1,2-Dichlorobenzene	UG/L	ND	10	ND	10	ND	10	ND	10
1,3-Dichlorobenzene	UG/L	ND	10	ND	10	ND	10	ND	10
3,3'-Dichlorobenzidine	UG/L	ND	20	ND	20	ND	19	ND	19
2,4-Dichlorophenol	UG/L	ND	10	ND	10	ND	10	ND	10
Diethyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
2,4-Dimethylphenol	UG/L	ND	10	ND	10	ND	10	ND	10
Dimethyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
4,6-Dinitro-2-methylphenol	UG/L	ND	50	ND	49	ND	48	ND	48
2,4-Dinitrophenol	UG/L	ND	10	ND	10	ND	10	ND	10
2,4-Dinitrotoluene	UG/L	ND	10	ND	10	ND	10	ND	10
2,6-Dinitrotoluene	UG/L	ND	0.8 J	ND	10	ND	10	ND	10
Di-n-octyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
Fluoranthene	UG/L	ND	10	ND	10	ND	10	ND	10
Hexachlorobenzene	UG/L	ND	10	ND	10	ND	10	ND	10
Hexachlorobutadiene	UG/L	ND	10	ND	10	ND	10	ND	10
Hexachlorocyclopentadiene	UG/L	ND	10	ND	10	ND	10	ND	10

000007

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 02/07/2002
Time: 18:41:44

Rept: AN0326

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Client ID Job No Sample Date	Lab ID	MW-1 A02-0656 01/22/2002		MW-2 A02-0656 01/22/2002		MW-3 A02-0656 01/22/2002		MW-4 A02-0656 01/22/2002	
		Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Hexachloroethane	UG/L	ND	10	ND	0.6 J	10	ND	10	ND
Indeno(1,2,3-cd)pyrene	UG/L	ND	10	ND	ND	10	ND	ND	10
Isophorone	UG/L	ND	10	ND	ND	10	ND	ND	10
2-Methyl Naphthalene	UG/L	ND	10	ND	ND	10	ND	ND	10
2-Methylphenol	UG/L	ND	10	ND	ND	10	ND	ND	10
Naphthalene	UG/L	ND	10	ND	ND	10	ND	ND	10
2-Nitroaniline	UG/L	ND	50	ND	49	ND	50	ND	50
3-Nitroaniline	UG/L	ND	50	ND	49	ND	50	ND	48
4-Nitroaniline	UG/L	ND	50	ND	49	ND	50	ND	48
Nitrobenzene	UG/L	ND	10	ND	10	ND	10	ND	10
2-Nitrophenol	UG/L	ND	10	ND	10	ND	10	ND	10
4-Nitrophenol	UG/L	ND	50	ND	49	ND	50	ND	48
N-nitrosodiphenylamine	UG/L	ND	10	ND	10	ND	10	ND	10
N-Nitroso-Di-n-propylamine	UG/L	ND	10	ND	10	ND	10	ND	10
Pentachlorophenol	UG/L	ND	50	ND	49	ND	50	ND	48
Phenanthrene	UG/L	ND	10	ND	2 J	ND	10	ND	10
Phenol	UG/L	ND	10	ND	10	ND	10	ND	10
Pyrene	UG/L	ND	10	ND	3 J	ND	10	ND	10
1,2,4-Trichlorobenzene	UG/L	ND	10	ND	ND	10	ND	ND	10
2,4,5-Trichloropheno	UG/L	ND	10	ND	ND	10	ND	ND	10
2,4,6-Trichloropheno	UG/L	ND	10	ND	ND	10	ND	ND	10
IS/SURROGATE(S)		%	80	50-200	89	50-200	93	50-200	88
1,4-Dichlorobenzene-D4	%	78	50-200	91	50-200	95	50-200	89	50-200
Naphthalene-D8	%	77	50-200	90	50-200	94	50-200	90	50-200
Acenaphthene-D10	%	77	50-200	90	50-200	94	50-200	88	50-200
Phenanthrene-D10	%	78	50-200	89	50-200	94	50-200	84	50-200
Chrysene-D12	%	78	50-200	86	50-200	92	50-200	70	24-120
Perylene-D12	%	76	24-120	76	24-120	70	24-120	69	24-120
Nitrobenzene-D5	%	77	33-120	84	33-120	77	33-120	75	33-120
2-Fluorobiphenyl	%	91	24-130	88	24-130	88	24-130	84	24-130
p-Terphenyl-d14	%	22	10-120	22	10-120	21	10-120	20	10-120
Phenol-D5	%	31	10-120	33	10-120	33	10-120	31	10-120
2-Fluorophenol	%	87	24-143	90	24-143	94	24-143	88	24-143

NA = Not Applicable ND = Not Detected

000008

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Date: 02/07/2002
Time: 18:41:44

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Rept: AN0326

000009

Client ID	Job No	Sample Date	Lab ID	MW-5 A02-0656 01/22/2002	A2065605	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Analyte			Units								
Acenaphthene			UG/L	ND		10	NA	NA	NA	NA	NA
Acenaphthylene			UG/L	ND		10	NA	NA	NA	NA	NA
Anthracene			UG/L	ND		10	NA	NA	NA	NA	NA
Benzo(a)anthracene			UG/L	ND		10	NA	NA	NA	NA	NA
Benzo(b)fluoranthene			UG/L	ND		10	NA	NA	NA	NA	NA
Benzo(k)fluoranthene			UG/L	ND		10	NA	NA	NA	NA	NA
Benzo(ghi)perylene			UG/L	ND		10	NA	NA	NA	NA	NA
Benzo(a)pyrene			UG/L	ND		10	NA	NA	NA	NA	NA
Benzoic acid			UG/L	ND		48	NA	NA	NA	NA	NA
Benzyl alcohol			UG/L	ND		19	NA	NA	NA	NA	NA
Bis(2-chloroethoxy) methane			UG/L	ND		10	NA	NA	NA	NA	NA
Bis(2-chloroethyl) ether			UG/L	ND		10	NA	NA	NA	NA	NA
2,2'-Oxybis(1-Chloropropane)			UG/L	ND		10	NA	NA	NA	NA	NA
Bis(2-ethylhexyl) phthalate			UG/L	ND		2 ^J	10	NA	NA	NA	NA
4-Bromophenyl phenyl ether			UG/L	ND		10	NA	NA	NA	NA	NA
Butyl benzyl phthalate			UG/L	ND		10	NA	NA	NA	NA	NA
4-Chloroaniline			UG/L	ND		72	10	NA	NA	NA	NA
4-Chloro-3-methylphenol			UG/L	ND		10	NA	NA	NA	NA	NA
2-Chloronaphthalene			UG/L	ND		11	10	NA	NA	NA	NA
2-Chlorophenol			UG/L	ND		10	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether			UG/L	ND		10	NA	NA	NA	NA	NA
Chrysene			UG/L	ND		10	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene			UG/L	ND		10	NA	NA	NA	NA	NA
Dibenzofuran			UG/L	ND		10	NA	NA	NA	NA	NA
Di-n-butyl phthalate			UG/L	ND		2 ^J	10	NA	NA	NA	NA
1,2-Dichlorobenzene			UG/L	ND		32	10	NA	NA	NA	NA
1,3-Dichlorobenzene			UG/L	ND		2 ^J	10	NA	NA	NA	NA
1,4-Dichlorobenzene			UG/L	ND		19	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine			UG/L	ND		10	NA	NA	NA	NA	NA
2,4-Dichlorophenol			UG/L	ND		10	NA	NA	NA	NA	NA
Diethyl phthalate			UG/L	ND		10	NA	NA	NA	NA	NA
2,4-Dimethylphenol			UG/L	ND		10	NA	NA	NA	NA	NA
Dimethyl phthalate			UG/L	ND		10	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol			UG/L	ND		48	NA	NA	NA	NA	NA
2,4-Dinitrophenol			UG/L	ND		48	NA	NA	NA	NA	NA
2,4-Dinitrotoluene			UG/L	ND		10	NA	NA	NA	NA	NA
2,6-Dinitrotoluene			UG/L	ND		10	NA	NA	NA	NA	NA
Di-n-octyl phthalate			UG/L	ND		0.7 ^J	10	NA	NA	NA	NA
Fluoranthene			UG/L	ND		10	NA	NA	NA	NA	NA
Hexachlorobutadiene			UG/L	ND		10	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene			UG/L	ND		10	NA	NA	NA	NA	NA

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 02/07/2002
Time: 18:41:44

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Rept: AN0326

000010

Client ID Job No Sample Date	Lab ID	MU-5 A02-0656 01/22/2002	A2065605	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Analyte	Units								
Hexachloroethane	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Isophorone	UG/L	ND	10	NA	NA	NA	NA	NA	NA
2-Methyl Naphthalene	UG/L	ND	10	NA	NA	NA	NA	NA	NA
2-Methyl Phenol	UG/L	ND	10	NA	NA	NA	NA	NA	NA
4-Methyl Phenol	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Naphtha lene	UG/L	150	10	NA	NA	NA	NA	NA	NA
2-Nitroaniline	UG/L	ND	4.8	NA	NA	NA	NA	NA	NA
3-Nitroaniline	UG/L	ND	4.8	NA	NA	NA	NA	NA	NA
4-Nitroaniline	UG/L	ND	4.8	NA	NA	NA	NA	NA	NA
Nitrobenzene	UG/L	ND	10	NA	NA	NA	NA	NA	NA
2-Nitrophenol	UG/L	ND	10	NA	NA	NA	NA	NA	NA
4-Nitrophenol	UG/L	ND	4.8	NA	NA	NA	NA	NA	NA
N-nitrosodiphenylamine	UG/L	ND	10	NA	NA	NA	NA	NA	NA
N-Nitroso-Di-n-propylamine	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Pentachlorophenol	UG/L	ND	4.8	NA	NA	NA	NA	NA	NA
Phenanthrene	UG/L	0.7	J	NA	NA	NA	NA	NA	NA
Phenol	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Pyrene	UG/L	0.6	J	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	4	J	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	UG/L	ND	10	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	UG/L	ND	10	NA	NA	NA	NA	NA	NA
IS/SURROGATE (S)									
1,4-Dichlorobenzene-D4	%	91	50-200	NA	NA	NA	NA	NA	NA
Naphthalene-D8	%	93	50-200	NA	NA	NA	NA	NA	NA
Acenaphthene-D10	%	92	50-200	NA	NA	NA	NA	NA	NA
Phenanthrene-D10	%	92	50-200	NA	NA	NA	NA	NA	NA
Chrysene-D12	%	91	50-200	NA	NA	NA	NA	NA	NA
Perylene-D12	%	89	50-200	NA	NA	NA	NA	NA	NA
Nitrobenzene-D5	%	51	24-120	NA	NA	NA	NA	NA	NA
2-Fluorobiphenyl	%	61	33-120	NA	NA	NA	NA	NA	NA
p-Terphenyl-d14	%	84	24-130	NA	NA	NA	NA	NA	NA
Phenol-D5	%	21	10-120	NA	NA	NA	NA	NA	NA
2-Fluorophenol	%	29	10-120	NA	NA	NA	NA	NA	NA
2,4,6-Tribromophenol	%	88	24-143	NA	NA	NA	NA	NA	NA

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 02/07/2002
Time: 18:42:03

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - RCRA METALS - W

Rept: AN0326

000011

Client ID Job No Sample Date	Lab ID	MW-1 A02-0656 01/22/2002	A2065601	MW-2 A02-0656 01/22/2002	A2065602	MW-3 A02-0656 01/22/2002	A2065603	MW-4 A02-0656 01/22/2002	A2065604
Analyte	Units	Sample Value	Reporting Limit						
Arsenic - Total	MG/L	0.029	0.0070	0.10	0.0070	ND	0.0070	0.084	0.0070
Barium - Total	MG/L	0.39	0.0010	1.5	0.0010	0.32	0.0010	0.60	0.0010
Cadmium - Total	MG/L	ND	0.0010	0.0078	0.0010	ND	0.0010	ND	0.0010
Chromium - Total	MG/L	0.034	0.0020	0.15	0.0020	0.011	0.0020	0.11	0.0020
Lead - Total	MG/L	0.037	0.010	8.2	0.010	0.063	0.010	0.18	0.010
Mercury - Total	MG/L	ND	0.00020	0.031	0.0020	ND	0.0020	ND	0.0020
Selenium - Total	MG/L	ND	0.010	ND	0.010	ND	0.010	ND	0.010
Silver - Total	MG/L	ND	0.0030	0.0080	0.0030	ND	0.0030	ND	0.0030

Client ID Job No Sample Date	Lab ID	MW-5 A02-0656 01/22/2002	A2065605	MW-6 A02-0656 01/22/2002	A2065606	MW-7 A02-0656 01/22/2002	A2065607	MW-8 A02-0656 01/22/2002	A2065608
Analyte	Units	Sample Value	Reporting Limit						
Arsenic - Total	MG/L	0.10	0.0070	NA	NA	NA	NA	NA	NA
Barium - Total	MG/L	1.1	0.0010	NA	NA	NA	NA	NA	NA
Cadmium - Total	MG/L	0.0036	0.0010	NA	NA	NA	NA	NA	NA
Chromium - Total	MG/L	0.47	0.0020	NA	NA	NA	NA	NA	NA
Lead - Total	MG/L	3.4	0.010	NA	NA	NA	NA	NA	NA
Mercury - Total	MG/L	0.0099	0.00020	NA	NA	NA	NA	NA	NA
Selenium - Total	MG/L	ND	0.010	NA	NA	NA	NA	NA	NA
Silver - Total	MG/L	0.0031	0.0030	NA	NA	NA	NA	NA	NA

NA = Not Applicable ND = Not Detected

STL Buffalo

000012

Chronology and QC Summary Package

Date: 02/07/2002
Time: 18:42:27

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - METHOD 8260 - TCL VOLATILE ORGANICS

Rept: AN0326

Client ID Job No Sample Date	Lab ID	TRIP BLANK A02-0656 01/22/2002	A2065606	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Analyte	Units								
Acetone	UG/L	ND	25	NA	NA	NA	NA	NA	NA
Benzene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Bromodichloromethane	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Bromotform	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Bromomethane	UG/L	ND	10	NA	NA	NA	NA	NA	NA
2-Butanone	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Carbon Disulfide	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Chlorobenzene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Chloroethane	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Chloroform	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Chloromethane	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Dibromochloromethane	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene (Total)	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Ethylbenzene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
2-Hexanone	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Methylene chloride	UG/L	3.8 J	5.0	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Styrene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Toluene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Trichloroethene	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Vinyl acetate	UG/L	ND	10	NA	NA	NA	NA	NA	NA
Vinyl chloride	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA
Total xylenes	UG/L	ND	15	NA	NA	NA	NA	NA	NA
IS/SURROGATE(S)	%	100	50-200	NA	NA	NA	NA	NA	NA
Chlorobenzene-D5	%	101	50-200	NA	NA	NA	NA	NA	NA
1,4-Difluorobenzene	%	100	50-200	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene-D4	%	100	77-115	NA	NA	NA	NA	NA	NA
Toluene-D8	%	104	77-112	NA	NA	NA	NA	NA	NA
P-Bromofluorobenzene	%	95	84-126	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane-D4	%								

000013

NA = Not Applicable ND = Not Detected

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Date: 02/07/2002
Time: 18:42:27

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - METHOD 8260 - TCL VOLATILE ORGANICS

Rept: AN0326

000014

Client ID Job No Sample Date	Lab ID	VBLK101 A02-0656	A2065614	VBLK49 A02-0656	A2065612	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	25	ND	25	NA	NA	NA	NA	NA	NA
Benzene	UG/L	ND	5.0	ND	5.0	NA	NA	NA	NA	NA	NA
Bromodichloromethane	UG/L	ND	5.0	ND	5.0	NA	NA	NA	NA	NA	NA
Bromomethane	UG/L	ND	10	ND	10	10	10	NA	NA	NA	NA
2-Butanone	UG/L	ND	10	ND	10	10	10	NA	NA	NA	NA
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
Carbon Tetrachloride	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
Chlorobenzene	UG/L	ND	5.0	ND	5.0	NA	NA	NA	NA	NA	NA
Chloroethane	UG/L	ND	10	ND	10	10	10	NA	NA	NA	NA
Chloroform	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
Chloromethane	UG/L	ND	10	ND	10	10	10	NA	NA	NA	NA
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
1,1-Dichloroethane	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
1,2-Dichloroethane	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
1,1-Dichloroethene	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
1,2-Dichloroethene (Total)	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
1,2-Dichloropropane	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
Ethylbenzene	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
2-Hexanone	UG/L	ND	10	ND	10	10	10	NA	NA	NA	NA
Methylene chloride	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/L	ND	10	ND	10	10	10	NA	NA	NA	NA
Styrene	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
Tetrachloroethene	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
Toluene	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
Trichloroethene	UG/L	ND	10	ND	10	10	10	NA	NA	NA	NA
Vinyl acetate	UG/L	ND	5.0	ND	5.0	5.0	5.0	NA	NA	NA	NA
Vinyl chloride	UG/L	ND	15	ND	15	15	15	NA	NA	NA	NA
Total Xylenes	UG/L	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
1S/SURROGATE(S)	%	101	50-200	79	50-200	74	50-200	NA	NA	NA	NA
Chlorobenzene-D5	%	100	50-200	50-200	50-200	65	50-200	NA	NA	NA	NA
1,4-Difluorobenzene	%	100	50-200	50-200	50-200	102	50-200	NA	NA	NA	NA
Toluene-D8	%	100	77-115	77-115	77-115	96	77-115	NA	NA	NA	NA
p-Bromofluorobenzene	%	102	77-112	77-112	77-112	84-126	77-112	NA	NA	NA	NA
1,2-Dichloroethane-D4	%	97	84-126	84-126	84-126	119	84-126	NA	NA	NA	NA

NA = Not Applicable ND = Not Detected

Date: 02/07/2002
Time: 18:42:27

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - METHOD 8260 - TCL VOLATILE ORGANICS

Rept: AN0326

Client ID Job No Sample Date	Lab ID	Matrix Spike Blank A2065613			Matrix Spike Blank A2065615			Matrix Spike Blk Dup A2065616		
		Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value
Acetone	UG/L	ND	25	270	25	ND	25	NA	NA	NA
Benzene	UG/L	54	5.0	50	5.0	ND	5.0	NA	NA	NA
Bromodichloromethane	UG/L	ND	5.0	52	5.0	ND	5.0	NA	NA	NA
Bromomethane	UG/L	ND	5.0	51	5.0	ND	5.0	NA	NA	NA
2-Butanone	UG/L	ND	10	60	10	ND	10	NA	NA	NA
Carbon Disulfide	UG/L	ND	10	270	10	ND	10	NA	NA	NA
Carbon Tetrachloride	UG/L	ND	5.0	48	5.0	ND	5.0	NA	NA	NA
Chlorobenzene	UG/L	52	5.0	51	5.0	ND	5.0	NA	NA	NA
Chloroethane	UG/L	ND	10	52	10	ND	10	NA	NA	NA
Chloroform	UG/L	ND	5.0	51	5.0	ND	5.0	NA	NA	NA
Chloromethane	UG/L	ND	10	46	10	ND	10	NA	NA	NA
Dibromochloromethane	UG/L	ND	5.0	52	5.0	ND	5.0	NA	NA	NA
1,1-Dichloroethane	UG/L	ND	5.0	53	5.0	ND	5.0	NA	NA	NA
1,2-Dichloroethane	UG/L	ND	5.0	53	5.0	ND	5.0	NA	NA	NA
1,1-Dichloroethene	UG/L	58	5.0	50	5.0	ND	5.0	NA	NA	NA
1,2-Dichloroethene (Total)	UG/L	ND	5.0	110	5.0	ND	5.0	NA	NA	NA
1,2-Dichloropropane	UG/L	ND	5.0	50	5.0	ND	5.0	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	ND	5.0	51	5.0	ND	5.0	NA	NA	NA
trans-1,3-Dichloropropene	UG/L	ND	5.0	52	5.0	ND	5.0	NA	NA	NA
Ethylbenzene	UG/L	ND	5.0	51	5.0	ND	5.0	NA	NA	NA
2-Hexanone	UG/L	ND	10	270	10	ND	10	NA	NA	NA
Methylene chloride	UG/L	ND	5.0	46	5.0	ND	5.0	NA	NA	NA
4-Methyl-2-pentanone	UG/L	ND	10	270	10	ND	10	NA	NA	NA
Styrene	UG/L	ND	5.0	52	5.0	ND	5.0	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	51	5.0	ND	5.0	NA	NA	NA
Tetrachloroethene	UG/L	ND	5.0	50	5.0	ND	5.0	NA	NA	NA
Toluene	UG/L	53	5.0	49	5.0	ND	5.0	NA	NA	NA
1,1,1-Trichloroethane	UG/L	ND	5.0	50	5.0	ND	5.0	NA	NA	NA
1,1,2-Trichloroethane	UG/L	ND	5.0	52	5.0	ND	5.0	NA	NA	NA
Trichloroethene	UG/L	ND	10	290	10	ND	1.9 J	NA	NA	NA
Vinyl acetate	UG/L	ND	5.0	50	5.0	ND	5.0	NA	NA	NA
Vinyl chloride	UG/L	ND	15	150	15	ND	15	NA	NA	NA
Total Xylenes	UG/L									
IS/SURROGATE(S)	%	89	50-200	102	50-200	101	50-200	101	50-200	NA
Chlorobenzene-D5	%	83	50-200	102	50-200	100	50-200	100	50-200	NA
1,4-Difluorobenzene	%	74	50-200	101	50-200	99	50-200	99	50-200	NA
1,4-Dichlorobenzene-D4	%	97	77-115	102	77-115	102	77-115	102	77-115	NA
Toluene-D8	%	96	77-112	103	77-112	102	77-112	102	77-112	NA
p-Bromofluorobenzene	%	108	84-126	98	84-126	100	84-126	100	84-126	NA

000015

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 02/07/2002
Time: 18:42:57

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Rept: AN0326

000016

Client ID Job No Sample Date	Lab ID	S BLANK A02-0656		A2B0060502					
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acenaphthene	UG/L	ND	10	NA		NA		NA	
Acenaphthylene	UG/L	ND	10	NA		NA		NA	
Anthracene	UG/L	ND	10	NA		NA		NA	
Benz(a)anthracene	UG/L	ND	10	NA		NA		NA	
Benzo(b)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(k)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(g,h)perylene	UG/L	ND	10	NA		NA		NA	
Benzo(a)pyrene	UG/L	ND	10	NA		NA		NA	
Benzoic acid	UG/L	ND	50	NA		NA		NA	
Benzyl alcohol	UG/L	ND	20	NA		NA		NA	
Bis(2-chloroethoxy) methane	UG/L	ND	10	NA		NA		NA	
Bis(2-chloroethyl) ether	UG/L	ND	10	NA		NA		NA	
2,2'-Oxybis(1-chloropropane)	UG/L	ND	10	NA		NA		NA	
Bis(2-ethylhexyl) phthalate	UG/L	ND	10	NA		NA		NA	
4-Bromophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Butyl benzyl phthalate	UG/L	ND	10	NA		NA		NA	
4-Chloroaniline	UG/L	ND	10	NA		NA		NA	
4-Chloro-3-methylphenol	UG/L	ND	10	NA		NA		NA	
2-Chloronaphthalene	UG/L	ND	10	NA		NA		NA	
2-Chlorophenol	UG/L	ND	10	NA		NA		NA	
4-Chlorophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Chrysene	UG/L	ND	10	NA		NA		NA	
Dibenz(a,h)anthracene	UG/L	ND	10	NA		NA		NA	
Dibenzofuran	UG/L	ND	10	NA		NA		NA	
Di-n-butyl phthalate	UG/L	ND	10	NA		NA		NA	
1,2-Dichlorobenzene	UG/L	ND	10	NA		NA		NA	
1,3-Dichlorobenzene	UG/L	ND	10	NA		NA		NA	
1,4-Dichlorobenzene	UG/L	ND	10	NA		NA		NA	
3,3'-Dichlorobenzidine	UG/L	ND	20	NA		NA		NA	
2,4-Dichlorophenol	UG/L	ND	10	NA		NA		NA	
Diethyl phthalate	UG/L	ND	10	NA		NA		NA	
2,4-Dimethylphenol	UG/L	ND	10	NA		NA		NA	
Dimethyl phthalate	UG/L	ND	10	NA		NA		NA	
4,6-Dinitro-2-methylphenol	UG/L	ND	50	NA		NA		NA	
2,4-Dinitrophenol	UG/L	ND	10	NA		NA		NA	
2,4-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
2,6-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
Di-n-octyl phthalate	UG/L	ND	10	NA		NA		NA	
Fluoranthene	UG/L	ND	10	NA		NA		NA	
Fluorene	UG/L	ND	10	NA		NA		NA	
Hexachlorobenzene	UG/L	ND	10	NA		NA		NA	
Hexachlorobutadiene	UG/L	ND	10	NA		NA		NA	
Hexachlorocyclopentadiene	UG/L	ND	10	NA		NA		NA	

NA = Not Applicable ND = Not Detected

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Date: 02/07/2002
Time: 18:42:57

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Rept: AN0326

Client ID Job No Sample Date	Lab ID	S BLANK A02-0656	A2B0060502	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Hexachloroethane		UG/L	ND	10	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		UG/L	ND	10	NA	NA	NA	NA	NA
Isophorone		UG/L	ND	10	NA	NA	NA	NA	NA
2-Methylnaphthalene		UG/L	ND	10	NA	NA	NA	NA	NA
2-Methylphenol		UG/L	ND	10	NA	NA	NA	NA	NA
4-Methylphenol		UG/L	ND	10	NA	NA	NA	NA	NA
Naphthalene		UG/L	ND	10	NA	NA	NA	NA	NA
2-Nitroaniline		UG/L	ND	50	NA	NA	NA	NA	NA
3-Nitroaniline		UG/L	ND	50	NA	NA	NA	NA	NA
4-Nitroaniline		UG/L	ND	50	NA	NA	NA	NA	NA
Nitrobenzene		UG/L	ND	10	NA	NA	NA	NA	NA
2-Nitrophenol		UG/L	ND	10	NA	NA	NA	NA	NA
4-Nitrophenol		UG/L	ND	50	NA	NA	NA	NA	NA
N-nitrosodiphenylamine		UG/L	ND	10	NA	NA	NA	NA	NA
N-Nitroso-Di-n-propylamine		UG/L	ND	10	NA	NA	NA	NA	NA
Pentachlorophenol		UG/L	ND	50	NA	NA	NA	NA	NA
Phenanthrene		UG/L	ND	10	NA	NA	NA	NA	NA
Phenol		UG/L	ND	10	NA	NA	NA	NA	NA
Pyrene		UG/L	ND	10	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene		UG/L	ND	10	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol		UG/L	ND	10	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol		UG/L	ND	10	NA	NA	NA	NA	NA
[S]SURROGATE(S)		%	81	50-200	NA	NA	NA	NA	NA
1,4-Dichlorobenzene-D4		%	80	50-200	NA	NA	NA	NA	NA
Naphthalene-D8		%	77	50-200	NA	NA	NA	NA	NA
Acenaphthene-D10		%	75	50-200	NA	NA	NA	NA	NA
Phenanthrene-D10		%	74	50-200	NA	NA	NA	NA	NA
Chrysene-D12		%	75	50-200	NA	NA	NA	NA	NA
Perylene-D12		%	73	24-120	NA	NA	NA	NA	NA
Nitrobenzene-D5		%	75	33-120	NA	NA	NA	NA	NA
2-Fluorobiphenyl		%	107	24-130	NA	NA	NA	NA	NA
p-Terphenyl-D14		%	20	10-120	NA	NA	NA	NA	NA
Phenol-D5		%	33	10-120	NA	NA	NA	NA	NA
2-Fluorophenol		%	90	24-143	NA	NA	NA	NA	NA

000017

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 02/07/2002
Time: 18:42:57

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Rept: AN0326

Client ID Job No Sample Date	Lab ID	MW-1 A02-0656 01/22/2002		MW-1 A02-0656 01/22/2002		Matrix Spike Blank A2B0060501	
		Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acenaphthene	UG/L	150	20	190	20	71	10
Acenaphthylene	UG/L	ND	20	ND	20	ND	NA
Anthracene	UG/L	ND	20	ND	20	ND	NA
Benzo(a)anthracene	UG/L	ND	20	ND	20	ND	NA
Benzo(b)fluoranthene	UG/L	ND	20	ND	20	ND	NA
Benzo(k)fluoranthene	UG/L	ND	20	ND	20	ND	NA
Benzo(ghi)perylene	UG/L	ND	20	ND	20	ND	NA
Benzo(a)pyrene	UG/L	ND	20	ND	20	ND	NA
Benzoic acid	UG/L	100	20	100	20	ND	10
Benzyl alcohol	UG/L	ND	40	ND	40	ND	50
Bis(2-chloroethoxy) methane	UG/L	ND	20	ND	20	ND	20
Bis(2-chloroethyl) ether	UG/L	ND	20	ND	20	ND	10
2,2'-Oxybis(1-Chloropropane)	UG/L	ND	20	ND	20	ND	10
Bis(2-ethylhexyl) phthalate	UG/L	ND	20	ND	20	ND	10
4-Bromophenyl phenyl ether	UG/L	ND	20	ND	20	ND	10
Butyl benzyl phthalate	UG/L	ND	20	ND	20	ND	10
4-Chloroaniline	UG/L	ND	20	ND	20	ND	10
4-Chloro-3-methylphenol	UG/L	83	20	180	20	81	10
2-Chloronaphthalene	UG/L	ND	20	ND	20	ND	10
2-Chlorophenol	UG/L	6	J	110	20	51	10
4-Chlorophenyl phenyl ether	UG/L	ND	20	ND	20	ND	10
Chrysene	UG/L	ND	20	ND	20	ND	10
Dibenzo(a,h)anthracene	UG/L	ND	20	ND	20	ND	10
Dibenzofuran	UG/L	ND	20	ND	20	ND	10
Di-n-butyl phthalate	UG/L	ND	20	ND	20	ND	10
1,2-Dichlorobenzene	UG/L	ND	20	ND	20	ND	10
1,3-Dichlorobenzene	UG/L	ND	20	ND	20	ND	10
1,4-Dichlorobenzene	UG/L	100	20	ND	20	ND	10
3,3'-Dichlorobenzidine	UG/L	ND	40	ND	40	ND	20
2,4-Dichlorophenol	UG/L	ND	20	ND	20	ND	10
Diethyl phthalate	UG/L	ND	20	ND	20	ND	10
2,4-Dimethylphenol	UG/L	ND	20	ND	20	ND	10
Dimethyl phthalate	UG/L	ND	20	ND	20	ND	10
4,6-Dinitro-2-methylphenol	UG/L	ND	100	ND	100	ND	50
2,4-Dinitrophenol	UG/L	ND	100	ND	100	ND	50
2,4-Dinitrotoluene	UG/L	160	20	210	20	94	10
2,6-Dinitrotoluene	UG/L	ND	20	ND	20	ND	10
Di-n-octyl phthalate	UG/L	ND	20	ND	20	ND	10
Fluoranthene	UG/L	ND	20	ND	20	ND	10
Fluorene	UG/L	ND	20	ND	20	ND	10
Hexachlorobenzene	UG/L	ND	20	ND	20	ND	NA
Hexachlorobutadiene	UG/L	ND	20	ND	20	ND	NA
Hexachlorocyclopentadiene	UG/L	ND	20	ND	20	ND	NA

000018

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 02/07/2002
Time: 18:42:57

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Rept: AN0326

000019

Client ID Job No Sample Date	Lab ID	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
		MW-1 A02-0656 01/22/2002	20	ND	20	ND	10	NA
		A2065601MS	20	ND	20	ND	10	NA
		MW-1 A02-0656 01/22/2002	ND	ND	ND	ND	10	NA
		Matrix Spike Blank A2B0060501						
Hexachloroethane	µg/L	ND	20	ND	20	ND	10	NA
Indeno(1,2,3- <i>cd</i>)pyrene	µg/L	ND	20	ND	20	ND	10	NA
Isophorone	µg/L	ND	20	ND	20	ND	10	NA
2-Methylnaphthalene	µg/L	ND	20	ND	20	ND	10	NA
2-Methylphenol	µg/L	ND	20	ND	20	ND	10	NA
4-Methylphenol	µg/L	ND	20	ND	20	ND	10	NA
Naphthalene	µg/L	ND	20	ND	20	ND	10	NA
2-Nitroaniline	µg/L	ND	100	ND	100	ND	50	NA
3-Nitroaniline	µg/L	ND	100	ND	100	ND	50	NA
4-Nitroaniline	µg/L	ND	100	ND	100	ND	50	NA
Nitrobenzene	µg/L	ND	20	ND	20	ND	10	NA
2-Nitrophenol	µg/L	ND	20	ND	20	ND	10	NA
4-Nitrophenol	µg/L	ND	100	ND	100	ND	50	NA
N-nitrosodiphenylamine	µg/L	ND	20	ND	20	ND	10	NA
N-Nitroso-Di- <i>n</i> -propylamine	µg/L	140	20	170	20	67	10	NA
Pentachlorophenol	µg/L	24	J	100	110	100	61	50
Phenanthrene	µg/L	ND	20	ND	20	ND	10	NA
Phenol	µg/L	7	J	20	60	20	17	10
Pyrene	µg/L	180	20	210	20	110	10	NA
1,2,4-Trichlorobenzene	µg/L	110	20	140	20	44	10	NA
2,4,5-Trichlorophenol	µg/L	ND	20	ND	20	ND	10	NA
2,4,6-Trichlorophenol	µg/L	ND	20	ND	20	ND	10	NA
IS/SURROGATE (S)	%	83	50-200	83	50-200	82	50-200	NA
1,4-Dichlorobenzene-D4	%	81	50-200	80	50-200	79	50-200	NA
Naphthalene-D8	%	78	50-200	78	50-200	77	50-200	NA
Acenaphthene-D10	%	76	50-200	76	50-200	75	50-200	NA
Phenanthrene-D10	%	80	50-200	81	50-200	73	50-200	NA
Chrysene-D12	%	79	50-200	80	50-200	74	50-200	NA
Perylene-D12	%	71	24-120	91	24-120	61	24-120	NA
Nitrobenzene-D5	%	76	33-120	97	33-120	68	33-120	NA
2-Fluorobiphenyl	%	86	24-130	101	24-130	107	24-130	NA
p-Terphenyl-d14	%	3	*	10-120	29	10-120	16	10-120
Phenol-D5	%	0	*	10-120	37	10-120	25	10-120
2-Fluorophenol	%	7	*	24-143	72	24-143	97	24-143

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 02/07/2002
Time: 18:43:16

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - RCRA METALS - W

Rept: AN0326

000020

Client ID Job No Sample Date	Lab ID	Method Blank A02-0656	Method Blank A2B0078902	Method Blank A02-0656	Method Blank A2B0080103	Sample Value	Sample Value	Sample Value	Reporting Limit	Reporting Limit	Reporting Limit
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	NA	NA	NA	NA	NA	NA
Arsenic - Total	MG/L	ND	0.0070	NA	NA	NA	NA	NA	NA	NA	NA
Barium - Total	MG/L	ND	0.0010	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium - Total	MG/L	ND	0.0010	NA	NA	NA	NA	NA	NA	NA	NA
Chromium - Total	MG/L	ND	0.0020	NA	NA	NA	NA	NA	NA	NA	NA
Lead - Total	MG/L	ND	0.010	NA	NA	NA	NA	NA	NA	NA	NA
Silver - Total	MG/L	ND	0.0030	NA	ND	NA	NA	NA	NA	NA	NA
Mercury - Total	MG/L	NA	0.010	0.00020	NA	NA	NA	NA	NA	NA	NA
Selenium - Total	MG/L	ND									

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 02/07/2002
Time: 18:43:16

Parsons Engineering Science, Inc.
Parsons - Lehigh Valley Wells
PARSONS - RCRA METALS - W

Rept: AN0326

Client ID Job No Sample Date	Lab ID	LCS A02-0656	A2B0080101	LFB A02-0656	A2B0078901	LFB A02-0656	A2B0080102	MW-1 A02-0656 01/22/2002	A2065601MS
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Arsenic - Total	MG/L	NA		0.20	0.0070	NA		NA	
Barium - Total	MG/L	NA		0.20	0.0010	NA		NA	
Cadmium - Total	MG/L	NA		0.21	0.0010	NA		NA	
Lead - Total	MG/L	NA		0.20	0.010	NA		NA	
Selenium - Total	MG/L	NA		0.18	0.010	NA		NA	
Silver - Total	MG/L	NA		0.049	0.0030	NA		NA	
Chromium - Total	MG/L	NA		0.20	0.0020	NA		NA	
Mercury - Total	MG/L	0.0065	0.00020		0.0065	0.00020		0.0066	0.00020

Client ID Job No Sample Date	Lab ID	MW-1 A02-0656 01/22/2002	A2065601SD	MW-5 A02-0656 01/22/2002	A2065605MS	MW-5 A02-0656 01/22/2002	A2065605SD
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Mercury - Total	MG/L	0.0066	0.00020	0.016	0.00020	0.016	0.00020

NA = Not Applicable ND = Not Detected

STL Buffalo

000021

Date : 02/07/2002 18:43:32

Rept: AN0364

Client Sample ID: VBLK101
Lab Sample ID: A2065614Matrix Spike Blank
A2065615Matrix Spike Blk Dup
A2065616

Analyte	Units of Measure	Concentration	Spike Amount	SBD	SB	SBD	% Recovery	% RPD	QC LIMITS RPD REC.
	Spike Blank	Spike Blank Dup	SB	SBD	SB	SBD	Avg	% RPD	
PARSONS - METHOD 8260 - TCL VOLATILE ORG	UG/L	50.0	50.0	50.0	100	109	105	9	16.0 65-143
1,1-Dichloroethene	UG/L	50.2	51.6	50.0	100	103	102	3	16.0 72-120
Trichloroethene	UG/L	50.4	53.7	50.0	101	107	104	6	13.0 71-120
Benzene	UG/L	49.3	51.2	50.0	99	102	101	3	18.0 69-120
Toluene	UG/L	51.1	51.4	50.0	102	103	103	1	19.0 73-120
Chlorobenzene	UG/L								

000022

* Indicates Result is outside QC Limits
 NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 02/07/2002 18:43:32

Rept: AN0364

Client Sample ID: VBLK49
Lab Sample ID: A2065612

Matrix Spike Blank A2065613					
Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
PARSONS - METHOD 8260 - TCL VOLATILE ORG	UG/L	58.3	50.0	117	65-143
1,1-Dichloroethene	UG/L	52.4	50.0	105	72-120
Trichloroethene	UG/L	54.3	50.0	109	71-120
Benzene	UG/L	52.8	50.0	106	69-120
Toluene	UG/L	52.5	50.0	105	73-120
Chlorobenzene	UG/L				

000023

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not calculated

STL Buffalo

Date : 02/07/2002 18:43:49

SAMPLE DATE 01/22/2002

Rept: AN0364

Client Sample ID: MW-1
Lab Sample ID: A2065601MW-1
A2065601MS

Analyte	Units of Measure	Sample	Matrix Spike	Spike Duplicate	Concentration	MS	Spike Amount	MSD	% Recovery	MS	MSD	Avg	% RPD	QC LIMITS RPD	REC.
PARSONS - 8270 - TCL SEMI-VOLATILE ORGAN	UG/L	0	6.8	59.8	200	200	30	17	164 *	35.0	5-120				
Phenol	UG/L	0	5.8	109	200	200	3 *	29	179 *	35.0	27-120				
2-Chlorophenol	UG/L	0	100	134	200	200	50	67	59	29	35.0	19-120			
1,4-Dichlorobenzene	UG/L	0	136	174	200	200	68	87	78	24	35.0	33-120			
N-Nitroso-Di-n-propylamine	UG/L	0	108	145	200	200	54	72	63	28	35.0	23-120			
1,2,4-Trichlorobenzene	UG/L	0	83.4	179	200	200	42 *	90	66	73 *	35.0	43-120			
4-Chloro-3-methylphenol	UG/L	0	150	188	200	200	75	94	85	22	35.0	36-120			
Acenaphthene	UG/L	0	0	61.8	200	200	0 *	21	11	200 *	35.0	1-120			
4-Nitrophenol	UG/L	0	159	206	200	200	80	103	92	25	35.0	49-120			
2,4-Dinitrotoluene	UG/L	0	23.9	106	200	200	12 *	53	33	126 *	35.0	18-141			
Pentachlorophenol	UG/L	0	177	210	200	200	89	105	97	16	35.0	47-126			
Pyrene	UG/L	0													

000024

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 02/07/2002 18:43:49

Rept: AN0364

Client Sample ID: S BLANK
Lab Sample ID: A2B0060502Matrix Spike Blank
A2B0060501

Analyte	Units of Measure	Blank Spike	Concentration Spike Amount	% Recovery Blank Spike	QC LIMITS
PARSONS - 8270 - TCL SEMI-VOLATILE ORGAN	UG/L	16.9	100	17	5-120
Phenol	UG/L	50.6	100	51	27-120
2-Chlorophenol	UG/L	38.5	100	38	19-120
1,4-Dichlorobenzene	UG/L	66.8	100	67	33-120
N-Nitroso-di-n-propylamine	UG/L	43.6	100	44	23-120
1,2,4-Trichlorobenzene	UG/L	81.3	100	81	43-120
4-Chloro-3-methylphenol	UG/L	70.9	100	71	36-120
Acenaphthene	UG/L	15.6	100	16	1-120
4-Nitrophenol	UG/L	94.3	100	94	49-120
2,4-Dinitrotoluene	UG/L	60.8	100	61	18-141
Pentachlorophenol	UG/L	107	100	107	47-126
Pyrene					

000025

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not calculated

STL Buffalo

Date : 02/07/2002 18:44:06

Rept: AN0364

SAMPLE DATE 01/22/2002

Client Sample ID: MW-1
Lab Sample ID: A2065601

MW-1
A2065601SD

Analyte	Units of Measure	Sample	Concentration			% Recovery			QC LIMITS RPD REC.
			Matrix	Spike	Duplicate	MS	MSD	Avg	
PARSONS - RCRA METALS - W PARSONS - TOTAL MERCURY - W	MG/L	0	0.00655	0.00660	0.0066	0.0066	98	98	20.0 80 - 120

000026

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 02/07/2002 18:44:06

Rept: AN0364

SAMPLE DATE 01/22/2002

Client Sample ID: MW-5
Lab Sample ID: A2065605MW-5
A2065605MS

Client Sample ID: MW-5 Lab Sample ID: A2065605		MW-5 A2065605MS		MW-5 A2065605SD					
Analyte	Units of Measure	Sample	Concentration		% Recovery	QC LIMITS	RPD	REC.	
			Matrix	Spike					
PARSONS - RCRA METALS - W	MG/L	0.00990	0.0163	0.0162	0.0066	0.0066	96	96	
PARSONS - TOTAL MERCURY - W						95	96	1	
						20.0	80-120		

000027

* Indicates Result is outside QC Limits
 NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 02/07/2002 18:44:06

Rept: AN0364

Client Sample ID: Method Blank
Lab Sample ID: A2B0078902LFB
A2B0078901

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
PARSONS - RCRA METALS - W	MG/L	0.204	0.20	102	80-120
PARSONS - TOTAL ARSENIC - W	MG/L	0.201	0.20	100	80-120
PARSONS - TOTAL BARIUM - W	MG/L	0.207	0.20	103	80-120
PARSONS - TOTAL CADMIUM - W	MG/L	0.201	0.20	100	80-120
PARSONS - TOTAL CHROMIUM - W	MG/L	0.202	0.20	101	80-120
PARSONS - TOTAL LEAD - W	MG/L	0.178	0.20	89	80-120
PARSONS - TOTAL SELENIUM - W	MG/L	0.0490	0.050	98	80-120
PARSONS - TOTAL SILVER - W	MG/L				

000028

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date : 02/07/2002 18:44:06

Rept: ANC364

Client Sample ID: Method Blank
Lab Sample ID: A2B0030103

LFB
A2B0030102

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
PARSONS - RCRA METALS - W PARSONS - TOTAL MERCURY - W	MG/L	0.00653	0.0066	97	80-120

000029

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

STL Buffalo

Date: 02/07/2002
Time: 18:44:25

PARSON'S ENGINEERING SCIENCE INC.
SAMPLE CHRONOLOGY

Rept: AN0374
Page: 1

PARSONS - METHOD 8260 - TCL VOLATILE ORGANICS

Client Sample ID	MW-1 A02-0656	A2065601	MW-2 A02-0656	A2065602	MW-3 A02-0656	A2065603	MW-4 A02-0656	A2065604	MW-5 A02-0656	A2065605
Job No & Lab Sample ID	01/22/2002 13:00		01/22/2002 13:15		01/22/2002 13:30		01/22/2002 13:45		01/22/2002 14:00	
Sample Date	01/22/2002 15:30		01/22/2002 15:30		01/22/2002 15:30		01/22/2002 15:30		01/22/2002 15:30	
Received Date										
Extraction Date										
Analysis Date										
Extraction HT Met?	01/29/2002 07:31		-	01/29/2002 08:02		01/29/2002 08:34		01/29/2002 09:05		02/05/2002 16:10
Analytical HT Met?										
Sample Matrix										
Dilution Factor										
Sample wt/vol										
% Dry										

000030

NA = Not Applicable

Date: 02/07/2002
Time: 18:44:25

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

Rept: AN0374
Page: 2

PARSONS - METHOD 8260 - TCL VOLATILE ORGANICS

Client Sample ID	TRIP BLANK
Job No & Lab Sample ID	A02-0656 A2045606
Sample Date Received Date	01/22/2002 01/22/2002
Extraction Date	15:30
Analysis Date	02/05/2002
Extraction HT Met?	15:40
Analytical HT Met?	-
Sample Matrix	YES
Dilution Factor	WATER
Sample wt/vol	1.0
% Dry	0.005 LITERS

000031

Date: 02/07/2002
Time: 18:44:25

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

Rept: AN0374
Page: 4

PARSONS - METHOD 8260 - TCL VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	VBLK101 A02-0656	A2065614	VBLK49 A02-0656	A2065612
Sample Date				
Received Date				
Extraction Date	02/05/2002	10:48	01/29/2002	00:11
Analysis Date	-	-	-	-
Extraction HT Met?	-	-	-	-
Analytical HT Met?				
Sample Matrix	WATER		WATER	
Dilution Factor	1.0	1.0	1.0	1.0
Sample wt/vol	0.005	LITERS	0.005	LITERS
% Dry				

000032

NA = Not Applicable

STL Buffalo

Date: 02/07/2002
Time: 18:44:25

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

Rept: AN0374
Page: 3

PARSONS - METHOD 8260 - TCL VOLATILE ORGANICS

Client Sample ID	Matrix Spike Blank A02-0656 A2065613	Matrix Spike Blank A02-0656 A2065615	Matrix Spike Blk Dup A02-0656 A2065616
Sample Date Received Date		02/05/2002 09:48	02/05/2002 10:18
Extraction Date	01/28/2002 23:40	-	-
Analysis Date	-	-	-
Extraction HT Met?		WATER	WATER
Analytical HT Met?		1.0	1.0
Sample Matrix	0.005 LITERS	0.005 LITERS	0.005 LITERS
Dilution Factor			
Sample wt/vol % Dry			

000033

Date: 02/07/2002
Time: 18:44:40

PARSON'S ENGINEERING SCIENCE INC.
SAMPLE CHRONOLOGY

Rept: AN0374
Page: 1

PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Client Sample ID Job No & Lab Sample ID	MW-1 A02-0656 A2065601	MW-2 A02-0656 A2065602	MW-3 A02-0656 A2065603	MW-4 A02-0656 A2065604	MW-5 A02-0656 A2065605
Sample Date	01/22/2002	13:00	01/22/2002	13:15	01/22/2002
Received Date	01/22/2002	15:30	01/22/2002	15:30	01/22/2002
Extraction Date	01/23/2002	07:00	01/23/2002	07:00	01/23/2002
Analysis Date	01/25/2002	21:23	01/28/2002	14:14	01/28/2002
Extraction HT Met?	YES		YES	YES	YES
Analytical HT Met?	YES		YES	YES	YES
Sample Matrix	WATER		WATER	WATER	WATER
Dilution Factor	1.0	LITERS	1.0	1.0	1.0
Sample wt/vol % Dry	1.0		1.02	LITERS	1.04
				LITERS	LITERS

NA = Not Applicable

000034

STL Buffalo

Date: 02/07/2002
Time: 18:46:40

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

Rept: AN0374
Page: 3

PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

	Client Sample ID Job No & Lab Sample ID	S BLANK A02-0656 A2B0060502	
Sample Date			
Received Date		01/23/2002 07:00	
Extraction Date		01/25/2002 17:01	
Analysis Date		-	
Extraction HT Met?		-	
Analytical HT Met?			
Sample Matrix		WATER	
Dilution Factor		1.0	LITERS
Sample wt/vol		1.0	
% Dry			

000035

NA = Not Applicable

STL Buffalo

Date: 02/07/2002
Time: 18:44:40

PARSON'S ENGINEERING SCIENCE INC.
QC SAMPLE CHRONOLOGY

Rept: AN0374
Page: 2

PARSONS - 8270 - TCL SEMI-VOLATILE ORGANICS - W

Client Sample ID Job No & Lab Sample ID	MW-1 A02-0656	A2065601MS	MW-1 A02-0656	A2065601SD	Matrix Spike Blank A02-0656 A2B0060501
Sample Date	01/22/2002	13:00	01/22/2002	13:00	
Received Date	01/22/2002	15:30	01/22/2002	15:30	
Extraction Date	01/23/2002	07:00	01/23/2002	07:00	01/23/2002 07:00
Analysis Date	01/25/2002	22:07	01/25/2002	22:50	01/25/2002 16:18
Extraction HT Met?	YES		YES		-
Analytical HT Met?	YES		YES		
Sample Matrix	WATER		WATER		
Dilution Factor	1.0	LITERS	1.0	LITERS	
Sample wt/vol % Dry	0.5		0.5		1.0 LITERS

000036

NA = Not Applicable

STL Buffalo

Date: 02/07/2002 18:44:57
Jobno: A02-0656

PARSON'S ENGINEERING SCIENCE INC.
SAMPLE CHRONOLOGY

Rept: AN0369

Lab ID	Sample ID	Units	Analyte	Method	Dilution Factor	Sample Date	Receive Date	TCLP Date	THT	Analysis Date	AHT	Matrix
A2065601	MW-1	MG/L	Arsenic - Total	6010	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	02/06 06:21	Yes	WATER
		MG/L	Barium - Total	6010	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	02/06 06:21	Yes	WATER
		MG/L	Cadmium - Total	6010	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	02/06 06:21	Yes	WATER
		MG/L	Chromium - Total	6010	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	02/06 06:21	Yes	WATER
		MG/L	Lead - Total	6010	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	02/06 06:21	Yes	WATER
		MG/L	Mercury - Total	7470	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	01/30	Yes	WATER
		MG/L	Selenium - Total	6010	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	02/06 06:21	Yes	WATER
		MG/L	Silver - Total	6010	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	02/06 06:21	Yes	WATER
		MG/L	Arsenic - Total	6010	1.00	01/22/2002 13:15	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Barium - Total	6010	1.00	01/22/2002 13:15	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
A2065602	MW-2	MG/L	Cadmium - Total	6010	1.00	01/22/2002 13:15	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Chromium - Total	6010	1.00	01/22/2002 13:15	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Lead - Total	6010	1.00	01/22/2002 13:15	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Mercury - Total	7470	10.00	01/22/2002 13:15	01/22 15:30	NA	NA	01/30	Yes	WATER
		MG/L	Selenium - Total	6010	1.00	01/22/2002 13:15	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Silver - Total	6010	1.00	01/22/2002 13:15	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Arsenic - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Barium - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Cadmium - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Chromium - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
A2065603	MW-3	MG/L	Lead - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:26	Yes	WATER
		MG/L	Mercury - Total	7470	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:40	Yes	WATER
		MG/L	Selenium - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:40	Yes	WATER
		MG/L	Silver - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:40	Yes	WATER
		MG/L	Arsenic - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:40	Yes	WATER
		MG/L	Barium - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:40	Yes	WATER
		MG/L	Cadmium - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:40	Yes	WATER
		MG/L	Chromium - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:40	Yes	WATER
		MG/L	Lead - Total	6010	1.00	01/22/2002 13:30	01/22 15:30	NA	NA	02/06 06:40	Yes	WATER
		MG/L	Mercury - Total	7470	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	01/30	Yes	WATER
A2065604	MW-4	MG/L	Selenium - Total	6010	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	02/06 06:44	Yes	WATER
		MG/L	Silver - Total	6010	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	02/06 06:44	Yes	WATER
		MG/L	Arsenic - Total	6010	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	02/06 06:44	Yes	WATER
		MG/L	Barium - Total	6010	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	02/06 06:44	Yes	WATER
		MG/L	Cadmium - Total	6010	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	02/06 06:44	Yes	WATER
		MG/L	Chromium - Total	6010	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	02/06 06:44	Yes	WATER
		MG/L	Lead - Total	6010	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	02/06 06:44	Yes	WATER
		MG/L	Mercury - Total	7470	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	01/30	Yes	WATER
		MG/L	Selenium - Total	6010	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	02/06 06:44	Yes	WATER
		MG/L	Silver - Total	6010	1.00	01/22/2002 13:45	01/22 15:30	NA	NA	02/06 06:44	Yes	WATER
A2065605	MW-5	MG/L	Arsenic - Total	6010	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	02/06 06:50	Yes	WATER
		MG/L	Barium - Total	6010	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	02/06 06:50	Yes	WATER
		MG/L	Chromium - Total	7470	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	01/30	Yes	WATER
		MG/L	Selenium - Total	6010	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	02/06 06:50	Yes	WATER
		MG/L	Silver - Total	6010	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	02/06 06:50	Yes	WATER
		MG/L	Arsenic - Total	6010	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	02/06 06:50	Yes	WATER
		MG/L	Barium - Total	6010	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	02/06 06:50	Yes	WATER
		MG/L	Cadmium - Total	6010	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	02/06 06:50	Yes	WATER
		MG/L	Chromium - Total	6010	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	02/06 06:50	Yes	WATER
		MG/L	Lead - Total	6010	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	02/06 06:50	Yes	WATER

000037

STL Buffalo

AHT = Analysis Holding Time Met
THT = TCLP Holding Time Met
NA = Not Applicable

Date: 02/07/2002 18:44:57
Jobno: A02-0656

PARSON'S ENGINEERING SCIENCE INC.
QC CHRONOLOGY

Rept: AN0369

Lab ID	Sample ID	Units	Analyte	Method	Dilution Factor	Sample Date	Receive Date	TCLP Date	THT	Analysis Date	AHT	Matrix
A2065601MS	MW-1	MG/L	Mercury - Total	7470	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	01/30	Yes	WATER
A2065601SD	MW-1	MG/L	Mercury - Total	7470	1.00	01/22/2002 13:00	01/22 15:30	NA	NA	01/30	Yes	WATER
A2065605MS	MW-5	MG/L	Mercury - Total	7470	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	01/30	Yes	WATER
A2065605SD	MW-5	MG/L	Mercury - Total	7470	1.00	01/22/2002 14:00	01/22 15:30	NA	NA	01/30	Yes	WATER
A2B0078902	Method Blank	MG/L	Arsenic - Total	6010	1.00	-	-	-	-	02/06 06:13	Yes	WATER
A2B0078902	Method Blank	MG/L	Barium - Total	6010	1.00	-	-	-	-	02/06 06:13	Yes	WATER
A2B0078902	Method Blank	MG/L	Cadmium - Total	6010	1.00	-	-	-	-	02/06 06:13	Yes	WATER
A2B0078902	Method Blank	MG/L	Chromium - Total	6010	1.00	-	-	-	-	02/06 06:13	Yes	WATER
A2B0078902	Method Blank	MG/L	Lead - Total	6010	1.00	-	-	-	-	02/06 06:13	Yes	WATER
A2B0078902	Method Blank	MG/L	Selenium - Total	6010	1.00	-	-	-	-	02/06 06:13	Yes	WATER
A2B0078902	Method Blank	MG/L	Silver - Total	6010	1.00	-	-	-	-	02/06 06:13	Yes	WATER
A2B0080103	Method Blank	MG/L	Mercury - Total	7470	1.00	-	-	-	-	01/30	Yes	WATER
A2B0080101	LCS	MG/L	Mercury - Total	7470	1.00	-	-	-	-	01/30	Yes	WATER
A2B0080101	LFB	MG/L	Arsenic - Total	6010	1.00	-	-	-	-	02/06 06:17	Yes	WATER
A2B0080101	LFB	MG/L	Barium - Total	6010	1.00	-	-	-	-	02/06 06:17	Yes	WATER
A2B0080101	LFB	MG/L	Cadmium - Total	6010	1.00	-	-	-	-	02/06 06:17	Yes	WATER
A2B0080101	LFB	MG/L	Chromium - Total	6010	1.00	-	-	-	-	02/06 06:17	Yes	WATER
A2B0080101	LFB	MG/L	Lead - Total	6010	1.00	-	-	-	-	02/06 06:17	Yes	WATER
A2B0080101	LFB	MG/L	Selenium - Total	6010	1.00	-	-	-	-	02/06 06:17	Yes	WATER
A2B0080101	LFB	MG/L	Silver - Total	6010	1.00	-	-	-	-	02/06 06:17	Yes	WATER
A2B0080102	LFB	MG/L	Mercury - Total	7470	1.00	-	-	-	-	01/30	Yes	WATER

000038

AHT = Analysis Holding Time Met
THT = TCLP Holding Time Met
NA = Not Applicable

STL Buffalo

000039

Chain of Custody

Chain of Custody Record

STL-4124 (07/00)

Severn Trent Laboratories, Inc.

SEVERN
TRENT
SERVICES

Client Address	Project Manager Name	Date	Chain of Custody Number
180 Lawrence Bell Jr., Ste. #104 City Williamsburg State NY Zip Code 14221	Jeri Benson	1/22/02	012191
Telephone Number (Area Code)/Fax Number	Lab Number	Page	of
716-633-7074 / 716-633-7195		/	/
Site Contact	Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt	
Carrier/Waybill Number			
Contract/Purchase Order/Quote No.			

Containers & Preservatives

(Containers for each sample may be combined on one line)

Sample I.D. No. and Description	Date	Time	All	Aqueous	Soil	Soil	NaOH	HCl	HNOS	H2SO4	Uptns	NaOH	ZnAc/HOAc	EC69 6A1C	EC69 72T	EC69 72L	EC69 72J	EC69 72I	EC69 72H
MW-1	1/22/02	1300	X		3	3													
MW-2		1315	X		3	3													
MW-3		1330	X		3	3													
MW-4		1345	X		3	3													
MW-5		1400	X		3	3													

Trip Blank - (1) - - -

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Return To Client Disposal By Lab Archive For _____ Months

Sample Disposal

(A fee may be assessed if samples are retained longer than 3 months)

QC Requirements (Specify)

Turn Around Time Required	24 Hours	<input checked="" type="checkbox"/>	48 Hours	<input type="checkbox"/>	7 Days	<input type="checkbox"/>	14 Days	<input type="checkbox"/>	21 Days	<input type="checkbox"/>	Other _____	1. Received By <i>John Jay</i>	Date 1/22/02	Time 1530	2. Received By <i>John Jay</i>	Date 1/22/02	Time 1530	3. Received By <i>John Jay</i>	Date 1/22/02	Time 1530
1. Relinquished By																				
2. Relinquished By																				
3. Relinquished By																				

Comments
bc

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

00040