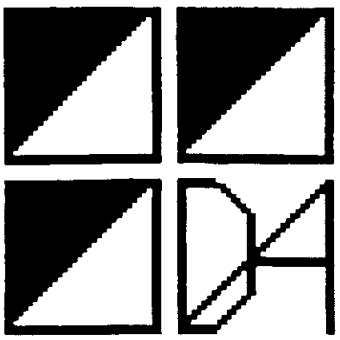
SITE INVESTIGATION REPORT

Site Name:

GOWANDA DAY HABILITATION CENTER
4 Industrial Place
Town of Persia, Cattaraugus County
Voluntary Cleanup Agreement V-00463-9

Prepared for:



Dormitory Authority of the State of New York
And
New York State Office of Mental Retardation and Developmental Disabilities

JDE Project # 151050999

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GOWANDA DAY HABILITATION CENTER
Town of Persia, Cattaraugus County, New York
VCA # V-00463-9

SITE INVESTIGATION

1.0 INTRODUCTION

1.1 Background

This Site Investigation (SI) Report was prepared by Bergmann Associates (Bergmann) on behalf of the Dormitory Authority of the State of New York (DASNY) and the New York State Office of Mental Retardation and Developmental Disabilities (OMRDD).

Bergmann was authorized by DASNY and the OMRDD to conduct a site investigation at the Gowanda Day Habilitation Center building located at 4 Industrial Place in the Town of Persia, Cattaraugus County, New York 14070. OMRDD, as the volunteer, has entered into a VCA agreement with the NYSDEC to conduct this investigation in accordance with VCA Site # V-00463-9, effective August 16, 2001.

Bergmann conducted the site investigation in accordance with the Investigation Work Plan for a Voluntary Cleanup Program Site Investigation, dated October 29, 2001. This plan was approved by the NYSDEC in a letter dated January 28, 2002, with minor revisions.

The potential for on-site contamination at the Gowanda Day Habilitation Center subject parcel was evaluated in the Bergmann Soil Gas Investigation Summary Report dated July 14, 2000, and the Bergmann Subsurface Investigation and Indoor Air Quality Summary Report dated February 26, 2001. The previous investigations at the subject parcel indicated the presence of volatile organic compounds in soil gas samples inside the building and also in soil and groundwater samples adjacent to the structure.

1.2 Objectives

The objectives of the SI were to define hydrogeologic conditions in the area of the source of contamination and to define the extent of the existing contamination at the Gowanda Day Habilitation Center property. The SI includes a contaminant exposure pathway analysis to determine potential and/or completed exposure pathways by which receptors could be exposed to the contaminants.

The following objectives were addressed as part of the SI:

- Define the occurrence and extent of impacted soil (surface and subsurface) and groundwater contamination at the study site.

- Evaluate the presence of possible on-site source areas that may be present at the facility.

- Evaluate possible off-site sources of contamination that may be impacting the study site.
- Evaluate impacted soil and groundwater that may be present beneath the building.
- Evaluate possible impacted soil at an on-site garden at the study site.
- Define the groundwater regime and flow direction at the study site.
- Evaluate the potential for off-site migration of impacted groundwater.
- Develop remedial alternatives for site cleanup measures that may be warranted.

1.3 Site Description

The subject parcel consists of an irregular-shaped, 5.94-acre parcel located at 4 Industrial Place in the Town of Persia(which contains the Village of Gowanda), Cattaraugus County, New York. The location of the subject parcel is shown on Figure 1, which was prepared from a U.S.G.S. topographic map for the area. The subject parcel is developed with the Gowanda Day Habilitation Center building, parking lots, access roads, landscaped yards and a garden. The building consists of a single story slab-on-grade, approximate 56,000 square foot concrete block structure with aluminum siding expansions. The building, previously used by several manufacturing operations, was built in stages between 1956 and 1987 and was renovated in 1987-1988. New York State agencies have occupied the building since 1982. New York State acquired the parcel in 1989. The subject parcel was last operated by the Western New York Developmental Disabilities Services Office as a Day Habilitation Center for mental care clients. In April 2001 operations ceased at the facility, and services were relocated to alternate OMRDD locations. The building was vacant at the time of the site investigation.

Industrial Place is a dead-end street less than a quarter mile in length. Gowanda Electronics, a manufacturing facility, is located on the east side of Industrial Place, across from the subject parcel. Residential properties are located along Torrance Place, north of the subject parcel, and commercial/industrial properties are located along Industrial Place to the east and southeast. Thatcher Creek, a small tributary to Cattaraugus Creek, delineates the western border while the residences of Torrance Place are on the northern border. A railroad line and vacant land border the study site to the south and southwest.

1.4 Site History

A summary of the subject parcel's historic development and use was determined from review of historic aerial photographs, historic Sanborn ® fire insurance maps, information provided by the Town of Persia Assessor, the Village of Gowanda Clerk's Office and from records and site survey maps and drawings provided OMRDD. The site history is summarized below in Table 1.

TABLE 1
SUMMARY OF SITE HISTORY

Approximate Dates	Site Use
Unknown until circa 1939	Agricultural-farmland, no structures present. Based on an aerial photograph dated 1939.
1948	Manufacturing – Upholstery business, a small building was present on eastern portion of the property (based on a historic Sanborn ® fire insurance map).
Circa 1956	Small commercial-type building present on the eastern portion of the property (based on review of historic aerial photo).
Undetermined to October 1981	Owned by AVM (American Voting Machines). Used as a manufacturing facility. The Gowanda study site is also known locally as the AVM building. AVM previously occupied the study site and other nearby parcels (including the nearby Gowanda Electronics facility located at 1 Industrial Place). Exact dates of operation at the study site could not be determined, but AVM and a predecessor company that was apparently acquired by AVM (Knowles-Fisher Corp.) and a successor-in-interest company (American Locker Group Inc.) that apparently acquired AVM were active at the study site property from about 1945 until 1979. These companies operated various machine and stamping shops and manufactured voting machines. Actual operations conducted at the study site could not be determined but may have included various manufacturing and warehouse/storage operations. AVM use of the study site property apparently ceased between 1979 and 1981.
October 1981	Site acquired by Murco Development Corp. Murco Development Corp. reportedly acquired the study site property in October 1981. In 1982 New York State Offices occupied the study site building, and the New York State Office of Mental Retardation and Developmental Disabilities renovated the building into a Day Habilitation Center.
1982	Site is occupied by NYS OMRDD. Renovated into the Western New York Day Habilitation Center (WNYDDSO).
April 1984	Site acquired by Vincent Gaito. Still occupied by OMRDD.
1987-1988	Major renovation of the building is completed. This work included renovations to the loading dock area on the south side of the building. This area was enclosed and converted to a Cafeteria, hallways and offices.
September 1989	Site acquired by Consolidated Capital Special Trust. The building is still occupied by OMRDD.
1989	Site acquired by the State of New York. The subject parcel building was utilized by OMRDD as a Day Habilitation Center for OMRDD.
2002	OMRDD vacates the building and relocates operations to other facilities

1.5 Site Investigation Work Tasks

The approach and techniques used to accomplish the goals of the field investigation are described in Section 2.0. The Site Investigation included the following tasks:

- Installation of test borings and groundwater monitoring wells;
- Field screening of soil samples;
- Laboratory analysis on soil and groundwater samples;
- Determination of the local groundwater and aquifer hydraulic characteristics;
- Evaluation of the potential for off-site migration of impacted groundwater; and
- Preparation of the Site Investigation report.

Development of interim remedial measures for on-site cleanup and preparation of recommendations for additional investigative work were also addressed as part of this Site Investigation process.

Indoor Air Sampling was included as part of the investigations conducted during 2000 at the Gowanda Day Habilitation Center building. No indoor air sampling was conducted as part of this current site investigation.

2.0 SITE INVESTIGATION FIELD ACTIVITIES

The SI consisted of a series of field activities employing a phased approach to efficiently generate the data and provide the information necessary to fully understand the nature and extent of contamination. Environmental samples were collected throughout the study area, initially at the known source area working outward, generally to the north, with the selection of sample locations based on analytical results as they became available. Samples of soil and groundwater were collected and analyzed using a variety of techniques and tools.

On-site investigative activities at the Gowanda Day Habilitation Center subject parcel began on July 3, 2002 were completed on December 10, 2002. The fieldwork was completed in general accordance with the approved work plan. A summary of the field investigation activities follows.

2.1 Test Boring Installation

The site investigation fieldwork consisted of installation of 28 soil test borings, with selected borings completed as monitoring wells. All test borings and monitoring wells were installed by Geologic NY, Inc, with continuous oversight by Bergmann Associates personnel. Test boring locations were described in the 2001 work plan, and were approved by the NYSDEC and NYSDOH. Well locations were adjusted based on site access, overhead clearance and ease of drilling (for internal borings only). Locations for the test borings are shown on Figure 2, Test Boring and Monitoring Well Location Map.

Test boring activities commenced on July 8, 2002 and was completed on July 31, 2002. Twenty four (24) of the test borings were installed by advancing 4 ¼ inch diameter hollow stem auguers. Continuous spilt spoon soil samples were obtained in two (2) foot intervals at each boring. Four (4) of the interior test borings (B-25, B-26, B-27 and B-28) were located in narrow hallways with limited access. These borings were installed by driving a Macrocore ® spilt spoon soil sampler with an electric jack hammer. Soil samples were collected using a disposable acetate liner that was replaced for each four (4) foot run.

All test boring equipment was disassembled and decontaminated between locations in accordance with the SI Work Plan. Soil cuttings from all test borings were collected and placed in 55 gallon drums. The cuttings were disposed of at an approved disposal facility as non-hazardous waste.

2.2 Field Screening of Test Boring Soil Samples

All soil samples were examined noting any visual characteristics. Field screening and laboratory analysis was performed as part of the test boring/well installation program. 28 test borings, advanced to an underlying clay-glacial till deposits (marking the bottom of the overburden water table), were installed. The dates of installation, approximate depths to groundwater, depth to the underlying glacial till and field screening observations are summarized in table 2. The test boring logs are included in Appendix 1.

TABLE 2
SUMMARY OF TEST BORING INSTALLATION AND FIELD SCREENING

Test Boring/ Well Number	Date Completed	Drilling Methodology	Max PID Reading of VOCs, Sample Interval	Soil Sample Interval Submitted for Analysis	Approximate Depth to Groundwater, while Drilling	Depth to Underlying Glacial Till
B-1/MW-1	07/31/2002	Drill Rig, auger	176 ppm, 2'-4'	2 samples:2'-4', VOCs	8 feet	16.17 feet
B-2/MW-2	07/25/2002	Drill Rig, auger	0.3 ppm, 8'-10'	8'-10': 0.3 ppm	8 feet	17.0 feet
B-3/MW-3	07/12/2002	Drill Rig, auger	27 ppm, 8'-10'	8'-10': PID=27 ppm	8 feet	17.0 feet
B-4/MW-4	07/11/2002	Drill Rig, auger	All samples =ND	10'-12': PID = 0 ppm	11 feet	15.83 feet
B-5/MW-5	07/31/2002	Drill Rig, auger	56 ppm, 6'-8'	8' - 13' composite	12 feet	14.0 feet
B-6/MW-6	07/30/2002	Drill Rig, auger	27 ppm, 18'-20'	18'-20': PID=27 ppm	12 feet	20.5 feet
B-7/MW-7	07/30/2002	Drill Rig, auger	3.7 ppm, 16-18'	16'-17.5': PID=3.7 ppm	12 feet	19.5 feet
B-8/MW-8	07/24/2002	Drill Rig, auger	All samples =ND	9'-10': PID=0 ppm	9 feet	15.83 feet
B-9/MW-9	07/11/2002	Drill Rig, auger	All samples =ND	8'-10': PID = 0 ppm	8 feet	19.5 feet
B-10/MW-10	07/10/2002	Drill Rig, auger	All samples =ND	6'-8': PID = 0 ppm	7 feet	17.5 feet
B-11/MW-11	07/17/2002	Skid Rig, auger	130 ppm, 4'-6'	9'-11': PID=60 ppm	9 feet	15.25 feet
B-12/MW-12	07/16/2002	Skid Rig, auger	30 ppm, 12'-14'	12'-14': PID=30 ppm	10 feet	17.17 feet
B-13/MW-13	07/15/2002	Skid Rig, auger	9 ppm, 10'-12'	10'-12': PID = 9 ppm	8 feet	17.5 feet
B-14/MW-14	07/18/2002	Skid Rig, auger	143 ppm, 10'-12'	10'-12': PID=143 ppm	11 feet	18.5 feet
B-15/MW-15	07/19/2002	Skid Rig, auger	161 ppm, 2'-4'	12'-14': PID=84 ppm	12 feet	20.5 feet
B-16	07/08/2002	Drill Rig, auger	All samples =ND	8'-10': PID=0 ppm	7 feet	18.0 feet
B-17	07/09/2002	Drill Rig, auger	All samples =ND	8'-12': PID=0 ppm	8 feet	16.0 feet
B-18	07/10/2002	Drill Rig, auger	All samples =ND	5'-6': PID = 0 ppm	6 feet	15.83 feet
B-19	07/24/2002	Drill Rig, auger	All samples =ND	8'-10': PID=0 ppm	8 feet	18.5 feet
B-20	07/26/2002	Drill Rig, auger	14.7 ppm, 12'-14'	12'-14': PID=14.7 ppm	12 feet	15.0 feet
B-21	07/24/2002	Drill Rig, auger	2.5 ppm, 2'-4'	8'-10': PID = 0 ppm	8 feet	16.5 feet
B-22	07/09/2002	Drill Rig, auger	All samples =ND	4'-6': PID=0 ppm	4 feet	13.5 feet
B-23	07/25/2002	Drill Rig, auger	17.8 ppm, 4'-6'	10'-11': PID=0.5 ppm	10 feet	15.83 feet
B-24	07/31/2002	Drill Rig, auger	18.4 ppm, 18'-20'	18'-20': PID=18.4 ppm	11 feet	22.25 feet
B-25	07/23/2002	MacroCore	All samples =ND	9'-11': PID=0 ppm	9 feet	>16 feet, Refusal
B-26	07/23/2002	MacroCore	18.9 ppm, 3'-4'	11'-12': PID=3.9 ppm	11 feet	>16 feet, Refusal
B-27	07/26/2002	MacroCore	3.4 ppm, 12'-13'	12'-13': PID=3.4 ppm	12 feet	>17 feet, Refusal
B-28	07/23/2002	MacroCore	15.3 ppm, 11'-12'	11'-12': PID =15.3 ppm	11 feet	13.0 feet

2.3 Installation of Groundwater Monitoring Wells

The site investigation fieldwork included installation of groundwater monitoring wells. A total of fifteen (15) monitoring wells were installed throughout the study area to evaluate the hydrogeologic conditions of the water table aquifer and to collect samples for laboratory analysis. Monitoring wells were installed between July 10 and July 31, 2002 by Geologic NY, Inc, with oversight by Bergmann Associates personnel. Monitoring well locations and elevation data are shown on Figure 2.

All monitoring wells installed in 2002 were located on the Gowanda Day Habilitation Center property. The wells include up-gradient monitoring points. The test boring and monitoring well installation program was completed during July 2002. Boring logs and well construction details are included as Appendix 1. Monitoring well details are summarized in Table 3.

TABLE 3
MONITORING WELL CONSTRUCTION SUMMARY

Well Number	Date Completed	Construction Material	Well Dia.	Elevation of the Top of Well Casing, Feet, Mean Sea Level	Approximate Depth to Groundwater	Well Screen Interval	Depth to Underlying Glacial Till
MW-1	07/31/2002	PVC	2"	778.23	8 feet	4.5 to 16.5 feet	16.17 feet
MW-2	07/25/2002	PVC	2"	778.08	8 feet	4.0 to 17.5 feet	17.0 feet
MW-3	07/12/2002	PVC	2"	778.38	8 feet	4.5 to 17.5 feet	17.0 feet
MW-4	07/11/2002	PVC	2"	778.43	11 feet	4.5 to 16.5 feet	15.83 feet
MW-5	07/31/2002	PVC	2"	778.61	12 feet	4.5 to 14.5 feet	14.0 feet
MW-6	07/30/2002	PVC	2"	781.10	12 feet	6.0 to 21.0 feet	20.5 feet
MW-7	07/30/2002	PVC	2"	780.94	12 feet	5.0 to 20.0 feet	19.5 feet
MW-8	07/24/2002	PVC	2"	781.33	9 feet	4.5 to 16.5 feet	15.83 feet
MW-9	07/11/2002	PVC	2"	782.61	8 feet	5.0 to 20.0 feet	19.5 feet
MW-10	07/10/2002	PVC	2"	780.02	7 feet	3.0 to 18.0 feet	17.5 feet
MW-11	07/17/2002	PVC	2"	778.58	9 feet	4.0 to 16.0 feet	15.25 feet
MW-12	07/16/2002	PVC	2"	778.50	10 feet	4.0 to 18.0 feet	17.17 feet
MW-13	07/16/2002	PVC	2"	778.39	8 feet	4.0 to 18.0 feet	17.5 feet
MW-14	07/18/2002	PVC	2"	778.43	11 feet	5.0 to 19.0 feet	18.5 feet
MW-15	07/19/2002	PVC	2"	778.38	12 feet	6.0 to 21.0 feet	20.5 feet

Five (5) monitoring wells were installed inside the subject parcel building. The remaining 10 wells were installed at exterior locations. The monitoring wells were installed using hollow stem auger techniques. Determination of well locations was based on the understanding of the groundwater contaminant plume, ease of access for the drill rig and sampling equipment.

Test borings for monitoring wells were installed by advancing 4 1/4" hollow stem augers to the base of the shallow aquifer, identified by the top of glacial till. Borings for the monitoring wells were also advanced six (6) inches into the till layer. Completed monitoring wells ranged in depth from 14.5 feet to 21.0 feet below ground surface, depending upon location. Continuous split spoon samples were collected at each boring for visual identification and logging of the soil

types encountered. This information has been used to develop a comprehensive understanding of the geology within the study area.

The monitoring wells were all constructed of 2 inch (inside diameter), Schedule 40 PVC ,.010 inch slot well screen, with 2 inch (inside diameter) PVC riser. Well screens are 10 to 15 feet in length, as necessary to intercept the saturated thickness of the aquifer. Wells constructed in the access roads of the facility have been completed with flush mounted curb boxes, while those on commercial property not in the potential path of auto traffic were completed with an outer protective casing and approximately 30 inches of stickup riser. Well construction details for each monitoring well are included in Appendix 1.

2.4 Measurement of Groundwater Elevations

The depth to groundwater was measured in all the monitoring wells after completion and development. Measurements were made on August 28, 2002, November 17, 2002 and December 10, 2002. The data was converted to sea level-elevation based on surveyed points on the monitoring well and developed into a surface plot. This information indicates the direction of groundwater flow and was used to determine groundwater flow velocities. Measurements were obtained in August and December 2002 to allow for seasonal fluctuations in the depth to groundwater and changes in the local flow pattern. Field data is included in Appendix 2.

2.5 Aquifer Testing

Following the development of the monitoring wells, in-situ aquifer testing (slug tests) was performed on October 17, 2002 to determine the hydraulic conductivity of the aquifer at various locationsSlug testing was performed on six (6) monitoring wells, at locations up-gradient and down-gradient of the inferred source area of groundwater contamination as well as on three (3) monitoring wells in the apparent area of maximum groundwater contamination. Results are discussed in Section 3.2. Slug test field data and results of modeling are included in Appendix 3.

2.6 Survey Work

At the completion of the test boring program and well installation work, all sampling points and monitoring wells were surveyed and added to the base map. Monitoring wells were also surveyed for elevation to establish a point from which to measure groundwater elevations. It should be noted that all buildings shown on the base map were not precisely surveyed, but rather estimated to provide a frame of reference. The survey work was completed by Larson Engineers and Surveyors on August 20 – 21, 2002. A detailed property survey was not completed. An existing survey map of the subject parcel property supplied by OMRDD, prepared at a scale of 1 inch = 80 feet by Krehbiel Associates (drawing D-2297) dated June 16, 1992 was used as the base map (Figure 2).

Elevations for ground surface for all test boring locations was determined, relative to mean sea level. The elevation for the top of PVC well casing, and the top of the protective steel casing/roadway box was also determined relative to mean sea level. The top of PVC well casing and top of protective devices (curb boxes or stand pipes) for each well was determined to an

0.010 foot accuracy. Well locations were determined to 0.10 foot accuracy (northing and easting). Iron rods that marked property corners were also exposed to determine accuracy of past site survey maps and to determine the subject parcel's property lines. Elevation data for grade, top of well casing and for the protective device are shown on Figure 2.

2.7 Laboratory Analysis on Soil Samples

At least one (1) soil sample was collected from each test boring for laboratory analysis. The base analysis included volatile organic compounds, by U.S. EPA Method 8260. All soil samples were submitted for analysis for VOCs via this method. A total of 33 soil samples were collected for the base VOC analysis. This included one (1) sample from all 28 test borings, collection of an additional sample from boring B-1/MW-1 (two samples at different depths at this boring), (2) duplicate soil samples and two (2) surface soil samples from the garden area south of the Day Habilitation Center building.

Five (5) soil samples from four (4) borings (1 duplicate sample) and one (1) surface sample from the garden area were submitted for an expanded list of analytical parameters. These samples represented approximately 15% of the total number of soil samples. The expanded analysis included the base analysis, and also included:

- Target Compound List (TCL) of metals plus cyanide;
- TCL list of Semi-volatile organic compounds (SVOCs), including Base Neutral and Acid extractable constituents.
- PCBs;
- TCL Pesticides; and
- TCL Herbicides.

The expanded laboratory analysis was performed on the soil samples collected from the following:

- The surface soil sample collected to a depth of six (6) inches at the garden (north sample);
- Test Boring B-17, in the former baseball field up-gradient of the facility, collected from eight to twelve feet below grade;
- Test Boring B-21, at the west loading dock area, collected from eight to 10 feet below grade;
- Test Boring B-25, located inside the building (a duplicate soil sample was also submitted from this location, from the same interval); both samples collected from nine to eleven feet below grade;

- The soil sample collected from monitoring well B-1/MW-1 located adjacent to the south side of the study site building. The expanded analysis was performed on the sample collected from the eight to ten foot interval, except for the herbicide analysis. Due to insufficient sample material the herbicides analysis at B-1/MW-1 was performed on the soil sample collected from the two foot to four foot interval at this location.

The QA/QC program also included analysis of sufficient Field Duplicate, Matrix Spike and/or Trip Blank samples to comply with New York State Analytical Services Protocol (ASP). 20% of the collected samples were subject to ASP review.

Analytical results are discussed in Section 3.3 of this report. All soil samples were collected by Bergmann Associates personnel. The soil samples were handled, labeled and preserved in accordance with the approved SI plan. The soil samples were submitted under chain-of-Custody protocol to Severn Trent Services, a NYSDOH certified analytical laboratory for testing. Samples were hand-delivered to the Severn Trent facility located in Amherst, NY. The soil samples were delivered on July 11; July 12; July 19; July 26; and August 1, 2002.

2.8 Groundwater Sampling and Laboratory Analysis

The groundwater monitoring wells on the Gowanda Day Habilitation property were installed between July 19 to July 31, 2003. All monitoring wells were developed to remove sediments from the filter pack, and to improve groundwater flow into the well. The wells were developed by a combination of low flow pumping and surging using dedicated bailers, removing sufficient water to remove sediment from the filter pack. Wells were developed until turbidity levels decreased to 50 Nephelometric Turbidity Units (NTUs). Development is necessary to insure proper communication of the well screen with the aquifer for accurate measurements of hydrogeologic properties and for the collection of representative groundwater samples.

Groundwater samples were collected in August and September 2002 from all on-site monitoring wells for chemical analyses. All fifteen (15) groundwater monitoring wells were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs). 10% of the samples were submitted for these analyses according to NYSDEC Analytical Services Protocol (ASP). Four groundwater samples from three (3) monitoring wells (MW-1, MW-1 Duplicate, MW-6 and MW-12) were submitted for the expanded analysis. The expanded analysis on the groundwater samples included the same parameters listed for the soil samples, as listed below;

- Target Compound List (TCL) of metals plus cyanide;
- TCL list of Semi-volatile organic compounds, including Base Neutral and Acid extractable constituents.
- PCBs;
- TCL Pesticides; and
- TCL Herbicides.

Monitoring wells were purged of at least three well volumes of water (the amount of water in the well under static conditions) using a peristaltic pump at a low flow rate, prior to sampling to insure all stagnant water was removed. Purge water was collected in 55 gallon drums for off-site disposal. Field parameters of turbidity, conductivity, pH, and temperature were measured, with stability of those parameters used as an indication that the well was completely purged. Samples were then collected with a dedicated bailer, sealed in the appropriate containers, and placed on ice for shipment to Severn Trent Laboratories in Amherst, NY, a NYSDOH certified laboratory, which performed the analysis.

All soil samples were collected by Bergmann Associates personnel. The soil samples were handled, labeled and preserved in accordance with the approved SI plan. The soil samples were submitted under chain-of-Custody protocol to Severn Trent Services, a NYSDOH certified analytical laboratory for testing. Samples were hand-delivered to the Severn Trent facility in Amherst, NY on August 30 and September 4, 2002. Analytical results are discussed in Section 3.4 of this report.

2.9 Data Validation and Usability

In accordance with the SI work plan, a Data Usability Summary Report was prepared by a qualified, independent firm – Data Validation Services on data packages generated by Severn Trent Laboratories. This included soil samples collected between July 8, 2002 – July 31, 2002 and aqueous samples collected between August 28, 2002 and September 4, 2002. The following number of data packages were reviewed:

- Five (5) soil samples – Target Compound List (TCL) and STARS VOC's, TCL SVOC's, TCL pesticides, TCL PCB's, herbicides (three only) and TAL Metals/CN (four by USEPA SW846 methods and one by 2000 NYSDEC ASP.
- Seven (7) aqueous samples – TCL and STARS VOC's, TCL SVOC's, TCL pesticides, TCL PCB's, herbicides (three only) and TAL Metals/CN (six by USEPA SW846 methods and one by 2000 NYSDEC ASP).
- Twenty-seven (27) soil samples – TCL and STARS VOC's (twenty-three by USEPA SW846 methods and four by 2000 NYSDEC ASP).
- Twelve (12) aqueous samples – TCL and STARS VOC's (ten by USEPA SW846 methods and two by 2000 NYSDEC ASP).
- Sample matrix spikes, equipment and trip blanks were also processed.

The field samples processed by NYSDEC 2000 ASP were reported with full laboratory deliverables. This includes review of all summary form and sample raw data. The remaining analytical packages were processed by USEPA SW846 methodologies and reduced summary level data packages were provided. This includes review of data packages and any observed anomalies in QC. The data has been reviewed for application of qualifiers per the NYSDEC Division of Environmental Remediation guidance for the Development of data Usability

Summary Reports as it relates to the usability of this sample data. Results of the usability review including items that indicated deficiencies are discussed in Section 3.5. The following items were reviewed:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times
- Surrogate and Internal standard Recoveries
- Matrix Spike Recoveries/Duplicate Correlation
- Preparation and Calibration Blanks
- Control Spike and Laboratory Control Samples
- Instrumental Tunes and IDL's (ASP only)
- Calibration/CRI/CRA Standards (ASP only)
- ICP Interference Check Standards (ASP only)
- ICP Serial Dilution Correlation (ASP only)

3.0 SITE INVESTIGATION FINDINGS

The findings and interpretation of the data for the SI are discussed in this section. A description of the site geology and hydrogeology provide a basis to further understand the nature and extent of contamination across the study area. Contaminant distribution is discussed based on the site geology and hydrogeology and the analytical results of soil, groundwater samples and previously collected indoor air samples with an overall description of current conditions

3.1 Site Geology

Information on regional geologic conditions was obtained by review of published literature and available mapping. The subject parcel is located in the flood plain for Cattaraugus Creek. Cattaraugus is unique for New York State, with both glaciated and unglaciated topography present. The Village of Gowanda is located at the southern extreme of the Lake Erie physiographic province, abutting New York Uplands to the south (Tesmer, 1975). Cattaraugus Creek has sharply incised underlying glacial deposits consisting of till to exposed bedrock in the stream valley. Regional geologic mapping of surface deposits indicates that the unconsolidated deposits at the subject parcel consist of Recent Deposits (al), unconsolidated sediments generally confined to flood plains within a valley. These deposits are oxidized, non-calcareous fine sand to gravel, and can be overlain by silt in larger valleys, and may be subject to frequent flooding. Figure 3 shows the Surface Geology for the region. This map was prepared from the Surficial Geologic Map of New York, Niagara Sheet, 1988.

Bedrock was not encountered in any of the test borings installed for this site investigation. Borings were advanced to depths ranging from 14 feet to 22 feet below ground surface. Regional geologic mapping indicates that the bedrock at the subject parcel consists of sedimentary units, the Machias Formation of the Upper Devonian-age Canadaway Group. In the vicinity of Gowanda this formation consists of 400 to 600 feet of undifferentiated and interbedded gray shale and gray siltstone members. Figure 4 shows the Bedrock Geology for the region, this map was prepared from the Geologic Map of New York, Niagara Sheet, 1970.

All subsurface deposits encountered during the Site Investigation consist of unconsolidated overburden material, representing three (3) distinct units and a thin layer of fill/reworked native deposits. The lowermost unit encountered is a glacial till deposit. The till is comprised of clay, silt, and fine sand, is very dense and compact, and is relatively impermeable. The total thickness of the till unit was not identified during this study. The till deposit is at least 15 feet thick, based on information from the Remedial Investigation conducted at the AVM Gowanda/Gowanda Electronics site (NYSDEC Registry of Inactive Hazardous Waste Disposal Sites # 905025). As part of the AVM Gowanda Remedial Investigation, two (2) test borings were advanced 15 feet into the till deposit, without encountering bedrock. Based on the widespread occurrence, apparent thickness, relatively high clay content and the relative lack of free moisture (compared to overlying deposits) the glacial till functions as a barrier to downward groundwater flow and contaminant migration. The top of this till unit is found at the subject parcel at depths of from 13.5 feet to 22.25 feet below ground surface, depending on location.

The primary water bearing unit is immediately above the till, consisting of alluvium sand and gravel of varying composition. This deposit is present at depths ranging from 6.0 to 12.0 feet below ground surface and extending to the top of glacial till deposit. The relatively coarse grained alluvium deposit is an average of 8.8 feet thick, ranging from a minimum of 4.5 feet to a maximum of 12.5 feet in thickness. The alluvium sand and gravel deposit is a post-glacial alluvial deposit as a result of streams flowing over the till, carrying and depositing large quantities of sand and gravel. These streams continually changed course, cutting and subsequently filling channels with sediment of various grain size depending on the volume and rate of flow, resulting in the variability of material observed during the SI.

The post-glacial streams that flowed over the till were also responsible for the contouring of this deposit through erosion processes. Surface features of the till, such as the bowl beneath Torrance Place, are a result of this erosion. Overall, the alluvial unit is a relatively permeable mix of sand and gravel, with channel deposits of coarser material (and therefore even more permeable) controlling, in part, groundwater flow pathways. The surface of the glacial till deposit is shown on Figure 5.

The uppermost naturally occurring unit encountered at the Gowanda Day Habilitation site is a layer of flood plain deposits consisting of fine sand, silt, and clay. This soil unit extends from the ground surface to the top of the alluvial sand and gravel unit, generally 6.0 feet to 12.0 feet in thickness (including the overlying fill deposits, which can resemble re-worked native deposits). The path of the stream system responsible for the sand and gravel was displaced as the deposits filled the channels. Periodic flooding over the banks of the stream carried from grained sediments, the fine sand, silt, and clay, in the quieter floodwaters and deposited them on top of the sand and gravel. The flood plain deposits contain silt, are finer-grained and are thus less permeable than the underlying sand and gravel unit.

A veneer of fill and/or re-worked native soil was encountered at the ground surface across the study site. Much of the site is paved with asphalt, and crushed gravel and fill, which appeared to consist of sand and gravel resembling the alluvium deposits, were observed. Re-worked native sediments were also encountered directly beneath the concrete slab for the Day Habilitation Center building. The structure does not have a basement. The surface fill at the subject parcel varied in thickness from 0 feet (not present) to 7.8 feet thick at a loading dock on the western side of the building. Fill was also encountered during the hand excavation, to a depth of 1.0 feet, in the grassy garden area south of the building.

The unconsolidated geology at the subject parcel is shown visually on geologic cross-sections A-A^1, presented on Figure 6, and on cross-section B-B^1, presented on Figure 7.

The cross-sections were prepared utilizing information gathered from the installation of the 28 test borings and 15 groundwater-monitoring wells in July 2002. Cross-section A-A^1 presents subsurface overburden characteristics in an easterly-westerly direction. Cross-section B-B^1 presents the subsurface characteristics in a southerly to northerly direction. The B-B^1 cross-section also generally follows the shallow water table surface through the site

3.2 Site Hydrogeology

The uppermost water-bearing unit at the subject parcel occurs within the alluvial sand and gravel unit under unconfined conditions. An unconfined aquifer is one where the groundwater surface, or water table, is free to rise and fall depending on aquifer recharge and artificial influences such as pumping wells or drainage systems. The saturated thickness of the aquifer (based on measurements obtained in December 2002) ranges from 3.2 feet to 13.2 feet. The saturated thickness tends to be thicker in the southern and western portions of the study, and thinner in the western and northern areas. Recharge occurs to a water table aquifer through horizontal flow from an up-gradient source and/or infiltration of precipitation. The study area is served with storm drains to Cattaraugus Creek for the paved areas including parking lots and village streets. Regionally, the area is bound by Thatcher Creek, a tributary to Cattaraugus Creek, to the east, and Cattaraugus Creek to the west. Locally, Thatcher Creek, is inferred to exerts a minor influence on groundwater flow within the study area, as can be observed on Figures 8 and 9, Shallow Water Table surface and Groundwater Flow for August and December 2002, respectively.

Sanitary and storm sewer lines are present at the subject parcel and along Torrance Place. These municipal service lines are at depths above the water table and are inferred as having no effect on groundwater flow.

Groundwater flow direction is determined by observing the elevation of the water table at various locations and calculating the slope (hydraulic gradient) of that surface, with flow being in the direction of high to low elevation, or potential. Groundwater flow velocity is determined using the hydraulic gradient, hydraulic conductivity, and the porosity of the material through which the flow is occurring. The calculated values of these parameters for the water table aquifer are discussed below.

All monitoring wells have had water levels recorded during three (3) site visits, conducted at approximate two (2) month intervals, in August, October and December 2002 to for seasonal variations. The measured depth to water is subtracted from the top of PVC casing, a point with a determined elevation relative to sea level, to obtain the equivalent water table elevation at that point. The depth to water measurements and equivalent groundwater elevations (relative to mean sea level) for the three (3) monitoring events are summarized in Table 4. Monitoring Well Depth Gauging and Development Forms are provided as Appendix 2.

TABLE 4
SUMMARY OF DEPTH TO WATER AND GROUNDWATER TABLE ELEVATIONS

Well #	Elevation, TOC	Depth to Water 08/28/02	Water Table Elevation 08/28/02	Depth to Water 10/17/02	Water Table Elevation 10/17/02	Depth to Water 12/10/02	Water Table Elevation 12/10/02
MW-1 [a]	778.23	6.24	771.99	5.99	772.24	5.49	772.74
MW-2 [a]	778.08	5.96	772.12	5.75	772.33	5.28	772.80
MW-3 [a]	778.38	6.42	771.96	6.23	772.15	5.72	772.66
MW-4 [a]	778.43	7.95	770.48	8.06	770.37	7.07	771.36
MW-5 [a]	778.61	10.79	767.82	10.97	767.64	10.69	767.92
MW-6 [b]	781.10	13.33	767.77	13.44	767.66	13.18	767.92
MW-7 [b]	780.94	13.23	767.71	13.33	767.61	13.12	767.82
MW-8 [b]	781.33	9.36	771.97	9.10	772.23	8.60	772.73
MW-9 [b]	782.61	9.25	773.36	9.08	773.53	8.30	774.31
MW-10 [b]	780.02	7.09	772.93	6.70	773.32	6.21	773.81
MW-11 [a]	778.58	6.61	771.97	6.42	772.16	5.90	772.68
MW-12 [a]	778.50	7.23	771.27	7.00	771.50	6.56	771.94
MW-13 [a]	778.39	7.28	771.11	7.07	771.32	6.73	771.66
MW-14 [a]	778.43	10.04	768.39	9.93	768.50	9.54	768.89
MW-15 [a]	778.38	10.51	767.87	10.60	767.78	10.37	768.01

a: These monitoring wells are flush-to-grade
b: These monitoring wells extend above ground surface and are protected with steel protective piping
All measurements are in feet. Water Table Elevations are relative to Mean Sea Level
TOC = Top of PVC Casing, relative to mean sea level.

Equipotential lines representing areas of equal water table elevation were prepared using the groundwater elevations established for the 15 monitoring wells. Groundwater flow is estimated at right angles to the equipotential lines.

Mapping was prepared from the August 28, 2002 and December 10, 2002 well gauging events. The shallow groundwater at the subject parcel is present at depths ranging from 4.5 feet to 11 feet below ground surface. The August 2002 shallow groundwater at the subject property is shown to be flowing in a northerly direction.

The December 2002 gauging showed that the shallow water table at the subject parcel flows in the northerly direction, in a similar flow direction as the August 2002 pattern. The average depth to groundwater was approximately 8.18 feet below ground surface. The water table surface showed a rise of approximately 0.57 feet compared to the August 2002 values, likely to seasonal precipitation.

The hydraulic gradients have been calculated for the study area. Hydraulic gradient is the difference in hydraulic head (in this case water table elevation) between two points, divided by the distance between those points, expressed as a percentage. It is necessary for the calculation of groundwater velocity and is an indicator of flow direction.

The average hydraulic gradient in the down-gradient direction varies from 0.028 feet/foot to 0.0241 feet/foot along the B-B^1 geologic cross section.

To obtain aquifer characteristics slug testing was performed using both rising head and falling head techniques. A slug (solid PVC pipe) was lowered or removed into the well to displace the water column. Changes in water elevation were recorded electronically using the In-Situ ® Mini Troll Pro data logger and a lap top computer. Hydraulic conductivity was evaluated via the Bouwer and Rice slug test method for unconfined aquifers using the Aqtesolv ® for windows software. Hydraulic conductivity data generated from the slug tests are presented in Table 5. Values across the study area range from 1.001 x 10^{-3} to 1.403 x 10^{-3} cm/sec (centimeters per second), with an average hydraulic conductivity of 1.236 x 10^{-3} cm/sec. The slug test results indicate a relatively permeable aquifer capable of transmitting a moderate volume of groundwater. However, it should be noted that hydraulic conductivity values generated from slug tests provide limited data at best, especially in moderately conductive aquifers with localized variability. More precise values, when necessary, can be obtained from aquifer pumping tests that were not conducted as part of this study. Slug test field data is provided as Appendix 3.

Groundwater velocity, has been calculated based on the information above and assuming a porosity of 30% for a sand and gravel mix (Fetter, 1988). The groundwater flow velocity was calculated in an approximate north-south direction, parallel to the hydraulic gradient and direction of groundwater flow. Since groundwater flow directions and the hydraulic gradient varies across the site, groundwater flow velocities will show variability.

TABLE 5
SLUG TEST HYDRAULIC CONDUCTIVITY VALUES

Monitoring Well Number	K (cm/sec)	K (ft/day)
MW-1	1.265 x 10^{-3}	3.586
MW-5	1.001 x 10^{-3}	2.838
MW-7	1.319 x 10^{-3}	3.739
MW-9	1.403 x 10^{-3}	3.978
MW-12	1.189 x 10^{-3}	3.371
MW-13	1.238 x 10^{-3}	3.510
Average Values	1.236 x 10^{-3}	3.504

K = Hydraulic Conductivity
Seepage Velocity = Vs
Vs = K * I/Ne
Average K = 1.236 x 10^{-3} cm/sec = 3.504 ft/day

I = Hydraulic Gradient, feet/foot
Ne = effective porosity, assumed to be 30%
In the down-gradient direction, MW1 to MW14, I = 0.028 ft/foot
Vs = (3.504 ft/day *0.028 ft/foot)/0.30 = 0.327 ft/day

Geologic Cross –Section B-B^1, approximately along flow axis
Down-gradient direction beneath the building slab, direct down-gradient direction,
I = 0.0241 ft/foot
Vs = (3.504 ft/day *0.0241ft/foot)/0.3 =0.281 ft/day

3.3 Laboratory Analysis Summary, Soil Samples

Validated results of the laboratory analysis on the soil samples are presented on summary tables provided in Appendix 4. The complete laboratory analytical reporting package and chain-of-custody forms for the soil samples are provided as Appendix 5.

Chlorinated VOCs were detected in 18 of the 33 test boring and/or surface soil samples that were submitted for laboratory analysis. A summary of the VOC laboratory analytical results on soil samples is presented in Table 6.

The chlorinated compounds detected in soil samples consisted of Trichloroethene (TCE), cis-Dichloroethene (cis-DCE), trans-Dichloroethene (trans-DCE and Vinyl Chloride (VC). TCE was detected in 18 soil samples, with a maximum concentration of 14,000 ppb detected in the shallow soil sample at boring B-1/MW-1 (2'-4' interval). No chlorinated VOCs were detected in the soil samples collected from twelve (12) test borings. (B-4, B-8, B-9, B-10, B-16, B-17, B-18, B-19, B-20, B-21, B-22, B-23).

TCE was detected at an estimated concentration of 1.0 ppb in both of the surface soil samples collected from the garden area. No other chlorinated VOCs were detected in the garden samples.

Cis-DCE was detected in 14 soil samples, with a maximum concentration of 940 ppb in the shallow soil sample from B-1/MW-1. Trans-DCE was detected in two (2) soil samples, at a maximum concentration of 10 ppb in the B-1/MW-1 shallow sample. Vinyl Chloride was detected in a single soil sample, the deep sample collected in B-1/MW-1 at the 8'-10' interval.

Acetone, Methylene chloride and Toluene were detected in the majority of the soil samples. These compounds were also detected in several trip blanks, field blanks and method blanks. Concentrations were highest in samples that required dilution due to the presence of chlorinated VOCs. The presence of Acetone, Methylene chloride and Toluene is likely due to dilution and contamination while performing extraction and analysis at the laboratory, and are not inferred as indicative of site conditions, and are assumed as not present in the soil at the subject parcel. Th data validation and Usability Summary Report deleted these compounds, and they are not shown as present in the validated results.

Laboratory Analysis for semi-volatile organic compounds (SVOCs) were performed on six (6) soil samples, from the four (4) borings targeted for the expanded analysis and on the north garden surface soil sample. The SVOCs Bis (2-ethylhexyl) phthalate and Butyl benzyl phthalate were detected in four (4) samples. Phthalates can be introduced during extraction and analysis and are attributed to laboratory contamination in these samples.

Petroleum-based SVOCs were detected in the deep soil sample from boring B-1/MW-1, collected at the approximate water table. The detected SVOCs in this sample (Anthracene, Chrysene, Fluoranthrene, Phenanthrene and Pyrene) can be indicative of diesel fuel or heating oil, when these compounds are detected as a group. All of the detected concentrations of these petroleum-based SVOCs were present at concentrations below recommended NYSDEC cleanup

objectives. None of these SVOCs were detected in the groundwater samples collected at this same location.

The heavy metal Arsenic was detected in the soil sample and duplicate soil sample collected from boring B-25 at a depth of 9 to 11 feet below grade, at concentrations of 29.8 ppm (mg/kg) and 25 ppm. These values exceed the Eastern USA Background Range (3 –12 ppm) and the NYSDEC recommended cleanup objective (7.5 ppm or site background). This appears to be an isolated result that is not indicative of overall site conditions. Concentrations for all other metals, including the other seven RCRA heavy metals were all detected at levels within Eastern USA Background Ranges. The detected concentrations of metals in the study site soil samples do not appear to present an adverse impact at the subject parcel.

Cyanide was not detected in any of the six (6) samples submitted for the expanded analysis. The Cyanide analyses were performed outside of hold time, and were not validated. Cyanide was not detected in any of the groundwater samples, and Cyanide is not inferred as presenting an adverse impact at the subject parcel.

The PCB Aroclor 1254 was detected in the garden north surface soil sample at a concentration of 40 ppb. This concentration is below the NYSDEC recommended cleanup objective of 1,000 ppb (1.0 ppm) for surface soil. No other PCBs were detected in any of the remaining soil samples, and no PCBs were detected in any of the groundwater samples. PCBs are not inferred as presenting an adverse environmental impact onto the subject parcel.

Low concentrations of pesticides were detected in the Garden north surface soil sample, and in subsurface soil sample collected at B-1 and B-25. The herbicides detected in the Garden north soil sample were 4,4'-DDD, 4,4-DDE and 4,4'-DDT. Methoxychlor was detected in the soil sample from boring B-1 and both of the B-25 samples. Endosulfan sulfate was detected in the B-25 boring sample only. All pesticide concentrations were detected at concentrations below relevant NYSDEC Recommended Cleanup Objectives. The detected pesticides may be indicative of the historical agricultural development of the subject parcel and surrounding area, and also may reflect use of these pesticides in the large field/baseball field southwest of the Day Habilitation Center building. No pesticides were detected in any of the groundwater samples. No herbicides were detected in any of the soil samples or groundwater samples collected from the subject parcel. Past use of pesticides and herbicides are not inferred as presenting an adverse environmental impact onto the subject parcel.

3.4 Laboratory Analysis Summary, Groundwater Samples

Validated results on the laboratory analysis performed on the groundwater samples are presented on summary tables provided in Appendix 4. The complete laboratory analytical reporting package and chain-of-custody forms on the groundwater samples are provided as Appendix 5.

Chlorinated VOCs were detected in the groundwater samples collected from all 15 on-site monitoring wells. A summary of the VOC analysis on the groundwater samples is presented in Table 7. The distribution of Chlorinated VOCs in groundwater is discussed in Section 4.2 of this SI report.

Low concentrations of the aromatic VOC Toluene were detected in three (3) groundwater samples. Toluene was also detected in method blanks, and in one (1) trip blank prepared by the analytical laboratory. The Toluene detected in the groundwater samples can thus be attributed to laboratory contamination and is not inferred as indicating the presence of this compound at the site. The Data Validation and Usability Summary Report deleted the Toluene as detected in the groundwater samples, and this VOC is not shown in the validated summary tables. No other aromatic VOCs indicative of petroleum distillates were detected in the groundwater samples.

Acetone and Methylene chloride were detected in several groundwater samples with elevated chlorinated VOCs also present. Acetone and Methylene chloride were also detected in method blanks, trip blanks and field blanks. The detected Acetone and Methylene chloride likely reflect laboratory contamination and, are not inferred as reflecting the presence of these compounds at the study site.

Detected concentrations for the 8 RCRA heavy metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) were all below relative NYSDEC Class GA groundwater standards. No release of metals into the subsurface or elevated levels of metals in groundwater has been identified, and metals are not inferred as presenting an adverse impact at the study site.

No PCB compounds, pesticides or herbicides were detected in any of the groundwater samples collected from the Gowanda Day Habilitation Center in 2002. These substances are not inferred as presenting an adverse impact at the study site.

TABLE 6
VOC LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES

Boring/Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-1/MW-1 2' - 4' 07/30/02	B-1/MW-1 8' - 10' 07/31/02	B-2/MW-2 8' - 10' 07/25/02	B-3/MW-3 8'- 10' 07/12/02	B-4/MW-4 10' - 12' 07/11/02	B-5/MW-5 8' - 13' 07/31/02	B-6/MW-6 18' - 20' 07/30/02	B-7/MW-7 16' - 17.5' 07/30/02	B-8/MW-8 9' - 10' 07/24/02
Trichloroethene	0.7 ppm (700 ppb)	14000 D	3600 D	8	3 J	ND	5	44 J	330 D	ND
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	940 D	170	12	ND	ND	7	190	550 D	ND
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	10	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.2 ppm (200 ppb)	ND	5 J	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.06 ppm (6 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3 ppm (300 ppb)	ND	ND	10 J	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND

Results are ug/kg (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 6, Continued
VOC LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES

Boring/Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-1/MW-1 2' - 4' 07/30/02	B-1/MW-1 8' - 10' 07/31/02	B-2/MW-2 8' - 10' 07/25/02	B-3/MW-3 8'- 10' 07/12/02	B-4/MW-4 10' - 12' 07/11/02	B-5/MW-5 8' - 13' 07/31/02	B-6/MW-6 18' – 20' 07/30/02	B-7/MW-7 16' - 17.5' 07/30/02	B-8/MW-8 9' - 10' 07/24/02
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	0.12 ppm (120 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1.5 ppm (1500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor		ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	ND	2 J	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
P-Cymene		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND

Results are ug/kg (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 6 Continued
VOC LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES

Boring/Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-9/MW-9 8' – 10' 07/11/02	B-10/MW-10 6' - 8' 07/10/02	B-11/MW-11 9' - 11' 07/17/02	B-12/MW-12 12' - 14' 07/16/02	B-13/MW-13 10' - 12' 07/15/02	B-14 10' - 12' 07/18/02	B-15 12' - 14' 07/19/02	B-16 8' - 10' 07/08/02
Trichloroethene	0.7 ppm (700 ppb)	ND	ND	480	3300	6	79	51	ND
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	110	ND	3 J	12	7 J	ND
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.06 ppm (6 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane		ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND

Results are ug/kg (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 6 Continued
VOC LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES

Boring/Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-9/MW-9 8' - 10' 07/11/02	B-10/MW-10 6' - 8' 07/10/02	B-11/MW-11 9' - 11' 07/17/02	B-12/MW-12 12' - 14' 07/16/02	B-13/MW-13 10' - 12' 07/15/02	B-14 10' - 12' 07/18/02	B-15 12' - 14' 07/19/02	B-16 8' – 10' 07/08/02
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	0.12 ppm (120 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	ND	ND	ND	1 J
Toluene	1.5 ppm (1500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor		ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
P-Cymene		ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene		ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene		ND	ND	ND	ND	ND	ND	ND	ND

Results are ug/kg (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 6 Continued
VOC LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES

Boring/Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-17 8' - 12' 07/09/02	B-18 5' - 6' 07/10/02	B-19 8' - 10' 07/24/02	B-20 12' - 14' 07/26/02	B-21 8' - 10' 07/24/02	B-22 4' - 6' 07/09/02	B-23 10'-11' 07/25/02	B- 23D 10' - 11' 07/25/02	B-24 18' – 20' 07/31/02
Trichloroethene	0.7 ppm (700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	910 D
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	700 D
Trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	3 J
Vinyl chloride	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.06 ppm (6 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	N	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	3 J
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	2 J	ND	ND	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND

Results are ug/kg (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 6 Continued
VOC LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES

Boring/Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-17 8' - 12' 07/09/02	B-18 5' - 6' 07/10/02	B-19 8' - 10' 07/24/02	B-20 12' - 14' 07/26/02	B-21 8' - 10' 07/24/02	B-22 4' - 6' 07/09/02	B-23 10'-11' 07/25/02	B- 23D 10' - 11' 07/25/02	B-24 18' – 20' 07/31/02
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	0.12 ppm (120 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1.5 ppm (1500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor		ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
P-Cymene		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND

Results are ug/kg (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 6 Continued
VOC LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES

Boring/Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-25 9' - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	B-26 11-12' 07/23/02	B-27 12' - 13' 07/26/02	B-28 11' - 12' 07/23/02	Garden Soil-N 0'-0.5' 07/19/02	Garden Soil-S 0'-0.5' 07/19/02
Trichloroethene	0.7 ppm (700 ppb)	4 J	11	160	130	6	1 J	1 J
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	6	28	65	ND	ND	ND
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND
Benzene	0.06 ppm (6 ppb)	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ND	ND	ND	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane		ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	ND	ND	ND	ND	ND

Results are ug/kg (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 6 (Continued)
VOC LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES

Boring/Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-25 9' - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	B-26 11-12' 07/23/02	B-27 12' - 13' 07/26/02	B-28 11' – 12' 07/23/02	Garden Soil-N 0'-0.5' 07/19/02	Garden Soil-S 0'-0.5' 07/19/02
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloropropene		ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloropropene		ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	0.12 ppm (120 ppb)	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	ND	ND	ND
Toluene	1.5 ppm (1500 ppb)	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor		ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	ND	ND	ND	ND	ND	ND	ND
P-Cymene		ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene		ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene		ND	ND	ND	ND	ND	ND	ND

Results are ug/kg (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 7
VOC LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES

Groundwater Monitoring Well and Sampling Date

VOC Compound	NYSDEC Class GA Standard TOGS 1.1.1	MW-1 09/04/02	MW-1D 09/04/02	MW-2 08/28/02	MW-3 08/28/92	MW-4 08/28/02	MW-5 08/28/02	MW-6 08/29/02	MW-7 08/29/02	MW-7D 08/29/02
Trichloroethene	5.0 ug/L	380	320	4.7J	2.3J	1.8J	12	2.4 J	26	23
cis-1,2-Dichloroethene	5.0 ug/L	380	300	18	9.6	2.0 J	1.7 J	400	420	380
trans-1,2-Dichloroethene	5.0 ugL	4J	4.0 J	ND	ND	ND	ND	3.4 J	ND	2.1 J
Vinyl chloride	2.0 ug/L	4 J	3.2 J	ND	3.1J	ND	ND	ND	4 J	3.3 J
Acetone	25.0 ug/L	5 J	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	60.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (methyl chloride)	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane (hexamethylene)	none: Table 3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (ethylene dibromide)	6 x 10-4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND

Results are ug/L (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 7 Continued
VOC LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES

Groundwater Monitoring Well and Sampling Date

VOC Compound	NYSDEC Class GA Standard TOGS 1.1.1	MW-1 09/04/02	MW-1D 09/04/02	MW-2 08/28/02	MW-3 08/28/92	MW-4 08/28/02	MW-5 08/28/02	MW-6 08/29/02	MW-7 08/29/02	MW-7D 08/29/02
cis-1,3-Dichloropropene	0.4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	none: Table 3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	10.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	none: Table 3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NA: Not Listed	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluorethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Propylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Cymene (4-Isopropyltoluene)	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Butylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL DETECTED VOCS:		768.0	627.2	22.7	15.0	3.8	13.7	405.8	450.0	408.4

Results are ug/L (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 7 Continued
VOC LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES

VOC Compound	NYSDEC Class GA Standard TOGS 1.1.1	MW-8 08/28/02	MW-9 08/28/02	MW-10 08/28/02	MW-11 08/29/02	MW-12 08/29/02	MW-13 08/28/02	MW-14 08/29/02	MW-15 08/29/02
Trichloroethene	5.0 ug/L	1.4 J	4.2 J	2.6 J	2300	9600	250	180	320
cis-1,2-Dichloroethene	5.0 ug/L	ND	ND	ND	2300	3000	69	130	380
trans-1,2-Dichloroethene	5.0 ugL	ND	ND	ND	16	28	1.3 J	1.6 J	ND
Vinyl chloride	2.0 ug/L	ND	ND	ND	31	15	ND	3.6 J	ND
Acetone	25.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	60.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (methyl chloride)	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane (hexamethylene)	none: Table 3	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (ethylene dibromide)	6 x 10-4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0 ug/L	ND	ND	ND	3.1 J	8.3	ND	ND	ND
1,2-Dichloropropane	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND

Results are ug/L (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

TABLE 7 Continued
VOC LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES

VOC Compound	NYSDEC Class GA Standard TOGS 1.1.1	MW-8 08/28/02	MW-9 08/28/02	MW-10 08/28/02	MW-11 08/29/02	MW-12 08/29/02	MW-13 08/28/02	MW-14 08/29/02	MW-15 08/29/02
2-Hexanone	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	none: Table 3	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	10.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	none: Table 3	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NA: Not Listed	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0 ug/L	ND	ND	ND	ND	1.0 J	ND	ND	ND
Toluene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluorethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
N-Propylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
p-Cymene (4-Isopropyltoluene)	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
N-Butylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL DETECTED VOCS:		1.4	4.2	2.6	4,647.0	12,643.0	315.3	315.2	730.0

Results are ug/L (ppb) D = Concentration detected in diluted sample ND = Not Detected J = Estimated, detected below method detection limit
B = Detected in Method Blank BDJ = Detected in Method Blank, and estimated concentration in diluted sample

3.5 Data Usability and QA/QC

The following is a synopsis of the more prominent points identified and detailed in the DUSR provided by Data Validation Services. This summary regards the usability of the complete data set of the analytical reports generated by Severn-Trent Laboratories for this investigation and resulting conclusions of the results' validity. The complete DUSR report, prepared by Data Validation Services, is included as Appendix 6.

In general the data was summarized as being usable as reported or with minor qualification as estimated. However, several areas of quality concern were presented. Most of these were related to analysis of pesticides, PCB's and cyanide:

- Pesticide data for two (2) aqueous samples is not usable due to an apparent matrix effect.
- PCB and pesticide data for one (1) soil sample is not usable due to an apparent matrix effect.
- Cyanide results for five (5) soil samples are not usable due to exceedance of allowable holding time.
- Low bias to additional sample pesticide and PCB results is indicated due to an apparent matrix effect.

The following presents quality issues identified by Data Validation Services during the course of the data usability review.

General

Field Duplicate discrepancies were discovered for several samples including groundwater media from monitoring wells MW-1 and MW-7 and soil sample from boring B-25. These discrepancies were determined to be minor and were not sufficient justification to void the data set.

Matrix Spike accuracy and precision evaluations were documented as being generally acceptable. Exceptions to this are detailed in the below section "TAL Metals/CN".

Data Completeness

Some of the original data packages generated by Severn-Trent were incomplete. Data Validation Services had to request follow-up documentation following receipts of original packages. These were provided upon request. Most of this type of omission was related to herbicide, PCB and pesticide analyses.

Several results for reporting limit and/or correct date of sample collection needed to be revised by Severn-Trent.

Several summary level data packages were incomplete lacking laboratory personnel signature on case narratives and/or correlation between method blank analysis dates.

TCL VOC's – ASP CLP and SW846

Groundwater samples processed by ASP were reported with an incorrect reporting limit of 5 ug/L. This limit should be representative of the low calibration standard concentration at listed as 10 ug/L. Detected values between 5-10 ug/L should be flagged as estimated "J".

Surrogate and internal standard recoveries were accepted for mostly all samples as were holding times and instrument tunes for all samples reviewed by ASP.

The presence of Methylene chloride, acetone and toluene are considered external contamination due to the correlating presence of the three analytes in method, trip and/or equipment blanks. Values for these analytes reported should be edited and considered non-detect.

Twenty-one results for various soil and groundwater samples were flagged as concentrations exceeding the calibration range of the instrument for that specific analysis ("E"). The analyte in each of these results were identified as cis-1,2-dichloroethene and Trichloroethene. Results for these values should be derived from subsequent dilutions of these samples flagged as "DL." Results provided in this SI Report and used for VOC postings were documented as the DL values where applicable and not the E values. The remainder of the data set can be taken directly from initial sample analyses.

Two soil matrix spikes from samples collected at borehole locations B-01 and B-06 showed some discrepancy regarding recovery percentages. Several results of the latter were to be considered estimated ("J").

Tentatively identified Compounds (TICs) flagged as being found in associated blank ("B") as well as the sample are considered external contamination and should not be considered part of the sample data set representing field conditions.

TCL SVOC's – ASP CLP and SW846

The presence of di-n-butylphthalate in various groundwater samples and soils sampled from B-25 (9-11 feet) are considered external contamination due to the correlating presence of the three analytes in method and/or rinse blanks. Values for these analytes reported should be edited and considered non-detect. The same holds true for analyte bis(2-ethylhexyl)phthalate in the groundwater sample from monitoring well MW-02.

The result for the soil sample from borehole B-25 (9-11 feet) was flagged as a concentration exceeding the calibration range of the instrument for that specific analysis ("E"). The analyte of this result was identified as buytlybenzylphthalate. The result for this value should be derived from subsequent dilutions of this sample flagged as "DL." Results provided in this SI Report and used for VOC postings were documented as the DL values where applicable and not the E values.

Several calibration standards for ASP processing were noted as not showing acceptable response and should be flagged as qualified estimated ("UJ").

Tentatively identified Compounds (TICs) flagged as being found in associated blank ("B") as well as the sample are considered external contamination and should not be considered part of the sample data set representing field conditions. Results flagged as aldol condensates ("A") should also be rejected on this basis.

TCL Pesticides/PCB and Herbicides – CLP and SW846

Reporting limits for herbicides were reported unnecessarily high for the soil samples.

Sample results for groundwater samples collected from monitoring wells MW-06 and MW-12, as well as the soil sample collected from B-17 (8-12 feet) are not usable due to extremely low recovery (<10%) of surrogate standards. These samples could not be recollected due to the boreholes either being filled with grout or being converted to monitoring wells prior to the performance of the data usability study. Based on other usable pesticide data derived from other groundwater sampling locations further pesticide sampling may not be warranted. Confirmation of soil concentrations may need to be verified in subsequent investigations.

It appears that there was a negative processing effect on groundwater samples from MW-01 Duplicate (pesticides) and MW-06 and MW-12 (PCB's) leading to conclusion that these sample results be flagged as qualified estimated ("UJ").

TAL Metals/CN – CLP-M and SW846

Cyanide results for soil samples from B-17 (8-12 feet), Garden North, B-25 (9-11 feet) and B-21 (8-10 feet) are not usable due to the samples being analyzed outside of the suitable holding time (greater than 31 days) for this compound. In addition the cyanide results from B-01 (8-10 feet) and in the Field Blank collected on July 31, 2002 are qualified as estimated due to a holding time of between 24-25 days.

Soil analyzed from the sample collected at B-01 and the groundwater collected from MW-01 showed low recoveries of several analytes warranting estimated flagged results.

3.6 Nature and Extent of Contamination

Measurable concentrations of the chlorinated solvent Trichloroethene (TCE) were detected in soil and groundwater samples collected from the Day Habilitation Center site. Associated breakdown products of TCE, consisting of cis-Dichloroethene (cis-DCE), trans-Dichloroethene (trans-DCE) and Vinyl Chloride were also detected in soil and groundwater samples, showing the same general distribution pattern as TCE. The predominant contaminant based on highest concentrations and widespread distribution is TCE. Down gradient from the source area, cis-DCE was detected at higher concentrations than the parent compound at select locations.

The distributions of the detected chlorinated VOCs are shown on attached posting maps. Figure 10 shows a posting of detected chlorinated VOCs in the soil samples. The concentrations for the detected chlorinated VOCs are posted by each sample location. Figure 11 shows a posting of detected chlorinated VOCs in the groundwater samples, with detected concentrations plotted by each monitoring well.

The occurrence of volatile organic compounds, limited to the chlorinated VOC - TCE and various decay/daughter VOCs has been identified and characterized at the subject parcel. The former loading dock/storage area along the southern portion of the Day Habilitation Center building has been identified as the probable source area, with groundwater contamination extending northward. The nature and extent of contamination is discussed in this section corresponding to the environmental media sampled.

Extent of Impacted Groundwater

Utilizing data from the laboratory analysis on the groundwater samples, a groundwater contamination plume has been identified extending from the inferred source area, at the south side of the Day Habilitation Center building. TCE concentrations in groundwater samples ranged from 1.4 ppb at MW-8 to 9,600 ppb, with the highest levels found beneath the building, in the vicinity of Room 50, Client Cafeteria (monitoring well MW-12). TCE Breakdown products, cis-DCE, trans-DCE and Vinyl chloride were also detected in groundwater samples within the area of impacted groundwater.

Surface to near-surface introduction of the chlorinated VOC - TCE has apparently occurred immediately south of the building, south of the Client Cafeteria/Room 50, in the former loading dock area. The highest concentrations of chlorinated VOCs were detected in monitoring wells MW-11 and MW-12, located inside the southern portion of the Day Habilitation Center building near Room 50.

The aerial extent of the contamination that exceeds 1,000 ppb (total VOCs) covers an area of approximately 9,700 square feet and is inferred to be located entirely beneath the Day Habilitation Center building's foundation. The plume is elongated concurrent with the apparent direction of groundwater flow. The extent of contaminated groundwater is discussed in Section 4.3, Contaminant Migration.

4.0 INTERPRETATION OF SITE INVESTIGATION DATA

The findings, conclusions, and recommendations based on the SI activities at the Gowanda Day Habilitation Center property are summarized below.

4.1 Hydrogeologic Setting

Subsurface geologic units present at the Gowanda Day Habilitation Center site include the following in ascending order:

- Bedrock, consisting of Devonian-age shale and siltstone deposits (not encountered);
- Glacial till (lodgment or ablation-type glacial till);
- Alluvium deposits from a stream/fluvial-type depositional regime, consisting of fine gravel, sand, and silt; and
- Flood plain deposits consisting of fine sand, silt, and clay.

The lowest unconsolidated deposit consists of a glacial till unit, which presumably lies directly on bedrock, an Upper Devonian gray shale interbedded with thin gray siltstones of the Canadaway Group. Bedrock was not encountered in any of the borings during this SI.

The glacial till is a relatively dense, impermeable unit composted of clay, silt fine sand and little fine gravel. This deposit marks the base of the shallow water table at the subject parcel, and occurs at a depth of 13.5 feet to 22.25 feet below grade.

Glacial till can be characterized as lodgment till, ablation till or flow till. Lodgment till is deposited at the base of glacial deposits, and is deposited under the extreme weight and pressure of a moving glacier, spearing deposits onto the bedrock surface. Ablation till consists of sediments in upper sections of a glacier, accumulating as ice melts and the sediments are compressed by the weight of the overlying portion of the glacier. Ablation till deposits are often massive without any recognizable structures. Flow till deposits can occur in the uppermost section of a glacier, often at the surface of the melting glacier and can be interspersed with lacustrine deposits. Flow till deposits can contain deformed sedimentary structures indicative of mass movement in a partial lacustrine environment. The glacial till encountered at the subject parcel may reflect local ablation till and/or flow dill deposits. Based on the clay content observed in the till, relatively low moisture content and dense characteristics (based on blow counts recorded during test boring installation) this unit serves as an aquitard, providing an effective barrier, limiting further vertical migration of impacted groundwater.

The surface of the underlying glacial till, which marks the base of the unconsolidated water table aquifer at the study site decreases in elevation in a northerly direction. The glacial till deposit surface elevation is shown on Figure 5. A filled-in stream channel on the top of the glacial till surface also is apparent at the study site, as an elongated trough or depression. This feature may be a former stream channel that scoured into the relatively impermeable till surface, and was

subsequently filled in with permeable alluvial deposits. This apparent trough is oriented in a southwest-to-northeast direction beneath the Gowanda Day Habilitation Center building. The general decrease in the till surface and the apparent buried stream channel may be influencing the flow pattern of the water table aquifer, and may also have an effect on the movement of the chlorinated solvents in the water table, such as restricting movement to the east.

The primary water-bearing unit underlying the site consists of permeable alluvial sand and gravel of varying composition. This material was deposited by post glacial-stream systems flowing from elevated areas south of the site northward over the glacial till, similar to present day Cattaraugus Creek. The alluvial deposits in the southern portion of the study area.

The relatively high energy of the fluvial environment that deposited the alluvial sand and gravel deposits resulted in scouring and erosion of the underlying glacial till deposit, with channels eventually accumulating with sand and gravel. Buried stream channels can influence groundwater flow patterns due to relatively higher hydraulic conductivity compared to the underlying glacial till and to less permeable, finer grained sand and silt deposits that may accumulate adjacent to the channels. These buried channels may also serve as pathway for the migration of contaminated groundwater.

The flood plain deposits are approximately 6 feet thick, but range up to 12 feet in the southern portion of the study area. Based on the higher percentage of silt in this deposit, relative to the underlying alluvial sand and gravel deposits, this unit may retard the upward movement of vapors in the vadose zone beneath the building. The concrete slab foundation for the Day Habilitation Center building and the underlying silt flood plain deposits may be limiting the movement of compounds that volatize from contaminated groundwater into the building. The majority of the flood plain deposits are unsaturated, although some infiltration of precipitation does occur through this unit providing recharge to groundwater. The lower portions of flood plain deposits were also saturated in the southern monitoring wells, i.e. MW-1 and MW-2.

Groundwater occurs in the alluvial sand and gravel unit under unconfined (water table) conditions with saturated thickness of the aquifer ranging from approximately 8.6 to 10.8 feet. The saturated thickness of the aquifer is greater at the southern portion of the study site, and thinner at the eastern and northern areas. Groundwater flow direction is in a generally northerly direction, corresponding with the decrease in the till surface. The water table aquifer likely discharges either into Cattaraugus Creek or into outwash or flood plain deposits approximately 2,400 feet north of the subject parcel. Cattaraugus Creek eventually discharges into Lake Erie, approximately 13 miles to the northwest of the Village of Gowanda.

Hydraulic conductivity measured at the groundwater monitoring wells range from 1.001×10^{-3} to 1.403×10^{-3} cm/sec (2.838 to 3.978 ft/day). Groundwater seepage velocity in the direction of flow has been estimated at 0.281 to 0.327 feet per day based on aquifer testing at the monitoring wells. These values are only estimates and significant variations may exist due to the heterogeneous nature of the aquifer.

Recharge to the water table aquifer at the subject parcel occurs predominately from up-gradient sources to the south. Although local vertical infiltration of precipitation can occur, the presence of asphalt and the building footprint will reduce such an effect.

The Village of Gowanda is serviced by a municipal water supply system. Residents in the study area are served with municipal water supply and connected to sanitary sewer, and groundwater is likely unaffected by domestic use.

4.2 Contaminant Characterization

During the Site Investigation completed in 2002, a total of 50 discrete samples were collected for laboratory analysis. This analysis included 33 soil samples (31 test boring samples and 2 surface soil samples from the garden area) and 17 groundwater samples. This total includes duplicate samples but does not include field blanks or trip blanks.

Chemicals of concern were selected based on concentration, frequency of detection, and distribution. Table 8 shows the physical characteristics of the chemical compounds detected in the soil and groundwater at the Day Habilitation Center site. The frequency and range of the chlorinated VOCs in the soil and groundwater samples are summarized in Table 9.

TABLE 8
PHYSICAL PROPERTIES OF DETECTED CHLORINATED VOCS

Chlorinated VOC	Solubility in Water	Maximum Detected Concentration	Specific Gravity Water =1	Vapor Pressure
Trichloroethene	1,100 mg/L	1.4 mg/L (ppm)	1.46	60 mm at 20° C
Cis-1,2 Dichloroethene	800 mg/L	0.94 mg/L (ppm)	1.28	200 mm at 25° C
Trans-1,2 Dichloroethene	600 mg/L	0.01 mg/L (ppm)	1.26	200 mm at 14° C
Vinyl Chloride	1.1 mg/L	0.005 mg/L	0.92	2,660 mm at 25° C
1,1-Dichloroethene	100 mg/L	0.0083 mg/L	1.218	500 mm at 20° C
Tetrachloroethene	150 mg/L	0.001 mg/L (ppm)	1.626	14 mm at 25° C

Reference: K. Vershcueren, "Handbook of Environmental Data on Organic Chemicals", 2nd Ed, 1983.

The chlorinated VOC - Trichloroethene was the most commonly detected compound. Biotic decay products cis-1,2,Dichloroethene, trans-1,2-Dichloroethene and Vinyl Chloride were also widely detected. These four (4) chlorinated VOCs are the contaminants of concern at the study site. The chlorinated VOC 1,1-Dichloroethene was detected in two (2) groundwater samples, MW-11 and MW-12. This VOC is also a decay/daughter product from TCE or related chlorinated VOCs. A related chlorinated VOC, Tetrachloroethene, was detected in a single groundwater sample, from MW-12, at a concentration of 1.0 ug/L. No other chlorinated solvents were detected in any of the soil or groundwater samples.

TABLE 9
FREQUENCY AND RANGE OF DETECTED CHLORINATED VOCs

Chlorinated VOC	Frequency Detected/Total Samples	Concentration Range (ppb)	Solubility in Water
Soil Samples (includes surface samples from garden area)			
Trichloroethene	18/33 samples	14,000 ppb – 3 ppb	Not applicable
cis-1,2-Dichloroethene	14/33 samples	940 ppb – 3 ppb	Not applicable
Trans-1,2-Dichloroethene	2/33 samples	10 ppb – 3 ppb	Not applicable
Vinyl Chloride	1/33 samples	5 ppb	Not applicable
Groundwater Samples			
Trichloroethene	17/17 samples	9,600 ppb – 1.4 ppb	1,100 ppm (110,000 ppb)
cis-1,2-Dichloroethene	14/17 samples	3,000 ppb – 1.7 ppm	800 mg/L
Trans-2,3-Dichloroethene	8/17 samples	28 ppb –1.3 ppb	600 mg/L
Vinyl Chloride	8/17 samples	31 ppb –3.1 ppb	1.1 mg/L
1,1-Dichloroethene	2/17 samples	3.1 ppb-8.3 ppb	100 mg/L
Tetrachloroethene	1/17 samples	1.0 ppb	150 mg/L

TCE was detected in groundwater samples from all on-site groundwater monitoring wells, including wells located up-gradient and cross-gradient of the inferred source area. The TCE concentrations at the up-gradient and cross-gradient locations are significantly lower than at the source area, and were detected at concentrations below NYSDEC Class GA Standards. The presence of TCE up-gradient of the inferred source area may be the result of various hydraulic dispersion mechanisms, historic flooding which may have flushed TCE onto the ground surface in a wide area, or may reflect an undefined up-gradient source area.

Other volatile organic compounds detected in groundwater samples consist of Acetone, Methylene Chloride and Toluene. These compounds have been attributed to laboratory contamination and not site conditions due to detection of these compounds in trip blanks, field blanks and/or quality assurance samples. The discussion of the presence of lab contaminants is summarized in Section 5.4 and documented in the DUSR report, provided in Appendix 6.

4.3 Contaminant Migration

Surface to near-surface introduction of the TCE has apparently occurred immediately south of the building, adjacent to the Client Cafeteria/Room 50, in the former loading dock area. This release was possibly a non-point, unspecific source of discharge, such as indiscriminate surface spillage or dumping. No evidence has been found that a UST was ever present. Regardless of the source, the chemical release(s) likely occurred prior to 1982, the year that New York State Offices began occupying the building.

Plotting the distribution of VOCs in the soil and groundwater can assist in the evaluation of possible source areas for the historic introduction of TCE. Comparison of the distribution of detected VOCs in test boring soil samples, both vertically and laterally and comparing this distribution pattern to values detected in groundwater samples can also assist in evaluating

locations where and at what depth substances were released into the subsurface. Postings for detected Chlorinated VOCs in soil and groundwater samples are shown on Figures 10 and 11.

The approximate extent of the greatest impact to groundwater is shown visually on Figure 12. The area of highest detected chlorinated solvents in groundwater samples is an area beneath the building slab, in the vicinity of monitoring wells MW-12, MW-11, MW-1 and MW-15. The highest total VOC concentrations were detected in the sample from monitoring well MW-12, in the hallway immediately north of the Client Cafeteria Room 50 (TVOC value of 12,643 ppb). The next highest TVOC value was detected in the groundwater sample from well MW-11, located in the hallway north of the Nurse Clinic Room 39, approximately 33 west of Room 50.

The distribution of detected chlorinated VOCs in the test boring soil samples show that the sample with the highest TVOC concentrations was obtained at a shallow depth from the boring for monitoring well B-1/MW-1. This boring is located in the asphalt driveway approximately five feet south of the building, across from the Nurse Clinic Room 39. At this location two (2) subsurface soil samples were collected for analyses. The highest TCE concentration (14,000 ppb) was detected in the sample collected in the 2-4 foot interval. This value represented the highest TCE and total TVOC concentrations detected in the soil samples. The lower sample at the same boring, collected at the water table at the 8-10' interval, showed a lower TCE value, 3,600 ppb. The lower soil sample at boring B-1/MW-1 contained the second highest TCE value.

The decrease in chlorinated VOCs at the B-1/MW-1 location indicates a near surface release mechanism may have been responsible for introducing TCE into the subsurface at the subject parcel. The increase in total VOCs in groundwater down-gradient from this location indicates migration from the area of release. VOC contamination has likely migrated from the suspected area of release at the southern side of the Day Habilitation Center building downward to the confining till layer and in solution with the natural flow of groundwater.

Contaminant concentrations drop off both to the north and to the south (back towards the site), indicating an area of highest contamination corresponding to the bowl feature in the till. Left untreated, the apparent source of TCE in the soil south of the building will continue to contaminate groundwater leading to further migration of contaminants in the groundwater.

The extent of the area of greatest impact to groundwater shows correlation with subsurface geologic conditions determined from test borings, shown on cross sections A-A^1 and B-B^1. The highest concentration of VOCs that that has dissolved into groundwater has moved northward to beneath Room 50, decreasing in concentrations beneath the center of the building slab. The aerial extent of the contamination that exceeds 1,000 ppb covers an area of approximately 9,700 square feet and is inferred to be located entirely beneath the Day Habilitation Center building's foundation. The extent of the portion of the plume exceeding 1,000 ppb extends approximately 170 feet from the inferred source area, extending to the Client Cafeteria/Room124 on the north side of the building.

5.0 EXPOSURE PATHWAYS ANALYSIS/ QUALITATIVE RISK ASSESSMENT

An Exposure Pathways Analysis and Qualitative Risk Assessment has been conducted using data gathered during the 2002 Site Investigation and information obtained during the 2000 studies. The Exposure Pathways Analysis has been conducted to evaluate potential routes of exposure by which people or the environment may come into contact with the contaminant associated with the site.

5.1 Applicable Standards, Criteria and Guidance (SCGs)

In order to identify potential exposure pathways, applicable standards, criteria and guidance (SGSs) need to be identified. For this review SCGs are categorized as compound specific, location specific and action specific. These categories are defined as the following:

Compound Specific

These are health or risk-based numerical values or methodologies which when applied to site specific conditions result in the establishment of numerical values for substances of interest detected in the soil and groundwater samples (chlorinated VOCs). These values establish levels for substances that may be found in or discharged directly to the environment, i.e. via surface water discharge or present in groundwater.

Location Specific

These SCGs are restrictions placed on the concentrations of hazardous substances or the conduct of activities solely because they occur in a specific location.

Action Specific

These SCGs are usually technology or activity-based requirements or limitations on actions taken with respect to hazardous waste management and site cleanup.

Identified SCGs

The following SCGs have been identified as applicable to the Gowanda Day Habilitation study site:

Soil SCGs

- NYSDEC Division of Hazardous Waste Remediation Technical and Administrative Guidance Memorandum (TAGM) 4046 (HWR-94-4046), "Determination of Soil Cleanup Objectives and Cleanup Levels", Revised January 24, 1994.

- NYCRR Part 371, Identification and Listing of Hazardous Wastes.

- NYSDEC Division of Hazardous Substance Regulation Technical and Administrative Guidance Memorandum (TAGM) 3028, "Contained in Criteria for Environmental Media," dated November 1992.

Groundwater SCGs

- NYCRR Part 700-705, Water Quality Regulations for Surface Water and Groundwater.

- NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations", Reissued June 1998, April 2000 Addendum.

Waste SCGs

- NYCRR Part 371, Listing of Hazardous Waste.

- NYSDEC Division of Hazardous Substance Regulation TAGM 3028, "Contained in Criteria for Environmental Media," dated November 1992.

5.2 Human Exposure Pathways Analysis

This Human Exposure Pathway Analysis has been performed to qualitatively evaluate the potential for current or future adverse human health effects that might result from exposure to contaminants at or migrating from the Gowanda Day Habilitation Center property. This analysis was performed assuming current site conditions, in the absence of any further action to control or remove the identified contamination. The analysis provides a discussion of potential exposure to site contaminants, identification of media of concern, and identification of potential receptors based on available data from this SI and previous studies, including indoor air quality (IAQ) testing performed in 2000. This analysis has been prepared to assist in determining the need for remediation.

5.2.1 Identification of Media of Concern

Based on the information developed during the 2000 IAQ study, the 2000 environmental assessments and information obtained during this SI, chemical compounds of potential concern to various environmental media have been identified. Compounds of potential concern were selected based on frequency of detection, range of concentrations, and potential for migration.

On-Site Release of Contamination

Based on past records, environmental studies, and observed contaminant distribution and migration patterns, there has not been any single major release of contamination identified from the facility. The main source of contamination is apparently the result of uncontrolled surface releases of chlorinated solvents from past operations at the facility.

These releases likely occurred at or near the former south loading dock area at the southern portion of the building, while the facility was being utilized for industrial activities prior to New York State agencies occupying the facility in approximately 1982. Historic site drawings and anecdotal information provided by former site personnel indicate that vehicles could pull into the building, with parking available adjacent to loading docks.

The facility is not registered with the NYSDEC as a chemical bulk storage facility. However, such registrations were not required until the mid-1980s, after the industrial use of the facility had ceased and various State agencies occupied the building. Visual observations of the facility did not reveal any evidence that would be indicative of past use of chemical storage tanks, such as fill ports, vent pipes or other features associated with storage tanks.

The set of plans for the 1987-1988 renovation made no mention or provided any details for the removal or handling of any underground storage tanks. Plans did call for filling in loading docks in the vicinity of Room 50-Client Cafeteria. As-built drawings dated 1988 make no mention concerning the removal or consideration of any known chemical storage tank or related features.

Migration of the detected chlorinated VOCs has apparently occurred as dissolved constituents in the ground water possibly from product that historically infiltrated vertically from source locations through the vadose zone into the aquifer. Chlorinated VOCs remain in the soil above the water table in the vicinity of the source area. The presence of chlorinated VOCs in near-surface areas is based on the distribution of detected TCE concentrations at test boring/monitoring well MW-1. Laboratory analysis on two (2) soil samples at this location showed a decrease in VOCs with depth.

The general category of chemical compounds that exist in the shallow, unconfined aquifer system are chlorinated VOCs. The VOCs detected in vadose zone soil samples, above the water table will likely continue to migrate into and dissolve into the groundwater, which is flowing in a northerly direction. Migration of VOCs will continue. No free-phase product was detected during this investigation, and detected levels of VOCs in groundwater samples are below maximum solubility levels. The migration of groundwater through areas of high VOCs may serve as a mechanism for propagation of contaminated groundwater in the down-gradient direction.

Table 10 identifies potential release sources, release mechanisms, and receiving media of concern for past, current, and future releases in the absence of any remedial action.

TABLE 10
IDENTIFICATION OF ENVIRONMENTAL MEDIA OF CONCERN

Media of Concern	Potential Release Mechanism	Receiving Medium
Contaminated Soil	Volatilization	Vadose zone soil beneath the building
	Adsorption and Absorption on to soil particles	Subsurface soil at source areas
	Vertical migration	Groundwater
Contaminated Groundwater	Groundwater flow	Groundwater downgradient
	Volatilization	Vadose zone
	Extraction via pumping Discharge to Thatcher Creek or Cattaraugus Creek	Water supply systems Surface soil Surface water

5.2.2 Identification of Exposure Pathways

The various exposure pathways, by which people could potentially come into contact with the contaminants associated with the site, either now or in the future, are summarized in Table 11. The scenarios involving exposure to off-site surface water and sediments were eliminated due to the nature and extent of contamination. All available data indicates contaminants are subsurface and have not reached surface water bodies, although impact to Thatcher Creek has not been evaluated.

The following is a list of specific conditions used in the evaluation of exposure pathways.

- The ground surface immediately adjacent to the Gowanda Day Habilitation Center is paved with asphalt. This greatly reduces the potential for direct contact with contaminated soil.

- The subject parcel and surrounding area is serviced by municipal water supply service. No on-site water supply wells are present. No local use of groundwater has been reported by local agencies or identified in review of available records.

- Wastewater at the subject parcel discharges to municipal sanitary sewer lines at Industrial Place. No on-site septic systems have been identified.

- Parking lot catch basins and storm sewers are present on the subject parcel. These discharge to municipal sewers at Industrial Place.

- One (1) storm water catch basin, observed west of the subject parcel building, discharges to Thatcher Creek.

A tributary to Thatcher Creek passes beneath the southwestern portion of the subject parcel. This stream flows through a conduit beneath an asphalt parking lot and a portion of the grass yard/pavilion west of the Day Habilitation Center.

TABLE 11
EXPOSURE PATHWAY ANALYSIS

Exposure Media or Route of Exposure	Exposure to On-Site Occupants	Exposure to Construction Workers/Subsurface	Exposure to off-site Population
Contaminated Soil	Limited: Site is paved or covered with building footprint	Yes, if excavation occurs to the water table	No
Groundwater	No: no use of groundwater	Yes, if excavation occurs to the water table	Only if groundwater is extracted. No use of groundwater identified.
Ingestion	No	No	No
Direct Contact to groundwater	No	Yes	No
Inhalation of Vapors	Yes	Yes	Possible: Further evaluation required

5.2.3 Summary of Human Exposure Pathway Analysis

The applicable SCG for groundwater in the area has been assumed to be NYSDEC GA standard (best usage, drinking water). However, groundwater in the area is currently not used for drinking water. All residential dwellings are reported by local agencies as served with municipal water. The potential for direct contact with groundwater may occur if shallow well points are used within the plume for irrigation or other non-potable purposes.

Measurable impacts to indoor air quality within the building, associated with volatilization from the groundwater plume beneath the building, have been identified as a source of potential direct exposure to VOCs through inhalation. The 2000 IAQ study did detect chlorinated VOCs inside the Day Habilitation Center building at concentrations that did indicate VOCs were present at various levels that may pose health concerns.

Potential impacts to off-site residential indoor air that may be associated with the groundwater plume have been identified as a potential route for direct exposure to VOCs through inhalation. Further field work needs to be completed to better define current conditions between the Day Habilitation Center property and residences to the north.

On-site/utility workers could be exposed during excavation or subsurface maintenance activities via dermal contact with waste materials, inhalation of vapors and airborne particulates when working in the area of wastes or near a waste treatment system (if implemented), and incidental ingestion due to soiled hands.

5.3 Habitat-Based Exposure Assessment

A habitat-based exposure assessment is performed to determine if an impact to wildlife may exist as a result of contamination that is present at a given study site. Field observations were made in conjunction with the environmental sampling and laboratory analysis to determine if a habitat-based exposure assessment is necessary for the Gowanda Day Habilitation VCA Site Investigation.

The potential impacts or routes of exposure to wildlife that were considered include but are not limited to the following:

- Direct contact with contaminants at the surface by animal life on or near the site.
- Surface storm runoff carrying contaminants of contaminated sediment to nearby surface water.
- Impacts to surface water via groundwater discharge.
- Uptake of contaminants by plant life on or near the site.
- Consumption of contaminated plants by animals in the area.

Field observations at the apparent source area for the compounds of concern (chlorinated solvents), in the areas at and adjacent to the south side of the Day Habilitation Center building, did not reveal any readily apparent evidence of waste material or contamination at the surface. The ground surface in this portion of the study is either paved with asphalt, or is beneath the building footprint. The grass yard south of the Day Habilitation Center building was free of any indications of stressed vegetation.

No evidence of stressed vegetation on-site or on nearby properties down-gradient of the site was observed. The extent of contamination identified at the subject parcel is present in the subsurface and is not impacted by surface runoff during storm events. No evidence of direct surface discharge (i.e. springs) of impacted groundwater was observed on the subject parcel property.

No stressed vegetation or staining was observed along the banks of Thatcher Creek. The plume of impacted groundwater extends to the north/northwest from the southern side of the Day Habilitation Center building. TCE was detected in the groundwater samples collected from the western monitoring wells, MW-9 and MW-8, but at levels significantly below the inferred plume, and both TCE values were below NYSDEC Class GA standard (5.0 ug/L). No chlorinated VOCs were detected in any of the subsurface soil samples collected from the western and southwestern portions of the subject parcel (B-16, B-17, B-21, MW-9 and MW-8).

Chlorinated VOCs (TCE, cis-DCE, trans-DCE and Vinyl Chloride) were detected in both the groundwater sample and subsurface soil collected from monitoring well MW-7, located near the northwest corner of the subject parcel. Concentrations did exceed relevant SCGs. The plume of

impacted groundwater does extend to the MW-7 area. The extent and concentration of any impacted groundwater beyond MW-7 has not been determined. It is possible that impacted groundwater down-gradient of the MW-7 area extends to the banks of Thatcher Creek. Thatcher Creek discharges to Cattaraugus Creek north of the subject parcel. Potential impact to the sediments in the eastern stream bank and/or discharge into Thatcher Creek is a potential exposure pathway that requires further evaluation.

Based on lack of vegetation in the immediate area, no exposed wastes, the presence of asphalt/building footprint overlying the plume of impacted groundwater, no direct impact to wildlife is apparent for the majority of the study site. Potential impact at the northwestern portion of the study site, in the vicinity of MW-7 is limited to the subsurface, and does not present a direct impact to wildlife. Impacted groundwater in this area is approximately 10 feet below grade, below the root zone at which plant uptake occurs. The contamination at the subject parcel does not appear to be adversely impacting wildlife, and no further habitat-based exposure assessment appears to be warranted

6.0 CONCLUSION

The Gowanda Day Habilitation Center site consists of a former industrial facility/renovated to office use located at Four Industrial Place in the Town of Persia. Presumably hazardous wastes were spilled or released of on the ground surface at the south side of the building, former loading dock area, during the course of industrial operations. Apparent non-point source releases occurred prior to site use by various New York State agencies commencing in 1982 or the 1987-1988 building renovation.

The site and resulting area of impacted groundwater is underlain by moderately to highly permeable alluvium comprised of a varying mix of sand and gravel, with buried stream channels filled with coarser sand and gravel that serve as preferential flow paths and in part control groundwater flow. Groundwater occurs within the alluvium under unconfined, or water table, conditions. Below the alluvium exists a dense glacial till that serves as a barrier to further downward migration of contaminants. The surface of this till slopes downward from the source area to its deepest point beneath the northern portion of the property, where a trough shaped feature has been eroded during post-glacial stream flow. This is likely a buried stream channel scoured into the underlying glacial till. The water bearing alluvium is covered with flood plain silt and clay. The finer grained flood plain deposits, in conjunction with the concrete slab foundation for the Day Habilitation Center building may retard or limit any upward movement of vapors that volatize from the impacted groundwater.

The following deposits were identified and delineated at the subject parcel:

- Fill Deposits, present beneath the building slab and asphalt and consisting of fine gravel and fine to coarse sand and re-worked native deposits;
- Flood Plain Deposits consisting of mottled Brown and gray generally stiff laminated silt and fine sand;
- Alluvial Deposits, consisting of generally medium dense and permeable brown and gray fine to medium gravel and fine to coarse sand with trace silt; and
- Glacial till, consisting of generally hard and relatively impermeable gray clay and silt, with trace of fine gravel.

The shallow water table is present in the Flood Plain and Alluvial Deposits. The glacial till layer, present at a depth that varies between 13 - 22 feet beneath ground surface, is a relatively impermeable deposit that marks the base of the overburden water table at the subject parcel.

The shallow groundwater at the subject parcel is present at depths ranging from 4.5 feet to 11 feet below ground surface. The August 2002 shallow groundwater at the subject property is shown to be flowing in a northerly direction. The December 2002 water table drawing shows that the shallow water table at the subject parcel flows in the northerly direction, in a similar flow direction as the August 2002 pattern. The average depth to groundwater was approximately 8.18

feet below ground surface. The water table surface showed a rise of approximately 0.57 feet compared to the August 2002 values, likely to seasonal precipitation.

A rise in the underlying glacial till appears to limit migration of groundwater and the accompanying VOC to the east.

Waste solvents are the contaminants of concern for the site, consisting of Trichloroethene (TCE) and related decay products cis-1,2-Dichloroethene, trans-1,2-Dichloroethene and Vinyl Chloride. The VOC 1,1-Dichloroethene was detected in two (2) groundwater samples, in the inferred area of greatest impacted groundwater (MW-11 and MW-12). Tetrachloroethene was detected in a single groundwater sample from MW-12 at a concentration of 1.0 ug/L.

TCE was detected in groundwater samples from all on-site groundwater monitoring wells, including wells located up-gradient and cross-gradient of the inferred source area. The TCE concentrations at the up-gradient and cross-gradient locations are significantly lower than at the source area, and were detected at concentrations below NYSDEC Class GA Standards. The presence of TCE up-gradient of the inferred source area may be the result of various hydraulic dispersion mechanisms, historic flooding which may have flushed TCE onto the ground surface in a wide area, or may reflect an undefined up-gradient source area.

The TCE released at an on-site surface or near-surface source area has apparently migrated vertically through the vadose zone to the shallow water table aquifer. Some TCE has dissolved in groundwater as it migrated through the aquifer. The area of the greatest impact to groundwater extends from the source area at the south side of the building to directly beneath the building. Significant concentrations of VOCs exist within the plume, greater than 10,000 ppb VOCs.

Highest groundwater impact has been detected 120 feet north of the presumed source area, to an area beneath the building, indicating that contamination continues to migrate northward. Left untreated, the TCE in the vadose zone source may continue to dissolve into the groundwater and migrate with groundwater towards the downgradient direction. Without implementing engineering controls it is possible that the plume of impacted groundwater will continue to migrate northward. Remediation of the aquifer is necessary for the full protection of human health and the environment.

Volatilization of chlorinated VOCs from the groundwater plume into homes along Torrance Place has been identified as a possible exposure pathway for human contact. Further investigation needs to be undertaken to determine the extent of any impacted soil and/or groundwater that extends off-site to the north of the subject parcel. Further investigation is also needed to determine the potential presence of VOCs in soil gas that may propagate towards the residences north of the Gowanda Day Habilitation Center property.

Volatilization of chlorinated solvents from the contaminant plume beneath the Gowanda Day Habilitation building slab has apparently contributed to previous indoor air quality issues at the facility. Soil contamination is present immediately south of the building. Chlorinated VOCs detected directly beneath the building indicate the greatest impact. TCE was detected in indoor air quality samples collected when the facility was active. Any future use of the facility may be

impacted from the migration of volatized VOCs from groundwater and impacted soils in the vadose zone into the building. Volatilization of chlorinated solvents in the plume beneath the building may continue until source controls are implemented.

Another potential for human contact with contamination is through direct contact with groundwater and soil below the water table during activities such as utility maintenance, both on site and throughout the area of the plume. All residents in the area are reportedly served with municipal water. Use of groundwater from sources such as private well points for gardening would provide direct exposure to contaminants, through both dermal contact and inhalation of vapors. However, no private wells were observed or reported by the Village of Gowanda Municipal officials.

7.0 RECOMMENDATIONS

Based on review of the results of investigative work completed to date, OMRDD/DASNY anticipates that that the following actions will be taken upon approval of the NYSDEC and NYDOH.

- Further investigative work is necessary to fully define the extent of impacted groundwater. This is to include installation of off-site groundwater monitoring wells north of the subject parcel. Additional sampling of up-gradient and cross-gradient monitoring wells may assist in evaluating possible off-site sources that are contributing to groundwater contamination.

- Investigative work is necessary to evaluate potential impact to Thatcher Creek.

- Further investigative work is necessary to address the potential for off-site volatilization of chlorinated solvents from the contaminant plume immediately north of the subject parcel, to allow for evaluation of indoor air quality impacts to the residences along Torrance Place. This work will consist of soil gas sampling along the subject parcel's northern property perimeter. The results of sampling along the property perimeter will assist in evaluating off-site occurrence of chlorinated VOCs in the unsaturated zone above the water table.

- Bergmann Associates has prepared on behalf of OMRDD and DASNY a draft work plan for Interim Remedial Measures (IRM) for the Gowanda Day Habilitation Center. Development of the draft IRM included evaluation of remedial alternatives to remove the contaminant mass, initiate remediation of impacted groundwater beneath the day Habilitation Center building and prevent future migration of VOC impacted groundwater. The draft IRM work plan has been submitted to the NYSDEC for review.

8.0 REFERENCES

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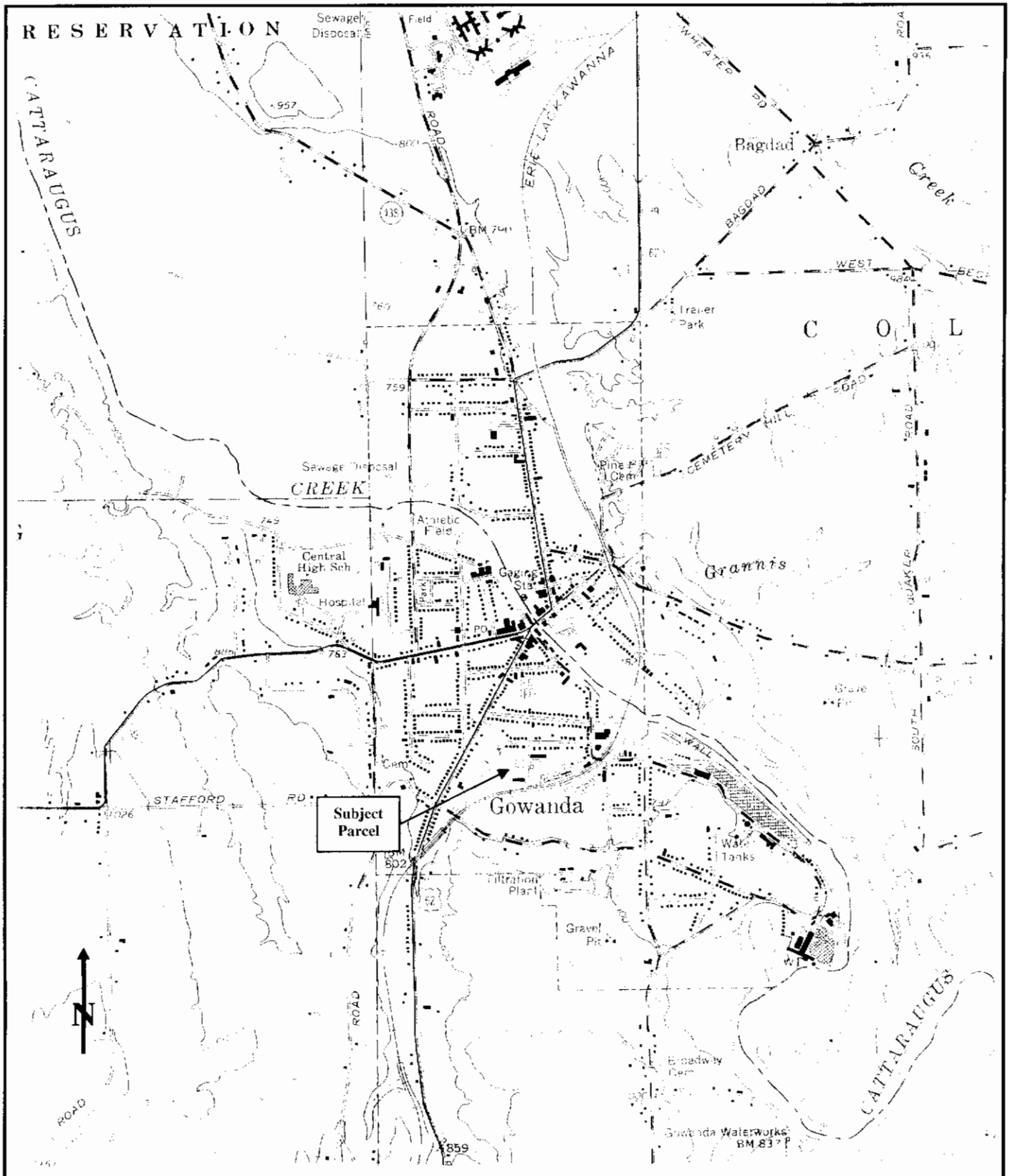
Tesmer, Irving H., "Geology of Cattaraugus County, New York", Buffalo Society of Natural Sciences Bulletin Vol.27.

FIGURES

FIGURES

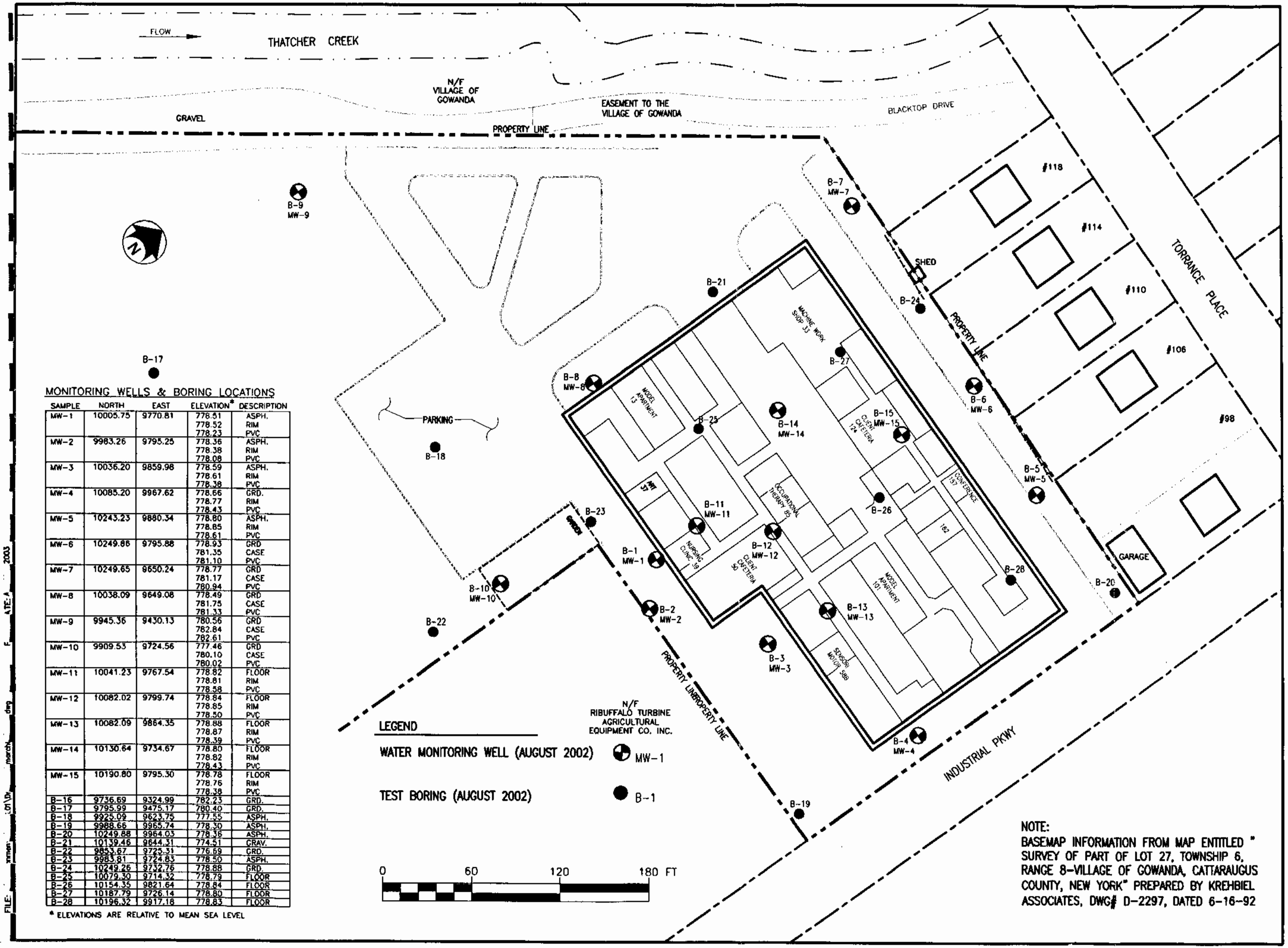


BERGMANN associates

GOWANDA DAY HABILITATION CENTER
Village of Gowanda, Cattaraugus County, New York
Voluntary Cleanup Program
SITE LOCATION MAP
USGS 7.5 Minute Topographic Map, Gowanda, NY Quadrangle, 1976
Scale: 1inch = 2,000 feet

Date
April 2003

Figure
1



MONITORING WELLS & BORING LOCATIONS

SAMPLE	NORTH	EAST	ELEVATION*	DESCRIPTION
MW-1	10005.75	9770.81	778.51 778.52 778.23	ASPH. RIM PVC
MW-2	9983.26	9795.25	778.36 778.38 778.08	ASPH. RIM PVC
MW-3	10036.20	9859.98	778.59 778.61 778.38	ASPH. RIM PVC
MW-4	10085.20	9967.62	778.66 778.77 778.43	GRD. RIM PVC
MW-5	10243.23	9880.34	778.80 778.85 778.61	ASPH. RIM PVC
MW-6	10249.86	9795.88	778.93 781.35 781.10	GRD CASE PVC
MW-7	10249.65	9650.24	778.77 781.17 780.94	GRD CASE PVC
MW-8	10038.09	9649.08	778.49 781.75 781.33	GRD CASE PVC
MW-9	9945.36	9430.13	780.56 782.84 782.61	GRD CASE PVC
MW-10	9909.53	9724.56	777.46 780.10 780.02	GRD CASE PVC
MW-11	10041.23	9767.54	778.82 778.81 778.58	FLOOR RIM PVC
MW-12	10082.02	9799.74	778.84 778.85 778.50	FLOOR RIM PVC
MW-13	10082.09	9864.35	778.88 778.87 778.39	FLOOR RIM PVC
MW-14	10130.64	9734.67	778.80 778.82 778.43	FLOOR RIM PVC
MW-15	10190.80	9795.30	778.78 778.76 778.38	FLOOR RIM PVC
B-16	9736.69	9324.99	782.23	GRD.
B-17	9795.99	9475.17	780.40	GRD.
B-18	9925.09	9623.75	777.55	ASPH.
B-19	9988.66	9965.74	778.30	ASPH.
B-20	10249.88	9964.03	778.36	ASPH.
B-21	10139.46	9644.31	774.51	GRAV.
B-22	9853.67	9725.31	776.69	GRD.
B-23	9983.81	9724.83	778.50	ASPH.
B-24	10249.26	9732.76	778.88	GRD.
B-25	10079.30	9714.32	778.79	FLOOR
B-26	10154.35	9821.64	778.84	FLOOR
B-27	10187.79	9726.14	778.80	FLOOR
B-28	10196.32	9917.18	778.83	FLOOR

* ELEVATIONS ARE RELATIVE TO MEAN SEA LEVEL

NOTE:
BASEMAP INFORMATION FROM MAP ENTITLED " SURVEY OF PART OF LOT 27, TOWNSHIP 6, RANGE 8-VILLAGE OF GOWANDA, CATTARAUGUS COUNTY, NEW YORK" PREPARED BY KREHBIEL ASSOCIATES, DWG# D-2297, DATED 6-16-92

FILE: J:\DWG\2003\March\Fig2.dwg, 3/17/2003 2:07:47 PM, jmann

DASNY

GOWANDA DAY
HABILITATION CENTER
4 INDUSTRIAL PLACE
GOWANDA, NY

BERGMANN associates
Engineers / Architects / Surveyors

DRAWING TITLE:
TEST BORING AND MONITORING WELL LOCATION MAP

BY:
T.BOLT

CHK'D BY:
E.JONES, J. MARSCHNER

DRAWING DATE:
MARCH 17, 2003

JOB #:
5596.03

SHEET #:
FIG-2

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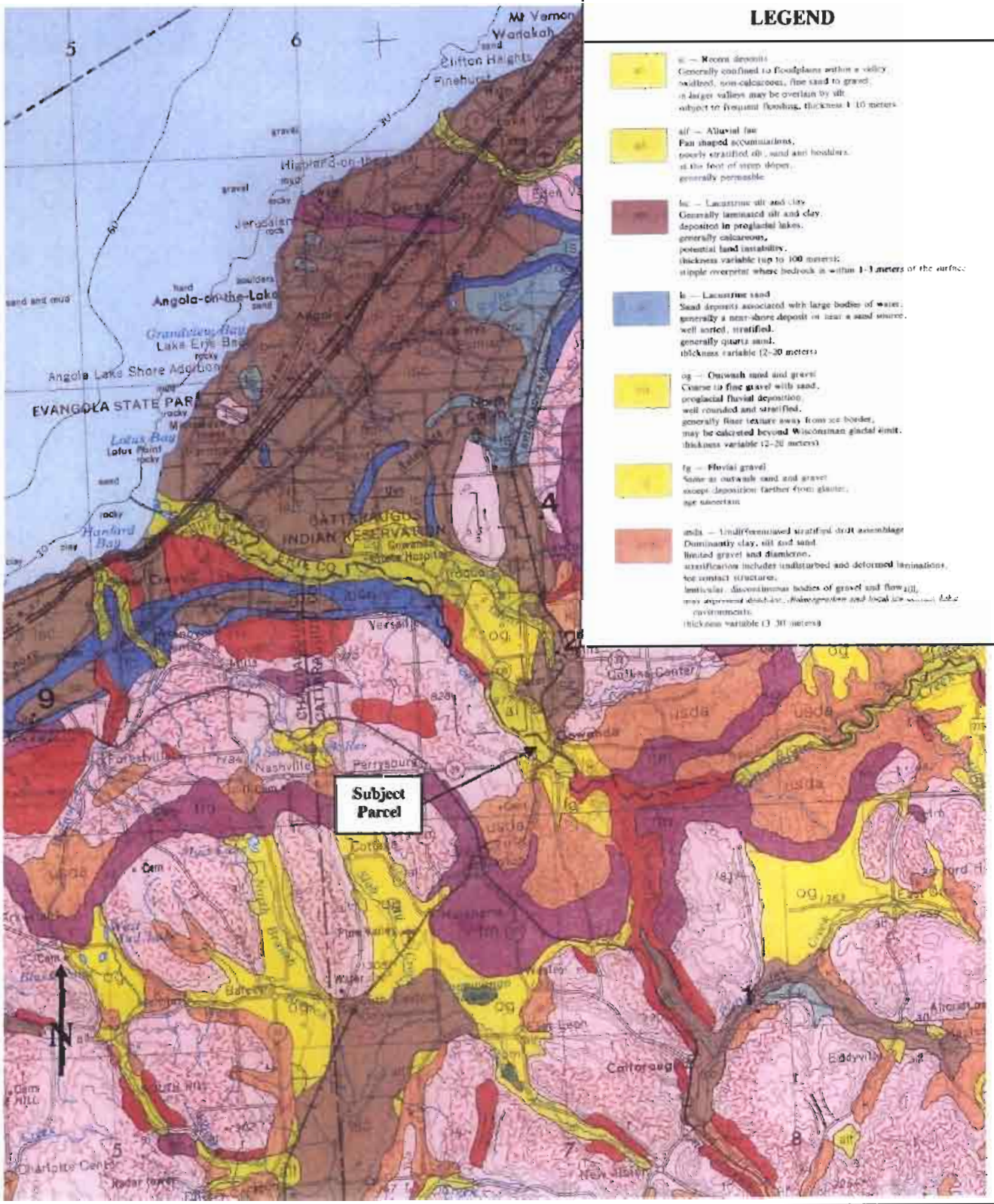
SCALE: 1" = 60'



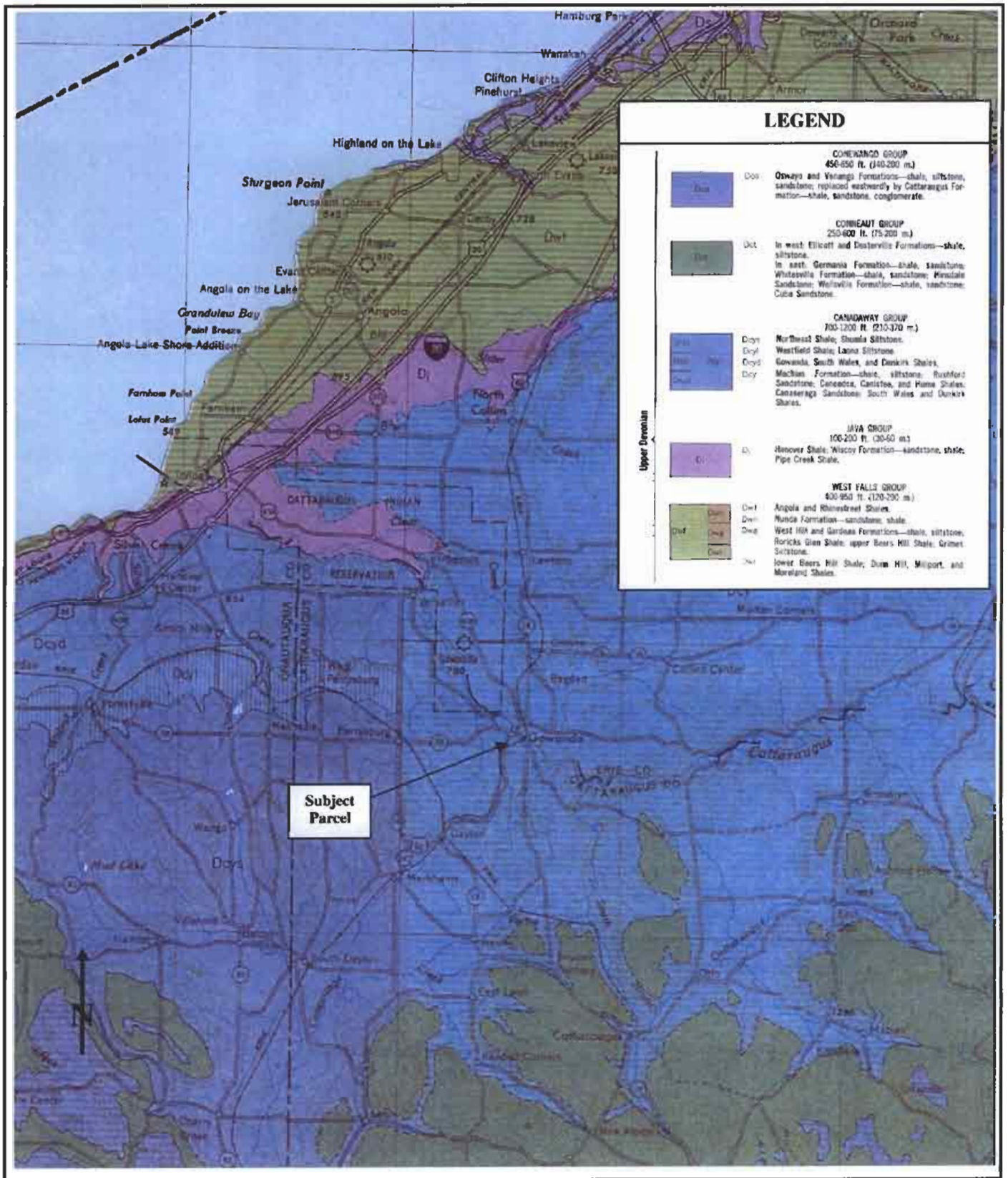
BERGMANN associates

GOWANDA DAY HABILITATION CENTER
Village of Gowanda, Cattaraugus County, New York
Voluntary Cleanup Program
SURFACE GEOLOGY MAP

Surficial Geologic Map of New York, Niagara Sheet, 1988
Approximate Scale: 1:250,000 (1 inch = 4 miles)

Date
April 2003

Figure
3



BERGMANN associates

GOWANDA DAY HABILITATION CENTER
Village of Gowanda, Cattaraugus County, New York
Voluntary Cleanup Program
BEDROCK GEOLOGY MAP
Geologic Map of New York, Niagara Sheet, 1970
Approximate Scale: 1:250,000 (1 inch = 4 miles)

Date
April 2003

Figure
4

FLOW

THATCHER CREEK

N/F VILLAGE OF GOWANDA

GRAVEL

CP-20
N 9974.74
E 9377.15

PROPERTY LINE

EASEMENT TO THE VILLAGE OF GOWANDA

CP-30
N 10210.94
E 9560.54

BLACKTOP DRIVE

TORRANCE PLACE

#118

#114

#110

#106

#98

B-9
MW-9
761.06

B-17
764.40

B-18
761.55

B-21
758.01

B-7
MW-7
759.27

B-24
756.63

B-8
MW-8
762.66

B-14
MW-14
760.30

B-25

B-27

B-6
MW-6
758.43

B-15
MW-15
758.28

B-5
MW-5
764.80

B-26

B-23
762.67

B-11
MW-11
763.57

B-1
MW-1
762.34

B-12
MW-12
761.62

B-10
MW-10
759.96

B-28
765.83

B-20
763.36

GARAGE

B-22
763.19

B-2
MW-2
761.36

B-13
MW-13
761.38

B-3
MW-3
761.59

CP-40

B-4
MW-4
762.83

B-19
761.80

E 10000.00

PARKING

MODEL APARTMENT 13

CLIENT CREEDMA 124

MACHINE WORK SHOP 33

NURSING HOME 19

CLIENT CAFETERIA 50

SENSORY MOTOR 389

MODEL APARTMENT 81

CONFERENCE 151

N/F
RIGUFFALO TURBINE
AGRICULTURAL
EQUIPMENT CO. INC.

PROPERTY LINE

INDUSTRIAL PKWY

LEGEND

WATER MONITORING WELL
VALUE = ELEVATION OF TOP OF TILL LAYER RELATIVE TO MEAN SEA LEVEL, FEET ELEVATION

MW-1
761.36

TEST BORING

B-1

CONTOUR LINE FOR TOP OF TILL LAYER, RELATIVE TO MEAN SEA LEVEL, FEET

762.0

0 60 120 180 FT

*ELEVATIONS ARE RELATIVE TO MEAN SEA LEVEL

FILE: DATE: 2003 day march 3:01 PM

DASNY

GOWANDA DAY
HABILITATION CENTER
4 INDUSTRIAL PLACE
GOWANDA, NY

BERGMANN associates
Engineers / Architects / Surveyors

DRAWING TITLE:
GLACIAL TILL DEPOSIT SURFACE ELEVATION MAP

BY:
T.BOLT

CHK'D BY:
E.JONES

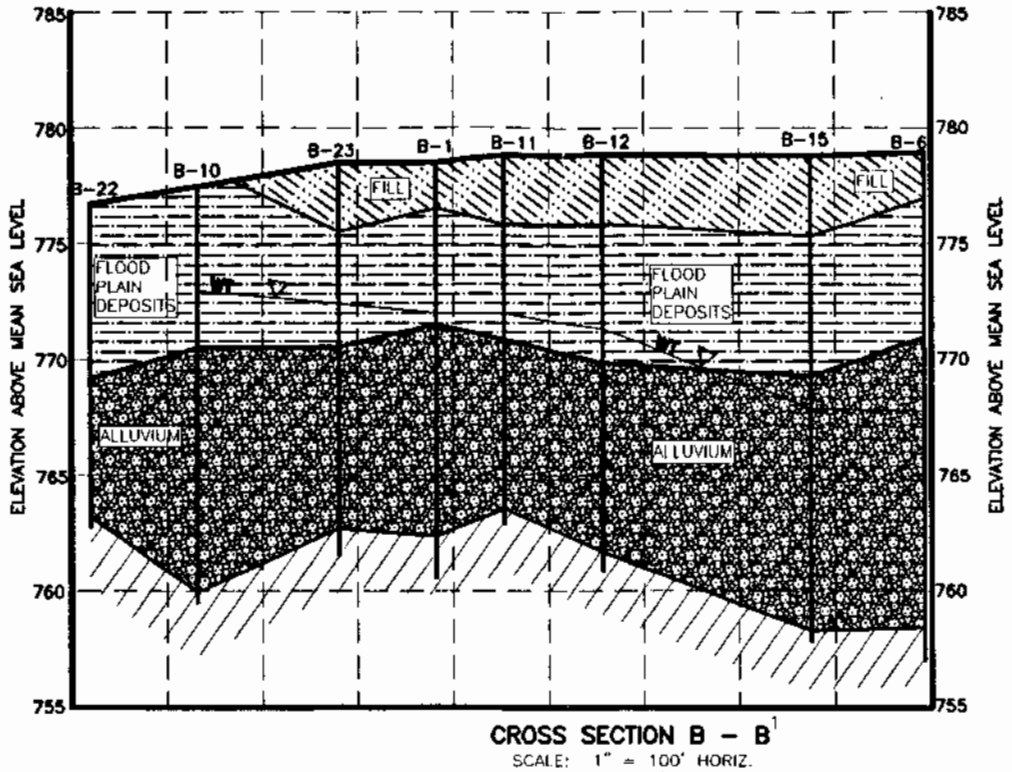
DRAWING DATE:
MARCH 5, 2003

JOB #:
5596.03

SHEET #:
FIG-5

I:\DASNY\GENERAL\5596.01\DRAWINGS\MXD-03\FIG5.DWG

SCALE: 1" = 60'



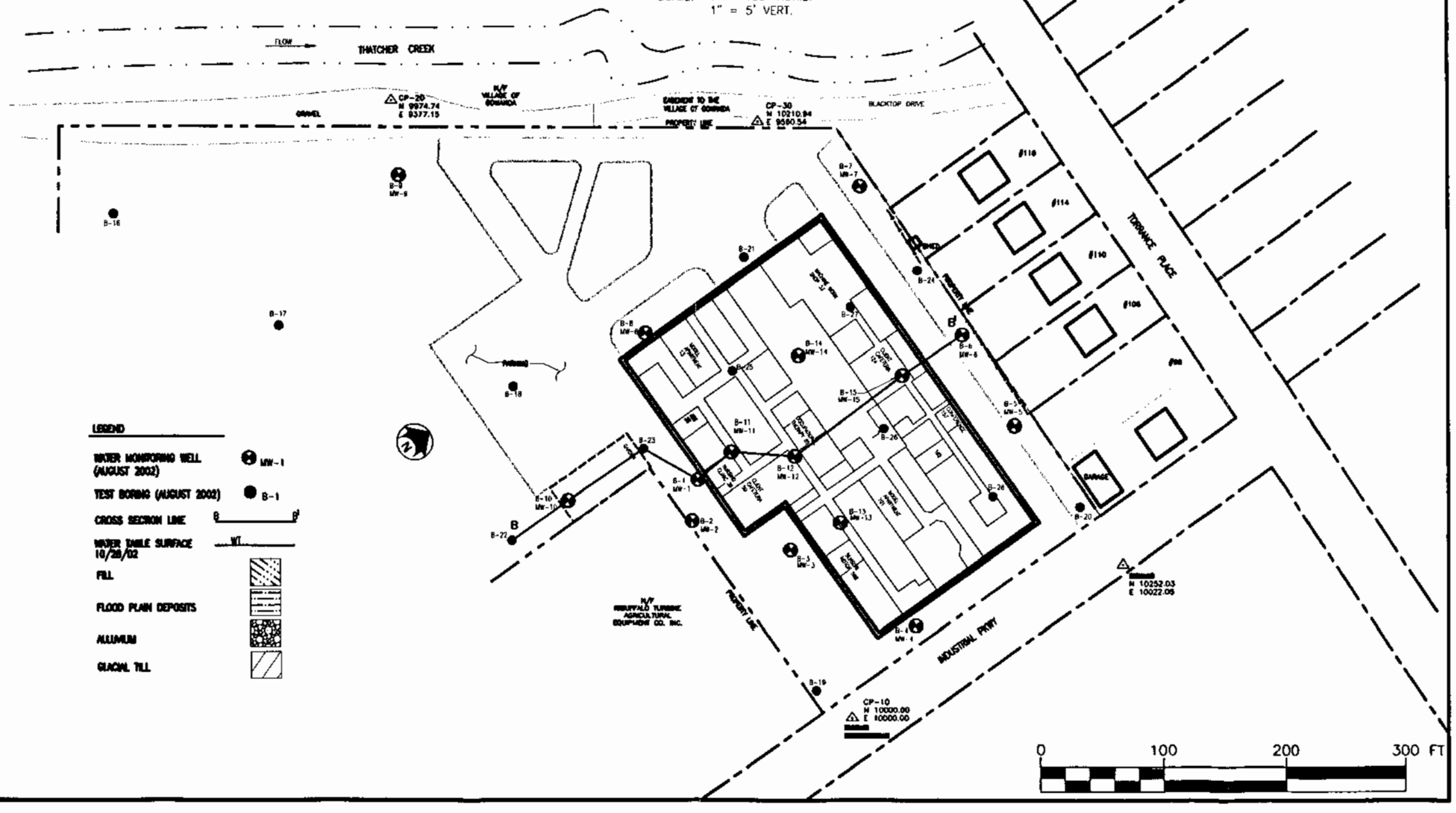
CROSS SECTION B – B'

SCALE: 1" = 100' HORIZ.
1" = 5' VERT.

MONITORING WELLS & BORING LOCATIONS

SAMPLE	NORTH	EAST	ELEVATION*	DESCRIPTION
MW-1	10005.75	9770.81	778.51	ASPH.
			778.52	RIM
			778.23	PVC
MW-2	9983.26	9795.25	778.36	ASPH.
			778.38	RIM
			778.08	PVC
MW-3	10038.20	9859.98	778.59	ASPH.
			778.81	RIM
			778.58	PVC
MW-4	10085.20	9987.62	778.66	GRD.
			778.77	RIM
			778.43	PVC
MW-5	10243.23	9880.34	778.80	ASPH.
			778.85	RIM
			778.81	PVC
MW-6	10249.88	9795.88	778.93	GRD
			781.35	CASE
			781.10	PVC
MW-7	10249.85	9850.24	778.77	GRD
			781.17	CASE
			780.94	PVC
MW-8	10038.09	9849.08	778.49	GRD
			781.75	CASE
			781.33	PVC
MW-9	9945.36	9430.13	780.58	GRD
			782.84	CASE
			782.61	PVC
MW-10	9908.53	9724.56	777.46	GRD
			780.10	CASE
			780.02	PVC
MW-11	10041.23	9767.84	778.82	FLOOR
			778.81	RIM
			778.58	PVC
MW-12	10082.02	9799.74	778.84	FLOOR
			778.85	RIM
			778.50	PVC
MW-13	10082.09	9864.35	778.88	FLOOR
			778.87	RIM
			778.59	PVC
MW-14	10130.64	9734.87	778.80	FLOOR
			778.82	RIM
			778.43	PVC
MW-15	10190.80	9795.30	778.78	FLOOR
			778.76	RIM
			778.38	PVC
B-16	9736.89	9374.99	782.23	GRD.
B-17	9793.99	9475.17	780.40	GRD.
B-18	9923.09	9423.75	777.45	ASPH.
B-19	9988.88	9865.74	778.50	ASPH.
B-20	10249.86	9951.03	778.38	ASPH.
B-21	10139.48	9844.31	774.51	GRAV.
B-22	9885.67	9725.31	776.89	GRD.
B-23	9983.81	9724.83	778.50	ASPH.
B-24	10249.48	9732.76	778.88	GRD.
B-25	10079.90	9714.32	778.75	FLOOR
B-26	10114.49	9821.62	778.84	FLOOR
B-27	10187.73	9776.14	778.80	FLOOR
B-28	10196.32	9817.18	778.83	FLOOR

*ELEVATIONS ARE RELATIVE TO MEAN SEA LEVEL



LEGEND

- WATER MONITORING WELL (AUGUST 2002) — MW-1
- TEST BORING (AUGUST 2002) — B-1
- CROSS SECTION LINE — B — B'
- WATER TABLE SURFACE 10/28/02 — WT
- FILL
- FLOOD PLAIN DEPOSITS
- ALLUVIUM
- GLACIAL TILL

DASNY

GOWANDA DAY
HABILITATION CENTER
4 INDUSTRIAL PLACE
GOWANDA, NY

BERGMANN associates
Engineers / Architects / Surveyors

DRAWING TITLE:
GEOLOGIC CROSS SECTION B - B'

BY:
T.BOLT

CHK'D BY:
E.JONES, J. MARSCHNER

DRAWING DATE:
MARCH 17,2003

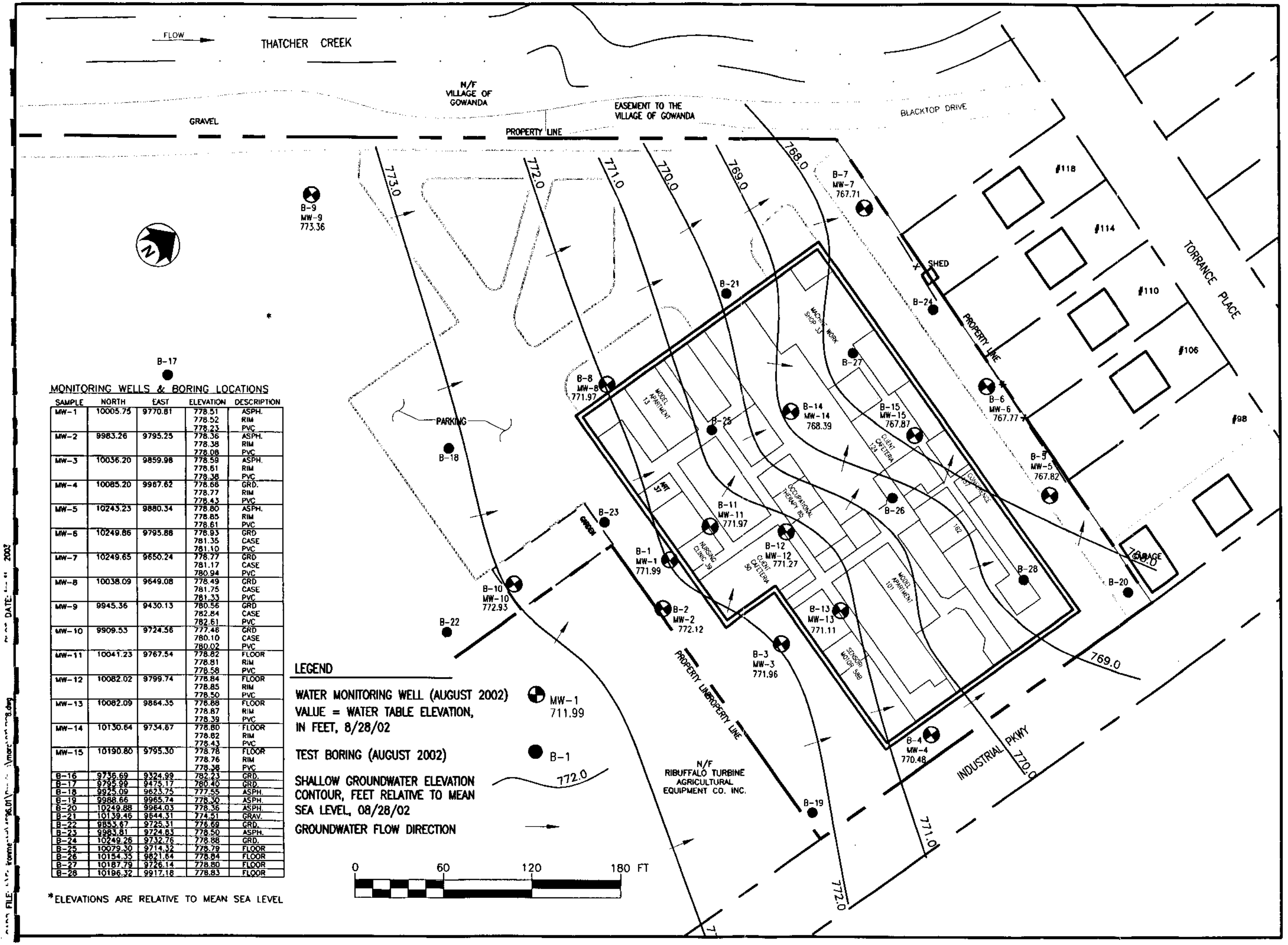
JOB #:
5596.03

SHEET #:
FIG-7

SCALE: 1" = 100'

PLOT DATE: Mar 29, 2003

CADD FILE: I:\Environmental \4596.01 \Drawings \March03 \FIG6.dwg



MONITORING WELLS & BORING LOCATIONS

SAMPLE	NORTH	EAST	ELEVATION	DESCRIPTION
MW-1	10005.75	9770.81	778.51 778.52 778.23	ASPH. RIM PVC
MW-2	9983.26	9795.25	778.36 778.38 778.08	ASPH. RIM PVC
MW-3	10036.20	9859.98	778.59 778.61 778.38	ASPH. RIM PVC
MW-4	10085.20	9967.62	778.66 778.77 778.43	GRD. RIM PVC
MW-5	10243.23	9880.34	778.80 778.85 778.61	ASPH. RIM PVC
MW-6	10249.86	9795.88	778.93 781.35 781.10	GRD CASE PVC
MW-7	10249.65	9650.24	778.77 781.17 780.94	GRD CASE PVC
MW-8	10038.09	9649.08	778.49 781.75 781.33	GRD CASE PVC
MW-9	9945.36	9430.13	780.56 782.84 782.61	GRD CASE PVC
MW-10	9909.53	9724.56	777.46 780.10 780.02	GRD CASE PVC
MW-11	10041.23	9767.54	778.82 778.81 778.58	FLOOR RIM PVC
MW-12	10082.02	9799.74	778.84 778.85 778.50	FLOOR RIM PVC
MW-13	10082.09	9864.35	778.88 778.87 778.39	FLOOR RIM PVC
MW-14	10130.64	9734.67	778.80 778.82 778.43	FLOOR RIM PVC
MW-15	10190.80	9795.30	778.78 778.76 778.36	FLOOR RIM PVC
B-16	9736.69	9324.99	782.23	GRD.
B-17	9795.99	9475.17	780.40	GRD.
B-18	9925.09	9623.75	777.55	ASPH.
B-19	9988.66	9965.74	778.30	ASPH.
B-20	10249.88	9964.03	778.36	ASPH.
B-21	10139.46	9644.31	774.51	GRAV.
B-22	9853.67	9725.31	776.69	GRD.
B-23	9983.81	9724.63	778.50	ASPH.
B-24	10249.26	9732.76	778.88	GRD.
B-25	10079.30	9714.32	778.79	FLOOR
B-26	10154.35	9821.64	778.84	FLOOR
B-27	10187.79	9726.14	778.80	FLOOR
B-28	10196.32	9917.18	778.83	FLOOR

*ELEVATIONS ARE RELATIVE TO MEAN SEA LEVEL

LEGEND

WATER MONITORING WELL (AUGUST 2002) VALUE = WATER TABLE ELEVATION, IN FEET, 8/28/02 — MW-1 711.99

TEST BORING (AUGUST 2002) — B-1

SHALLOW GROUNDWATER ELEVATION CONTOUR, FEET RELATIVE TO MEAN SEA LEVEL, 08/28/02 — 772.0

GROUNDWATER FLOW DIRECTION

DASNY

GOWANDA DAY
HABILITATION CENTER
4 INDUSTRIAL PLACE
GOWANDA, NY

BERGMANN associates
Engineers / Architects / Surveyors

DRAWING TITLE:
SHALLOW WATER TABLE SURFACE & GROUNDWATER FLOW, AUGUST 2002

BY: **T.BOLT**

CHK'D BY: **E.JONES, J. MARSCHNER**

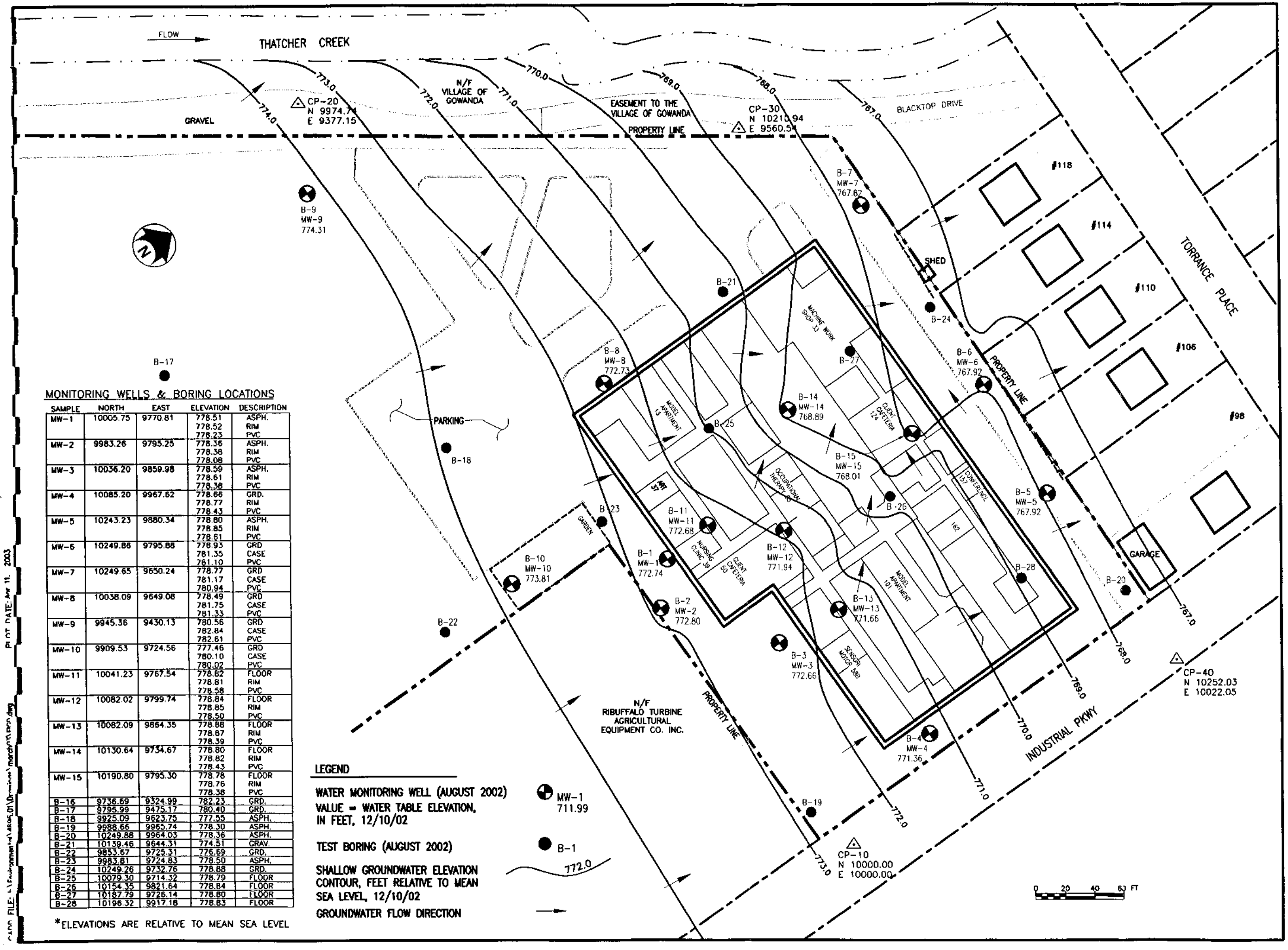
DRAWING DATE: **MARCH 17, 2003**

JOB #: **5596.03**

SHEET #: **FIG-8**

I:\ENVIRONMENTAL\4000.01\DRAWINGS\MARCH03\FIG8.DWG

SCALE: 1" = 60'



MONITORING WELLS & BORING LOCATIONS

SAMPLE	NORTH	EAST	ELEVATION	DESCRIPTION
MW-1	10005.75	9770.81	778.51 778.52 776.23	ASPH. RIM PVC
MW-2	9983.26	9795.25	778.36 778.38 778.08	ASPH. RIM PVC
MW-3	10036.20	9859.98	778.59 778.61 778.38	ASPH. RIM PVC
MW-4	10085.20	9967.62	778.66 778.77 778.43	GRD. RIM PVC
MW-5	10243.23	9880.34	778.60 778.85 778.61	ASPH. RIM PVC
MW-6	10249.86	9795.88	778.93 781.35 781.10	GRD CASE PVC
MW-7	10249.65	9650.24	778.77 781.17 780.94	GRD CASE PVC
MW-8	10038.09	9649.08	778.49 781.75 781.33	GRD CASE PVC
MW-9	9945.36	9430.13	780.56 782.84 782.61	GRD CASE PVC
MW-10	9909.53	9724.56	777.46 780.10 780.02	GRD CASE PVC
MW-11	10041.23	9767.54	778.62 778.81 778.58	FLOOR RIM PVC
MW-12	10082.02	9799.74	778.84 778.85 778.50	FLOOR RIM PVC
MW-13	10082.09	9864.35	778.88 778.87 778.39	FLOOR RIM PVC
MW-14	10130.64	9734.67	778.80 778.82 778.43	FLOOR RIM PVC
MW-15	10190.80	9795.30	778.78 778.76 778.38	FLOOR RIM PVC
B-16	9736.69	9324.99	782.23	GRD.
B-17	9795.99	9475.17	780.40	GRD.
B-18	9925.09	9623.75	777.55	ASPH.
B-19	9988.66	9965.74	778.30	ASPH.
B-20	10249.88	9964.03	778.36	ASPH.
B-21	10139.46	9644.31	774.51	GRAV.
B-22	9853.67	9725.31	776.69	GRD.
B-23	9983.81	9724.83	778.50	ASPH.
B-24	10249.26	9732.76	778.68	GRD.
B-25	10079.30	9714.32	778.79	FLOOR
B-26	10154.35	9821.64	778.84	FLOOR
B-27	10187.79	9726.14	778.80	FLOOR
B-28	10196.32	9917.18	778.83	FLOOR

*ELEVATIONS ARE RELATIVE TO MEAN SEA LEVEL

LEGEND

WATER MONITORING WELL (AUGUST 2002) VALUE = WATER TABLE ELEVATION, IN FEET, 12/10/02 — MW-1 711.99

TEST BORING (AUGUST 2002) — B-1

SHALLOW GROUNDWATER ELEVATION CONTOUR, FEET RELATIVE TO MEAN SEA LEVEL, 12/10/02 — 772.0

GROUNDWATER FLOW DIRECTION

DASNY

GOWANDA DAY
HABILITATION CENTER
4 INDUSTRIAL PLACE
GOWANDA, NY

BERGMANN associates
Engineers / Architects / Surveyors

DRAWING TITLE:
SHALLOW WATER TABLE SURFACE & GROUNDWATER FLOW, DEC. 2002

BY: **T.BOLT**

CHK'D BY: **E.JONES, J. MARSCHNER**

DRAWING DATE: **MARCH 17, 2003**

JOB #: **5596.03**

SHEET #: **FIG-9**

E:\ENVIRONDATA\4806.01\DRAWINGS\MARCH03\FIG9.DWG

SCALE: 1" = 60'

PLOT DATE: Apr 11, 2003

CADD FILE: L:\Environment\4806.01\Drawings\march03\fig9.dwg

CP-20
N 9974.74
E 9377.15

PROPERTY LINE

EASEMENT TO THE VILLAGE OF GOWANDA

CP-30
N 10210.94
E 9560.54

B-16	8'-10'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-16

B-9	8'-10'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-9
MW-9

B-17	8'-12'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-17

B-18	5'-6'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-18

PARKING

B-10	6'-8'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-10
MW-10

B-22	4'-6'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-22

B-23	10'-11'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-23

B-8	9'-10'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-8
MW-8

B-250	9'-11
TCE	11
CIS	6
TRANS	ND
VC	ND

B-14	8'-10'
TCE	79
CIS	12
TRANS	ND
VC	ND

B-14
MW-14

B-21	8'-10'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-21

B-7	16'-17.5'
TCE	330
CIS	350
TRANS	ND
VC	ND

B-7
MW-7

B-27	12'-13'
TCE	130
CIS	65
TRANS	ND
VC	ND

B-27

B-24	18'-20'
TCE	910
CIS	700
TRANS	3 J
VC	ND

B-24

B-15	12'-14'
TCE	51
CIS	7 J
TRANS	ND
VC	ND

B-15
MW-15

B-6	18'-20'
TCE	44 J
CIS	190
TRANS	ND
VC	ND

B-6
MW-6

B-5	8'-13'
TCE	5
CIS	7
TRANS	ND
VC	ND

B-5
MW-5

B-20	12'-14'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-20

B-11	9'-11'
TCE	480
CIS	110
TRANS	ND
VC	ND

B-11
MW-11

B-26	11'-12'
TCE	160
CIS	28
TRANS	ND
VC	ND

B-26

B-12	12'-14'
TCE	3300
CIS	ND
TRANS	ND
VC	ND

B-12
MW-12

B-1	2'-4'
TCE	14000
CIS	940
TRANS	10
VC	ND

B-1	8'-10'
TCE	3600
CIS	170
TRANS	ND
VC	5 J

B-1
MW-1

B-1

B-2	8'-10'
TCE	8
CIS	12
TRANS	ND
VC	ND

B-2
MW-2

B-13	10'-12'
TCE	6
CIS	3 J
TRANS	ND
VC	ND

B-13
MW-13

B-3	8'-10'
TCE	3 J
CIS	ND
TRANS	ND
VC	ND

B-3
MW-3

B-28	11'-12'
TCE	6
CIS	ND
TRANS	ND
VC	ND

B-28

B-4
MW-4

B-4	10'-12'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-19	8'-10'
TCE	ND
CIS	ND
TRANS	ND
VC	ND

B-19

CP-10
N 10000.00
E 10000.00

MACHINE WORK SHOP 53
MODEL APARTMENT 13
CLIENT CAFETERIA
CONFERENCE 157
ART 57
OCCUPATIONAL THERAPY 85
NURSING CLINIC 39
CLIENT CAFETERIA 50
MODEL APARTMENT 101
SENSORY MOTOR 56B
GARDEN
PROPERTY LINE
INDUSTRIAL PKWY

LEGEND

WATER MONITORING WELL (INSTALLED JULY 2002)

TEST BORING LOCATION (JULY 2002)

SOIL SAMPLES COLLECTED JULY 8 - JULY 31, 2002

SOIL SAMPLE DEPTH EXPRESSED AS AN INTERVAL IN FEET BELOW GROUND SURFACE

TCE = TRICHLOROETHENE

CIS = CIS-1,2-DICHLOROETHENE

TRANS = TRANS-1,2-DICHLOROETHENE

VC = VINYL CHLORIDE

ALL RESULTS EXPRESSED AS MICROGRAMS PER KILOGRAMS(UG/KG)=PARTS PER BILLION (PPB)

ND = NOT DETECTED

J = ESTIMATED CONCENTRATION

0 60 120 180 FT

DASNY

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4 INDUSTRIAL PLACE
GOWANDA, NY

BERGMANN associates
Engineers / Architects / Surveyors

DRAWING TITLE:
2002 SOIL ANALYTICAL RESULTS SUMMARY DETECTED VOCS

BY:
T.BOLT

CHK'D BY:
E.JONES, J. MARSCHNER

DRAWING DATE:
MARCH 17, 2003

JOB #:
5596.03

SHEET #:
FIGURE 10

SCALE: 1" = 60'

CP-20
N 9974.74
E 9377.15

PROPERTY LINE

EASEMENT TO THE VILLAGE OF GOWANDA

CP-30
N 10210.94
E 9560.54

MW-9	
TCE	4.2 J
CIS	ND
TRANS	ND
VC	ND

MW-7	
TCE	26
CIS	420
TRANS	ND
VC	4 J

MW-15	
TCE	320
CIS	380
TRANS	ND
VC	ND

MW-14	
TCE	180
CIS	130
TRANS	1.6 J
VC	3.6 J

MW-8	
TCE	1.4 J
CIS	ND
TRANS	ND
VC	ND

MW-6	
TCE	2.4 J
CIS	400
TRANS	3.4 J
VC	ND

MW-5	
TCE	12
CIS	1.7 J
TRANS	ND
VC	ND

MW-11	
TCE	2300
CIS	2300
TRANS	16
VC	31

MW-12	
TCE	9600
CIS	3000
TRANS	28
VC	15

MW-10	
TCE	2.6 J
CIS	ND
TRANS	ND
VC	ND

MW-1	
TCE	380
CIS	380
TRANS	4 J
VC	4 J

MW-13	
TCE	250
CIS	69
TRANS	1.3 J
VC	ND

MW-2	
TCE	4.7 J
CIS	18
TRANS	ND
VC	ND

MW-3	
TCE	2.3 J
CIS	9.6
TRANS	ND
VC	3.1 J

MW-4	
TCE	1.8 J
CIS	2.0 J
TRANS	ND
VC	ND

B-16, B-17, B-18, B-19, B-20, B-21, B-22, B-23, B-24, B-25, B-26, B-27, B-28

PARKING

MACHINE WORK SHOP 33

MODEL APARTMENT 13

CLIENT CAFETERIA 121

CONFERENCE 157

OCCUPATIONAL THERAPY 85

NURSING CLINIC 59

CLIENT CAFETERIA 50

MODEL APARTMENT 101

SEASON MOTOR 389

INDUSTRIAL PKWY

CP-10
N 10000.00
E 10000.00

LEGEND

WATER MONITORING WELL (INSTALLED JULY 2002) MW-1

TEST BORING LOCATION (JULY 2002) B-1

GROUNDWATER SAMPLES COLLECTED AUGUST 28 – SEPTEMBER 4, 2002

TCE = TRICHLOROETHENE

CIS = CIS-1,2-DICHLOROETHENE

TRANS = TRANS-1,2-DICHLOROETHENE

VC = VINYL CHLORIDE

ALL RESULTS EXPRESSED AS MICROGRAMS PER LITER(UG/L)=PARTS PER BILLION (PPB)

ND = NOT DETECTED

J = ESTIMATED CONCENTRATION

0 60 120 180 FT

FILE: ...\environmental\5596.01\Drawings\...\march\...dwg DATE: 2003

DASNY

GOWANDA DAY
HABILITATION CENTER
4 INDUSTRIAL PLACE
GOWANDA, NY

BERGMANN associates
Engineers / Architects / Surveyors

DRAWING TITLE:
2002 GROUNDWATER ANALYTICAL RESULTS SUMMARY DETECTED VOCS

BY:
T.BOLT

CHK'D BY:
E.JONES, J. MARSCHNER

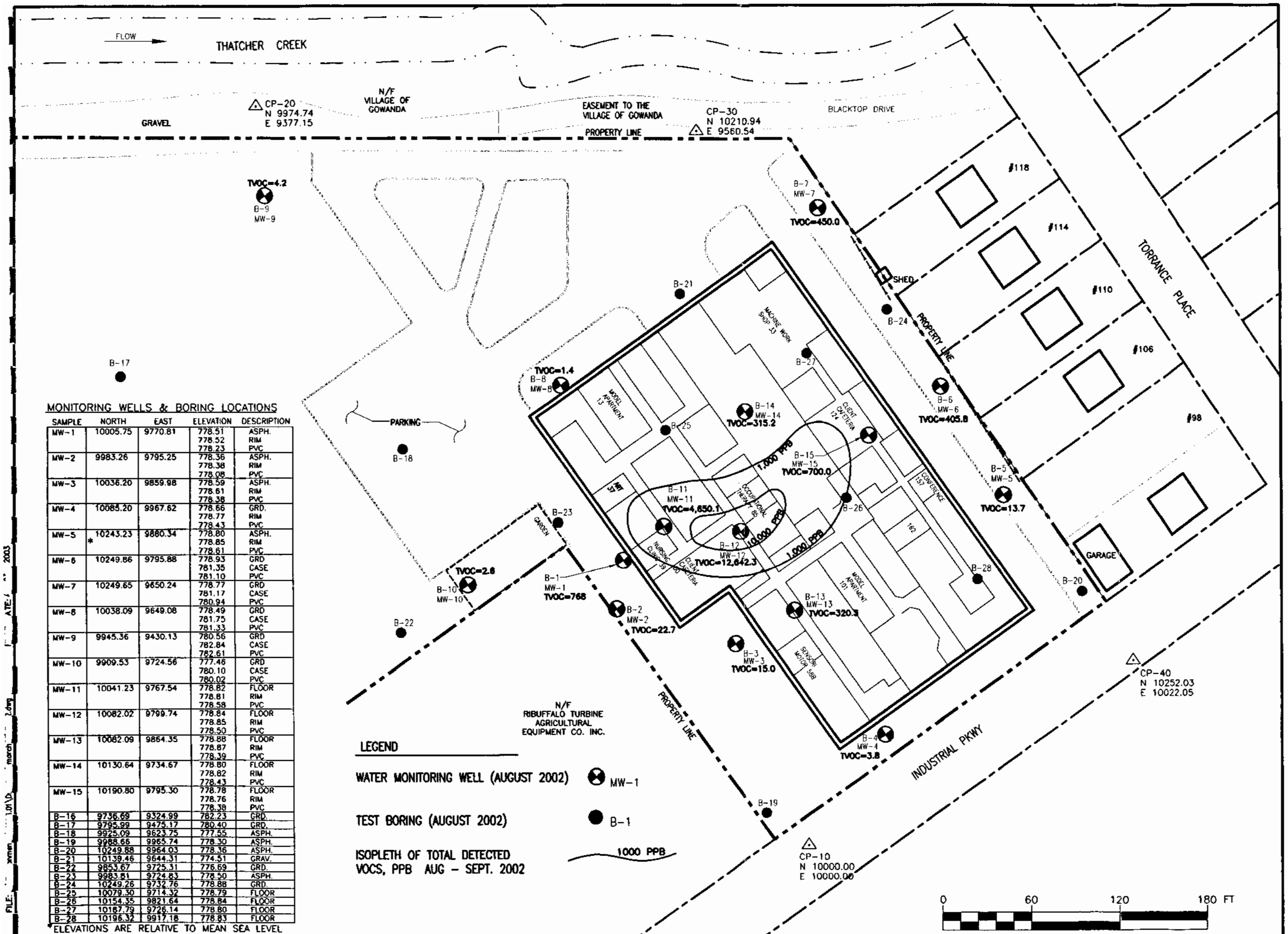
DRAWING DATE:
MARCH 17, 2003

JOB #:
5596.03

SHEET #:
FIGURE 11

I:\ENVIRONMENTAL\5596.01\DRAWINGS\MARCH\ST11.DWG

SCALE: 1" = 60'



MONITORING WELLS & BORING LOCATIONS

SAMPLE	NORTH	EAST	ELEVATION	DESCRIPTION
MW-1	10005.75	9770.81	778.51 778.52 778.23	ASPH. RIM PVC
MW-2	9983.26	9795.25	778.36 778.38 778.08	ASPH. RIM PVC
MW-3	10036.20	9859.98	778.59 778.61 778.38	ASPH. RIM PVC
MW-4	10085.20	9967.62	778.66 778.77 778.43	GRD. RIM PVC
MW-5	10243.23 *	9880.34	778.80 778.85 778.61	ASPH. RIM PVC
MW-6	10249.86	9795.88	778.93 781.35 781.10	GRD CASE PVC
MW-7	10249.65	9650.24	778.77 781.17 780.94	GRD CASE PVC
MW-8	10038.09	9649.08	778.49 781.75 781.33	GRD CASE PVC
MW-9	9945.36	9430.13	780.56 782.84 782.61	GRD CASE PVC
MW-10	9909.53	9724.56	777.46 780.10 780.02	GRD CASE PVC
MW-11	10041.23	9767.54	778.82 778.81 778.58	FLOOR RIM PVC
MW-12	10082.02	9799.74	778.84 778.85 778.50	FLOOR RIM PVC
MW-13	10082.09	9864.35	778.88 778.87 778.39	FLOOR RIM PVC
MW-14	10130.64	9734.67	778.80 778.82 778.43	FLOOR RIM PVC
MW-15	10190.80	9795.30	778.78 778.76 778.38	FLOOR RIM PVC
B-16	9736.69	9324.99	782.23	GRD.
B-17	9795.99	9475.17	780.40	GRD.
B-18	9925.09	9623.75	777.55	ASPH.
B-19	9965.66	9965.74	778.30	ASPH.
B-20	10249.88	9964.03	778.36	ASPH.
B-21	10139.46	9644.31	774.51	GRAV.
B-22	9853.67	9725.31	776.69	GRD.
B-23	9983.81	9724.83	778.50	ASPH.
B-24	10249.26	9732.76	778.88	GRD.
B-25	10079.30	9714.32	778.79	FLOOR
B-26	10154.35	9821.64	778.84	FLOOR
B-27	10167.79	9726.14	778.80	FLOOR
B-28	10196.32	9917.18	778.83	FLOOR

*ELEVATIONS ARE RELATIVE TO MEAN SEA LEVEL

DASNY

GOWANDA DAY
HABILITATION CENTER
4 INDUSTRIAL PLACE
GOWANDA, NY

BERGMANN associates
Engineers / Architects / Surveyors

DRAWING TITLE:
APPROXIMATE EXTENT OF GREATEST IMPACT TO GROUNDWATER MAP

BY:
T.BOLT

CHK'D BY:
E.JONES, J. MARSCHNER

DRAWING DATE:
MARCH 17, 2003

JOB #:
5596.03

SHEET #:
FIG-12

E:\ENVIRONMENTAL\5596.01\DRAWINGS\MARCH03\FIG12.DWG

SCALE: 1" = 60'

FILE: ... 1.01\D... ...march03\... 2.dwg DATE: ... 2003

APPENDIX 1

APPENDIX 1
Boring Logs and Well Construction Details

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-1/MW-1

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/31/02 | Finish Date: 07/31/02 | Top of Well: N/A | Boring No: B-1/MW-1

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In asphalt adjacent to south side of the building.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 8.0 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 8 feet

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 16.5 ft. to 4.5 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 18.0 ft to 3.5 ft

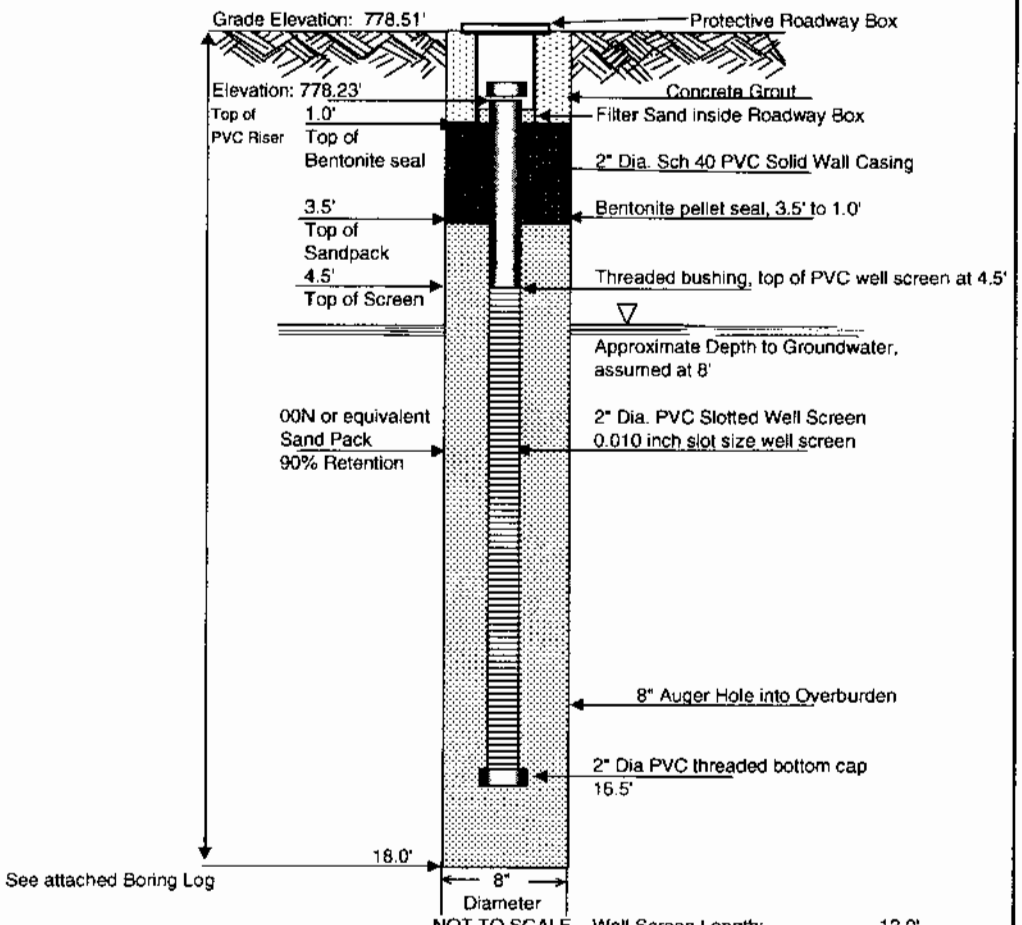
Seal: 3.5 to 1.0 feet | Weather Conditions: Overcast, humid, 75 degrees in morning

Flush to grade roadway box installed over the monitoring well. | Warmer & scattered rain in the afternoon

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	23	9			16	1	0-2'	soil	42%	Asphalt Surface 0.5'	
			7	5						GRAVEL and F-C Sand Fill to 2' 2.0'	4.1 ppm
	6	2			5	2	2'-4'	soil	75%	Damp Br. Mottled M. Stiff SILT,	
			3	3						Some F. Sand. Partings evident	176 ppm
5	5	4			7	3	4'-6'	soil	83%	Same SILT, some F. Sand. M. Stiff.	
			3	4						Roots encountered. moist at 6'	131 ppm
	1	WH			1	4	6'-8'	soil	13%	same Silt & F. Sand 7', then Gravel 7.0'	
			1	WH						Brown F-M GRAVEL Some F-C Sand	19.6 ppm
	2	4			8	5	8'-10'	soil	75%	Damp Br. Loose F-M GRAVEL,	
10			4	14						some F-C Sand, tr. Silt WT ~8'	31.0 ppm
	5	7			15	6	10'-12'	soil	67%	Same, M. Dense, Trace Silt, Wet at 8'	
			8	15						Same, saturated at 10'. Petroleum odor	6.5 ppm
	22	18			30	7	12'-14'	soil	67%	Same Gravel, becomes Dense	
			12	11						Grayish brown at 13'	2.1 ppm
15	29	22			36	8	14'-16'	soil	25%	Same Gray-Brown Gravel, some Sand	
			14	17						Same gravel to 16'2", then Clay 16'2"	2.8 ppm
	18	25			57	9	16'-18'	soil	100%	Damp Gray Hard CLAY and Silt	16.0 ppm
			32	40						Trace pebbles. TILL 18'	3.5 ppm
20											
										Boring terminated at 18.0 feet	
										2" diameter monitoring well	
										installed in test boring	
										All cuttings placed in drums.	
25											
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-1/MW-1



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-1**	**Date Installed:** 31-Jul-02

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-2/MW-2

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/25/02 | Finish Date: 07/25/02 | Top of Well: N/A | Boring No: B-2/MW-2

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In asphalt lot south side building, at property line.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 8.0 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 8 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 17.5 ft. to 4.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 18.0 ft to 3.0 ft

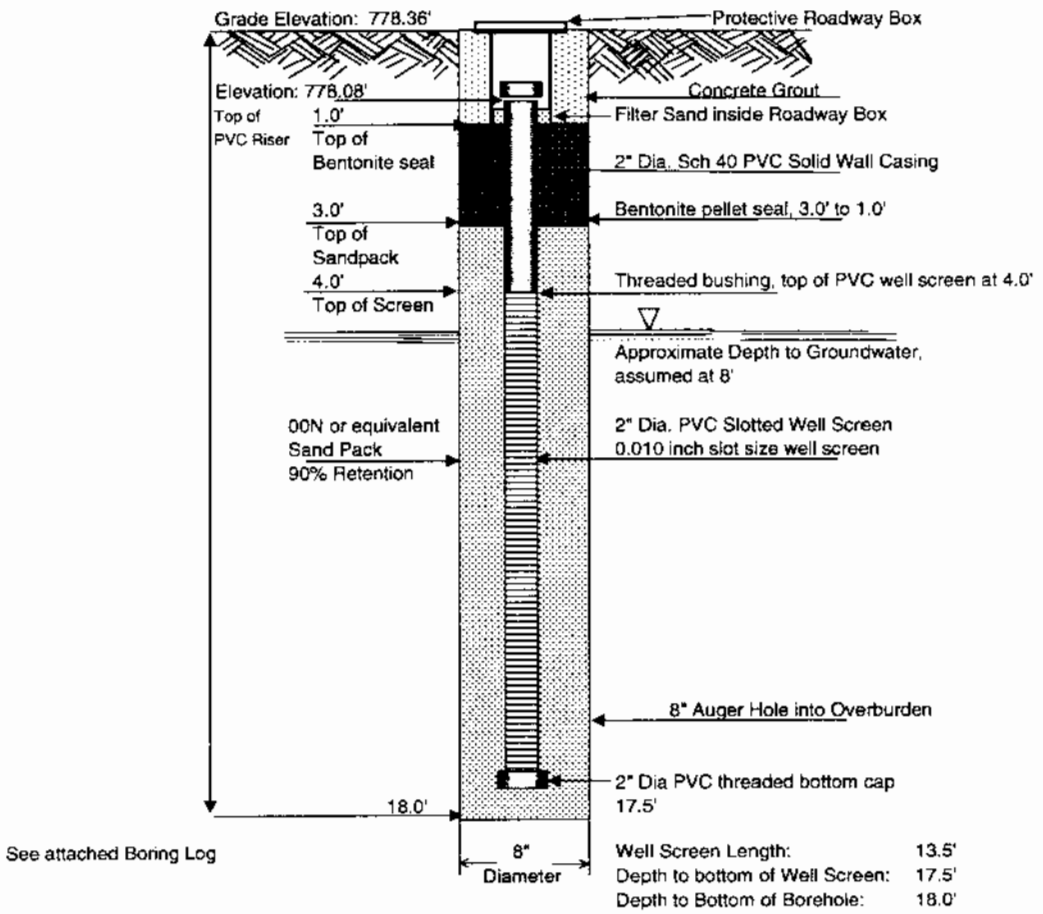
Seal: 3.0 to 1.0 feet | Weather Conditions: Sunny, 60 degree F in the morning

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	28	10			20	1	0-2'	soil	42%	Asphalt surface 6'	
			10	5						GRAVEL and F- C Sand. Fill 2'6"	0.1 ppm
	3	4			8	2	2'-4'	soil	92%	Damp Mottled BR & GR M. Stiff SILT,	
			4	4						Some F. Sand	0.5 ppm
5	3	3			7	3	4'-6'	soil	58%	Same, M. Stiff	
			4	3						Same, becomes v. moist at 6'	0.2 ppm
	WH	WH			1	4	6'-8'	soil	96%	Same mottled SILT, some F. Sand	
			WH	WH						becomes Wet at 8'. V. Soft 8.0'	0.3 ppm
	WH	WH			6	5	8'-10'	soil	21%	Wet Brown Loose F-M GRAVEL,	
10			6	9						Some F-C Sand. Tr. Silt	0.3 ppm
	12	8			16	6	10'-12'	soil	50%	Same, grayish-brown. M. Dense	
			8	15						Gravel is angular	0.3 ppm
	18	14			32	7	12'-14'	soil	79%	Same, saturated, Dense	
			18	14							0.2 ppm
15	1	2			10	8	14'-16'	soil	50%	Identical, Loose	
			8	11							ND
	23	22			59	9	16'-18'	soil	100%	Same to 17', Dense 17'	
			37	50						Damp Gray Hard Silty-CLAY, Trace	ND
										Gravel. Laminated. TILL 18'	
20										Boring terminated at 18.0 feet	
										2" diameter monitoring well	
										installed in test boring.	
										All cuttings placed in drums.	
25											
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-2/MW-2



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-2**	**Date Installed:** **25-Jul-02**

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: **Test Boring B-3/MW-3**

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/12/02 | Finish Date: 07/12/02 | Top of Well: N/A | Boring No: B-3/MW-3

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In asphalt parking lot, southeast side of the building

Inspector: Jim Marschner, Bergmann Associates | Water Level (During Drilling): Approximately 8.0 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 8 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 17.5 ft. to 4.5 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 18.0 ft to 3.0 ft

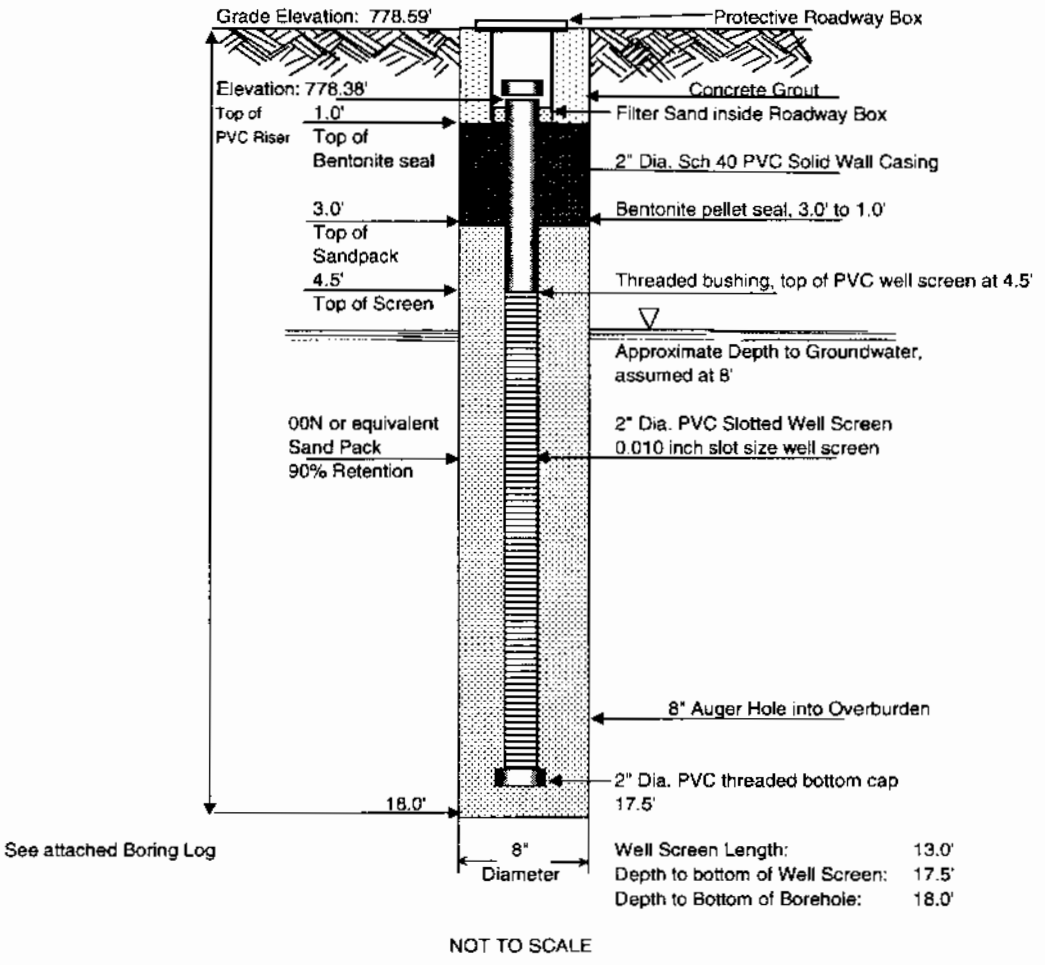
Seal: 3.0 to 1.0 feet | Weather Conditions: Sunny, 60 degree F in the morning

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	27	7			16	1	0-2'	soil	29%	Asphalt surface, Fill to 2'2" 6.0'	
			9	12						F-C Sand, F. Gravel, Concrete 2'2"	14.1 ppm
	11	11			43	2	2'-4'	soil	46%	Damp Tan Dense F-M SAND with Silt,	
			32	21						Trace Gravel	2.2 ppm
5	28	14			22	3	4'-6'	soil	8%	Same, M. Dense	
			8	10							8.0 ppm
	3	5			14	4	6'-8'	soil	88%	Moist Gr.-Br. Stiff SILT, inter-layered	
			9	8						with Fine Sand. Wet at 8' 8.0'	21.0 ppm
	6	9			16	5	8'-10'	soil	33%	Wet Br to Gr. M. Dense F-M GRAVEL,	
10			7	8						some F-M Sand, Some silt	27.0 ppm
	7	8			15	6	10'-12'	soil	46%	Same wet M. Dense Gravel, but Gray	
			7	4							25.0 ppm
	12	14			35	7	12'-14'	soil	50%	Same, becomes Dense	
			21	23							24.0 ppm
15	11	19			33	8	14'-16'	soil	29%	Dame Dense Gravel, some F. Sand	
			14	14							22.0 ppm
	14	23			58	9	16'-18'	soil	58%	Same Gravel & Sand to 17' 17'	
			35	47						Damp Gray Hard Silty-CLAY, Trace	7.7 ppm
										Gravel. Laminated. TILL 18'	
20										Boring terminated at 18.0 feet	
										2" diameter monitoring well	
										installed in test boring.	
										All cuttings placed in drums.	
25											
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-3/MW-3



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-3**	**Date Installed:** **12-Jul-02**

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-4/MW-4

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/11/02 | Finish Date: 07/11/02 | Top of Well: N/A | Boring No: B-4/MW-4

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In asphalt parking lot, east side of the building

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 11" feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 6 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 16.5 ft. to 4.6 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 18.0 ft to 3.0 ft

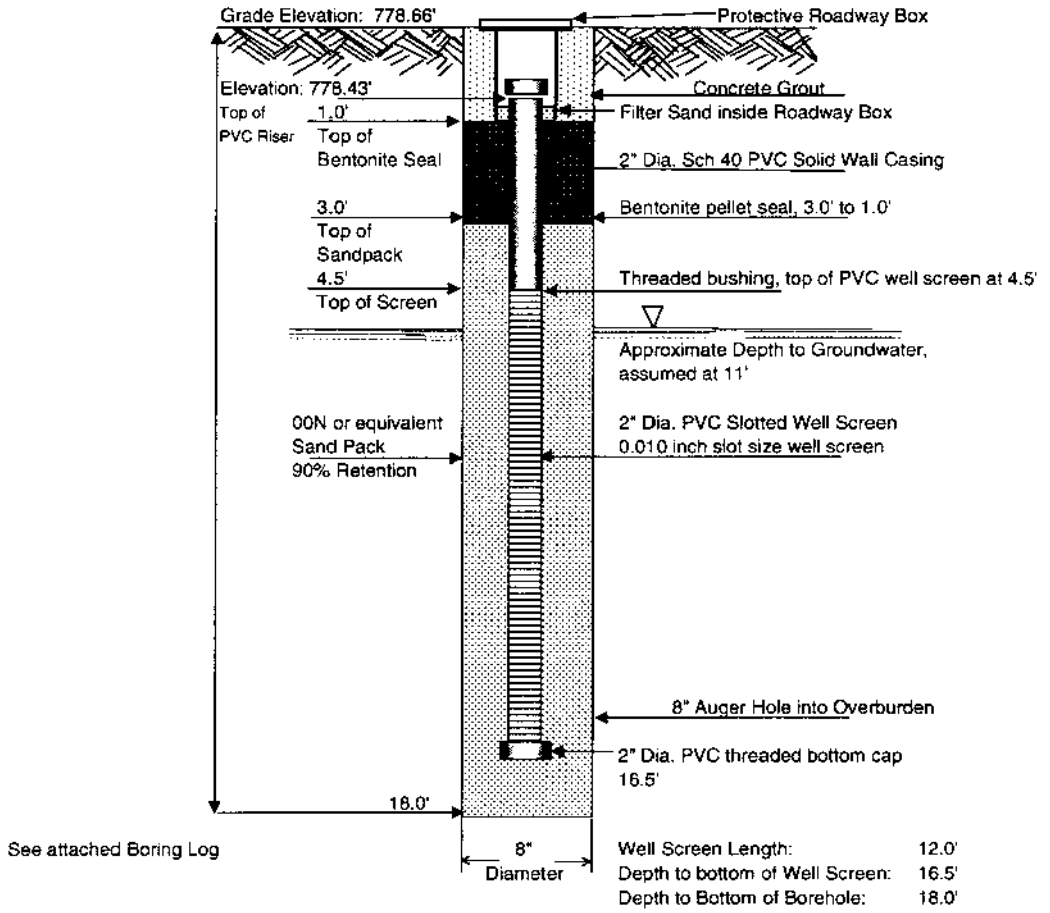
Seal: 3.0 to 1.0 feet | Weather Conditions: Sunny, 75 degree F in the morning

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	22	8			12	1	0-2'	soil	21%	Asphalt Surface 0.5'	
			4	4						Damp Grown F-C SAND and Gravel	ND
	4	2			6	2	2'-4'	soil	21%	Fill to 3.5'	
			4	5						Fill to 3.5' 3.5'	ND
5	2	3			6	3	4'-6'	soil	42%	Damp Gr-Br. Loose Fine SAND	
			3	4						and Silt	ND
	3	5			13	4	6'-8'	soil	38%	Damp Br. M. Stiff SILT, some F. Sand 7'	
			8	8						Damp Brown M. Dense F-M GRAVEL,	ND
	6	10			18	5	8'-10'	soil	25%	some F-C Sand, Trace Silt	
10			8	5						Same, M. Dense, V. Moist to wet	ND
	12	10			24	6	10'-12'	soil	50%	Dame, M. Dense, Wet at 11'10"	
			14	10							ND
	9	9			25	7	12'-14'	soil	100%	Same, Gray and Brown, M. Dense	
			16	14							ND
15	2	14			22	8	14'-16'	soil	92%	Same, saturated, M. Dense	
			8	14						Same Gravel to 15'10" 15'10"	ND
	15	21			47	9	16'-18'	soil	83%	Damp Gray Hard Silty-CLAY,	
			26	43						Trace Gravel. Laminated. TILL 18'	ND
20										Boring terminated at 18.0 feet	
										2" diameter monitoring well	
										installed in test boring.	
										All cuttings placed in drums.	
25											
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N = The number of blows to advance a 2" Split Spoon 12" with a 140 lb. Hammer dropped 30" each blow.

MONITORING WELL B-4/MW-4



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-4**	**Date Installed:** 11-Jul-02

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-5/MW-5

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/30/02 | Finish Date: 07/31/02 | Top of Well: N/A | Boring No: B-5/MW-5

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In grass strip north of building , near property line

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 12.0' feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Not recorded

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 14.5 ft. to 4.5 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 16.0 ft to 4.0 ft

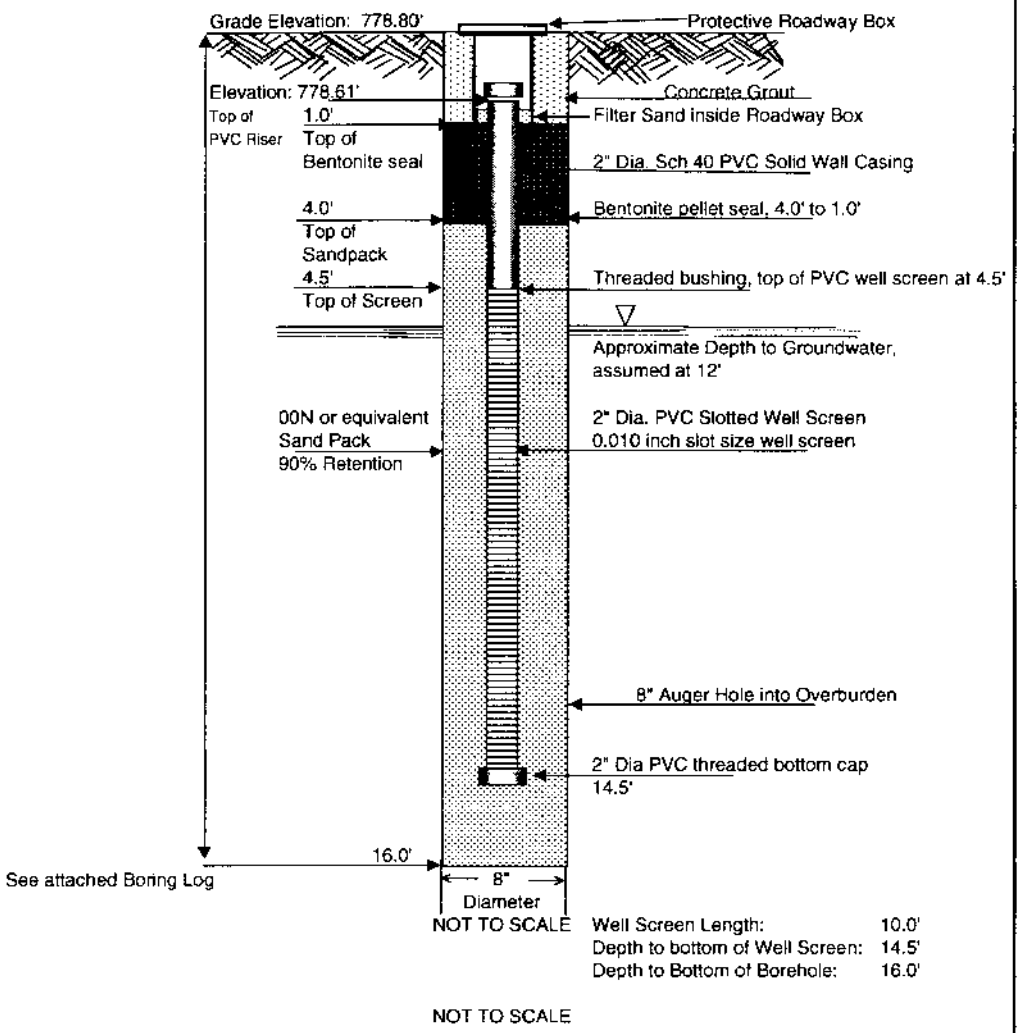
Seal: 4.0 to 1.0 feet | Weather Conditions: Overcast, humid, 75 degrees in morning

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	10	4			11	1	0-2'	soil	17%	Asphalt Surface 0.5'	
			7	10						F. GRAVEL and F-C Sand Fill, 2' 2.0'	17.4 ppm
	4	3			6	2	2'-4'	soil	71%	Damp Br. Mottled M. Stiff SILT,	
			3	3						Some F. Sand	18.0 ppm
5	2	4			7	3	4'-6'	soil	88%	Same damp M. Stiff SILT, some F. Sand	
			3	4							36.0 ppm
	2	3			6	4	6'-8'	soil	100%	Same to 7'10"	
			3	11						Start Brown Gravel 7'10'	56.0 ppm
	15	35			69	5	8'-10'	soil	54%	Damp Br. V. Dense F-M GRAVEL,	
10			34	18						some F-C Sand, tr. Silt	37.0 ppm
	10	16			27	6	10'-12'	soil	58%	Same F-M GRAVEL, Some F-C Sand	
			11	16						Becomes M. Dense, Wet at 12.0' WT~12'	3.0 ppm
	11	6			15	7	12'-14'	soil	13%		
			9	15						Same, wet to 14.0, then Clay 14.0'	2.0 ppm
15	39	21			42	8	14'-16'	soil	58%	Damp Gray hard CLAY and Silt	
			21	36						Trace Pebbles. Glacial Till 16.0'	1.6 ppm
										Boring terminated at 16.0 feet	
										2" diameter monitoring well	
20										installed in test boring	
										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
25										used to screen soil samples for VOCs	
30											

2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-5/MW-5



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-5**	**Date Installed:** 31-Jul-02

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-6/MW-6

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/30/02 | Finish Date: 07/30/02 | Top of Well: N/A | Boring No: B-6/MW-6

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In grass strip north of building , near property line

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 12 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 15 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 21.0 ft. to 6.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 22.0 ft to 5.0 ft

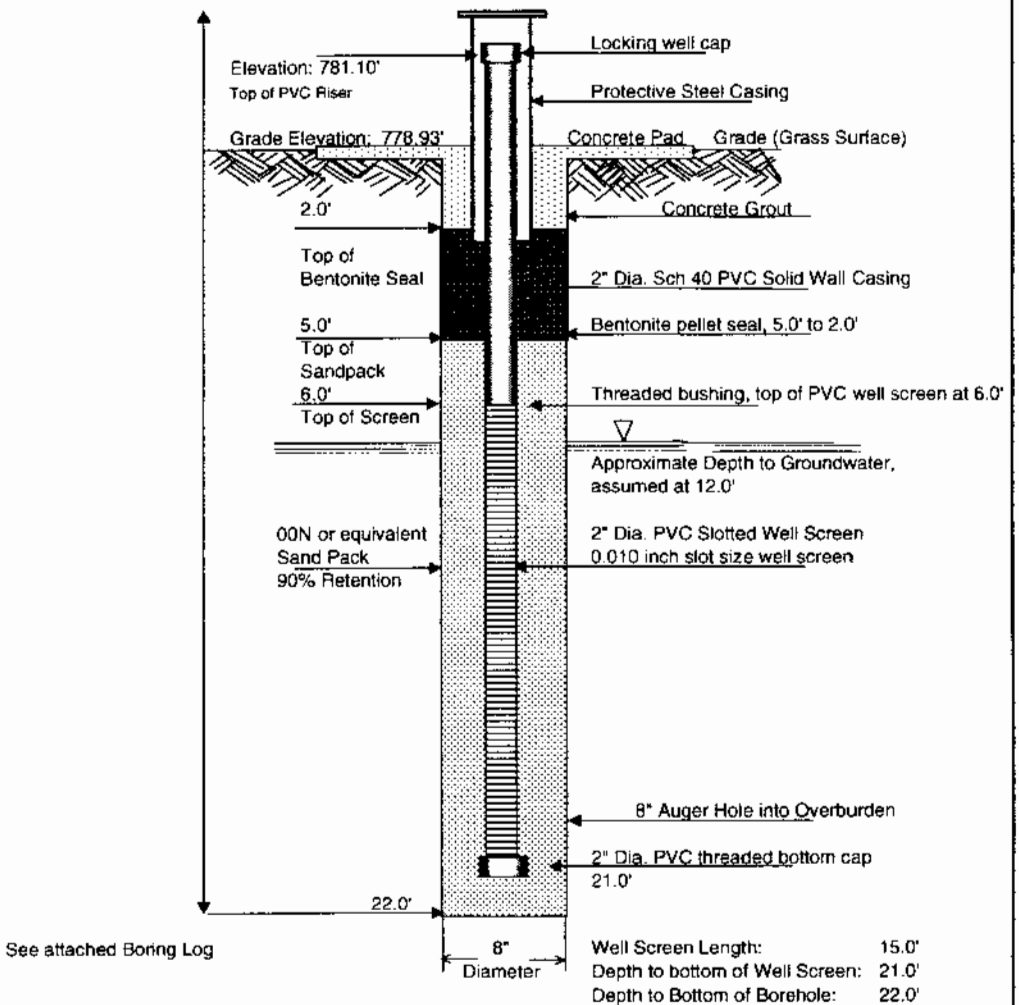
Seal: 5.0 to 2.0 feet | Weather Conditions: Overcast, humid, 75 degrees in morning

Protective Steel Casing installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	3	2			9	1	0-2'	soil	54%	Grass surface	
			7	4						GRAVEL and F-C Sand Fill to 2' 2.0'	1.1 ppm
	2	2			4	2	2'-4'	soil	71%	Damp Br Mottled Soft SILT,	
			2	4						some F. Sand. Partings evident	1.7 ppm
5	3	4			10	3	4'-6'	soil	63%	Same, Stiff, becomes Moist at 7'6"	
			6	6							0.5 ppm
	3	3			6	4	6'-8'	soil	100%	Same, M. Stiff to 8.0', then Gravel	
			3	4						8.0'	0.8 ppm
	8	15			25	5	8'-10'	soil	75%	Moist Br. M. Dense F-M GRAVEL,	
10			10	8						some f-C Sand, Trace Silt	2.6 ppm
	6	5			10	6	10'-12'	soil	50%	Same, becomes, Loose, moist	
			5	7							1.6 ppm
	7	9			19	7	12'-14'	soil	58%	Same, M. Dense, Saturated. WT ~ 12'	
			10	26							2.1 ppm
15	8	12			27	8	14'-16'	soil	100%	Same, saturated, becomes Gray	
			15	23							14.7 ppm
	10	26			56	9	16'-18'	soil	100%	Same, becomes V. Dense	
			30	50							22.0 ppm
	5	20			51	10	18'-20'	soil	100%	Same, V. Dense	
20			31	23							27.0 ppm
	10	10			31	11	20'-22'	soil	100%	Same to 20.5', then Damp Clay 20.5'	
			21	40						Damp Gray Hard SILT and Clay	10.0 ppm
										Trace pebbles. Glacial Till 22.0'	
25										Boring terminated at 22.0 feet	
										2" diameter monitoring well	
										installed in test boring	
										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
30										used to screen soil samples for VOCs	

N = The number of blows to advance a 2" Split Spoon 12" with a 140 lb. Hammer dropped 30" each blow.

MONITORING WELL B-6/MW-6



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-6**	**Date Installed:** **30-Jul-02**

DRILLING LOG

BERGMANN associates

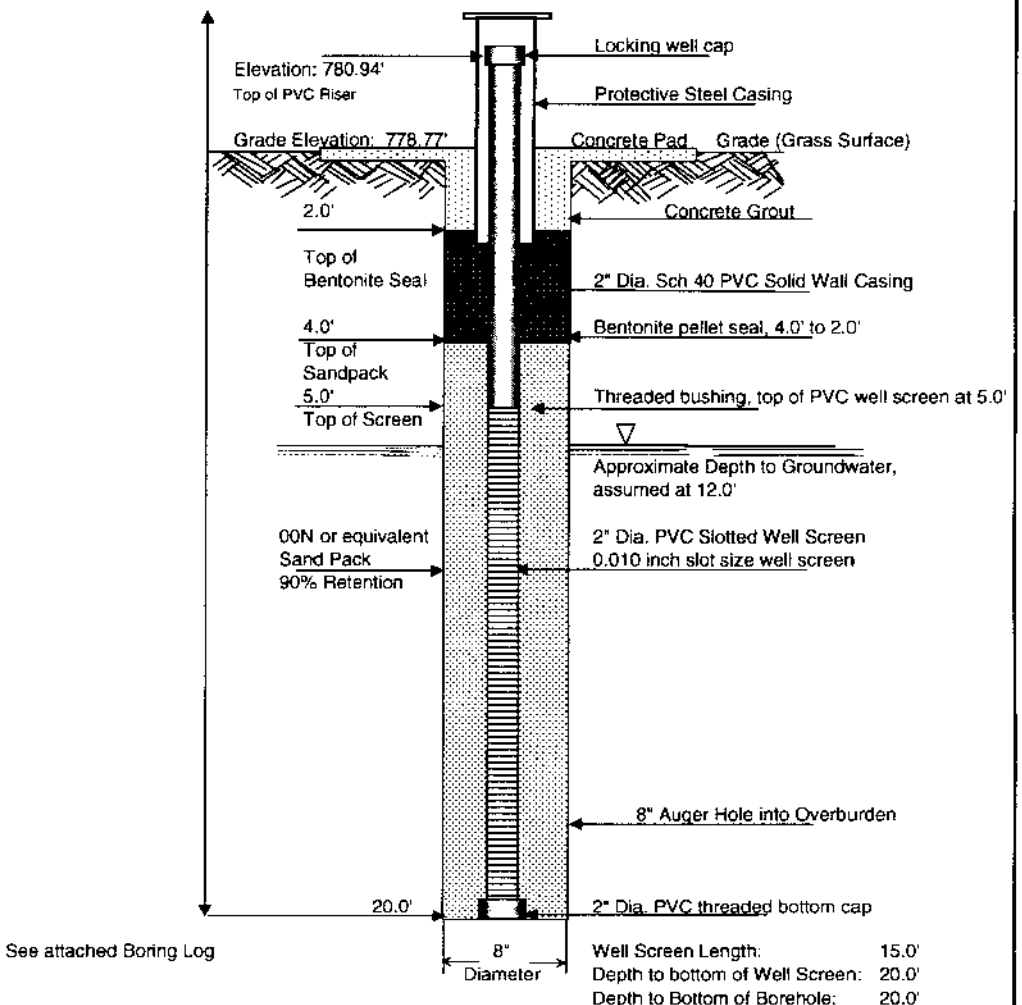
BORING/WELL NUMBER: **Test Boring B-7/MW-7**

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1
Start Date: 07/30/02 | Finish Date: 07/30/02 | Top of Well: N/A | Boring No: B-7/MW-7
Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In grass strip north of building at northwest corner
Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 12 feet
Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 15;9" feet below grade
Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.
Screened Interval: 20 ft. to 5.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 20.0 ft to 4.0 ft
Seal: 4.0 to 2.0 feet | Weather Conditions: Overcast, humid, 75 degrees in morning
Protective Steel Casing installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	1	4			11	1	0-2'	soil	58%	Grass surface	
			7	11						F. GRAVEL and F-C Sand. Fill 2'2"	1.1 ppm
	3	5			7	2	2'-4'	soil	71%	Damp Mottled BR & GR M. Stiff SILT,	
			2	4						Some F. Sand	0.9 ppm
5	4	3			6	3	4'-6'	soil	71%	Same M. Stiff, mottled brown & gray	
			3	5							0.9 ppm
	3	2			4	4	6'-8'	soil	100%	Same, Soft, mottled brown & gray, moist	
			2	3							0.7 ppm
	2	2			8	5	8'-10'	soil	75%	Same SILT to 9.0', then Gravel 9.0'	
10			6	8						V. Moist Br F-M M. Dense GRAVEL,	0.8 ppm
	3	3			4	6	10'-12'	soil	33%	Some F-C Sand, Tr. Silt	
			1	WR						Same, becomes V. Loose, Wet at 12'	2.9 ppm
	1	2			7	7	12'-14'	soil	38%	Same, becomes Loose, saturated	
			5	6							2.0 ppm
15	3	2			6	8	14'-16'	soil	63%	Same, saturated, becomes Gray	
			4	29							2.1 ppm
	17	43			93	9	16'-18'	soil	94%	Same Gray GRAVEL, Some F-C Sand,	
			50/4"							becomes V. Dense	3.7 ppm
	3	9			33	10	18'-20'	soil	100%	Same to 19'6" 19'6"	
20			24	24						Damp Gray V. Stiff SILT and Clay	2.1 ppm
										Glacial Till 20'	
25										Boring terminated at 20.0 feet	
										2" diameter monitoring well	
										installed in test boring	
										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
30										used to screen soil samples for VOCs	

2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-7/MW-7



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-7**	**Date Installed:** 30-Jul-02

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-8/MW-8

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/24/02 | Finish Date: 07/24/02 | Top of Well: N/A | Boring No: B-8/MW-8

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In grass at the southwest corner of the building.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 9 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 7.9 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 4.5 ft. to 16.5 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 17.0 ft to 3.5 ft

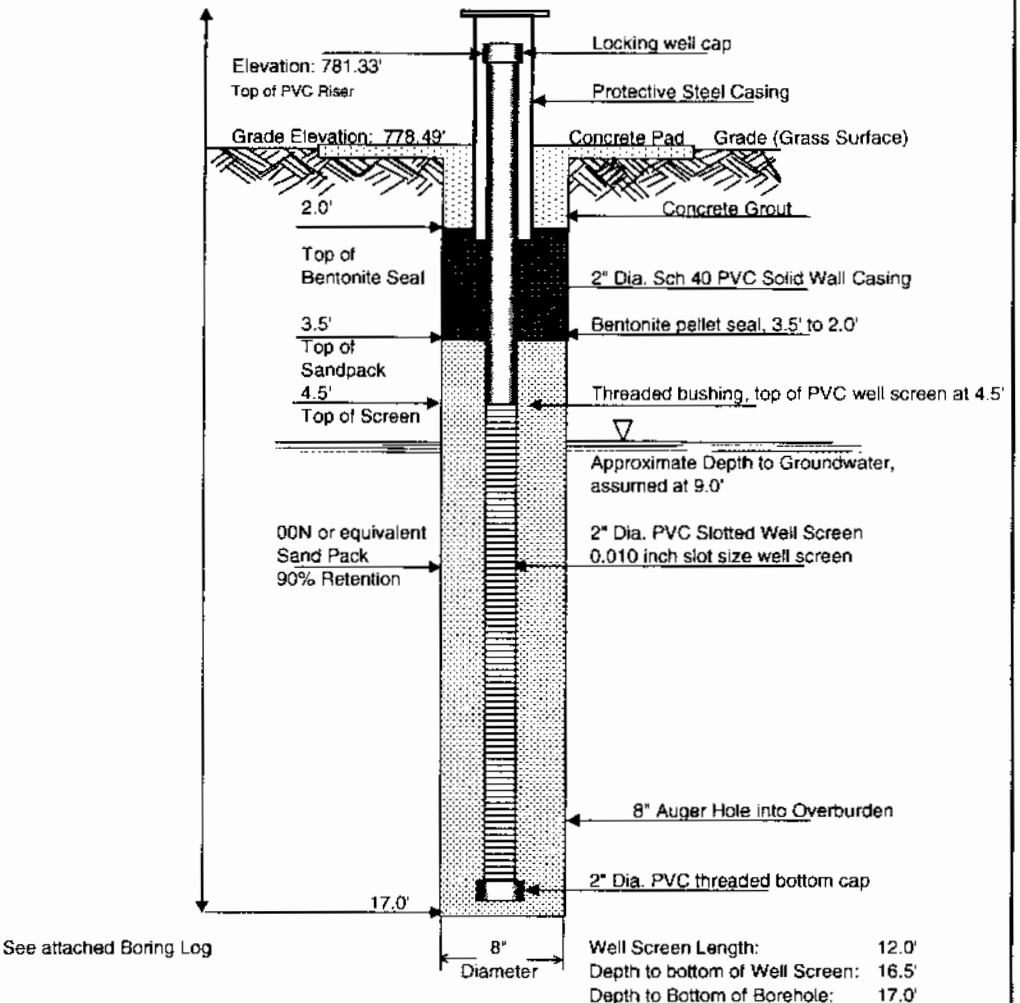
Seal: 3.5 to 2.0 feet | Weather Conditions: Sunny, 80 degrees in afternoon.

Protective Steel Casing installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER 0"/6"	6"/12"	12"/18"	18"/24"	SAMPLE N	NO.	Depth	Type	Recovery	SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0											
	1	5			10	1	0-2'	soil	75%	Grass surface, Sand & Gr. Fill to 1.0'	
			5	4						Damp mottled Loose SILT, Some F. Sand	ND
	3	4			10	2	2'-4'	soil	63%	Same damp mottled SILT and F. Sand	
			6	7						Loose	ND
5	2	4			9	3	4'-6'	soil	75%	Same, damp, Loose	
			5	5							ND
	1	1			2	4	6'-8'	soil	13%	Same, Very Loose	
			1	WH							ND
	WH	4			11	5	8'-10'	soil	67%	Same to 8'6" 8'6"	
10			7	20						Wet F-M GRAVEL, some F-C Sand	ND
	5	11			22	6	10'-12'	soil	33%	Same, M. Dense, saturated, trace silt	
			11	10							ND
	10	11			25	7	12'-14'	soil	58%	Same, saturated, M. Dense	
			14	23							ND
15	5	12			24	8	14'-16'	soil	58%		
			12	12						Same to 15'10" 15'10"	ND
	41	50/.4			50+	9	16'-17'	soil	83%	Damp Hard Gray CLAY	
										Trace gravel-pebbles, TILL 17'	ND
20										Boring terminated at 17.0 feet	
										2" diameter monitoring well	
										installed in test boring.	
										All cuttings placed in drums.	
25											
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-8/MW-8



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-8**	**Date Installed:** **24-Jul-02**

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-9/MW-9

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/11/02 | Finish Date: 07/11/02 | Top of Well: N/A | Boring No: B-9/MW-9

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: By access road, west of the building.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 8 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 13'4" feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 5.0 ft. to 20.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 20.0 ft to 4.0 ft

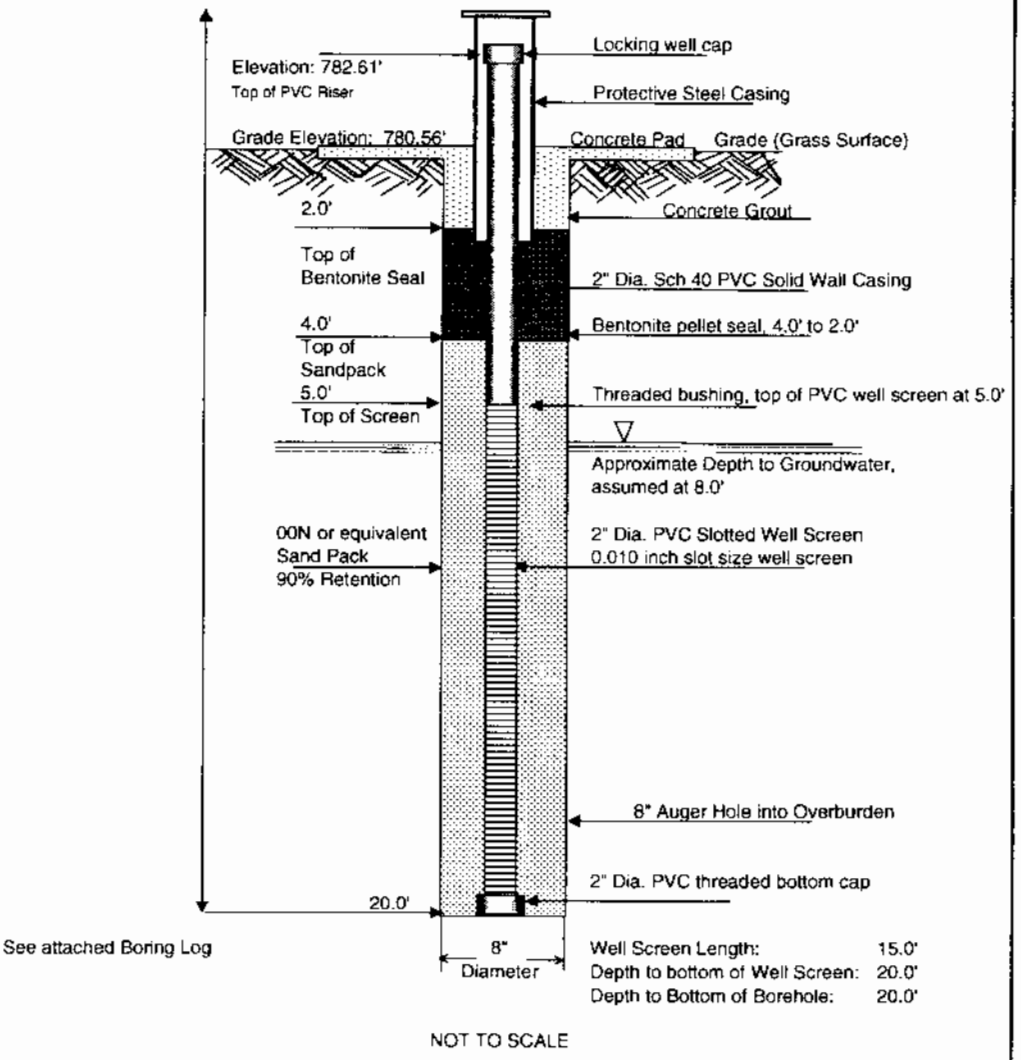
Seal: 4.0 to 2.0 feet | Weather Conditions: Sunny, 65 degrees F in Morning

Protective Steel Casing installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	11	12			19	1	0-2'	soil	67%	Grass surface; Gravel Fill to 1.0' 1.0'	
			7	7						Damp Br. Stiff SILT, mottled, partings	ND
	5	6			15	2	2'-4'	soil	63%	Same SILT, Stiff, little F. Sand	
			9	10							ND
5	4	7			13	3	4'-6'	soil	83%	Same Damp Br. Silt, layers of F. Sand	
			6	6							ND
	2	2			3	4	6'-8'	soil	83%	Same SILT, V. Soft, some F. Sand	
			1	1						Wet, Saturated at 8.0'	ND
	WH	WH			3	5	8'-10'	soil	83%	Brown F. SAND, some Silt, Saturated	
10			3	10						10.0'	ND
	WH	1			6	6	10'-12'	soil	25%	Saturated Br to Gr Loose F-M GRAVEL	
			5	5						Some F-C Sand, Trace Silt	ND
	5	7			16	7	12'-14'	soil	83%	Same, Saturated, M. Dense	
			9	8							ND
15	8	3			12	8	14'-16'	soil	58%	Same, Wet, M. Dense	
			9	12							ND
	22	16			31	9	16'-18'	soil	33%	Same, Wet, Dense F-M GRAVEL,	
			15	10						Some F-C Sand, Trace Silt 19.5"	ND
	4	5			20	10	18'-20'	soil	83%	Damp Grey V. Stiff SILT, Little Clay,	
20			15	25						Trace Gravel, Laminated. TILL 20'	
										Boring terminated at 20.0 feet	
										2" diameter monitoring well	
										installed in test boring.	
25											
										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-9/MW-9



See attached Boring Log

Well Screen Length:	15.0'
Depth to bottom of Well Screen:	20.0'
Depth to Bottom of Borehole:	20.0'

NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-9**	**Date Installed:** **11-Jul-02**

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-10/MW-10

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/10/02 | Finish Date: 07/10/02 | Top of Well: N/A | Boring No: B-10/MW-10

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In grass south of the building, near property line

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 7 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 6' 6" feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 3.0 ft. to 18.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 18.0 ft to 2.0 ft

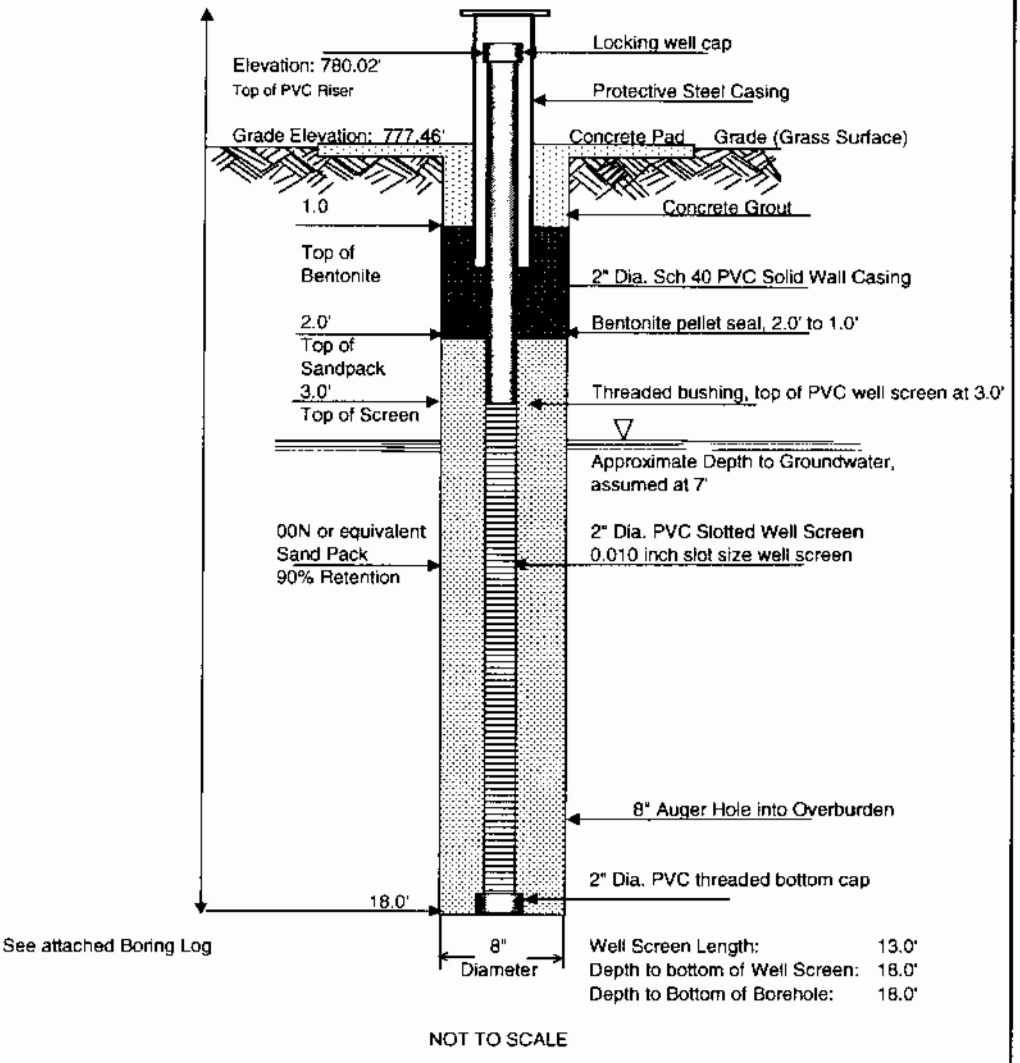
Seal: 2.0 to 1.0 feet | Weather Conditions: Sunny, 80 degrees in afternoon.

Protective Steel Casing installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	1	3			9	1	0-2'	soil	58%	Grass, then Fill: Damp F-C SAND	
			6	5						and Gravel, Brick fragments' 2.5'	ND
	3	3			9	2	2'-4'	soil	42%	Damp mottled Stiff SILT, little	
			6	6						fine Sand.	ND
5	5	5			9	3	4'-6'	soil	83%	V.Moist Loose F. SAND, Some Silt	
			4	2							ND
	1	3			8	4	6'-8'	soil	33%	Wet Brown Soft SILT, Some F. Sand 7'	
			5	7						Wet Brown M. Dense M-F GRAVEL,	ND
	8	3			9	5	8'-10'	soil	42%	Some Fine to Coarse Sand	
10			6	10						Same Gravel, Saturated, Loose	ND
	4	11			22	6	10'-12'	soil	50%	Same Gravel, Saturated, M. Dense	
			11	12							ND
	6	3			7	7	12'-14'	soil	83%	Same, becomes Gray, Loose	
			4	4							ND
15	6	14			34	8	14'-16'	soil	83%	Same Gray Gravel, some Sand, Dense	
			20	30						Same to 17.5' 17.5'	ND
	22	36			85	9	16'-18'	soil	75%	Damp Grey Hard SILT, Little Clay,	
			49	40						Trace Gravel. Laminated. TILL 18'	ND
20										Boring terminated at 18.0 feet	
										2" diameter monitoring well	
										installed in test boring.	
25										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N = The number of blows to advance a 2" Split Spoon 12" with a 140 lb. Hammer dropped 30" each blow.

MONITORING WELL B-10/MW-10



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-10**	**Date Installed:** 10-Jul-02

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-11/MW-11

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/17/02 | Finish Date: 07/17/02 | Top of Well: N/A | Boring No: B-11/MW-11

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: Inside the Building, by Nurse Clinic, Room 39

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 9 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, skid rig | Water Level (Post Drilling): Approx. 10 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 16 ft. to 4 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 16.0 ft to 3.0 ft

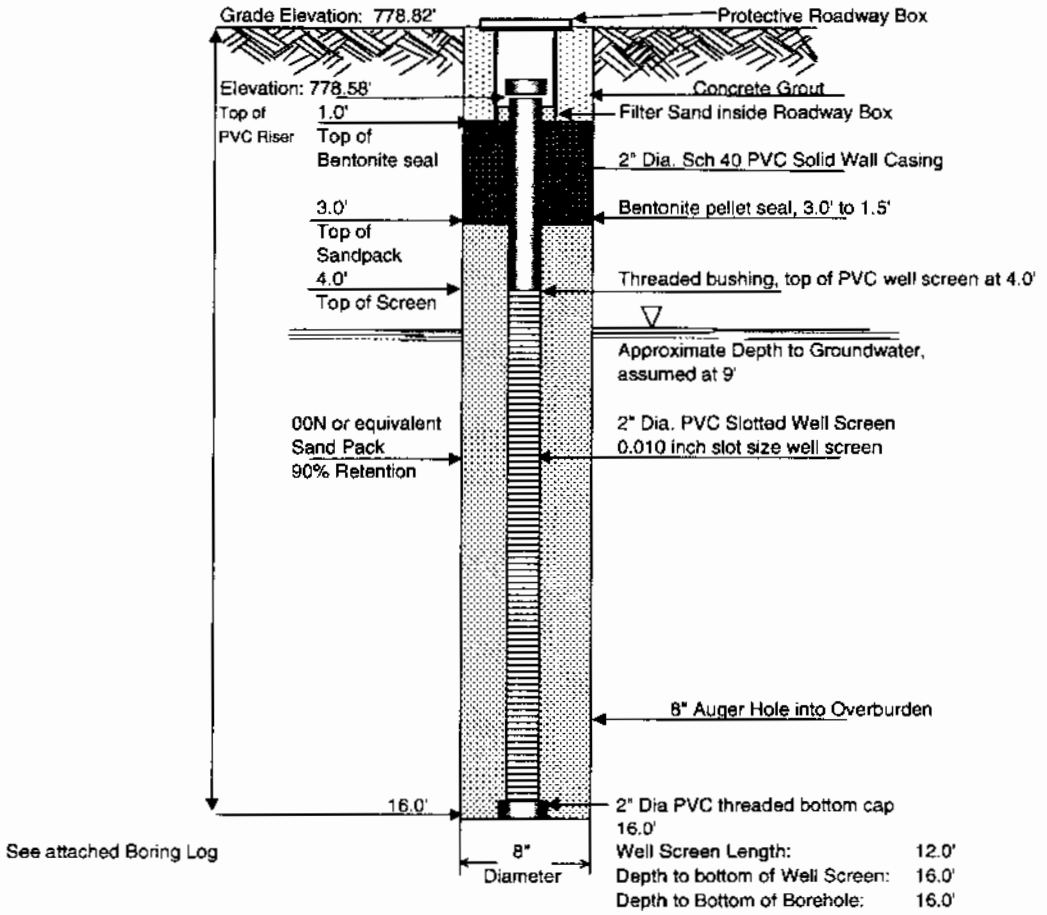
Seal: 3.0 to 1.0 feet | Weather Conditions: Not applicable: work was indoors.

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
		14			48	1	0-2'	soil	67%	Concrete floor to 0.5 feet	
			34	30						Damp Dark Br. F-C SAND and	ND
	not recorded				0	2	2'-4'	soil	58%	F-M Gravel, Some Silt. FILL 3.0'	74 ppm
										Damp Brown mottled SILT, some F. Sand	
5	2	5			9	3	4'-6'	soil	38%	Moist mottled Stiff SILT, some F. Sand	130 ppm
			4	4						V. Moist at 6'	
	5	5			10	4	6'-8'	soil	13%	Moist Br. Stiff SILT, some F-C Sand	75 ppm
			5	6						Same to 8' 8.0'	
	4	1			5	5	8'-10'	soil	17%	Saturated Br. Loose F-M GRAVEL,	60 ppm
10			4	11						some F-C Sand, trace silt	
	15	18			38	6	10'-12'	soil	50%	Same, becomes Dense G-M Gravel,	41 ppm
			20	20						some F-C Sand, Trace Silt	
	7	26			60	7	12'-14'	soil	79%	Same, becomes V. Dense	41 ppm
			34	27							
15	16	32			68	8	14'-16'	soil	63%	Same Saturated Gravel and Sand to 15'3"	32.8 ppm
			36	48						15'3"	
					0	9	16'-18'	soil	75%	Damp Gray Hard Silty CLAY, laminated,	
										trace pebbles. TILL 16'	33.5 ppm
20											
										Boring terminated at 16.0 feet	
										2" diameter monitoring well	
										installed in test boring.	
25										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-11/MW-11



NOT TO SCALE

Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-11**	**Date Installed:** 17-Jul-02

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-12/MW-12

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/16/02 | Finish Date: 07/16/02 | Top of Well: N/A | Boring No: B-12/MW-12

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: Inside the Building, by Cafeteria, Room 50

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 10.0 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, skid rig | Water Level (Post Drilling): Approx. 10 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 18 ft. to 4 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 18.0 ft to 3.0 ft

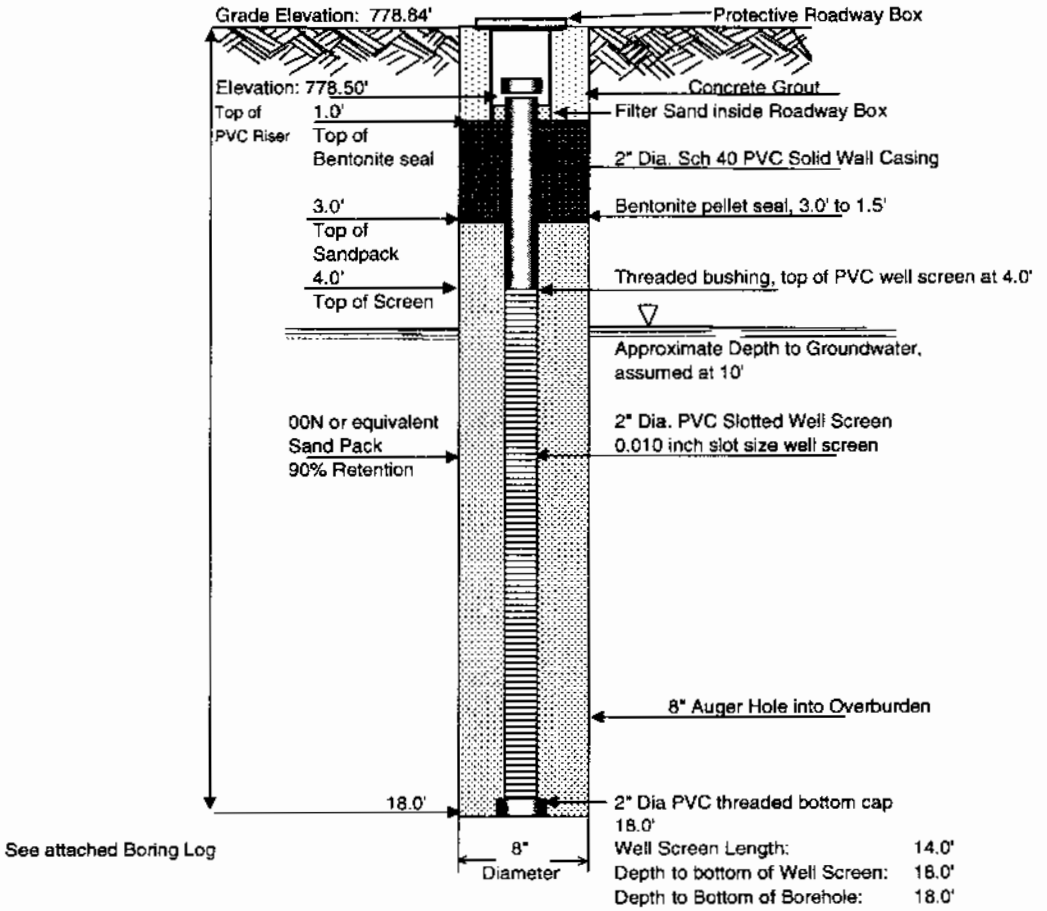
Seal: 3.0 to 1.0 feet | Weather Conditions: Not applicable: work was indoors.

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
		18			46	1	0-2'	soil	83%	Concrete floor to 0.5 feet	
			28	45						Damp Br. F-C SAND and F-M Gravel	7.0 ppm
	23	6			14	2	2'-4'	soil	58%	Trace silt. Reworked. Fill 3.0'	8.0 ppm
			8	6						Damp mottled Stiff SILT. Some F-C Sand	
5	8	12			20	3	4'-6'	soil	63%	Same, V. Stiff SILT, some F. Sand	6.5 ppm
			8	6							
	6	5			10	4	6'-8'	soil	25%	Same, Damp, Stiff SILT, some F. Sand	10.0 ppm
			5	4							
	not recorded				0	5	8'-10'	soil	83%	same Silt & F. Sand to 9.0' 9.0'	8.9 ppm
10										Wet Br. F-M GRAVEL and F-C Sand	
	9	17			32	6	10'-12'	soil	42%	Wet brown Dense F-M GRAVEL, some	16.0 ppm
			15	12						F-C Sand, Trace Silt.	
	8	12			24	7	12'-14'	soil	75%	Same, M. Dense, saturated	30.0 ppm
			12	8							
15	22	39			75	8	14'-16'	soil	63%	Same, M. Dense, saturated F-M GRAVEL	14.0 ppm
			36	34						some F-C Sand, Tr. Silt	
	21	14			64	9	16'-18'	soil	75%	Same to 17' 2" 17.17	9.0 ppm
			50	50/4"						Damp Gray Hard SILT and Clay,	
										Laminated TILL 18'	15 ppm
20										Boring terminated at 18.0 feet	
										2" diameter monitoring well	
										installed in test boring.	
25										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-12/MW-12



NOT TO SCALE

Elevation for Top of Well Casing (TOC) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-12**	**Date Installed:** 16-Jul-02

DRILLING LOG

BERGMANN associates

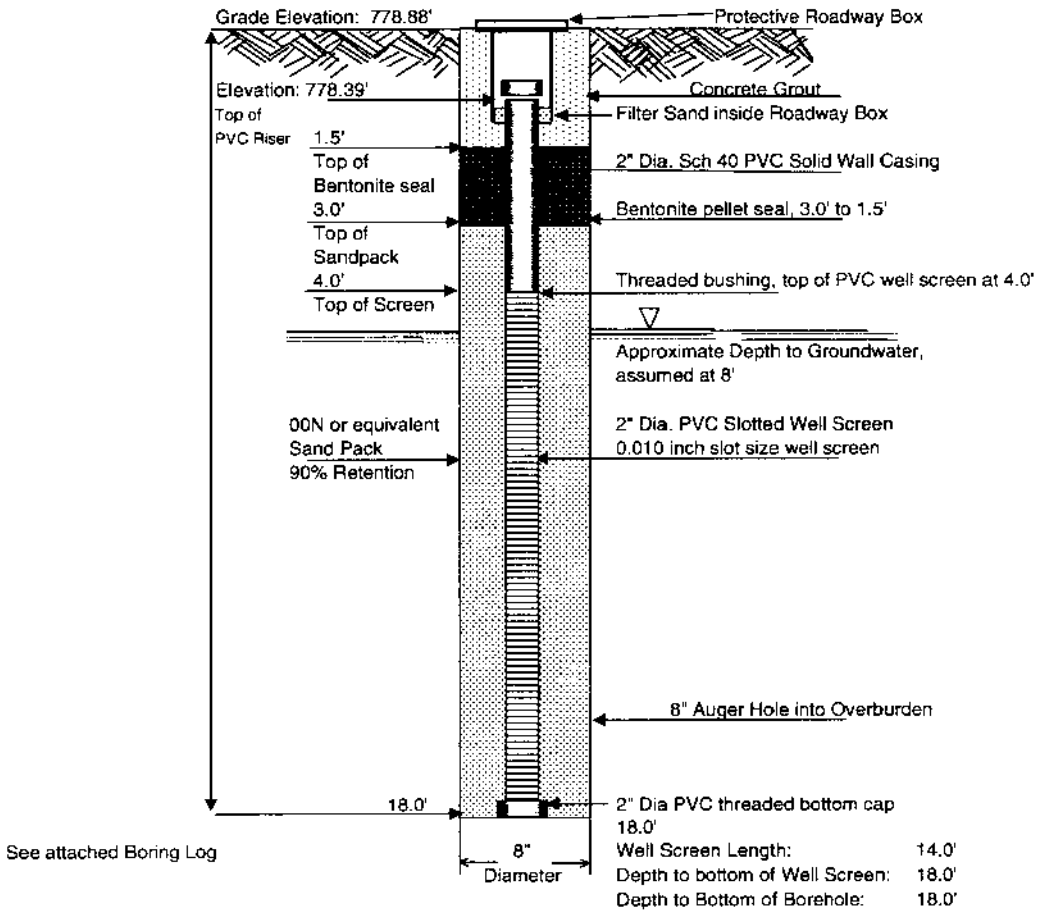
BORING/WELL NUMBER: Test Boring B-13/MW-13

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1
Start Date: 07/15/02 | Finish Date: 07/16/02 | Top of Well: N/A | Boring No: B-13/MW-13
Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: Inside the Building, in hallway by Room 58B
Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 8 feet
Drilling Method: 4-1/4 inch Hollow Stem Augers, skid rig | Water Level (Post Drilling): Approx. 14.5 feet below grade
Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.
Screened Interval: 18 ft. to 4 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 18.0 ft to 3.0 ft
Seal: 3.0 to 1.5 feet | Weather Conditions: Not applicable: work was indoors.
Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
		7			18	1	0-2'	soil	44%	Concrete floor to 0.5 feet	
			11	12						Damp brown F-C SAND	ND
	23	11			18	2	2'-4'	soil	25%	and F-G Gravel, Tr. Silt	
			7	8						Re-Worked soil, Fill	ND
5	10	8			17	3	4'-6'	soil	63%	Fill to 4.5' 4.5'	
			9	8						Damp Brown V. Still SILT and F-Sand,	ND
	12	18			29	4	6'-8'	soil	54%	Faint partings/laminae to 6' 6.0'	
			11	7						Damp dark Br. M Dense F-C SAND	ND
	14	6			20	5	8'-10'	soil	83%	and F-M Gravel, Tr. Silt. Wet at 8'	
10			14	9						Wet Gr. Br. M. Dense F-M GRAVEL	ND
	3	5			33	6	10'-12'	soil	25%	some F-C Sand, Tr. Silt	
			28	12						Same, Wet, becomes Dense	9.0 ppm
	20	17			49	7	12'-14'	soil	63%	Same, saturated, Dense	
			32	20							5.0 ppm
15	48	33			53	8	14'-16'	soil	25%	Same, becomes V. Dense	
			20	12							ND
	10	6			16	9	16'-18'	soil	50%	Same, M. Dense to 17'5" 17'5	
			10	30						Damp Gray Hard CLAY and Silt	ND
										Trace gravel-pebbles. Till 18'	
20										Boring terminated at 18.0 feet	
										2" diameter monitoring well	
										installed in test boring.	
										All cuttings placed in drums.	
25											
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-13/MW-13



NOT TO SCALE

Elevation for Top of Well Casing (TOC) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-13**	**Date Installed:** **16-Jul-02**

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-14/MW-14

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/18/02 | Finish Date: 07/18/02 | Top of Well: N/A | Boring No: B-14/MW-14

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: Inside loading dock area, by east wall.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 11 feet

Drilling Method: 4-1/4 inch Hollow Stem Augers, skid rig | Water Level (Post Drilling): Approx. feet 13 below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

Screened Interval: 19 ft. to 5 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 19.0 ft to 4.0 ft

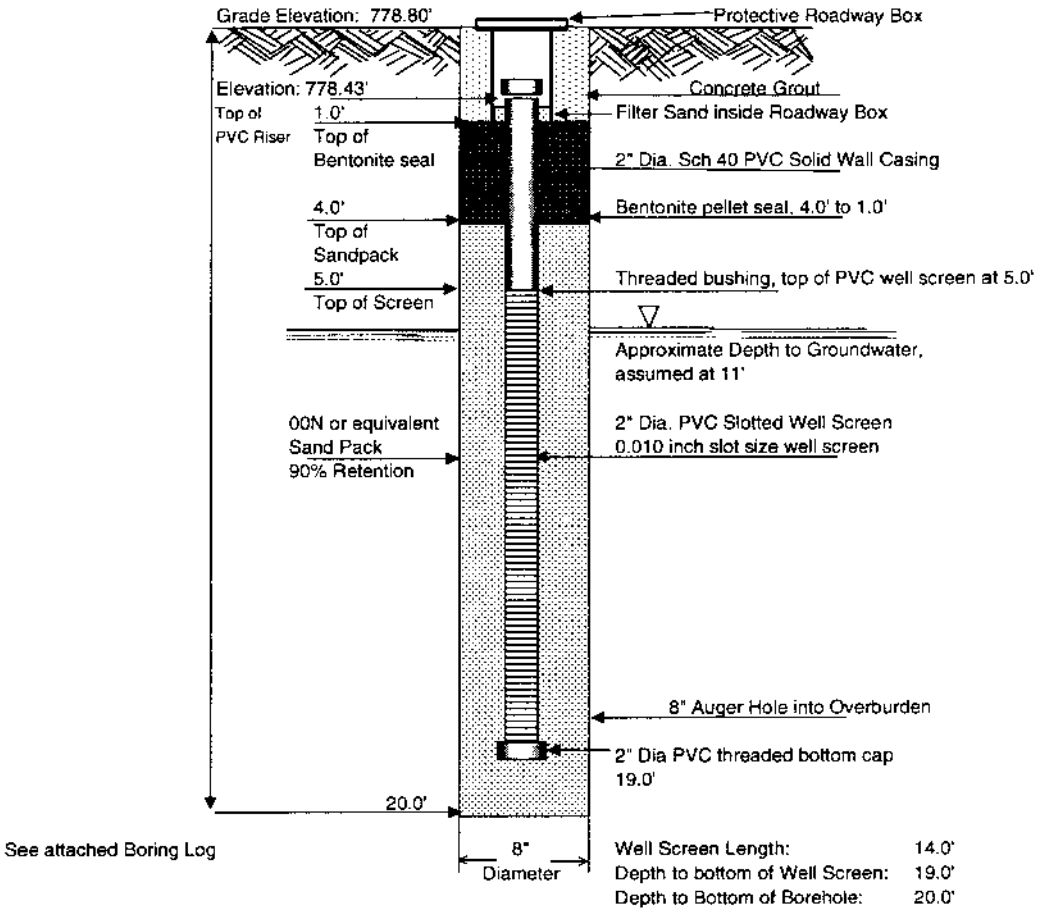
Seal: 4.0 feet to 1.0 feet | Weather Conditions: Not applicable: work was indoors.

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
		6			17	1	0-2'	soil	78%	Concrete floor to 0.5 feet	
			11	20						Damp Brown F-C Sand and F-C Gravel	16 ppm
	14	9			15	2	2'-4'	soil	42%	Fill to 3'6" 3'6"	120 ppm
			6	20						Damp DarkBrown SILT, some F. Sand	
5	5	3			8	3	4'-6'	soil	75%	Damp mottled M. Stiff SILT, some F-Sand	51 ppm
			5	5							
	6	5			11	4	6'-8'	soil	58%	Same Silt, inter-layered wth F-M Sand	78.5 ppm
			6	3							
	WH	WH			1	5	8'-10'	soil	50%	Damp Br. V. Soft SILT, some F. Sand	42 ppm
10			1	1						Wet Brown F SAND, Some Silt	
	1	2			8	6	10'-12'	soil	58%	same to 11' 11'	143 ppm
			6	7						Wet F-M GRAVEL some F-C Sand	
	14	15			33	7	12'-14'	soil	54%	Same, saturated, with a trace of Silt	60 ppm
			18	12							
15	3	8			14	8	14'-16'	soil	50%	Same saturated Gravel, M. Dense	53 ppm
			6	5							
	10	18			66	9	16'-18'	soil	91%	Same to 17'	43 ppm
			48	50/4"						Wet Grey M. Dense F-M GRAVEL	
	8	29			69	10	18'-20'	soil	100%	Some F-C Sand 18'6"	
20			40	50/2"						Damp Gray Hard SILT and Clay, Trace Pebbles TILL 20'	53 ppm
										Boring terminated at 20.0 feet	
										2" diameter monitoring well installed in test boring.	
25											
										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-14/MW-14



NOT TO SCALE

Elevation for Top of Well Casing (TOC) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-14**	**Date Installed:** **18-Jul-02**

DRILLING LOG

BERGMANN associates

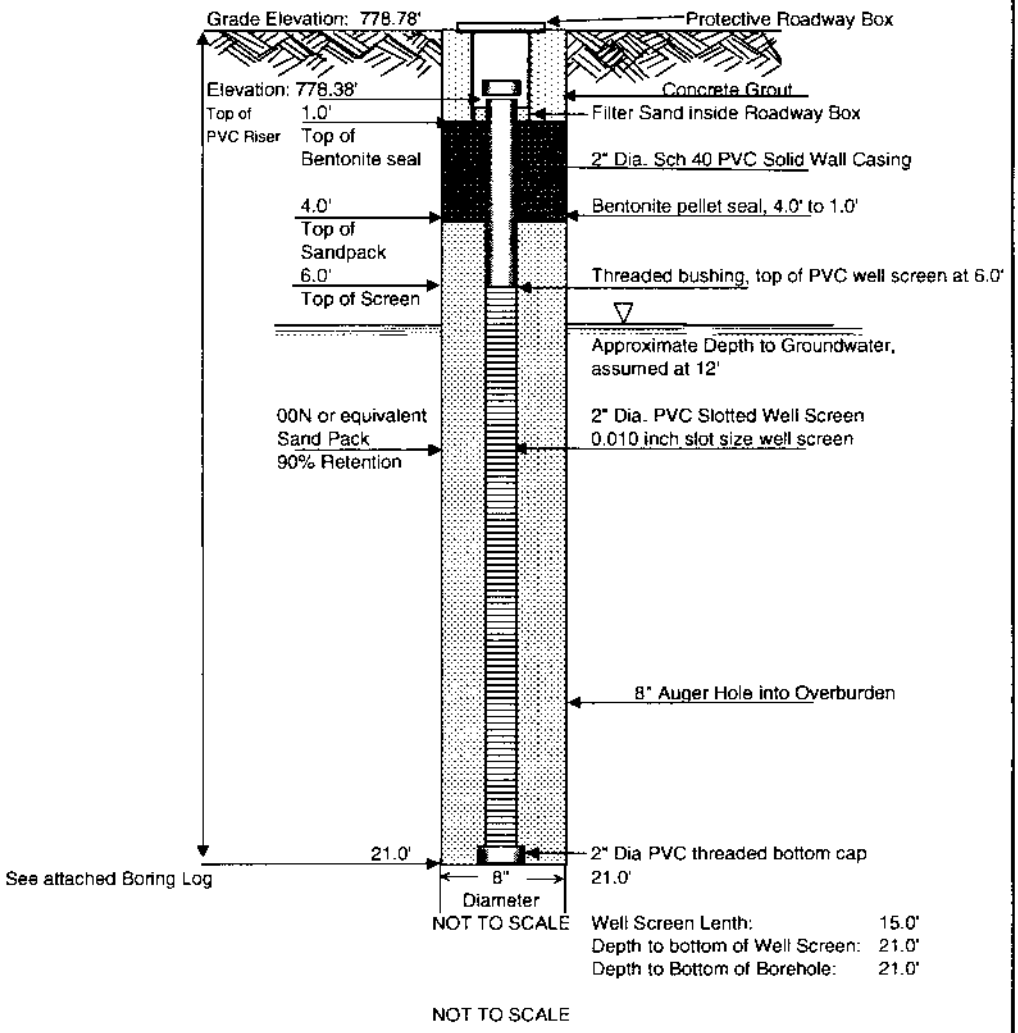
BORING/WELL NUMBER: Test Boring B-15/MW-15

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1
Start Date: 07/19/02 | Finish Date: 07/19/02 | Top of Well: N/A | Boring No: B-15/MW-15
Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: Inside building, in north cafeteria, room 124
Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 12 feet
Drilling Method: 4-1/4 inch Hollow Stem Augers, skid rig | Water Level (Post Drilling): Approx. 15 feet below grade
Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.
Screened Interval: 21 ft. to 6 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 21.0 ft to 4.0 ft
Seal: 4.0 feet to 1.0 feet | Weather Conditions: Not applicable: work was indoors.
Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
		7			21	1	0-2'	soil	72%	Concrete floor to 0.5 feet	
			14	30						Damp F-C SAND and F-C Gravel	102 ppm
	41	12			17	2	2'-4'	soil	58%	Fill to 3.5' 3'6"	161 ppm
			5	4						Mottled Soft SILT, Some F. Sand	
5	1	1			4	3	4'-6'	soil	75%	Damp mottled Soft SILT, some F-Sand	99 ppm
			3	5							
	6	8			14	4	6'-8'	soil	67%	Moist mottled stiff SILT, Some F. Sand	96.6 ppm
			6	7						partings/faint laminations evident	
	3	2			9	5	8'-10'	soil	67%	Same to 9'6" 9'6"	77 ppm
10			7	8						Damp Br. F-M GRAVEL, some	
	7	10			17	6	10'-12'	soil	50%	F-C Sand, Tr. Silt	83 ppm
			7	10						same, becomes M. Dense, wet at 11'10"	
	7	7			9	7	12'-14'	soil	33%	Same, saturated	84 pm
			2	1							
15	1	1			6	8	14'-16'	soil	58%	Same, saturated, becomes Loose	84 ppm
			5	9							
	25	34			68	9	16'-18'	soil	91%	Same, saturated, becomes V. Dense	70.2 ppm
			34	42							
	5	15			40	10	18'-20'	soil	50%	Same, becomes Dense	75.4 ppm
20			25	35							
	15	50/4"			50+	11	20-22'	soil		Same to 20.5' 20.5'	not recorded
										Gray hard CLAY and Silt, TILL 21'	
										Boring terminated at 21.0 feet	
25										2" diameter monitoring well	
										installed in test boring.	
										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
30										used to screen soil samples for VOCs	

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL B-15/MW-15



NOT TO SCALE

Elevation for Top of Well Casing (TOC) and Grade Elevation are in feet, relative to Mean Sea Level

BERGMANN associates	**GOWANDA DAY HABILITATION CENTER** **4 INDUSTRIAL PLACE, GOWANDA, NEW YORK** **MONITORING WELL CONSTRUCTION DETAIL** **MW-15**	**Date Installed:** 19-Jul-02

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-16

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1
Start Date: 07/08/02 | Finish Date: 07/08/02 | Top of Well: N/A | Boring No: B-16
Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In former ballfield, southwest corner of property
Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 7 feet.
Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 8.5 feet below grade
Remarks: Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed.
Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.
Seal: Backfilled boring with bentonite grout | Weather Conditions: Sunny and clear, 80 degrees F.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	2	2			4	1	0-2'	soil	50%	Grass surface, then Brown Soft	
			2	2						SILT and F. Sand. Roots to 4"	ND
	2	3			6	2	2'-4'	soil	75%	Same, becomes M. Stiff	
			3	4						Same, becomes v. moist to Wet	ND
5	2	3			6	3	4'-6'	soil	92%		
			3	2						Same	ND
	2	1			2	4	6'-8'	soil	92%		
			1	1						Saturated at 7' ~WT, becomes Soft	ND
	1	WR			2	5	8'-10'	soil	100%		
10			1	WR						Same, saturated, V. Soft	ND
	WH	WH			1	6	10'-12'	soil	13%		
			WH	1						Same to 12' 12'	ND
	5	6			11	7	12'-14'	soil	25%	Wet Br. M. Dense F-M GRAVEL,	
			5	5						Some F-C Sand	ND
15	5	10			24	8	14'-16'	soil	75%	Same, becomes V. Dense	
			14	11							ND
	10	19			39	9	16'-18'	soil	83%	Same	
			20	16						Grey Clay and Silt at 18' 18'	ND
20										Boring terminated at 18.0 feet.	
										Boring backfilled with Betonite pellets, hydrated.	
										All cuttings placed in drums.	
25										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-17

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/09/02 | Finish Date: 07/09/02 | Top of Well: N/A | Boring No: B-17

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In former ballfield, southwest corner of property

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 8.0 feet.

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. feet below grade

Remarks: Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed.

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: Hazy & overcast, then heavy rain and lightning in late morning/afternoon

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	3	2			4	1	0-2'	soil	42%	Grass surface, then Damp Brown	
			2	2						Soft SILT, mottled brown & gray	ND
	4	3			8	2	2'-4'	soil	83%	Same, becomes M. Stiff	
			5	7						Silt is interlayered with M-F Sand	ND
5	2	4			12	3	4'-6'	soil	50%	V. Moist Br. M. Dense F. SAND,	
			8	11						Some Silt. Gravel at 6' 6'	ND
	8	4			8	4	6'-8'	soil	42%	Wet Loose F-M GRAVEL and	
			4	4						Fine to Coarse Sand	ND
	1	1			2	5	8'-10'	soil	8%	Same Gravel and Sand, Saturated	
10			WR	WR							ND
	5	5			12	6	10'-12'	soil	58%	Wet Br. SILT & F. Sand to 11'	
			7	8						Saturated M. Dense GRAVEL & Sand	ND
	8	11			19	7	12'-14'	soil	67%	Same saturated brown M. Dense	
			8	9						GRAVEL, some F-C Sand, Trace silt	ND
15	10	14			30	8	14'-16'	soil	75%	Same to 16'	
			16	16						at 16' Begin Gray CLAY and Silt 16'	ND
20										Boring terminated at 16.0 feet. Borng backfilled with Bentonite pellets, hydrated.	
25										All cuttings placed in drums. Minirae 2000 PID with 10.6 ev lamp used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-18

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/10/02 | Finish Date: 07/10/02 | Top of Well: N/A | Boring No: B-18

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In parking lot south of the building.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 5 feet.

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. feet 7' 3" below grade

Remarks: Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed.

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: Sunny, 70 degrees F in the morning.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	19	8			11	1	0-2'	soil	25%	Asphalt surface	
			3	2						Fine Gravel and F-C Sand, FILL 2.0'	ND
	2	2			6	2	2'-4'	soil	92%	Damp Gray M. Stiff SILT, mottled	
			4	2						Interlayered with Fine SAND and Silt	ND
5	2	2			3	3	4'-6'	soil	83%	V. Moist Brown V. Loose F SAND,	
			1	1						Some Silt. WET at 5.0'	ND
	1	1			2	4	6'-8'	soil	42%	Wet Soft SILT and F. Sand to 7.5' 7.5'	
			1	4						Wet Br. M. Dense F-M GRAVEL,	ND
	6	9			15	5	8'-10'	soil	42%	Some F-C Sand, Trace Silt	
10			6	6						Same Wet Gravel, M. Dense	ND
	7	6			14	6	10'-12'	soil	67%	Same, Saturated, M. Dense	
			8	6							ND
	5	1			4	7	12'-14'	soil	58%	Same, becomes V. Loose Gravel	
			3	4							ND
15	3	15			41	8	14'-16'	soil	8%	Same, but poor recovery	
			26	49						Gray Silty CLAY at 16' 16'	ND
20											
25											
30											

Boring terminated at 16.0 feet
Boring backfilled with Bentonite pellets, hydrated.
All cuttings placed in drums.

Minirae 2000 PID with 10.6 ev lamp used to screen soil samples for VOCs

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-19

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/24/02 | Finish Date: 07/24/02 | Top of Well: N/A | Boring No: B-19

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In asphalt parking lot, southeast corner of property.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 8 feet.

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 8.8 feet

Remarks: Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed.

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: Partly cloudy, 80 degrees F in afternoon

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	24	16			30	1	0-2'	soil	50%	Asphalt Surface 0.5'	
			14	7						Fill, Damp F. GRAVEL & Sand 2'6"	ND
	3	2			6	2	2'-4'	soil	75%	Damp mottled M. Stiff SILT,	
			4	4						Some F. Sand	ND
5	4	5			9	3	4'-6'	soil	67%	Same mottled Stiff SILT some F. Sand	
			4	3						V. Moist at 6.0'	ND
	4	3			5	4	6'-8'	soil	58%		
			2	2						Same to 7'10", m. Stiff then WET 7'10"	ND
	3	22			42	5	8'-10'	soil	50%	Wet Gr-Br Dense F-M GRAVEL,	
10			20	12						Some F-C Sand, Trace Silt	ND
	14	6			18	6	10'-12'	soil	75%	Same, M. Dense, saturated	
			12	12							ND
	4	12			24	7	12'-14'	soil	83%	Same, M. Dense, saturated	
			12	12							ND
15	2	19			42	8	14'-16'	soil	92%	Same, becomes Dense	
			23	20						Becomes grey at 15'	ND
	18	28			52	9	16'-18'	soil	83%	Same to 17'6", then Wet Gray	
			24	19						M-C SAND, Trace Silt to 18'6" 18'6"	ND
	24	11			27	19	18'-20'	soil	92%	Damp Gray V. Stiff CLAY and Silt.	
20			16	27						Laminated. TILL 20.0'	ND
										Boring terminated at 20.0 feet	
										Boring backfilled with Bentonite	
25										pellets, hydrated.	
										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
30										used to screen soil samples for VOCs	

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-20

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1
Start Date: 07/26/02 | Finish Date: 07/26/02 | Top of Well: N/A | Boring No: B-20
Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: Asphalt parking lot, northeast corner of property
Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 12 feet.
Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Not encountered: augers dry.
Remarks: Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed.
Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.
Seal: Backfilled boring with bentonite grout | Weather Conditions: Warm, humid in afternoon, 78 degrees F

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION		Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery			
	25	7			15	1	0-2'	soil	58%	Asphalt Surface	0.5'	
			8	8						Gravel and F- C Sand Fill to 2.0'	2.0'	2.5 ppm
	6	5			10	2	2'-4'	soil	50%	Damp Br. Mottled Stiff SILT,		
			5	5						Some F. Sand. Faint partings		6.0 ppm
5	3	3			5	3	4'-6'	soil	4%	Same moist SILT, M. Stiff		
			2	3								9.5 ppm
	4	11			22	4	6'-8'	soil	50%	Same, Stiff, to 7', then Gravel	7.0'	
			11	11						Damp Br. F-M M. Dense GRAVEL,		6.5 ppm
	8	14			24	5	8'-10'	soil	67%	some F-C Silt, Tr. Silt		
10			10	14						Same, M. Dense		7.0 ppm
	7	12			21	6	10'-12'	soil	58%	Same, M. Dense,		
			9	10						becomes V. Moist to wet at 12'.		11.5 ppm
	12	16			32	7	12'-14'	soil	67%	Same, Dense, becomes Wet at 12'		
			16	18						becomes gray at 13'		14.7 ppm
15	6	12			27	8	14'-16'	soil	83%	Same to 15', then Clay	15.0'	
			15	31						Damp Gray Hard CLAY and Silt		9.3 ppm
										Trace Pebbles TILL	16.0'	
										Boring terminated at 16.0 feet		
20										Boring backfilled with Bentonite		
										pellets, hydrated		
										All cuttings placed in drums.		
										Minirae 2000 PID with 10.6 ev lamp		
25										used to screen soil samples for VOCs		
30												

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-21

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/09/02 | Finish Date: 07/09/02 | Top of Well: N/A | Boring No: B-21

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In gravel in front of the west loading dock

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 8 feet.

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 9.9 feet

Remarks: Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed.

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: Partly cloudy, 65 degrees F in morning warmer in the afternoon

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	3	3			4	1	0-2'	soil	25%	Gravel surface	1.7 ppm
			1	2						Damp brown Loose F. Gravel	
	2	1			3	2	2'-4'	soil	13%	and F-C Sand, Trace Silt. Fill	2.5 ppm
			2	2						same fill	
5	1	2			6	3	4'-6'	soil	54%	same fill	2.0 ppm
			4	10						Same fill to 7'10" 7'10"	
	6	5			10	4	6'-8'	soil	42%	Wet F-M GRAVEL, Some F-C Sand,	ND
			5	7						Trace Silt	
	9	19			47	5	8'-10'	soil	63%	Same, Saturated Dense F-M GRAVEL,	ND
10			28	18						some F-C Sand, Trace Silt	
	27	14			42	6	10'-12'	soil	83%	Same, Saturated, Dense	ND
			28	29							
	9	8			17	7	12'-14'	soil	67%	Same, becomes M. Dense	ND
			9	10							
15	28	25			53	8	14'-16'	soil	92%	Same, becomes V. Dense	ND
			28	17							
	11	14			38	9	16'-18'	soil	92%	Same to 16'6" 16'6"	ND
			24	25						Damp Gray Hard CLAY and Silt. Till 18.0'	
20										Boring terminated at 18.0 feet	
										Boring backfilled with Bentonite pellets, hydrated.	
										All cuttings placed in drums.	
25										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-22

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/09/02 | Finish Date: 07/09/02 | Top of Well: N/A | Boring No: B-22

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: South side of shed, near east property line.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 3.5 feet.

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx feet 4.5 below grade

Remarks: Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed.

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: Light rain/humid in the afternoon 80 degrees F.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	1	2			5	1	0-2'	soil	75%	Grass surface, then Damp Brown	
			3	4						M. Stiff SILT, mottled with roots	ND
	3	3			6	2	2'-4'	soil	67%	Same M. Stiff SILT, mottled	
			3	2						Brown and Gray in color 4'	ND
5	2	1			2	3	4'-6'	soil	100%	Wet Brown V. Loose F. SAND,	
			1	WR						Trace Silt	ND
	WH	2			6	4	6'-8'	soil	63%	Wet, becomes Loose and Gray 7'6"	
			4	5						Wet Gray M. Dense F-M GRAVEL	ND
	4	7			19	5	8'-10'	soil	67%	Some F-C Sand, Tr. Silt	
10			12	12						Same M. Stiff SILT, mottled	ND
	7	7			15	6	10'-12'	soil	33%	Same wet M. Dense M-F GRAVEL	
			8	9						Some F-C Sand, Tr. Silt 13.'5	ND
	7	9				7	12'-14'	soil	100%	Damp Gray V. Stiff CLAY and	
			9	13	18					Silt, Little Gravel, laminated TILL 14'	ND
15											
										Boring terminated at 14.0 feet	ND
										Boring backfilled with Bentonite	
										pellets, hydrated.	
										All cuttings placed in drums.	
20											
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
25											
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-23

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/25/02 | Finish Date: 07/25/02 | Top of Well: N/A | Boring No: B-23

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: Asphalt parking lot, south property line, by garden

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 9'10" feet.

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 9.0 feet

Remarks: Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed.

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: Partly cloudy, 80 degrees F in afternoon

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	38	14			28	1	0-2'	soil	67%	Asphalt Surface 0.5'	
			14	7						Gravel and F-C Sand. Fill	1.7 ppm
	3	3			5	2	2'-4'	soil	0%	No sample recovery: Fill to ~3' 3.0'	
			2	3						Becomes V. Moist at 4.0'	
5	3	3			6	3	4'-6'	soil	67%	Damp mottled M. Stiff SILT, Some	
			3	3						F-C Sand, Trace Silt	7.8 ppm
	WH	WH			1	4	6'-8'	soil	25%	Same, V. Soft, V. Moist	
			WH	WH						Gravel at 8' 8.0'	4.4 ppm
	WH	1			3	5	8'-10'	soil	33%	V. Moist Br-Gr V.Loose F-M GRAVEL,	
10			2	9						Some F-C Sand, Tr. Silt. Wet 9'10"	4.4 ppm
	5	9			21	6	10'-12'	soil	50%	Same, saturated, M. Dense	
			12	14							0.5 ppm
	14	15			27	7	12'-14'	soil	67%	Same, saturated, M. Dense	
			12	9							ND
15	7	17			29	8	14'-16'	soil	83%	Same, saturated, M. Dense, gray	
			12	14						15'10	1.7 ppm
	17	25			25	9	16'-17'	soil	100%	Damp Gray Hard CLAY and Silt	
			not sampled							Trace Pebbles, Laminated TILL 18'	0.5 ppm
20											
										Boring terminated at 18.0 feet	
										Boring backfilled with Bentonite pellets, hydrated	
										All cuttings placed in drums.	
25										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-24

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/31/02 | Finish Date: 07/31/02 | Top of Well: N/A | Boring No: B-24

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: Grass strip north of building , between MW-7 & MW-6

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 12 feet.

Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig | Water Level (Post Drilling): Approx. 11.0 feet

Remarks: Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed.

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: Warm, humid in afternoon, 80 degrees F

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	1	4			11	1	0-2'	soil	58%	Grass surface	
			7	5						Gravel and Sand Fill to 4.0'	0.4 ppm
	3	14			20	2	2'-4'	soil	58%	Re-worked native SILT and F-M Sand	
			6	4						Begin native soil at 4.0' 4.0'	0.3 ppm
5	2	3			7	3	4'-6'	soil	33%	Damp Br. Mottled M. Stiff SILT,	
			4	5						some F-C Sand Roots encountered	ND
	4	6			11	4	6'-8'	soil	58%	Same Silt, becomes Stiff	
			5	6							ND
	3	5			12	5	8'-10'	soil	100%	Same Stiff Silt, some F-C Sand	
10			7	8						Same to 9'8", then Gravel 9'8"	6.6 ppm
	5	7			12	6	10'-12'	soil	58%	Damp Br. F-M M. Dense GRAVEL,	
			5	7						some F-C Sand, Tr Silt	4.3 ppm
	5	5			12	7	12'-14'	soil	38%	Same, becomes saturated at 12' WT~12'	
			7	9							6.5 ppm
15	10	12			38	8	14'-16'	soil	75%	Becomes Dense, Same to 14'6",	
			26	40						Gray Gravel. Saturated	10.6 ppm
	35	33			73	9	16'-18'	soil	100%		
			40	50						All same Gray wet gravel, V. Dense	9.0 ppm
	10	49			99	10	18'-20'	soil	31%		
20			50/4"							Same to 22.25', then gray clay	18.4 ppm
	26	31			68	11	20'-22'	soil	100%	22.25'	
			37	49						Moist Gray Hard CLAY, some Silt. TILL	5.3 ppm
										22.50'	
25										Boring terminated at 22.5 feet	
										pellets, hydrated	
										All cuttings placed in drums.	
30										Minirae 2000 PID with 10.6 ev lamp used to screen soil samples for VOCs	

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-25

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/23/02 | Finish Date: 07/23/02 | Top of Well: N/A | Boring No: B-25

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In the building, at hallway intersection by Room 26

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 9 feet

Drilling Method: Portable Tripod, Bosch Electric Hammer, | Water Level (Post Drilling): Not determined using Marcro Core.

Remarks: 4 foot Macro Core Sampling Barrel used to collect continuous soil samples. Boring backfilled upon completion

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: not determined using Marcro Core. Work was inside the building.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
					ND	1	0-4'	soil	100%	Concrete floor to 0.5 feet	
										F-C SAND and F. Gravel Fill to 2.0'	ND
					ND					Damp mottled Br.-Gray SILT,	
									100%	little F. Sand	ND
5					ND	2	4'-8'	soil		Same Damp mottled SILT, little F. Sand	
										Same	ND
					ND						
										Same at 8.0'	ND at 9.0'
					ND	3	8'-12'	soil	100%	Same, becomes saturated at 9.0' 9.0'	ND at 9.0'
10										Change to Wet Brown F-M GRAVEL,	
					ND					some F-C Sand, Trace Silt	ND
					ND	4	12'-16'	soil	100%	Same, Saturated, becomes Gray	ND
15										Same Gravel and sand, trace Silt 16'	ND
										Refusal at 16. 0 feet	
										Boring terminated at 16.0 feet	
										Boring backfilled with Bentonite	
20										pellets, hydrated.	
										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
25										used to screen soil samples for VOCs	
30											

No blow counts recorded Soil samples collected using the 4 foot long Macro Core ® barrel and acetate liner.

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-26

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/23/02 | Finish Date: 07/23/02 | Top of Well: N/A | Boring No: B-26

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In the building, in hallway south of cafeteria Room 124

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 11 feet

Drilling Method: Portable Tripod, Bosch Electric Hammer, | Water Level (Post Drilling): Not determined using Marcro Core.

Remarks: 4 foot Macro Core Sampling Barrel used to collect continuous soil samples. Boring backfilled upon completion

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: not determined using Marcro Core. Work was inside the building.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
					ND	1	0-4'	soil	100%	Concrete floor to 0.5 feet	
										F-C SAND and F. Gravel Fill	15.5 ppm
					ND					Fill to 3.0' 3.0'	18.9 ppm
									100%	Damp mottled Orange Br. SILT,	3.7 ppm
5					ND	2	4'-8'	soil		little F. Sand. Partings observed	
										Same mottled SILT with F. Sand	8.1 ppm
					ND					Same, moist at 7'	
										Same	5.3 ppm
					ND	3	8'-12'	soil	100%		5.3 ppm
10										Same to 10.0' 10.0'	
					ND					Dark Br. F - M GRAVEL, some Silt	3.9 ppm
										Becomes Wet at 11'	3.7 ppb
					ND	4	12'-16'	soil	100%	F-M GRAVEL, Some F-C Sand, Tr Si.	2.0 ppm
										Saturated 12' to 16'	
15										Gray F-M SAND, little Silt 16'	2.0 ppm
										Refusal at 16. 0 feet	
										Boring terminated at 16.0 feet	
										Boring backfilled with Bentonite	
										pellets, hydrated.	
20										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
25											
30											

No blow counts recorded Soil samples collected using the 4 foot long Macro Core ® barrel and acetate liner.

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-27

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1
Start Date: 07/26/02 | Finish Date: 07/26/02 | Top of Well: N/A | Boring No: B-27
Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: In the building, machine shop room 33, by hallway
Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 12 feet
Drilling Method: Portable Tripod, Bosch Electric Hammer, | Water Level (Post Drilling): Not determined using Marcro Core.
Remarks: 4 foot Macro Core Sampling Barrel used to collect continuous soil samples. Boring backfilled upon completion
Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.
Seal: Backfilled boring with bentonite grout | Weather Conditions: Light rain, 68 degrees F in morning.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
					ND	1	0-4'	soil	100%	Concrete floor to 0.5 feet. Fill to 8"	
										F-C SAND and F. Gravel Fill to 0' 8"'	2.0 ppm
					ND					Damp mottled Br.-Gray SILT,	
									100%	little F. Sand. Root/tree fragment	0.8 ppm
5					ND	2	4'-8'	soil		Same Damp Brown SILT, little F. Sand	
										Same, mottled brown & gray	0.6 ppm
					ND						
										becomes v. moist at 8'	2.8 ppm
					ND	3	8'-10'	soil	100%	(short length sample)	
10										Same. V. Moist at 10'	1.0 ppm
					ND	4	10'-14'	soil	100%		
										Same to 12.0', then wet Gravel 12'	3.4 ppm
					ND					Wet Br. F-M GRAVEL, some	
						5	14-18'	soil	100%	F-C Sand, Tr. Silt	3.4 ppm
15										same, saturated gravel	
											1.5 ppm
										same, saturated gravel 17.0'	3.0 ppm
										Macro Core refusal at 17'	
										Boring terminated at 17.0 feet	
20										Boring backfilled with Bentonite	
										pellets, hydrated.	
										All cuttings placed in drums.	
25										Minirae 2000 PID with 10.6 ev lamp used to screen soil samples for VOCs	
30											

No blow counts recorded Soil samples collected using the 4 foot long Macro Core ® barrel and acetate liner.

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Test Boring B-28

PROJECT: Gowanda Day Habilitation Center | Project No: 5596.03 | Page No. 1 of 1

Start Date: 07/23/02 | Finish Date: 07/23/02 | Top of Well: N/A | Boring No: B-28

Driller: Steven Laramie, Geologic NY/NorthStar | Boring Location: Inside building, north hallway, northeast corner.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Approximately 11 feet

Drilling Method: Portable Tripod, Bosch Electric Hammer, | Water Level (Post Drilling): Not determined using Marcro Core.

Remarks: 4 foot Macro Core Sampling Barrel used to collect continuous soil samples. Boring backfilled upon completion

Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.

Seal: Backfilled boring with bentonite grout | Weather Conditions: not determined using Marcro Core. Work was inside the building.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
					ND	1	0-4'	soil	90%	Concrete floor to 0.5 feet	
										Damp Brown F-C SAND and F. Gravel	15 ppm
					ND					Fill to 3.0' 3.0'	18.2 ppm
									100%	Damp Br. mottled SILT, some F. Sand	16.5 ppm
5					ND	2	4'-8'	soil			15.4 ppm
										Same mottled SILT with F. Sand	15.4 ppm
					ND						
											15.4 ppm
					ND	3	8'-12'	soil	100%	Same to 9.0' 9.0'	
10										Dark Br. F - M GRAVEL, some Silt	15.3 ppm
					ND						
										Becomes Wet at 11' 13.0'	
					ND	4	12'-14'	soil	100%	Damp Gray CLAY and Silt, trace	3.4 ppm
										Gravel. TILL 13.5'	
15										Refusal at 13.5 feet	
										Boring terminated at 13.5 feet	
										Boring backfilled with Bentonite	
										pellets, hydrated.	
20										All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
										used to screen soil samples for VOCs	
25											
30											

No blow counts recorded Soil samples collected using the 4 foot long Macro Core ® barrel and acetate liner.

APPENDIX 2

APPENDIX 2
Monitoring Well Depth Gauging and Development Forms

SUMMARY OF GROUNDWATER ELEVATIONS AND FIELD MEASUREMENTS, AUGUST 28, 2002

Gowanda Day Habilitation Center
4 Industrial Place, Gowanda, New York
VCA # V-00463-9

	Sampling Date: Wednesday, August 28, 2002									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
Casing Elevation*	778.23	778.08	778.38	778.43	778.61	781.10	780.94	781.33	782.61	780.02
Depth to Groundwater (btoc)	6.24	5.96	6.42	7.95	10.79	13.33	13.23	9.36	9.25	7.09
Groundwater Elevation	771.99	772.12	771.96	770.48	767.82	767.77	767.71	771.97	773.36	772.93
Well Diameter	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
Product Thickness	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Well Depth (btoc)	16.02	17.15	16.30	15.78	13.95	22.88	21.80	17.65	20.96	19.42
Bottom of Well Elevation	762.21	760.93	762.08	762.65	764.66	758.22	759.14	763.68	761.65	760.60
Thickness of Water Column	9.78	11.19	9.88	7.83	3.16	9.55	8.57	8.29	11.71	12.33
Minimum Purge Volume (gal)	1.59	1.82	1.61	1.28	0.52	1.56	1.40	1.35	1.91	2.01
3 Volumes	4.78	5.47	4.83	3.83	1.55	4.67	4.19	4.05	5.73	6.03
Actual volume purged	5.50	5.50	5.25	4.00	2.00	5.50	4.50	4.50	6.00	6.50
Comments	Flush = -0.29'	Flush = -0.30'	Flush = -0.23'	Flush = -0.34'	Flush = -0.24'	Stickup=2.17'	stickup=2.17'	stickup=2.84'	stickup=2.05'	stickup=2.56'

	Sampling Date: Wednesday, August 28, 2002				
	MW-11	MW-12	MW-13	MW-14	MW-15
Casing Elevation	778.58	778.50	778.39	778.43	778.38
Depth to Groundwater (btoc)	6.61	7.23	7.28	10.04	10.51
Groundwater Elevation	771.97	771.27	771.11	768.39	767.87
Well Diameter	2"	2"	2"	2"	2"
Product Thickness	nd	nd	nd	nd	nd
Well Depth (btoc)	15.48	17.38	17.40	18.15	19.80
Bottom of Well Elevation	763.10	761.12	760.99	760.28	758.58
Thickness of Water Column	8.87	10.15	10.12	8.11	9.29
Minimum Purge Volume (gal)	1.45	1.65	1.65	1.32	1.51
3 Volumes	4.34	4.96	4.95	3.97	4.54
Actual volume purged	4.75	5.25	5.50	4.25	5.50
Comments	Flush = -0.23	Flush = -0.35	Flush = -0.48	Flush = -0.39	Flush = -0.38

TOTAL VOLUME TO PURGE, 3X ALL WELLS:
Gallons 67.89

NOTES

btoc = Below top of casing (inner riser) All measurements are in feet, referenced to Mean Sea Level
nd = No floating product encountered
Minimum purge volume = 3 X well volume, 0.163 gallon per foot in a 2" diameter well.

SUMMARY OF GROUNDWATER ELEVATIONS AND FIELD MEASUREMENTS, OCTOBER 17, 2002

Slug Test Measurements
Gowanda Day Habilitation Center
4 Industrial Place, Gowanda, New York
VCA # V-00463-9

	Monitoring Date: 10/17/02									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
Casing Elevation*	778.23	778.08	778.38	778.43	778.61	781.10	780.94	781.33	782.61	780.02
Depth to Groundwater (btoc)	5.99	5.75	6.23	8.06	10.97	13.44	13.33	9.10	9.08	6.70
Groundwater Elevation	772.24	772.33	772.15	770.37	767.64	767.66	767.61	772.23	773.53	773.32
Well Diameter	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
Product Thickness	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Well Depth (btoc)	16.02	17.15	16.30	15.78	13.95	22.88	21.80	17.65	20.96	19.42
Bottom of Well Elevation	762.21	760.93	762.08	762.65	764.66	758.22	759.14	763.68	761.65	760.60
Thickness of Water Column	10.03	11.40	10.07	7.72	2.98	9.44	8.47	8.55	11.88	12.72
Minimum Purge Volume (gal)	1.63	1.86	1.64	1.26	0.49	1.54	1.38	1.39	1.94	2.07
3 Volumes	4.90	5.57	4.92	3.78	1.46	4.62	4.14	4.18	5.81	6.22
Actual volume purged	5.50	5.50	5.25	4.00	2.00	5.50	4.50	4.50	6.00	6.50
Comments	Flush = -0.29'	Flush = -0.30'	Flush = -0.23'	Flush = -0.34'	Flush = -0.24'	Stickup=2.17'	stickup=2.17'	stickup=2.84'	stickup=2.05'	stickup=2.56'

	Monitoring Date: 10/17/02				
	MW-11	MW-12	MW-13	MW-14	MW-15
Casing Elevation	778.58	778.50	778.39	778.43	778.38
Depth to Groundwater (btoc)	6.42	7.00	7.07	9.93	10.60
Groundwater Elevation	772.16	771.50	771.32	768.50	767.78
Well Diameter	2"	2"	2"	2"	2"
Product Thickness	nd	nd	nd	nd	nd
Well Depth (btoc)	15.48	17.38	17.40	18.15	19.80
Bottom of Well Elevation	763.10	761.12	760.99	760.28	758.58
Thickness of Water Column	9.06	10.38	10.33	8.22	9.20
Minimum Purge Volume (gal)	1.48	1.69	1.68	1.34	1.50
3 Volumes	4.43	5.08	5.05	4.02	4.50
Actual volume purged	4.75	5.25	5.50	4.25	5.50
Comments	Flush = -0.23	Flush = -0.35	Flush = -0.48	Flush = -0.39	Flush = -0.38

ave. depth to gw: 8.64 ft.
Ave. GW elev: 770.69 ft.

TOTAL VOLUME TO PURGE, 3X ALL WELLS:
Gallons 68.68

NOTES

btoc = Below top of casing (inner riser) All measurements are in feet, referenced to Mean Sea Level
nd = No floating product encountered
Minimum purge volume = 3 X well volume, 0.163 gallon per foot in a 2" diameter well.

SUMMARY OF GROUNDWATER ELEVATIONS AND FIELD MEASUREMENTS, DECEMBER 10, 2002

Gowanda Day Habilitation Center
4 Industrial Place, Gowanda, New York
VCA # V-00463-9

	Monitoring Date: Tuesday, December 10, 2002									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
Casing Elevation*	778.23	778.08	778.38	778.43	778.61	781.10	780.94	781.33	782.61	780.02
Depth to Groundwater (btoc)	5.49	5.28	5.72	7.07	10.69	13.18	13.12	8.60	8.30	6.21
Groundwater Elevation	772.74	772.80	772.66	771.36	767.92	767.92	767.82	772.73	774.31	773.81
Well Diameter	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
Product Thickness	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Well Depth (btoc)	16.02	17.15	16.30	15.78	13.95	22.88	21.80	17.65	20.96	19.42
Bottom of Well Elevation	762.21	760.93	762.08	762.65	764.66	758.22	759.14	763.68	761.65	760.60
Thickness of Water Column	10.53	11.87	10.58	8.71	3.26	9.70	8.68	9.05	12.66	13.21
Minimum Purge Volume (gal)	1.72	1.93	1.72	1.42	0.53	1.58	1.41	1.48	2.06	2.15
3 Volumes	5.15	5.80	5.17	4.26	1.59	4.74	4.24	4.43	6.19	6.46
Actual volume purged	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Comments	Flush = -0.29'	Flush = -0.30'	Flush = -0.23'	Flush = -0.34'	Flush = -0.24'	Stickup=2.17'	stickup=2.17'	stickup=2.84'	stickup=2.05'	stickup=2.56'

	Monitoring Date: Tuesday, December 10, 2002				
	MW-11	MW-12	MW-13	MW-14	MW-15
Casing Elevation	778.58	778.50	778.39	778.43	778.38
Depth to Groundwater (btoc)	5.90	6.56	6.73	9.54	10.37
Groundwater Elevation	772.68	771.94	771.66	768.89	768.01
Well Diameter	2"	2"	2"	2"	2"
Product Thickness	nd	nd	nd	nd	nd
Well Depth (btoc)	15.48	17.38	17.40	18.15	19.80
Bottom of Well Elevation	763.10	761.12	760.99	760.28	758.58
Thickness of Water Column	9.58	10.82	10.67	8.61	9.43
Minimum Purge Volume (gal)	1.56	1.76	1.74	1.40	1.54
3 Volumes	4.68	5.29	5.22	4.21	4.61
Actual volume purged	ns	ns	ns	ns	ns
Comments	Flush = -0.23	Flush = -0.35	Flush = -0.48	Flush = -0.39	Flush = -0.38

Bailer*

TOTAL VOLUME TO PURGE, 3X ALL WELLS:
Gallons 72.06
Note: No purging required, depth gauging only

NOTES

btoc = Below top of casing (inner riser) All measurements are in feet, referenced to Mean Sea Level
nd = No floating product encountered ns = not sampled
Minimum purge volume = 3 X well volume, 0.163 gallon per foot in a 2" diameter well.

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation Center
Project Number: 5596.03
Site Location: Gowanda, NY
Sample Date: 09/04/02
Weather: Partly cloudy Sunny, ~75°F
Personnel: Edward Jones

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-1 - Resample
Location: South side of Building
Casing Diameter: 2"

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 6' 7 3/4" = 6.64'
Depth to bottom of the well: 15' 4" = 15.33' 16.02
Length of water column in well: 9.38'

Volume of water in well casing, gallons: 1.53 gallons
3 Well volumes (= length water column X gal/foot X 3): 4.59 gallons
Actual volume purged prior to sampling: 7.0 gallons
Sampling Methodology: Dedicated Teflon bailer
Sampling Equipment: variable speed peristaltic pump used to purge well at Low Flow Rate
Well Recharged? yes
Required Analysis: All: VOCs, SVOCs, metals, PCB, pest / Herb & pesticide

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons									
	0	.5	1	1.5	2	3	4	5	6	7
Turbidity	>999	>999	>999	307	>999	>999	384	537	129	37
Temperature	19.1	18.3	17.6	17.4	17.1	17.4	18.0	18.6	19.0	18.6
pH	7.03	7.24	7.35	7.42	7.44	7.45	7.49	7.50	7.53	7.59
Conductivity	0.684	0.652	0.630	0.557	0.613	0.607	0.606	0.600	0.604	0.594
DO	9.08	9.32	9.69	9.79	9.94	10.10	11.41	12.21	12.51	12.51
Sal	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Time sample was collected: 11 00 AM

COMMENTS	Collected Base sample, Duplicate sample MS sample & MSD sample

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation center
Project Number: 5596.03
Site Location: Gowanda, NY
Sample Date: 08/29/02
Weather: Humid, Light Rain, 75°F
Personnel: Ed Jones & Jim Marschner

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-1
Location: South side of Building
Casing Diameter: 2.0"

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 6.24
Depth to bottom of the well: 16.02
Length of water column in well: 9.78

Volume of water in well casing, gallons: 1.59
3 Well volumes (= length water column X gal/foot X 3): 4.78
Actual volume purged prior to sampling: 5.50
Sampling Methodology: Dedicated Bailer
Sampling Equipment: peristaltic pump to Develop well

Well Recharged? Yes
Required Analysis: Full Analysis, Duplicate, ASP, MS, MSD

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons							
	0	.5	1.0	1.5	2.0	3.0	4.0	5.50
Turbidity	68	41	765	580	363	142	59	27
Temperature	21.8	21.1	20.7	20.6	20.3	21.0	20.6	20.8
pH	8.66	8.65	8.66	8.64	8.64	8.65	8.65	8.65
Conductivity	0.569	0.566	0.548	0.541	0.533	0.528	0.521	0.517
DO	10.02	10.10	10.24	10.89	10.93	11.18	11.13	10.92
Sal	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Time sample was collected: 5:20 pm

COMMENTS Depth to water measured on 08/28/02

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda DAy Habilitation
Project Number: 5596.03
Site Location: Village Gowanda, NY
Sample Date: 08/28/02 Thurs
Weather: Humid, 75°F, showers
Personnel: Ed Jones & Jim Marschner

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-2
Location: Asphalt, South of Building
Casing Diameter: 2.0in

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Depth to water, below top of casing: 5.96
Depth to bottom of the well: 17.15
Length of water column in well: 11.19

Volume of water in well casing, gallons: 1.82
3 Well volumes (= length water column X gal/foot X 3): 5.47
Actual volume purged prior to sampling: 5.5 gallons
Sampling Methodology: Disposable Dedicated Bailer
Sampling Equipment: Variable Speed Peristaltic Pump used to develop & purge well
Well Recharged? Yes - pump rate = recharge
Required Analysis: VOCs - TCL

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons								
	INITIAL	5	10	15	2	3	4	5	5.5 FINAL
Turbidity	208	999	412	603	131	85	66	40	61
Temperature	16.2°	15.2	15.7	15.1	15.3	15.8	16.1	16.2	15.3
pH	8.55	8.52	8.25	8.32	8.29	8.43	8.40	8.51	8.49
Conductivity	1.09	605	.672	.589	.569	.553	.533	.528	.518
DO	11.59	12.05	11.79	12.02	12.04	12.00	11.82	11.82	11.87
SAL	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Time sample was collected: 16:30

COMMENTS Sample collected immediately after purging.

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation center
Project Number: 5596-03
Site Location: Gowanda, NY
Sample Date: weds 08/28/02
Weather: Humid 75 of
Personnel: Ed Jones & Jim Marschner

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-3
Location: Asphalt, South side of Building
Casing Diameter: 2.0in

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 6.42
Depth to bottom of the well: 16.30
Length of water column in well: 9.88

Volume of water in well casing, gallons: 1.61
3 Well volumes (= length water column X gal/foot X 3): 4.83
Actual volume purged prior to sampling: 5-0 gallons
Sampling Methodology: Dedicated Bailer
Sampling Equipment: variable speed peristaltic pump

Well Recharged? Yes
Required Analysis: VOCs - TCL

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons							
	0	0.5	1.5	2.0	3.0	4.0	5.0	SAMPLE
Turbidity	7991	619	130	488	575	342	137	123
Temperature	21.50	20.6	20.9	21.40	21.80	20.6	21.6	25.0
pH	8.71	8.56	8.56	8.56	8.61	8.44	8.57	8.43
Conductivity	0.715	0.564	0.554	0.584	0.609	0.552	0.515	0.627
DO	10.50	10.33	10.36	10.11	9.85	10.32	10.09	8.45
Sal	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Time sample was collected: 1430

COMMENTS pump rate = recharge rate
sample collected ~1 hour after well Development

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation center
Project Number: 5596-03
Site Location: Gowanda, NY
Sample Date: weds 08/28/02
Weather: Humid, 75°f
Personnel: Ed Jones & Jim Marschner

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-4
Location: parking LOT, East side of Building
Casing Diameter: 2.0in

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 7.95
Depth to bottom of the well: 15.78
Length of water column in well: 7.83

Volume of water in well casing, gallons: 1.30
3 Well volumes (= length water column X gal/foot X 3): 3.92
Actual volume purged prior to sampling: 4.0 gallons
Sampling Methodology: Dedicated bailer
Sampling Equipment: variable speed peristaltic pump

Well Recharged? yes
Required Analysis: VOCs - TCL

FIELD PARAMETER MEASUREMENTS

	Accumulated Volume Purged in Gallons							
Parameter	0	0.5	1	2.0	3.0	4.0		
Turbidity	>999	266	192	39	61	20		
Temperature	20.5	20.8	20.9	21.0	21.7	21.7		
pH	9.01	8.88	8.88	8.79	8.66	8.68		
Conductivity	0.614	0.620	0.624	0.626	0.616	0.612		
DO	9.21	9.28	9.31	9.67	10.20	10.22		
Sal	0.02	0.02	0.02	0.02	0.02	0.02		

Time sample was collected: 12:55

COMMENTS
Pump rate = recharge rate. Sample collected immediately after well Development

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation center
Project Number: 5596-03
Site Location: Gowanda, NY
Sample Date: Weds 08/28/02
Weather: Humid 75°F
Personnel: Ed Jones & Jim Marschner

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-5
Location: North east corner of property line
Casing Diameter: 2 in

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 10.79
Depth to bottom of the well: 13.95
Length of water column in well: 3.16

Volume of water in well casing, gallons: 0.52
3 Well volumes (= length water column X gal/foot X 3): 1.55
Actual volume purged prior to sampling: 2.0 gallons
Sampling Methodology: Dedicated Disposable Bailer
Sampling Equipment: Variable speed peristaltic pump

Well Recharged? Yes
Required Analysis: VOCs - TCL

FIELD PARAMETER MEASUREMENTS

	Accumulated Volume Purged in Gallons							
Parameter	0	0.5	0.75	1.0	1.25	1.5	1.75	FINAL - 2.0
Turbidity	140	667	532	345	254	176	139	50
Temperature	22.3	20.9	20.5	20.6	20.5	20.4	20.3	20.5
pH	8.56	8.55	8.48	8.46	8.48	8.48	8.47	8.47
Conductivity	1.00	0.97	0.740	0.735	0.735	0.732	0.721	0.740
DO	10.29	10.97	10.68	10.47	10.56	10.44	10.42	10.42
SAL	0.04	0.04	0.03	0.03	.03	0.03	0.03	0.03

Time sample was collected: 14:35

COMMENTS	well recharged - pump rate = recharge rate
	well Sampled immediately after Development
	Low Turbidity

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation Center
Project Number: 5596.03
Site Location: Gowanda, NY
Sample Date: 08/29/02
Weather: Overcast, 68°f in Am
Personnel: Ed Jones

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-6
Location: North property line
Casing Diameter: 2.0in

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 13.33
Depth to bottom of the well: 22.88
Length of water column in well: 9.55

Volume of water in well casing, gallons: 1.59
3 Well volumes (= length water column X gal/foot X 3): 4.78
Actual volume purged prior to sampling: 5-50 gallons
Sampling Methodology: Dedicated Bailer
Sampling Equipment: peristaltic variable speed pump used to purge well at low flow rate
Well Recharged? yes
Required Analysis: Full Analysis: VOCs, SVOCs, metals PCB, pesticides & Herbicides

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons								
	0	0.5	1.0	1.5	2	3	4	5	5.5
Turbidity	247	>999	272	>999	671	148	86	60	40
Temperature	18.2	17.7	18.1	17.5	17.2	17.6	17.4	17.6	17.6
pH	9.01	8.98	8.96	8.88	8.85	8.83	8.83	8.88	8.84
Conductivity	0.607	0.610	0.610	0.605	0.603	0.601	0.600	0.599	0.600
DO	9.99	10.15	9.92	10.05	10.13	9.94	9.94	10.08	10.07
Sal	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Time sample was collected: 9:30 AM

COMMENTS Depth to water measured on 08/28/02

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation Center
Project Number: 5596-03
Site Location: Gowanda, NY
Sample Date: 08/29/02
Weather: Overcast in morning, 68°F
Personnel: Edward Jones

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-7
Location: northwest corner of property, by fence
Casing Diameter: 2"

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 13.23'
Depth to bottom of the well: 21.80'
Length of water column in well: 8.57

Volume of water in well casing, gallons: 1.40 gal
3 Well volumes (= length water column X gal/foot X 3): 4.20 gal
Actual volume purged prior to sampling: 4.50
Sampling Methodology: Dedicated Bailer
Sampling Equipment: peristaltic pump used to Develop well at low flow Rate
Well Recharged? yes
Required Analysis: VOCs + Collected Duplicate sample

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons							
	0	.5	1	1.5	2	3	4	4.50
Turbidity	831	>999	>999	>999	794	216	151	NOT Recorded
Temperature	18.5	18.4	18.6	18.4	18.1	18.1	18.1	
pH	8.72	8.67	8.70	8.67	8.70	8.68	8.71	
Conductivity	0.97	0.97	0.726	0.699	0.693	0.683	0.682	
DO	10.30	10.40	10.81	10.78	10.92	11.23	11.00	
Sal	0.04	0.04	0.03	0.03	0.02	0.02	0.02	

Time sample was collected: 1:20 pm

COMMENTS 2 sets of Samples collected
Depth to water measured 08/28/02

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation center
Project Number: 5596.03
Site Location: Gowanda, NY
Sample Date: Weds 08/28/1002
Weather: Cloudy 70°F in Am
Personnel: Ed Jones & Jim Marschner

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-8
Location: Grass yard, west side of Building
Casing Diameter: 2"

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 9.36
Depth to bottom of the well: 17.65
Length of water column in well: 8.29

Volume of water in well casing, gallons: 1.352al
3 Well volumes (= length water column X gal/foot X 3): 4.059al
Actual volume purged prior to sampling: 4.5 gallons
Sampling Methodology: Dedicated Bailer
Sampling Equipment: Electric variable speed peristaltic pump

Well Recharged? Yes
Required Analysis: VOCs - TCL

FIELD PARAMETER MEASUREMENTS

	Accumulated Volume Purged in Gallons								
Parameter	0	0.5	1.0	2.0	3.0	3.5	4.0	4.5	
Turbidity	355	>999	>999	>999	>999	>999		900	139
Temperature	16.1	15.90	16.4	16.9	16.4	16.5	16.7	16.7	19.2
pH	8.70	9.12	9.04	9.05	8.97	8.94	9.03	9.14	8.68
Conductivity	2.63	1.11	1.47	1.16	0.94	0.93	0.735	0.725	0.705
DO	10.73	10.96	10.68	10.53	10.79	10.73	10.89	10.78	11.20
Sal	0.12	0.04	0.06	0.05	0.04	0.04	0.03	0.03	0.03

Time sample was collected: 1315

COMMENTS pump rate = recharge rate
sample collected 1 hour after well Development.

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation center
Project Number: 5596-03
Site Location: Gowanda, NY
Sample Date: Weds 08/28/02
Weather: Cloudy, 70°F in Am
Personnel: Ed Jones & Jim Marschner

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-9
Location: grass, by road, west property line
Casing Diameter: 2"

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 9.25
Depth to bottom of the well: 20.96
Length of water column in well: 11.71

Volume of water in well casing, gallons: 1.91 gal
3 Well volumes (= length water column X gal/foot X 3): 5.73
Actual volume purged prior to sampling: 6.50
Sampling Methodology: Peristaltic pump to purge: Bailer to sample
Sampling Equipment:

Well Recharged? Yes
Required Analysis: VOCs - TCL

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons								6.5
	0 gal	0.5	2.0	3.0	4.0	4.5	5.0	6.0	FINAL
Turbidity	705	>999	154	>999	175	>999	230	151	160
Temperature	14.2	13.9	13.6	13.4	14.6	13.6	13.9	14.1	14.5
pH	8.90	8.90	8.89	8.87	8.89	8.90	8.91	8.93	8.97
Conductivity	1.51	1.52	1.53	1.54	1.53	1.55	1.56	1.57	1.50
DO	11.54	11.60	11.64	11.66	11.79	11.96	11.87	12.29	11.30
Salinity	0.06	0.07	0.07	0.06	0.07	0.07	0.07	0.07	0.07

Time sample was collected: 10:30 Am

COMMENTS pump rate = recharge rate
Sample collected 1 hour after Development

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation Center
Project Number: 5596.03
Site Location: Gowanda, NY
Sample Date: Weds 08/28/02
Weather: Cloudy, 70°F
Personnel: Ed Jones & Jim Marschner

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-10
Location: Grass, South of parking lot
Casing Diameter: 2"

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 7.09
Depth to bottom of the well: 19.42
Length of water column in well: 12.33 Ft

Volume of water in well casing, gallons: 2.01
3 Well volumes (= length water column X gal/foot X 3): 6.03
Actual volume purged prior to sampling: 6.5 gallons
Sampling Methodology: Dedicated Bailer
Sampling Equipment: Variable speed peristaltic pump

Well Recharged? Yes
Required Analysis: VOCs - TCL

FIELD PARAMETER MEASUREMENTS

	Accumulated Volume Purged in Gallons							
Parameter	0	1 gal	2	4	5	6	6.5	Sample
Turbidity	152	>999	>999	703	342	130	128	151
Temperature	16.8	16.0	15.4	15.3	15.3	15.4	15.3	16.5
pH	8.70	8.73	8.78	8.80	8.81	8.78	8.82	9.09
Conductivity	0.502	0.489	0.515	0.539	0.524	0.524	0.524	0.479
OO	10.13	10.86	11.09	10.99	11.11	11.02	11.45	9.95
Sal	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01

Time sample was collected: 11:30

COMMENTS pump rate = recharge rate
Sample collected 1 hour after Development

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation Center
Project Number: 5596.03
Site Location: Gowanda, NY
Sample Date: 08/29/02
Weather: Humid, 75°F light Rain
Personnel: Edward Jones

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: mw-11
Location: inside Building, in Hall way
Casing Diameter: 2 in

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 6.61
Depth to bottom of the well: 15.48
Length of water column in well: 8.87

Volume of water in well casing, gallons: 1.45
3 Well volumes (= length water column X gal/foot X 3): 4.34
Actual volume purged prior to sampling: 4.75 gallons
Sampling Methodology: Dedicated Bailer
Sampling Equipment: peristaltic pump on Low flow setting was used to purge well
Well Recharged? Yes
Required Analysis: VOCs

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons							4.75	
	0	0.5	1.0	1.5	2	3	4	4.50	4.75
Turbidity	180	183	>999	>999	>999	>999	812	608	20
Temperature	18.0	17.6	17.3	17.2	17.0	17.1	17.2	17.1	17.3
pH	8.63	8.58	8.57	8.58	8.66	8.65	8.67	8.63	8.62
Conductivity	1.29	1.33	1.31	0.908	0.793	0.708	0.653	0.648	0.633
DO	11.28	11.43	11.37	11.42	11.44	11.40	11.23	11.13	11.00
Sal	0.05	0.06	0.05	0.03	0.04	0.03	0.03	0.03	0.03

Time sample was collected: 15 20

COMMENTS Depth to water measured on 08/28/02

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation center
Project Number: 5596.03
Site Location: Gowanda, NY
Sample Date: 08/29/02
Weather: Humid, 75°F, Showers
Personnel: Edward Jones

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: mw-12
Location: inside building, in Hallway
Casing Diameter: 2.0 in

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 7.23
Depth to bottom of the well: 17.38
Length of water column in well: 10.15

Volume of water in well casing, gallons: 1.65
3 Well volumes (= length water column X gal/foot X 3): 4.96
Actual volume purged prior to sampling: 5.25
Sampling Methodology: Dedicated Bailer
Sampling Equipment: peristaltic pump on Low Flow pump setting used to purge well
Well Recharged? Yes
Required Analysis: Full Analysis: VOCs, SVOCs, metals PCBs pesticides Herbicides

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons								
	0	.5	1	1.5	2	3	4	5.25	
Turbidity	89	49	23	17	21	7	21	11	3.0
Temperature	18.2	18.3	18.0	17.9	17.9	18.2	17.8		18.1
pH	8.55	8.50	8.53	8.48	8.52	8.51	8.47		8.58
Conductivity	0.507	0.507	507	.509	0.499	0.509	0.514		0.509
DO	10.41	10.22	[illegible]	[illegible]	10.41	10.26	10.30	10.26	
Sal	0.02	0.02	0.02	0.02	0.02	0.02	0.02		0.02

Time sample was collected: 4:15 pm

COMMENTS depth to water measured 08/28/02

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda DAy Rehabilitation
Project Number: 5596-03
Site Location: Gowanda, NY
Sample Date: 8/28/02
Weather: Humid, 75° F
Personnel: Ed Jones & Jim Marschner

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-13
Location: Inside Building Hallway
Casing Diameter: 2.0in

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1469 gal/foot
8"	= 2.61 gal/foot

Depth to water, below top of casing: 7.28
Depth to bottom of the well: 17.40
Length of water column in well: 10.12

Volume of water in well casing, gallons: 1.65
3 Well volumes (= length water column X gal/foot X 3): 4.95
Actual volume purged prior to sampling: 5.0 gallons
Sampling Methodology: Dedicated Bailer
Sampling Equipment: variable speed peri staltic pump

Well Recharged? yes
Required Analysis: VOCs - TCL

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons							
	0	0.5	1	1.5	2	3	4	5
Turbidity	12	43	46	6	3	3	1	11
Temperature	19.6	18.8	18.4	18.9	18.1	18.1	18.1	18.0
pH	8.54	8.45	8.37	8.33	8.35	8.35	8.37	8.39
Conductivity	0.480	0.480	0.477	0.481	0.483	0.481	0.488	0.490
DO	10.87	11.05	11.03	10.95	11.05	10.78	10.51	10.47
Sal	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.02

Time sample was collected: 15:40

COMMENTS	well Recharged. Pump rate = recharge
	very clear, Low Turbidity
	sampled immediately after development

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation Center
Project Number: 5596.03
Site Location: Gowanda, NY
Sample Date: 08/29/02
Weather: Humid, 75°F, Light Rain
Personnel: Edward Jones

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-14
Location: Inside Building, in Loading Dock/machine shop
Casing Diameter: 2.0 in

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Depth to water, below top of casing: 10.04
Depth to bottom of the well: 18.15
Length of water column in well: 8.11

Volume of water in well casing, gallons: 1.32
3 Well volumes (= length water column X gal/foot X 3): 3.97
Actual volume purged prior to sampling: 4.25 gallons
Sampling Methodology: Dedicated Bailer
Sampling Equipment: peristaltic pump used to purge well at low flow rate prior to sampling
Well Recharged? Yes
Required Analysis: VOCs only

FIELD PARAMETER MEASUREMENTS

Parameter	Accumulated Volume Purged in Gallons							
	0	.5	1	1.5	2	3	4	4.25
Turbidity	93	332	84	54	40	47	24	18
Temperature	19.4	18.3	18.2	18.3	17.90	18.0	18.2	18.1
pH	8.76	8.80	8.78	8.74	8.73	8.73	8.72	8.70
Conductivity	0.641	0.649	0.636	0.605	0.600	0.609	0.591	0.590
DO	9.81	10.39	10.52	10.64	10.65	10.38	10.39	10.40
Sal	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Time sample was collected: 12:10

COMMENTS	Depth to water measured 08/28/02

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Day Habilitation Center
Project Number: 5596.03
Site Location: Gowanda, NY
Sample Date: 08/29/02
Weather: Humid, 75°F, Light Rain-Showers
Personnel: Edward Jones

BERGMANN associates

GROUNDWATER SAMPLE POINT

Well Number: MW-15
Location: Inside the building, in North Cafeteria
Casing Diameter: 2.0 in

Well Dia.	Volume/Foot
1"	= 0.041 gal/foot
2"	= 0.163 gal/foot
4"	= 0.653 gal/foot
6"	= 1.469 gal/foot
8"	= 2.611 gal/foot

Depth to water, below top of casing: 10.51
Depth to bottom of the well: 19.80
Length of water column in well: 9.29

Volume of water in well casing, gallons: 1.51
3 Well volumes (= length water column X gal/foot X 3): 4.54
Actual volume purged prior to sampling: 5.50 gallons
Sampling Methodology: Dedicated Bailer
Sampling Equipment: Peristaltic pump on low flow rate used to purge well prior to sampling
Well Recharged? Yes
Required Analysis: VOCs only

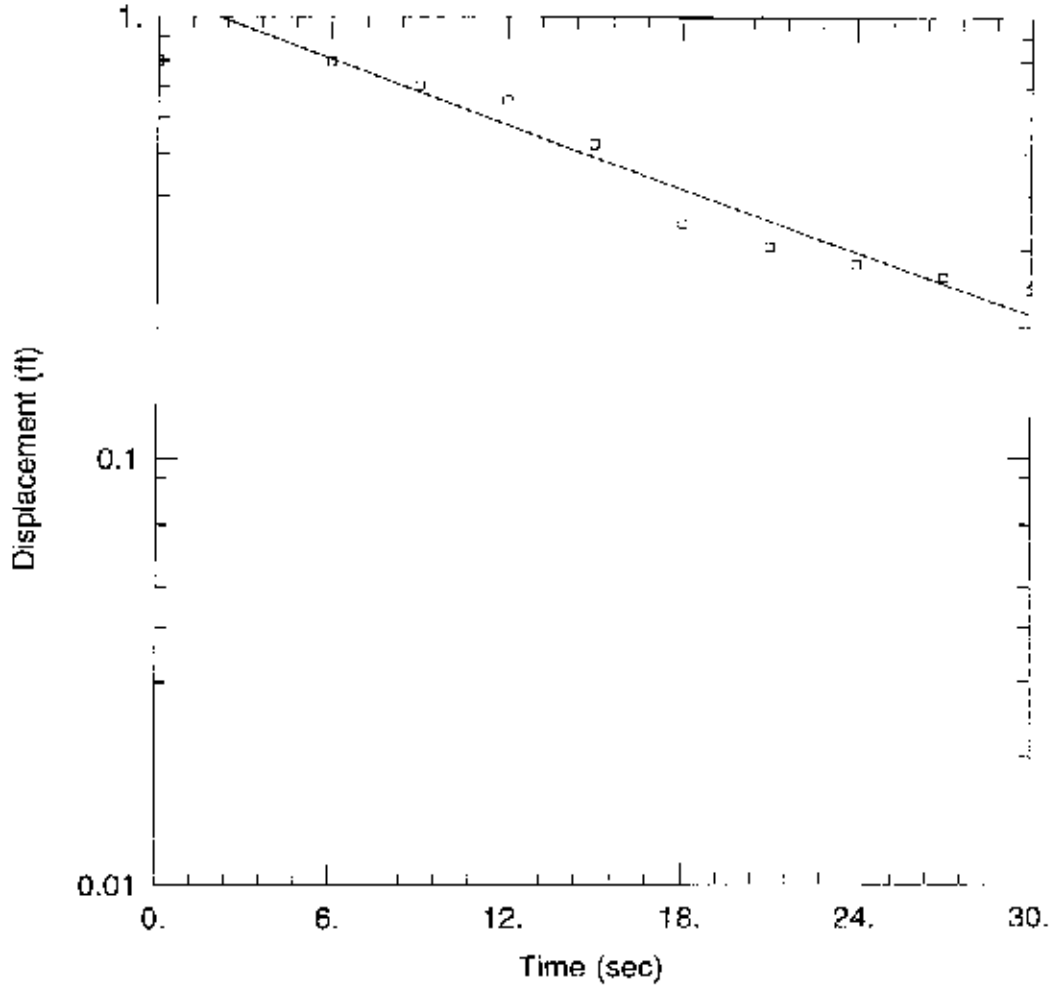
FIELD PARAMETER MEASUREMENTS

	Accumulated Volume Purged in Gallons								
Parameter	0	.5	1	1.5	2	3	4	5	5.5
Turbidity	122	>999	>999	>999	>999	>999	>999	126	123
Temperature	18.4	18.3	18.2	18.2	18.5	18.6	18.6	18.8	18.9
pH	8.83	8.80	8.74	8.73	8.74	8.75	8.75	8.76	8.73
Conductivity	1.11	1.18	1.05	0.96	0.95	0.705	0.646	0.627	0.635
DO	9.84	10.02	10.06	9.95	9.91	9.88	9.90	9.93	9.86
Sal	0.05	0.05	0.04	0.04	0.04	0.03	0.02	0.02	0.02

Time sample was collected: 11 40

COMMENTS Depth to water measured 08/28/02

APPENDIX 3
Slug Test Field Data and Analysis



SLUG TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-1limited 2nd.aqt
Date: 02/13/03 Time: 13:19:10

PROJECT INFORMATION

Company: Bergmann
Client: DASNY
Project: 5596.03
Test Location: Gowanda
Test Well: MW-1
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 10.03 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-1)

Initial Displacement: 0.8 ft
Wellbore Radius: 0.333 ft
Screen Length: 12. ft
Gravel Pack Porosity: 0.42
Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 10.03 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.001265 cm/sec y0 = 1.122 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-1limited 2nd.aqt
Title: Slug Test
Date: 02/13/03
Time: 13:19:20

PROJECT INFORMATION

Company: Bergmann
Client: DASNY
Project: 5596.03
Location: Gowanda
Test Date: 10/17/02
Test Well: MW-1

AQUIFER DATA

Saturated Thickness: 10.03 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.8 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 12. ft
Total Well Penetration Depth: 10.03 ft
Gravel Pack Porosity: 0.42

No. of observations: 10

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	15.	0.523	27.	0.26
6.	0.796	18.	0.346	30.	0.243
9.	0.704	21.	0.305		
12.	0.652	24.	0.279		

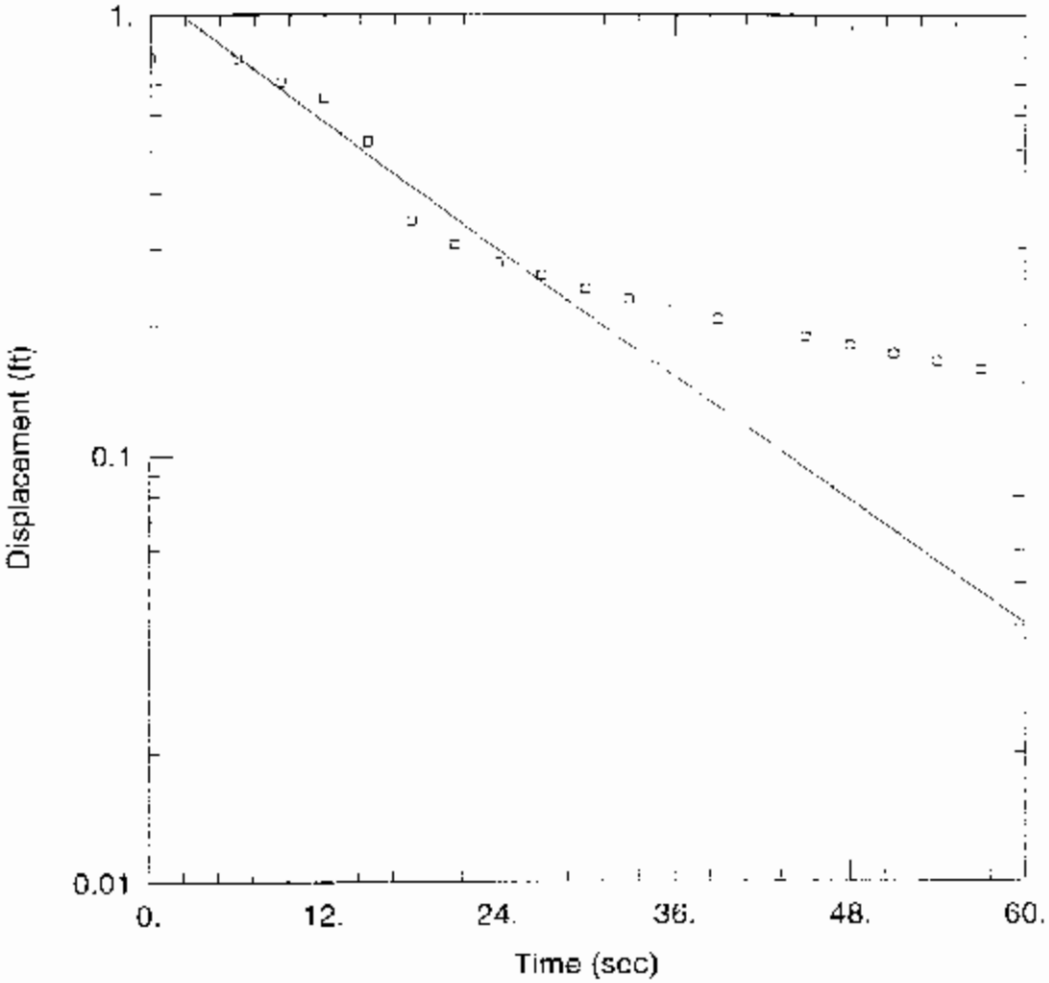
SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001265	cm/sec
y0	1.122	ft



SLUG TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-1.aqt
Date: 02/13/03 Time: 14:04:37

PROJECT INFORMATION

Company: Bergmann
Client: DASNY
Project: 5596.03
Test Location: Gowanda
Test Well: MW-1
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 10.03 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-1)

Initial Displacement: 0.8 ft
Wellbore Radius: 0.333 ft
Screen Length: 12. ft
Gravel Pack Porosity: 0.42

Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 10.03 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.001265 cm/sec y0 = 1.122 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-1.aqt
Title: Slug Test
Date: 02/13/03
Time: 14:04:45

PROJECT INFORMATION

Company: Bergmann
Client: DASNY
Project: 5596.03
Location: Gowanda
Test Date: 10/17/02
Test Well: MW-1

AQUIFER DATA

Saturated Thickness: 10.03 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.8 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 12. ft
Total Well Penetration Depth: 10.03 ft
Gravel Pack Porosity: 0.42

No. of observations: 20

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	24.	0.279	45.	0.188
6.	0.796	27.	0.26	48.	0.18
9.	0.704	30.	0.243	51.	0.172
12.	0.652	33.	0.229	54.	0.165
15.	0.523	36.	0.218	57.	0.158
18.	0.346	39.	0.207	60.	0.15
21.	0.305	42.	0.197		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

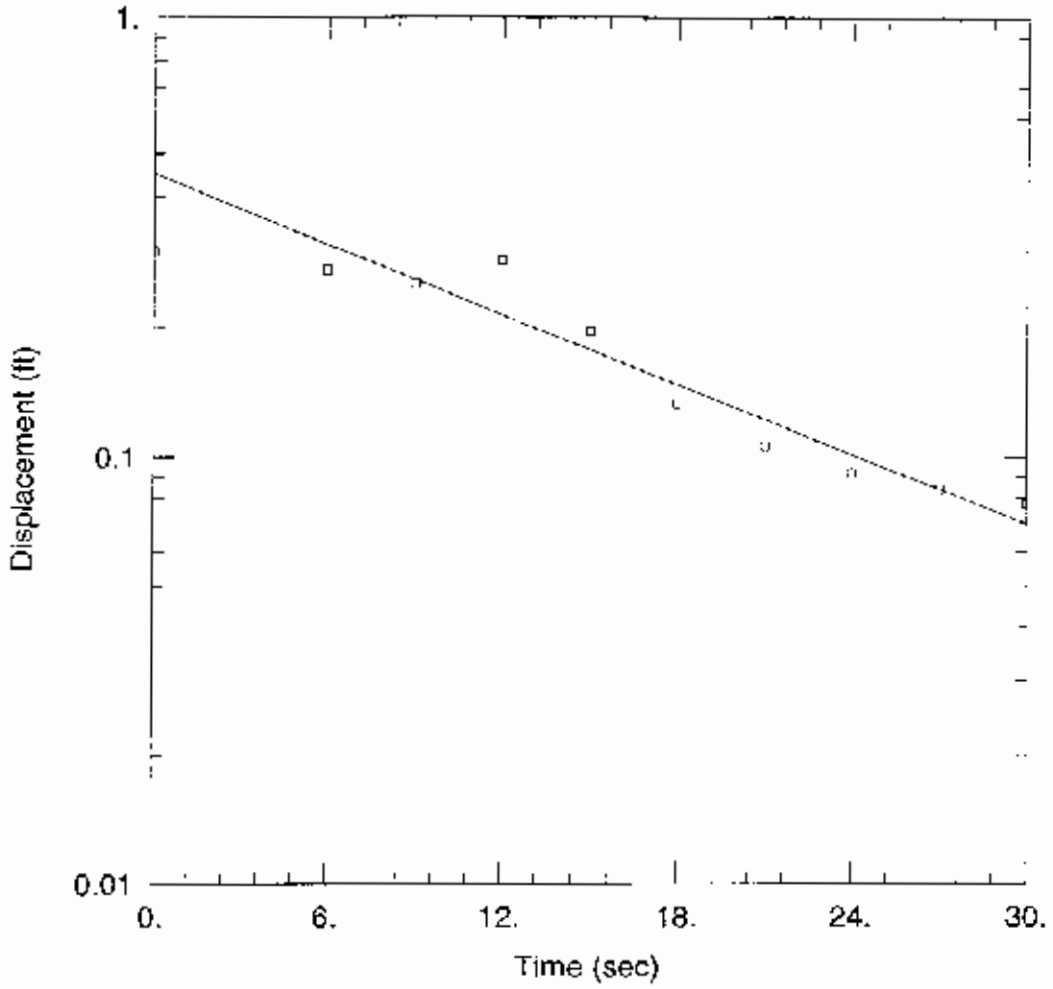
VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001265	cm/sec
y0	1.122	ft

MW-1 Initial Elevation: 10.14

Date	Time	ET (sec)	ET (min)	Chan[1] Fahrenheit	Chan[2] Feet H2O	Change in Elev.
10/17/2002	17:39:16	0	0.000	60.13	10.7	0.56
10/17/2002	17:39:19	3	0.050	60.13	10.833	0.693
10/17/2002	17:39:22	6	0.100	60.13	10.936	0.796
10/17/2002	17:39:25	9	0.150	60.13	10.844	0.704
10/17/2002	17:39:28	12	0.200	60.12	10.792	0.652
10/17/2002	17:39:31	15	0.250	60.11	10.663	0.523
10/17/2002	17:39:34	18	0.300	60.11	10.486	0.346
10/17/2002	17:39:37	21	0.350	60.11	10.445	0.305
10/17/2002	17:39:40	24	0.400	60.11	10.419	0.279
10/17/2002	17:39:43	27	0.450	60.11	10.4	0.26
10/17/2002	17:39:46	30	0.500	60.11	10.383	0.243
10/17/2002	17:39:49	33	0.550	60.11	10.369	0.229
10/17/2002	17:39:52	36	0.600	60.1	10.358	0.218
10/17/2002	17:39:55	39	0.650	60.1	10.347	0.207
10/17/2002	17:39:58	42	0.700	60.1	10.337	0.197
10/17/2002	17:40:01	45	0.750	60.09	10.328	0.188
10/17/2002	17:40:04	48	0.800	60.09	10.32	0.18
10/17/2002	17:40:07	51	0.850	60.09	10.312	0.172
10/17/2002	17:40:10	54	0.900	60.09	10.305	0.165
10/17/2002	17:40:13	57	0.950	60.09	10.298	0.158
10/17/2002	17:40:16	60	1.000	60.09	10.29	0.15
10/17/2002	17:40:19	63	1.050	60.09	10.284	0.144
10/17/2002	17:40:22	66	1.100	60.09	10.278	0.138
10/17/2002	17:40:25	69	1.150	60.08	10.272	0.132
10/17/2002	17:40:28	72	1.200	60.08	10.268	0.128
10/17/2002	17:40:31	75	1.250	60.07	10.265	0.125
10/17/2002	17:40:34	78	1.300	60.07	10.263	0.123
10/17/2002	17:40:37	81	1.350	60.06	10.261	0.121
10/17/2002	17:40:40	84	1.400	60.06	10.26	0.12
10/17/2002	17:40:43	87	1.450	60.06	10.259	0.119
10/17/2002	17:40:46	90	1.500	60.06	10.258	0.118
10/17/2002	17:40:49	93	1.550	60.06	10.257	0.117
10/17/2002	17:40:52	96	1.600	60.06	10.256	0.116
10/17/2002	17:40:55	99	1.650	60.06	10.255	0.115
10/17/2002	17:40:58	102	1.700	60.06	10.254	0.114
10/17/2002	17:41:01	105	1.750	60.06	10.253	0.113
10/17/2002	17:41:04	108	1.800	60.06	10.252	0.112
10/17/2002	17:41:07	111	1.850	60.06	10.251	0.111
10/17/2002	17:41:10	114	1.900	60.05	10.248	0.108
10/17/2002	17:41:13	117	1.950	60.05	10.246	0.106
10/17/2002	17:41:16	120	2.000	60.04	10.242	0.102
10/17/2002	17:41:19	123	2.050	60.04	10.238	0.098
10/17/2002	17:41:22	126	2.100	60.04	10.236	0.096
10/17/2002	17:41:25	129	2.150	60.04	10.233	0.093
10/17/2002	17:41:28	132	2.200	60.04	10.231	0.091
10/17/2002	17:41:31	135	2.250	60.04	10.229	0.089
10/17/2002	17:41:34	138	2.300	60.04	10.228	0.088



MW-13 SLUG TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-13-limited.aqt
Date: 02/13/03 Time: 13:20:51

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda
Test Well: MW-13
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 10.33 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-13)

Initial Displacement: 0.3 ft
Wellbore Radius: 0.333 ft
Screen Length: 14. ft
Gravel Pack Porosity: 0.42
Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 10.33 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.001238 cm/sec y0 = 0.4511 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-13-limited.aqt
Title: MW-13 Slug Test
Date: 02/13/03
Time: 13:20:59

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda
Test Date: 10/17/02
Test Well: MW-13

AQUIFER DATA

Saturated Thickness: 10.33 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.3 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 14. ft
Total Well Penetration Depth: 10.33 ft
Gravel Pack Porosity: 0.42

No. of observations: 10

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	15.	0.196	27.	0.084
6.	0.272	18.	0.133	30.	0.078
9.	0.253	21.	0.106		
12.	0.286	24.	0.092		

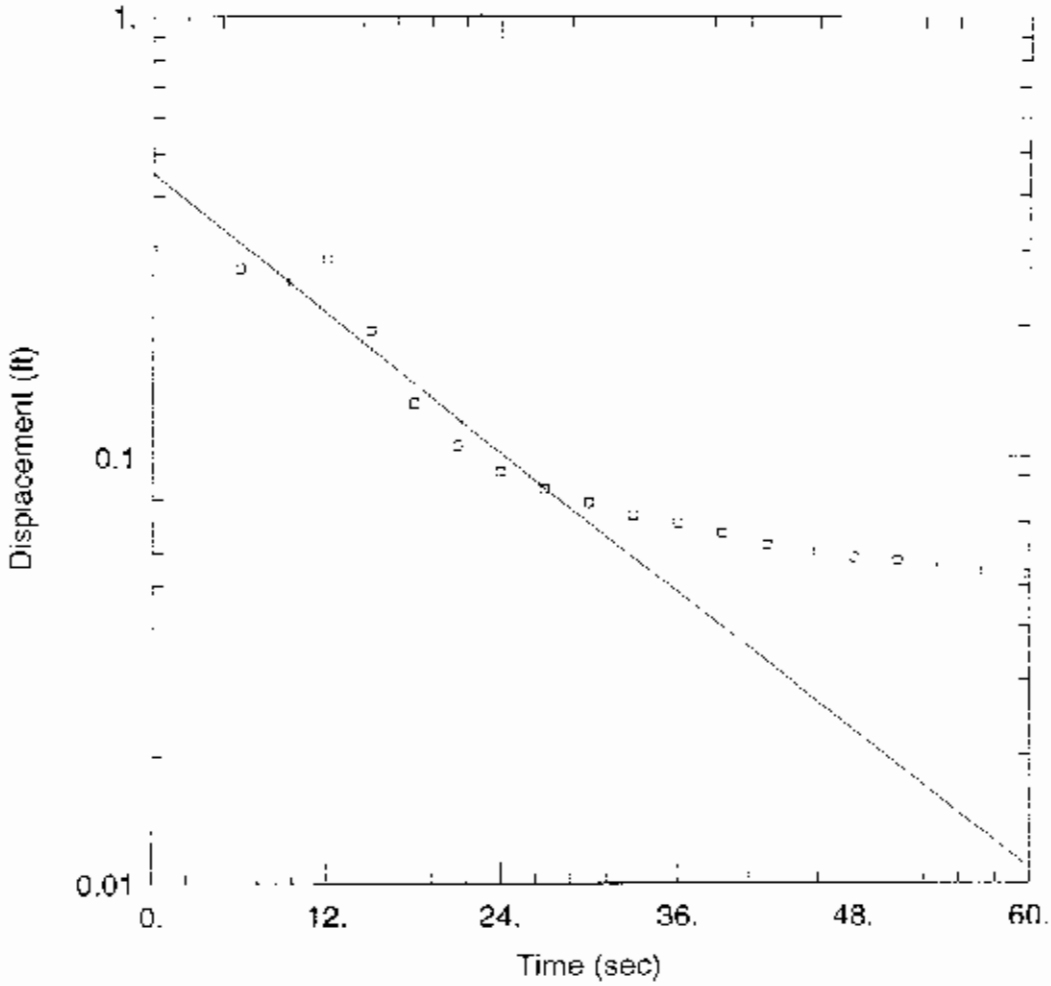
SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001238	cm/sec
y0	0.4511	ft



MW-13 SLUG TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-13.aqt
Date: 02/13/03 Time: 14:28:23

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda
Test Well: MW-13
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 10.33 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-13)

Initial Displacement: 0.3 ft
Wellbore Radius: 0.333 ft
Screen Length: 14. ft
Gravel Pack Porosity: 0.42
Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 10.33 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.001238 cm/sec
y0 = 0.4511 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-13.aqt
Title: MW-13 Slug Test
Date: 02/13/03
Time: 14:28:29

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda
Test Date: 10/17/02
Test Well: MW-13

AQUIFER DATA

Saturated Thickness: 10.33 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.3 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 14. ft
Total Well Penetration Depth: 10.33 ft
Gravel Pack Porosity: 0.42

No. of observations: 20

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	24.	0.092	45.	0.06
6.	0.272	27.	0.084	48.	0.058
9.	0.253	30.	0.078	51.	0.057
12.	0.286	33.	0.073	54.	0.055
15.	0.196	36.	0.07	57.	0.054
18.	0.133	39.	0.066	60.	0.053
21.	0.106	42.	0.062		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer Rice

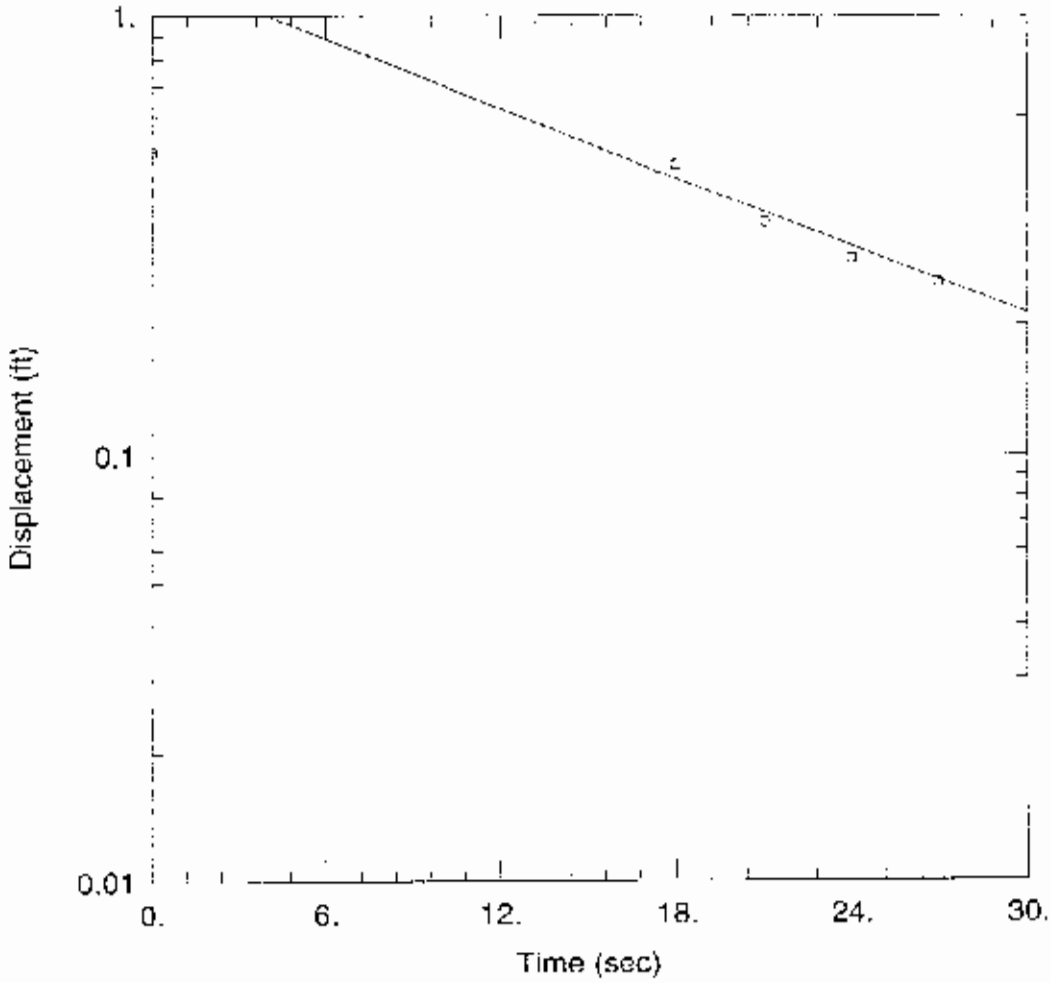
VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001238	cm/sec
y0	0.4511	ft

MW-13 RISING HEAD

Date	Time	ET (sec)	ET (Min)	Chan[1] Fahrenheit	Chan[2] Feet H2O	Start Elev:	9.694
							Change Head
10/17/2002	15:50:47	0	0.000	65.8	9.694		0
10/17/2002	15:50:50	3	0.050	65.8	9.925		0.231
10/17/2002	15:50:53	6	0.100	65.8	9.966		0.272
10/17/2002	15:50:56	9	0.150	65.8	9.947		0.253
10/17/2002	15:50:59	12	0.200	65.81	9.98		0.286
10/17/2002	15:51:02	15	0.250	65.81	9.892		0.198
10/17/2002	15:51:05	18	0.300	65.82	9.827		0.133
10/17/2002	15:51:08	21	0.350	65.82	9.8		0.106
10/17/2002	15:51:11	24	0.400	65.82	9.786		0.092
10/17/2002	15:51:14	27	0.450	65.82	9.778		0.084
10/17/2002	15:51:17	30	0.500	65.83	9.772		0.078
10/17/2002	15:51:20	33	0.550	65.84	9.767		0.073
10/17/2002	15:51:23	36	0.600	65.84	9.764		0.07
10/17/2002	15:51:26	39	0.650	65.85	9.76		0.066
10/17/2002	15:51:29	42	0.700	65.85	9.756		0.062
10/17/2002	15:51:32	45	0.750	65.85	9.754		0.06
10/17/2002	15:51:35	48	0.800	65.85	9.752		0.058
10/17/2002	15:51:38	51	0.850	65.85	9.751		0.057
10/17/2002	15:51:41	54	0.900	65.85	9.749		0.055
10/17/2002	15:51:44	57	0.950	65.85	9.748		0.054
10/17/2002	15:51:47	60	1.000	65.85	9.747		0.053
10/17/2002	15:51:50	63	1.050	65.86	9.745		0.051
10/17/2002	15:51:53	66	1.100	65.86	9.744		0.05
10/17/2002	15:51:56	69	1.150	65.87	9.743		0.049
10/17/2002	15:51:59	72	1.200	65.87	9.742		0.048
10/17/2002	15:52:02	75	1.250	65.87	9.741		0.047
10/17/2002	15:52:05	78	1.300	65.87	9.74		0.046
10/17/2002	15:52:08	81	1.350	65.87	9.739		0.045
10/17/2002	15:52:11	84	1.400	65.87	9.738		0.044
10/17/2002	15:52:14	87	1.450	65.87	9.737		0.043
10/17/2002	15:52:17	90	1.500	65.87	9.737		0.043
10/17/2002	15:52:20	93	1.550	65.87	9.737		0.043
10/17/2002	15:52:23	96	1.600	65.87	9.736		0.042
10/17/2002	15:52:26	99	1.650	65.87	9.735		0.041
10/17/2002	15:52:29	102	1.700	65.87	9.735		0.041
10/17/2002	15:52:32	105	1.750	65.87	9.735		0.041
10/17/2002	15:52:35	108	1.800	65.87	9.734		0.04
10/17/2002	15:52:38	111	1.850	65.87	9.734		0.04
10/17/2002	15:52:41	114	1.900	65.87	9.734		0.04



MW-12 SLUG TEST

Data Set: C:\...\MW-12-Limited-2nd.aqt
Date: 02/13/03 Time: 13:49:09

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda, NY
Test Well: MW-12
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 10.38 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-12)

Initial Displacement: 0.5 ft
Wellbore Radius: 0.333 ft
Screen Length: 14. ft
Gravel Pack Porosity: 0.42
Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 10.38 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.001189 cm/sec y0 = 1.267 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-12-Limited-2nd.aqt
Title: MW-12 Slug Test
Date: 02/13/03
Time: 13:49:17

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda, NY
Test Date: 10/17/02
Test Well: MW-12

AQUIFER DATA

Saturated Thickness: 10.38 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.5 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 14. ft
Total Well Penetration Depth: 10.38 ft
Gravel Pack Porosity: 0.42

No. of observations: 6

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	21.	0.344	27.	0.25
18.	0.467	24.	0.284	30.	0.224

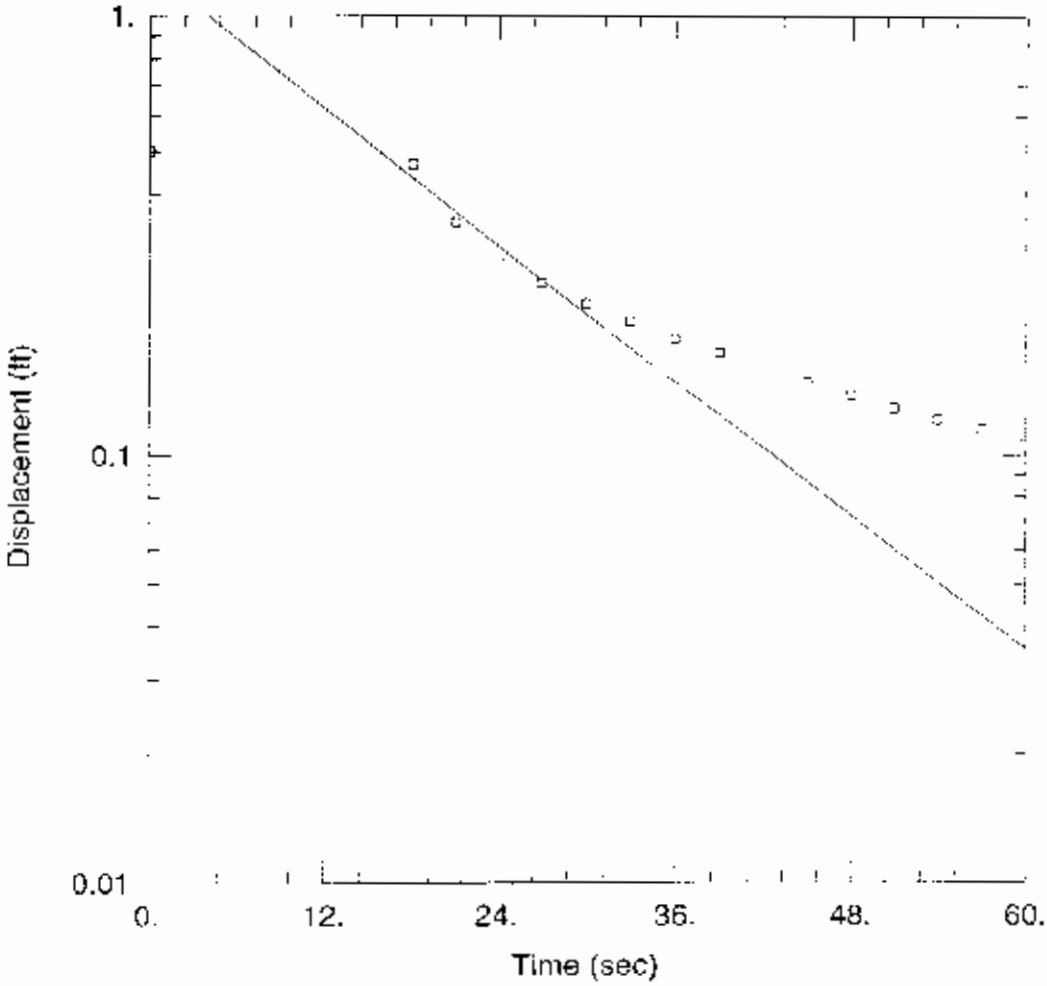
SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001189	cm/sec
y0	1.267	ft



MW-12 SLUG TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-12limited.aqt
Date: 02/13/03 Time: 13:55:07

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda, NY
Test Well: MW-12
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 10.38 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-12)

Initial Displacement: 0.5 ft
Wellbore Radius: 0.333 ft
Screen Length: 14. ft
Gravel Pack Porosity: 0.42
Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 10.38 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.001189 cm/sec
y0 = 1.267 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-12limited.aqt
Title: MW-12 Slug Test
Date: 02/13/03
Time: 13:55:13

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda, NY
Test Date: 10/17/02
Test Well: MW-12

AQUIFER DATA

Saturated Thickness: 10.38 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.5 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 14. ft
Total Well Penetration Depth: 10.38 ft
Gravel Pack Porosity: 0.42

No. of observations: 16

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	33.	0.204	51.	0.129
18.	0.467	36.	0.187	54.	0.121
21.	0.344	39.	0.173	57.	0.115
24.	0.284	42.	0.16	60.	0.11
27.	0.25	45.	0.148		
30.	0.224	48.	0.138		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

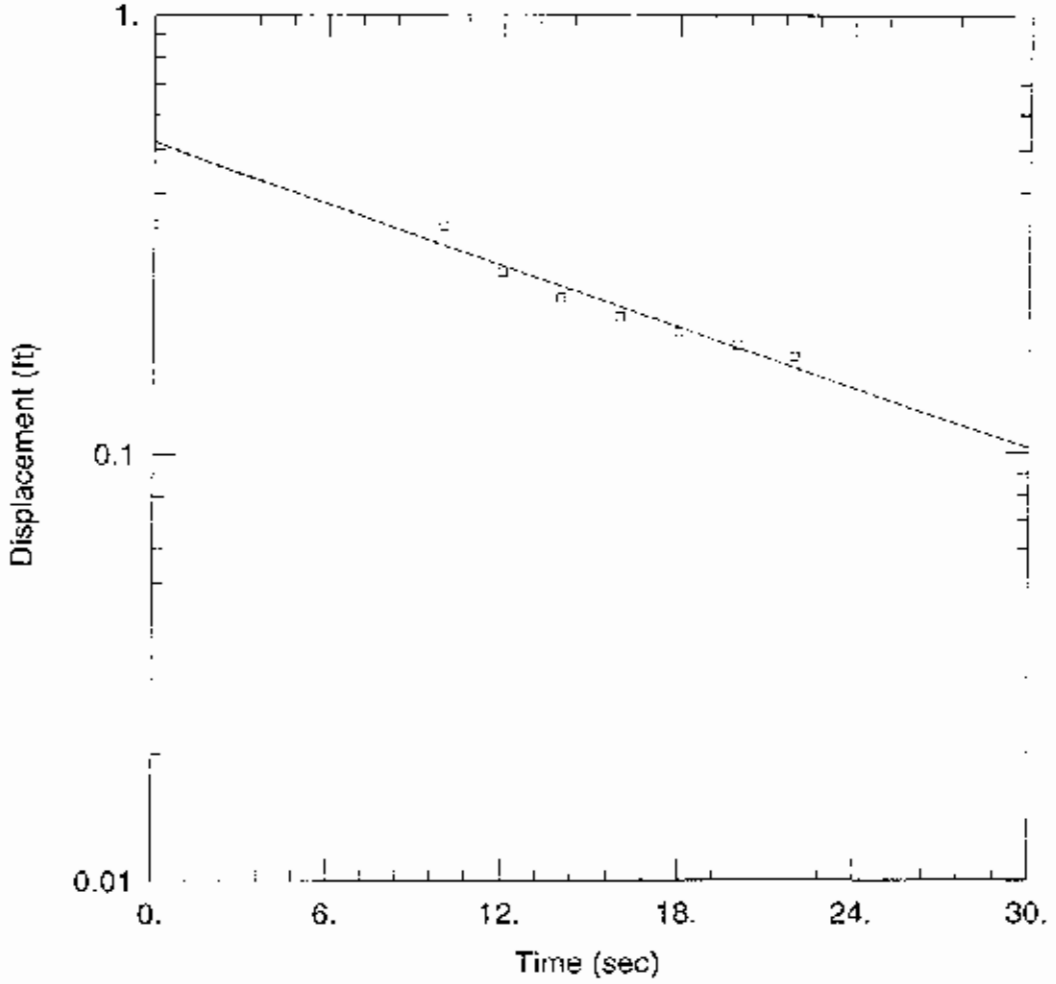
Estimated Parameters

Parameter	Estimate	
K	0.001189	cm/sec
y0	1.267	ft

MW-12 Slug Test

Initial WT: 10.25

Date	Time	ET (sec)	Chan[2] Feet H2O	Change in Elev.
10/17/2002	17:03:47	0	10.311	0.061
10/17/2002	17:03:50	3	10.478	0.228
10/17/2002	17:03:53	6	10.142	-0.108
10/17/2002	17:03:56	9	10.357	0.107
10/17/2002	17:03:59	12	10.46	0.21
10/17/2002	17:04:02	15	10.448	0.198
10/17/2002	17:04:05	18	10.717	0.467
10/17/2002	17:04:08	21	10.594	0.344
10/17/2002	17:04:11	24	10.534	0.284
10/17/2002	17:04:14	27	10.5	0.25
10/17/2002	17:04:17	30	10.474	0.224
10/17/2002	17:04:20	33	10.454	0.204
10/17/2002	17:04:23	36	10.437	0.187
10/17/2002	17:04:26	39	10.423	0.173
10/17/2002	17:04:29	42	10.41	0.16
10/17/2002	17:04:32	45	10.398	0.148
10/17/2002	17:04:35	48	10.388	0.138
10/17/2002	17:04:38	51	10.379	0.129
10/17/2002	17:04:41	54	10.371	0.121
10/17/2002	17:04:44	57	10.365	0.115
10/17/2002	17:04:47	60	10.36	0.11
10/17/2002	17:04:50	63	10.36	0.11
10/17/2002	17:04:53	66	10.361	0.111
10/17/2002	17:04:56	69	10.362	0.112
10/17/2002	17:04:59	72	10.361	0.111
10/17/2002	17:05:02	75	10.356	0.106
10/17/2002	17:05:05	78	10.35	0.1
10/17/2002	17:05:08	81	10.346	0.096
10/17/2002	17:05:11	84	10.345	0.095
10/17/2002	17:05:14	87	10.347	0.097
10/17/2002	17:05:17	90	10.347	0.097
10/17/2002	17:05:20	93	10.347	0.097
10/17/2002	17:05:23	96	10.343	0.093
10/17/2002	17:05:26	99	10.339	0.089
10/17/2002	17:05:29	102	10.337	0.087
10/17/2002	17:05:32	105	10.336	0.086
10/17/2002	17:05:35	108	10.337	0.087
10/17/2002	17:05:38	111	10.336	0.086
10/17/2002	17:05:41	114	10.335	0.085
10/17/2002	17:05:44	117	10.334	0.084
10/17/2002	17:05:47	120	10.332	0.082
10/17/2002	17:05:50	123	10.331	0.081



MW-5 RISING HEAD TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-5-limited 2nd.aqt
Date: 02/13/03 Time: 14:49:37

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda, NY
Test Well: MW-5
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 2.98 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-5)

Initial Displacement: 0.34 ft
Wellbore Radius: 0.333 ft
Screen Length: 10. ft
Gravel Pack Porosity: 0.42
Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 2.98 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.001001 cm/sec
y0 = 0.5212 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-5-limited 2nd.aqt
Title: MW-5 Rising Head Test
Date: 02/13/03
Time: 14:49:43

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda, NY
Test Date: 10/17/02
Test Well: MW-5

AQUIFER DATA

Saturated Thickness: 2.98 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.34 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 2.98 ft
Gravel Pack Porosity: 0.42

No. of observations: 8

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	14.	0.23	20.	0.179
10.	0.336	16.	0.208	22.	0.168
12.	0.263	18.	0.192		

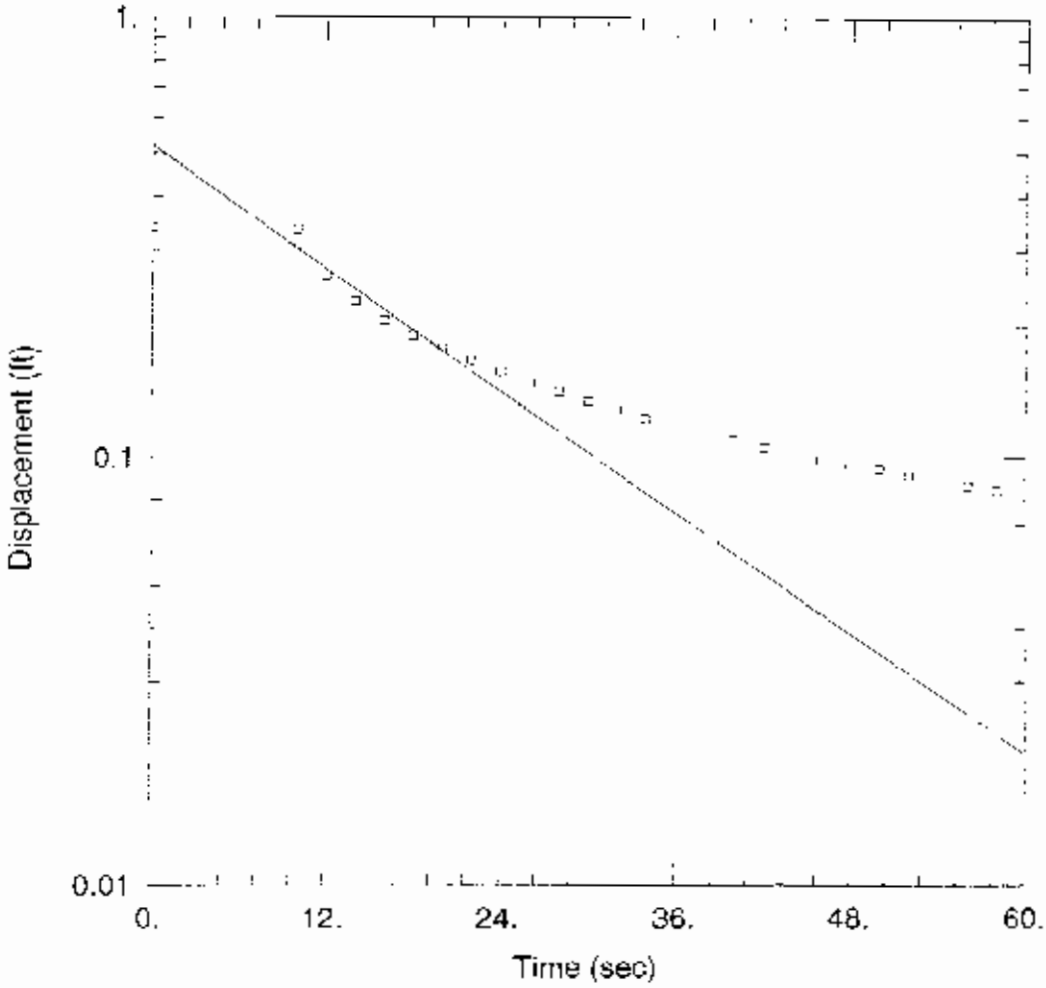
SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001001	cm/sec
y0	0.5212	ft



MW-5 RISING HEAD TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-5.aqt
Date: 02/13/03 Time: 14:47:48

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda, NY
Test Well: MW-5
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 2.98 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-5)

Initial Displacement: 0.34 ft
Wellbore Radius: 0.333 ft
Screen Length: 10. ft
Gravel Pack Porosity: 0.42

Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 2.98 ft

SOLUTION

Aquifer Model: Unconfined
K = 0.001001 cm/sec

Solution Method: Bouwer-Rice
y0 = 0.5212 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-5.aqt
Title: MW-5 Rising Head Test
Date: 02/13/03
Time: 14:47:55

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda, NY
Test Date: 10/17/02
Test Well: MW-5

AQUIFER DATA

Saturated Thickness: 2.98 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.34 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 2.98 ft
Gravel Pack Porosity: 0.42

No. of observations: 27

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	26.	0.149	44.	0.103
10.	0.336	28.	0.142	46.	0.099
12.	0.263	30.	0.135	48.	0.097
14.	0.23	32.	0.129	50.	0.094
16.	0.208	34.	0.123	52.	0.091
18.	0.192	36.	0.119	54.	0.089
20.	0.179	38.	0.114	56.	0.086
22.	0.168	40.	0.11	58.	0.084
24.	0.158	42.	0.106	60.	0.082

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

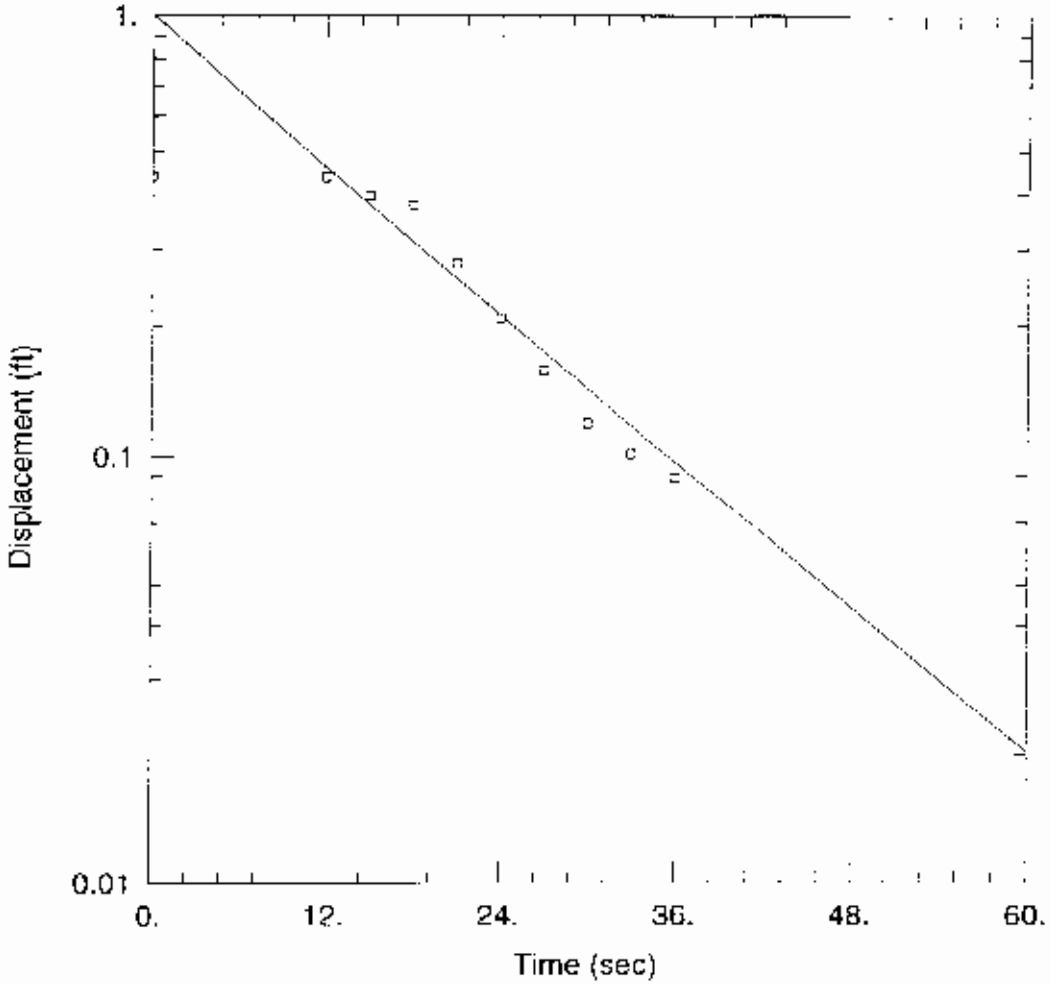
VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001001	cm/sec
y0	0.5212	ft

MW-5 Rising Head
Initial Water Column: 3.13

Date	Time	ET (sec)	ET (min)	Chan[2] Feet H2O	Change
10/17/2002	18:22:20	0	0.000	3.148	0.018
10/17/2002	18:22:22	2	0.033	3.153	0.023
10/17/2002	18:22:24	4	0.067	3.314	0.184
10/17/2002	18:22:26	6	0.100	3.35	0.220
10/17/2002	18:22:28	8	0.133	3.413	0.283
10/17/2002	18:22:30	10	0.167	3.466	0.336
10/17/2002	18:22:32	12	0.200	3.393	0.263
10/17/2002	18:22:34	14	0.233	3.36	0.230
10/17/2002	18:22:36	16	0.267	3.338	0.208
10/17/2002	18:22:38	18	0.300	3.322	0.192
10/17/2002	18:22:40	20	0.333	3.309	0.179
10/17/2002	18:22:42	22	0.367	3.298	0.168
10/17/2002	18:22:44	24	0.400	3.288	0.158
10/17/2002	18:22:46	26	0.433	3.279	0.149
10/17/2002	18:22:48	28	0.467	3.272	0.142
10/17/2002	18:22:50	30	0.500	3.265	0.135
10/17/2002	18:22:52	32	0.533	3.259	0.129
10/17/2002	18:22:54	34	0.567	3.253	0.123
10/17/2002	18:22:56	36	0.600	3.249	0.119
10/17/2002	18:22:58	38	0.633	3.244	0.114
10/17/2002	18:23:00	40	0.667	3.24	0.110
10/17/2002	18:23:02	42	0.700	3.236	0.106
10/17/2002	18:23:04	44	0.733	3.233	0.103
10/17/2002	18:23:06	46	0.767	3.229	0.099
10/17/2002	18:23:08	48	0.800	3.227	0.097
10/17/2002	18:23:10	50	0.833	3.224	0.094
10/17/2002	18:23:12	52	0.867	3.221	0.091
10/17/2002	18:23:14	54	0.900	3.219	0.089
10/17/2002	18:23:16	56	0.933	3.216	0.086
10/17/2002	18:23:18	58	0.967	3.214	0.084
10/17/2002	18:23:20	60	1.000	3.212	0.082
10/17/2002	18:23:22	62	1.033	3.21	0.080
10/17/2002	18:23:24	64	1.067	3.209	0.079
10/17/2002	18:23:26	66	1.100	3.208	0.078
10/17/2002	18:23:28	68	1.133	3.206	0.076
10/17/2002	18:23:30	70	1.167	3.205	0.075
10/17/2002	18:23:32	72	1.200	3.204	0.074
10/17/2002	18:23:34	74	1.233	3.202	0.072
10/17/2002	18:23:36	76	1.267	3.201	0.071
10/17/2002	18:23:38	78	1.300	3.2	0.070
10/17/2002	18:23:40	80	1.333	3.198	0.068
10/17/2002	18:23:42	82	1.367	3.197	0.067
10/17/2002	18:23:44	84	1.400	3.197	0.067
10/17/2002	18:23:46	86	1.433	3.196	0.066
10/17/2002	18:23:48	88	1.467	3.196	0.066
10/17/2002	18:23:50	90	1.500	3.195	0.065
10/17/2002	18:23:52	92	1.533	3.194	0.064
10/17/2002	18:23:54	94	1.567	3.193	0.063



MW-7 FALLING HEAD TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-7-Limited3.aqt
Date: 02/13/03 Time: 14:55:13

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda, NY
Test Well: MW-7
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 8.47 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7)

Initial Displacement: 0.44 ft
Wellbore Radius: 0.333 ft
Screen Length: 13. ft
Gravel Pack Porosity: 0.42
Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 8.47 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.001319 cm/sec
y0 = 1.003 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-7-Limited3.aqt
Title: MW-7 Falling Head Test
Date: 02/13/03
Time: 14:55:20

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda, NY
Test Date: 10/17/02
Test Well: MW-7

AQUIFER DATA

Saturated Thickness: 8.47 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.44 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 13. ft
Total Well Penetration Depth: 8.47 ft
Gravel Pack Porosity: 0.42

No. of observations: 10

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	21.	0.278	33.	0.101
12.	0.438	24.	0.208	36.	0.089
15.	0.397	27.	0.158		
18.	0.378	30.	0.119		

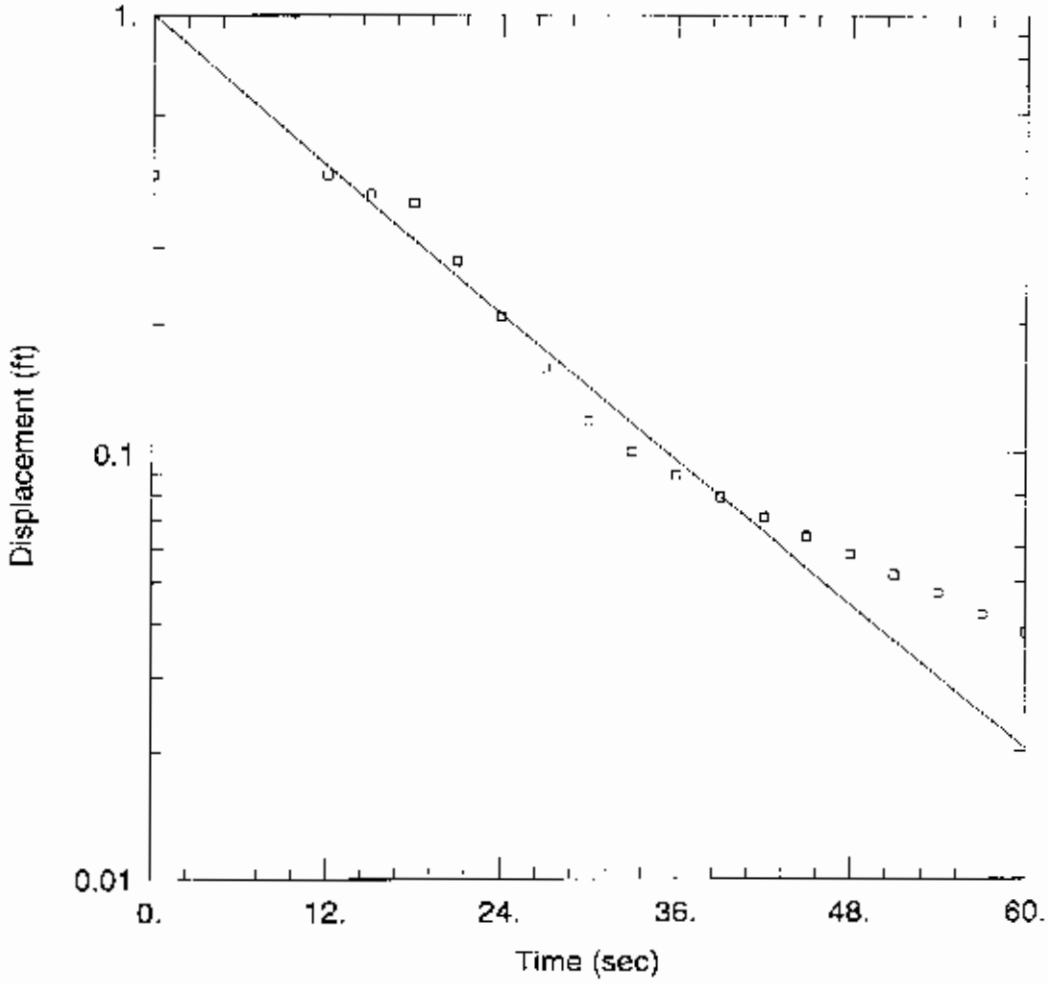
SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001319	cm/sec
y0	1.003	ft



MW-7 FALLING HEAD TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-7-Limited.aqt
Date: 02/13/03 Time: 13:14:59

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda, NY
Test Well: MW-7
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 8.47 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7)

Initial Displacement: 0.44 ft
Wellbore Radius: 0.333 ft
Screen Length: 13. ft
Gravel Pack Porosity: 0.42

Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 8.47 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.001319 cm/sec y0 = 1.003 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-7-Limited.aqt
Title: MW-7 Falling Head Test
Date: 02/13/03
Time: 13:15:10

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda, NY
Test Date: 10/17/02
Test Well: MW-7

AQUIFER DATA

Saturated Thickness: 8.47 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.44 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 13. ft
Total Well Penetration Depth: 8.47 ft
Gravel Pack Porosity: 0.42

No. of observations: 18

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	27.	0.158	45.	0.064
12.	0.438	30.	0.119	48.	0.058
15.	0.397	33.	0.101	51.	0.052
18.	0.378	36.	0.089	54.	0.047
21.	0.278	39.	0.079	57.	0.042
24.	0.208	42.	0.071	60.	0.038

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

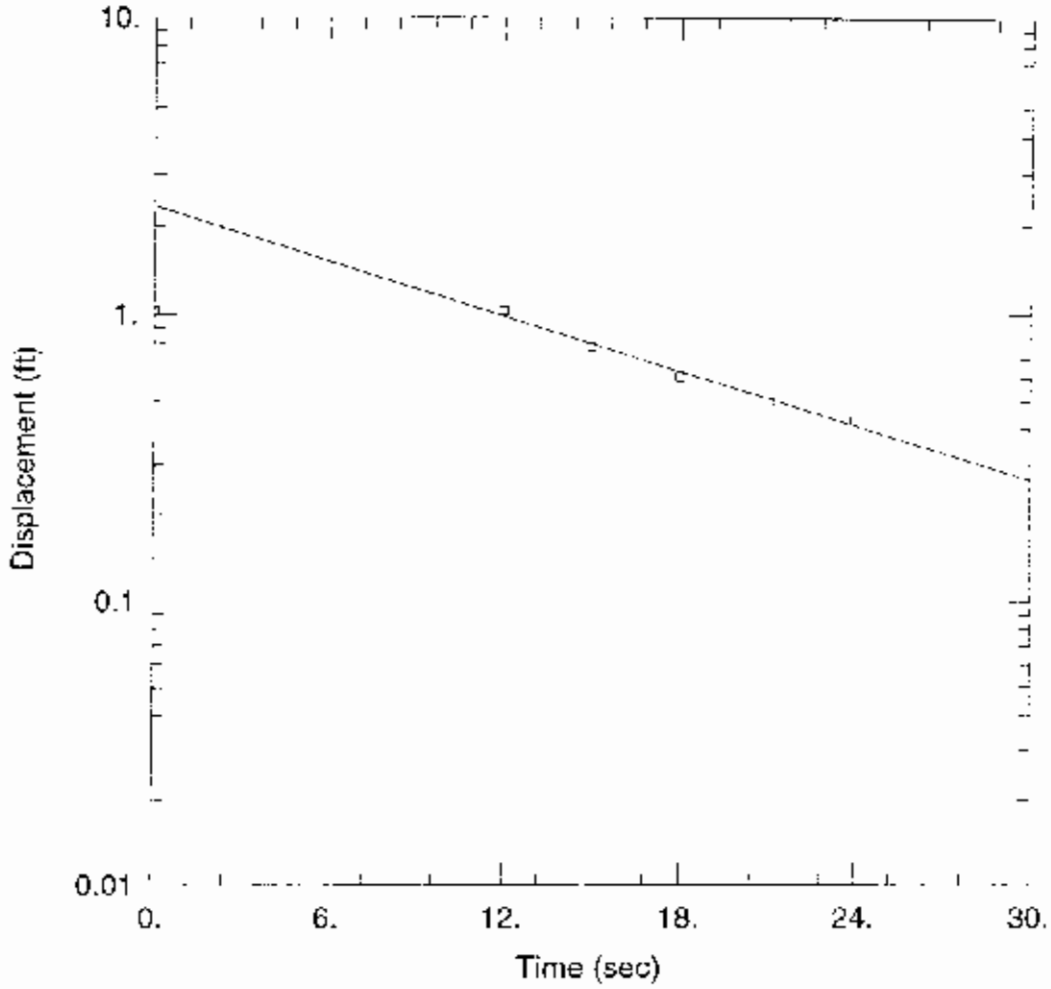
Estimated Parameters

Parameter	Estimate	
K	0.001319	cm/sec
y0	1.003	ft

MW-7 Falling Head, Slug Removed

Initial Water Level: 8.13

Date	Time	ET (sec)	ET (min)	Chan[2] Feet H2O	Change in Elev
10/17/2002	19:20:59	0		8.482	-0.332
10/17/2002	19:21:02	3		8.08	0.07
10/17/2002	19:21:05	6		7.996	0.154
10/17/2002	19:21:08	9		7.896	0.254
10/17/2002	19:21:11	12		7.712	0.438
10/17/2002	19:21:14	15		7.753	0.397
10/17/2002	19:21:17	18		7.772	0.378
10/17/2002	19:21:20	21		7.872	0.278
10/17/2002	19:21:23	24		7.942	0.208
10/17/2002	19:21:26	27		7.992	0.158
10/17/2002	19:21:29	30		8.031	0.119
10/17/2002	19:21:32	33		8.049	0.101
10/17/2002	19:21:35	36		8.061	0.089
10/17/2002	19:21:38	39		8.071	0.079
10/17/2002	19:21:41	42		8.079	0.071
10/17/2002	19:21:44	45		8.086	0.064
10/17/2002	19:21:47	48		8.092	0.058
10/17/2002	19:21:50	51		8.098	0.052
10/17/2002	19:21:53	54		8.103	0.047
10/17/2002	19:21:56	57		8.108	0.042
10/17/2002	19:21:59	60		8.112	0.038
10/17/2002	19:22:02	63		8.115	0.035
10/17/2002	19:22:05	66		8.119	0.031
10/17/2002	19:22:08	69		8.121	0.029
10/17/2002	19:22:11	72		8.124	0.026
10/17/2002	19:22:14	75		8.127	0.023
10/17/2002	19:22:17	78		8.129	0.021
10/17/2002	19:22:20	81		8.132	0.018
10/17/2002	19:22:23	84		8.135	0.015
10/17/2002	19:22:26	87		8.137	0.013
10/17/2002	19:22:29	90		8.139	0.011
10/17/2002	19:22:32	93		8.141	0.009
10/17/2002	19:22:35	96		8.143	0.007
10/17/2002	19:22:38	99		8.145	0.005
10/17/2002	19:22:41	102		8.147	0.003
10/17/2002	19:22:44	105		8.148	0.002
10/17/2002	19:22:47	108		8.15	0



MW-9 FALLING HEAD TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-9-Limited.aqt
Date: 02/13/03 Time: 15:58:06

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda, NY
Test Well: MW-9
Test Date: 1-/17/02

AQUIFER DATA

Saturated Thickness: 11.88 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9)

Initial Displacement: 1.03 ft
Wellbore Radius: 0.333 ft
Screen Length: 15. ft
Gravel Pack Porosity: 0.42

Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 11.88 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.001403 cm/sec y0 = 2.354 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-9-Limited.aqt
Title: MW-9 Falling Head Test
Date: 02/13/03
Time: 15:58:12

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda, NY
Test Date: 1-/17/02
Test Well: MW-9

AQUIFER DATA

Saturated Thickness: 11.88 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 1.03 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 15. ft
Total Well Penetration Depth: 11.88 ft
Gravel Pack Porosity: 0.42

No. of observations: 6

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	15.	0.775	21.	0.501
12.	1.026	18.	0.611	24.	0.429

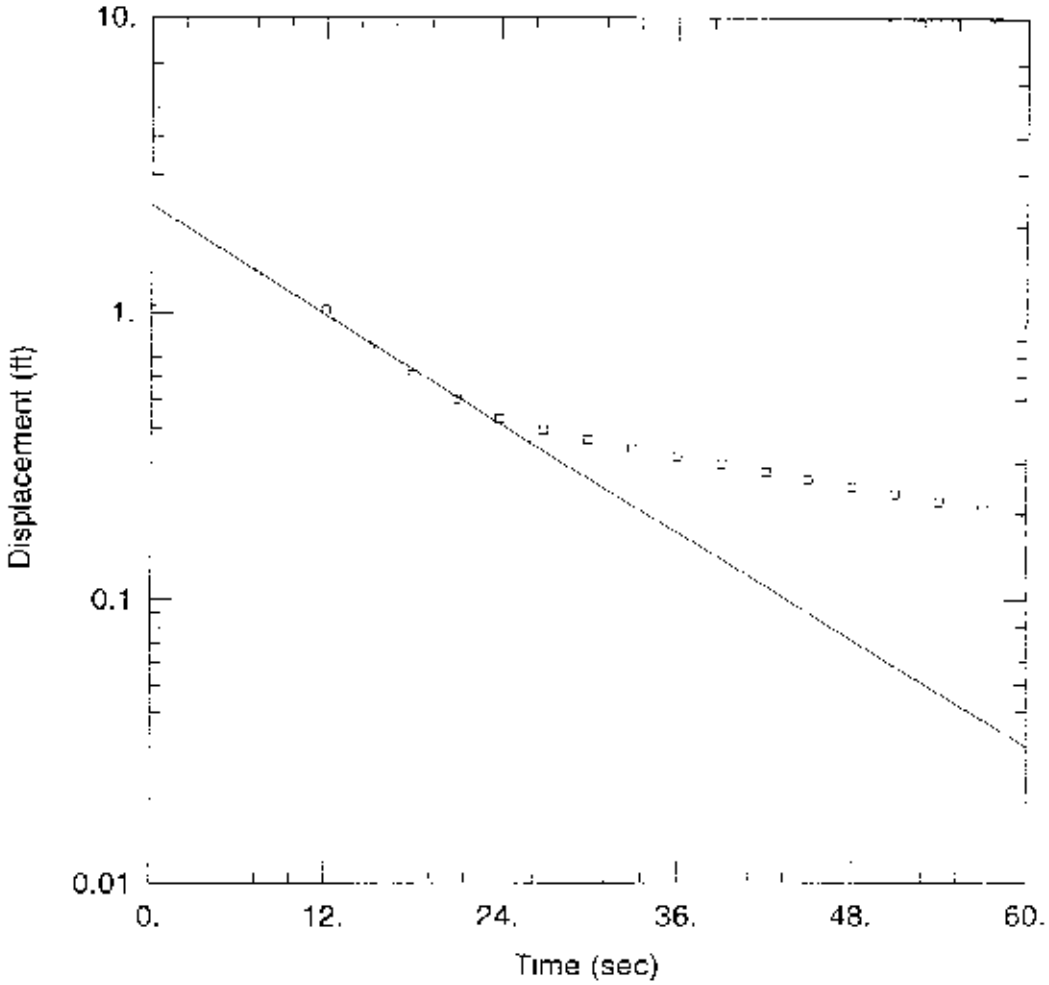
SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001403	cm/sec
y0	2.354	ft



MW-9 FALLING HEAD TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-9.aqt
Date: 02/13/03 Time: 15:56:01

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Test Location: Gowanda, NY
Test Well: MW-9
Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 11.88 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW09)

Initial Displacement: 1.03 ft
Wellbore Radius: 0.333 ft
Screen Length: 15. ft
Gravel Pack Porosity: 0.42

Casing Radius: 0.083 ft
Well Skin Radius: 0.333 ft
Total Well Penetration Depth: 11.88 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.001403 cm/sec
y0 = 2.354 ft

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-9.aqt
Title: MW-9 Falling Head Test
Date: 02/13/03
Time: 15:56:07

PROJECT INFORMATION

Company: Bergmann Associates
Client: DASNY
Project: 5596.03
Location: Gowanda, NY
Test Date: 10/17/02
Test Well: MW-9

AQUIFER DATA

Saturated Thickness: 11.88 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 1.03 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 15. ft
Total Well Penetration Depth: 11.88 ft
Gravel Pack Porosity: 0.42

No. of observations: 18

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	27.	0.393	45.	0.264
12.	1.026	30.	0.364	48.	0.248
15.	0.775	33.	0.339	51.	0.234
18.	0.611	36.	0.318	54.	0.22
21.	0.501	39.	0.299	57.	0.208
24.	0.429	42.	0.28	60.	0.195

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001403	cm/sec
y0	2.354	ft

MW-9 Falling Head

Initial WT Elev: 11.27

Date	Time	ET (sec)	Chan[2] Feet H2O	Change Elev.
10/17/2002	14:49:03	0	11.082	0.118
10/17/2002	14:49:06	3	10.391	0.809
10/17/2002	14:49:09	6	10.294	0.906
10/17/2002	14:49:12	9	10.309	0.891
10/17/2002	14:49:15	12	10.174	1.026
10/17/2002	14:49:18	15	10.425	0.775
10/17/2002	14:49:21	18	10.589	0.611
10/17/2002	14:49:24	21	10.699	0.501
10/17/2002	14:49:27	24	10.771	0.429
10/17/2002	14:49:30	27	10.807	0.393
10/17/2002	14:49:33	30	10.836	0.364
10/17/2002	14:49:36	33	10.861	0.339
10/17/2002	14:49:39	36	10.882	0.318
10/17/2002	14:49:42	39	10.901	0.299
10/17/2002	14:49:45	42	10.92	0.28
10/17/2002	14:49:48	45	10.936	0.264
10/17/2002	14:49:51	48	10.952	0.248
10/17/2002	14:49:54	51	10.966	0.234
10/17/2002	14:49:57	54	10.98	0.22
10/17/2002	14:50:00	57	10.992	0.208
10/17/2002	14:50:03	60	11.005	0.195
10/17/2002	14:50:06	63	11.016	0.184
10/17/2002	14:50:09	66	11.027	0.173
10/17/2002	14:50:12	69	11.037	0.163
10/17/2002	14:50:15	72	11.046	0.154
10/17/2002	14:50:18	75	11.054	0.146
10/17/2002	14:50:21	78	11.062	0.138
10/17/2002	14:50:24	81	11.069	0.131
10/17/2002	14:50:27	84	11.077	0.123
10/17/2002	14:50:30	87	11.084	0.116
10/17/2002	14:50:33	90	11.091	0.109
10/17/2002	14:50:36	93	11.098	0.102
10/17/2002	14:50:39	96	11.104	0.096
10/17/2002	14:50:42	99	11.11	0.09
10/17/2002	14:50:45	102	11.116	0.084
10/17/2002	14:50:48	105	11.122	0.078
10/17/2002	14:50:51	108	11.127	0.073
10/17/2002	14:50:54	111	11.132	0.068
10/17/2002	14:50:57	114	11.137	0.063
10/17/2002	14:51:00	117	11.142	0.058
10/17/2002	14:51:03	120	11.147	0.053

Appendix 4:
Validated Laboratory Analytical Results Tables

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-1/MW-1 2' - 4' 07/30/02	B-1/MW-1 8' - 10' 07/31/02	B-2/MW-2 8' - 10' 07/25/02	B-3/MW-3 8' - 10' 07/12/02	B-4/MW-4 10' - 12' 07/11/02	B-5/MW-5 8' - 13' 07/31/02	B-6/MW-6 18' - 20' 07/30/02	B-7/MW-7 16' - 17.5' 07/30/02	B-8/MW-8 9' - 10' 07/24/02
Trichloroethene	0.7 ppm (700 ppb)	14000 D	3600 D	8	3 J	ND	5	44 J	330 D	ND
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	940 D	170	12	ND	ND	7	190	550 D	ND
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	10	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.2 ppm (200 ppb)	ND	5 J	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.06 ppm (6 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3 ppm (300 ppb)	ND	ND	10 J	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND

Legend
D = Detected in dilluted sample
ND = Not Detected
J = Estimated concentration
B = Detected in Method Blank
BDJ = Detected in Method Blank
Bold = Concentration above method detection limit

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-1/MW-1 2' - 4' 07/30/02	B-1/MW-1 8' - 10' 07/31/02	B-2/MW-2 8' - 10 07/25/02	B-3/MW-3 8' - 10' 07/12/02	B-4/MW-4 10' - 12' 07/11/02	B-5/MW-5 8' - 13' 07/31/02	B-6/MW-6 18' - 20' 07/30/02	B-7/MW-7 16' - 17.5' 07/30/02	B-8/MW-8 9 - 10' 07/24/02
1,2-Dichloropropane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	0.12 ppm (120 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1.5 ppm (1500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	ND	2 J	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
P-Cymene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND

Legend
D = Detected in diluted sample
ND = Not Detected
J = Estimated concentration
B = Detected in Method Blank
BDJ = Detected in Method Blank
Bold = Concentration above method detection limit

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-9/MW-9 8' - 10' 07/11/02	B-10/MW-10 6' - 8' 07/10/02	B-11/MW-11 9' - 11' 07/17/02	B-12/MW-12 12' - 14' 07/16/02	B-13/MW-13 10' - 12' 07/15/02	B-14/MW-14 10' - 12' 07/18/02	B-15/MW-15 12' - 14' 07/19/02	B-16 8' - 10' 07/08/02
Trichloroethene	0.7 ppm (700 ppb)	ND	ND	480	3300	6	79	51	ND
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	110	ND	3 J	12	7 J	ND
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2 ppm (200 ppb)	ND	ND	N	ND	ND	ND	ND	ND
Benzene	0.06 ppm (6 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	none	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	none	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	none	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	none	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	none	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND

Legend
D = Detected in diluted sample
ND = Not Detected
J = Estimated concentration
B = Detected in Method Blank
BDJ = Detected in Method Blank
Bold = Concentration above method detection limit

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-9/MW-9 8' - 10' 07/11/02	B-10/MW-10 6' - 8' 07/10/02	B-11/MW-11 9' - 11' 07/17/02	B-12/MW-12 12' - 14' 07/16/02	B-13/MW-13 10' - 12' 07/15/02	B-14/MW-14 10' - 12' 07/18/02	B-15/MW-15 12' - 14' 07/19/02	B-16 8' - 10' 07/08/02
1,2-Dichloropropane	none	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	none	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	none	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	0.12 ppm (120 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	none	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	none	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	ND	ND	ND	1 J
Toluene	1.5 ppm (1500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	none	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor	none	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
P-Cymene	none	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND	ND

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GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-17 8' - 12' 07/09/02	B-18 5' - 6' 07/10/02	B-19 8' - 10' 07/24/02	B-20 12' - 14' 07/26/02	B-21 8' - 10 07/24/02	B-22 4' - 6' 07/09/02	B-23 10'-11' 07/25/02	B- 23D 10' - 11' 07/25/02	B-24 18' - 20' 07/31/02
Trichloroethene	0.7 ppm (700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	910 D
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	700 D
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	3 J
Vinyl chloride	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.06 ppm (6 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	none	ND	ND	ND	ND	N	ND	ND	ND	ND
Bromoform	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	3 J
Chloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	none	ND	ND	ND	2 J	ND	ND	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND

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GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-17 8' - 12' 07/09/02	B-18 5' - 6' 07/10/02	B-19 8 - 10' 07/24/02	B-20 12' - 14' 07/26/02	B-21 8' - 10' 07/24/02	B-22 4' - 6' 07/09/02	B-23 10'-11' 07/25/02	B-23D 10' - 11' 07/25/02	B-24 18' - 20' 07/31/02
1,2-Dichloropropane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	0.12 ppm (120 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1.5 ppm (1500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
P-Cymene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND	ND	ND

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GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-25 9' - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	B-26 11-12' 07/23/02	B-27 12' - 13' 07/26/02	B-28 11' - 12 07/23/02	Garden Soil-N 0'-0.5' 07/19/02	Garden Soil-S 0'-0.5' 07/19/02
Trichloroethene	0.7 ppm (700 ppb)	4 J	11	160	130	6	1 J	1 J
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	6	28	65	ND	ND	ND
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND
Benzene	0.06 ppm (6 ppb)	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	none	ND	ND	ND	ND	ND	ND	ND
Bromoform	none	ND	ND	ND	ND	ND	ND	ND
Bromomethane	none	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ND	ND	ND	ND	ND	ND	ND
Chloromethane	none	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	none	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	none	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	none	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	none	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	none	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	ND	ND	ND	ND	ND

Legend
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GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	B-25 9' - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	B-26 11-12' 07/23/02	B-27 12' - 13' 07/26/02	B-28 11' - 12' 07/23/02	Garden Soil-N 0'-0.5' 07/19/02	Garden Soil-S 0'-0.5' 07/19/02
1,2-Dichloropropane	none	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	none	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	none	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	0.12 ppm (120 ppb)	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	none	ND	ND	ND	ND	ND	ND	ND
Styrene	none	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	ND	ND	ND
Toluene	1.5 ppm (1500 ppb)	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	none	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor	none	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	none	ND	ND	ND	ND	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	ND	ND	ND	ND	ND	ND	ND
P-Cymene	none	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND

Legend
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GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

VOC Compound	NYSDEC Recommended Cleanup Objective	Field Blank B-4 FB 07/11/02	Trip Blank TB 07/11/02	Field Blank B-15 FB 07/19/02	Trip Blank TB 07/19/02	Field Blank B-20 FB 07/26/02	Trip Blank TB 07/26/02	Field Blank B-1 FB 07/31/02	Trip Blank TB 07/31/02
Trichloroethene	0.7 ppm (700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2 ppm (200 ppb)	3 J	6 BJ	16 J	ND	ND	7.7 BJ	7.8 J	9.6 J
Benzene	0.06 ppm (6 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	none	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	none	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	none	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	none	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	none	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND

Legend
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GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

		Boring/Monitoring Well Number, Sample Collection Interval and Sample Date							
VOC Compound	NYSDEC Recommended Cleanup Objective	Field Blank B-4 FB 07/11/02	Trip Blank TB 07/11/02	Field Blank B-15 FB 07/19/02	Trip Blank TB 07/19/02	Field Blank B-20 FB 07/26/02	Trip Blank TB 07/26/02	Field Blank B-1 FB 07/31/02	Trip Blank TB 07/31/02
1,2-Dichloropropane	none	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloropropene	none	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	none	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	none	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1 ppm (100 ppb)	3 BJ	4 BJ	3 BJ	4.2 BJ	3.5 BJ	2.3 BJ	2.0 BJ	1.9 BJ
Methyl tert butyl ether	0.12 ppm (120 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	none	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	none	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1.5 ppm (1500 ppb)	ND	ND	ND	ND	4.8 J	1.1 BJ	2.3 J	2.4 BJ
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	none	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor	none	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	none	ND	ND	ND	ND	ND	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
P-Cymene	none	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	none	ND	ND	ND	ND	ND	ND	ND	ND

Legend
D = Detected in dilluted sample
ND = Not Detected
J = Estimated concentration
B = Detected in Method Blank
BDJ = Detected in Method Blank
Bold = Concentration above method detection limit

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

SVOC Compound	NYSDEC Recommended Cleanup Objective	B-1/MW-1 8' - 10' 07/31/02	B-17 8' - 12' 07/09/02	B-21 8 - 10' 07/24/02	B-25 9' - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	Garden Soil-N 0' - 0.5' 07/19/02	Field Blank B-1 FB 07/31/02
Acenaphthene	50 ppm (50000 ppb	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	41 ppm (41000 ppb)	ND	ND	ND	ND	ND	ND	ND
Anthracene	50 ppm (50000 ppb	ND	ND	ND	ND	ND	ND	ND
Benao(a)anthracene	0.224 ppm (224 ppb)	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthrene	1.1 ppm (1100 ppb)	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthrene	1.1 ppm (1100 ppb)	ND	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene	50 ppm (50000 ppb	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.061 ppm (61 ppb)	ND	ND	ND	ND	ND	ND	ND
Benzoic acid	N/A	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	N/A	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxyl) methane	N/A	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl) ether	N/A	ND	ND	ND	ND	ND	ND	ND
2,2'-Oxbis(1-Chloropropane)	N/A	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phtahalate	N/A	ND	2400	38 J	ND	ND	ND	ND
4-Bromophenyl phenyl ether	N/A	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	N/A	ND	ND	ND	1700	7300 D	ND	ND
4-Chloroaniline	N/A	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	N/A	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.4 ppm (400 ppb)	270 J	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.014 ppm (14 ppb)	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	N/A	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	8.1 ppm (8100 ppb)	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected
All results micrograms per kilogram, ug/kg (ppb)
J = Estimated, detected below method detection limit
NA = Not Applicable, no NYSDEC cleanup objective for these compounds

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

SVOC Compound	NYSDEC Recommended Cleanup Objective	B-1/MW-1 8' - 10' 07/31/02	B-17 8' - 12' 07/09/02	B-21 8' - 10' 07/24/02	B-25 9' - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	Garden Soil-N 0' - 0.5' 07/19/02	Field Blank B-1 FB 07/31/02
1,2-Dichlorobenzene	N/A	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	N/A	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	N/A	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	N/A	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	N/A	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	N/A	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	N/A	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	N/A	ND	3100	ND	98 J	640	ND	ND
Fluoranthrene	50 ppm (50000 ppb	700 J	ND	ND	ND	ND	210 J	ND
Fluorene	50 ppm (50000 ppb	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.41 ppm (410 ppb)	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadine	N/A	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadine	N/A	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	N/A	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	3.2 ppm (3200 ppb)	ND	ND	ND	ND	ND	ND	ND
Isophorone	4.40 ppm (4400 ppb)	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	36.4 ppm (36400 ppl	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	0.100 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	0.9 pppm (900 ppb)	ND	ND	ND	ND	ND	ND	ND
Naphthalene	13 ppm (13000 ppb)	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected
All results micrograms per kilogram, ug/kg (opb)
J = Estimated, detected below method detection limit
NA = Not Applicable, no NYSDEC cleanup objective for these compounds

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

SVOC Compound	NYSDEC Recommended Cleanup Objective	B-1/MW-1 8' - 10' 07/31/02	B-17 8' - 12' 07/09/02	B-21 8' - 10' 07/24/02	B-25 9' - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	Garden Soil-N 0' - 0.5' 07/19/02	Field Blank B-1 FB 07/31/02
2-Nitroaniline	0.43 ppm	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	0.500 ppm (500 ppb)	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	N/A	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.2 ppm (200 ppb)	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	0.330 ppm (330 ppb)	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	0.100 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND
H-nitrosodiphenylamine	N/A	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-Di-n-propylamine	N/A	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50 ppm (50000 ppb	590 J	ND	ND	ND	ND	ND	ND
Phenol	0.03 ppm (3 ppb)	ND	ND	ND	ND	ND	ND	ND
Pyrene	50 ppm (50000 ppb	480 J	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	N/A	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected
All results micrograms per kilogram, ug/kg (ppb)
J = Estimated, detected below method detection limit
NA = Not Applicable, no NYSDEC cleanup objective for these compounds

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, PESTICIDES AND HERBICIDES

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

Compound	Recommended NYSDEC Cleanup Objective	B-1/MW-1 8' - 10' 07/31/02	B-17 8' - 12' 07/09/02	B-21 8' - 10' 07/24/02	B-25 9' - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	Garden Soil-N 0' - 0.5' 07/19/02
Pesticides, ug/kg (ppb)							
Aldrin	0.041 ppm (41 ppb)	ND	ND R	ND	ND	ND	ND
alpha-BHC	0.11 ppm (110 ppb)	ND	ND R	ND	ND	ND	ND
beta-BHC	0.2 ppm (200 ppb)	ND	ND R	ND	ND	ND	ND
gamma-BHC (Lindane)	0.06 ppm (6 ppp)	ND	ND R	ND	ND	ND	ND
delta-BHC	0.3 ppm (300 ppb)	ND	ND R	ND	ND	ND	ND
Chlordane	0.54 ppm (540 ppb)	ND	ND R	ND	ND	ND	ND
4,4'-DDD	2.9 ppm (2900 ppb)	ND	ND R	ND	ND	ND	Nd
4,4-DDE	2.1 ppm (2100 ppb)	ND	ND R	ND	ND	ND	28 ug/kg
4,4 -DDT	2.1 ppm (2100 ppb)	ND	ND R	ND	ND	ND	520 ug/kg
Dieldrin	0.044 ppm (44 pppb)	ND	ND R	ND	MD	ND	37 ug/kg
Endosulfan I	0.9 ppm (900 ppb)	ND	ND R	ND	ND	ND	ND
Endosulfan II	0.9 ppm (900 ppb)	ND	ND R	ND	ND	ND	ND
Endosulfan sulfate	1.0 ppm (1000 ppb)	ND	ND R	ND	18 ug/kg J	13 ug/kg J	ND
Endrin	0.10 ppm (100 ppb)	ND	ND R	ND	ND	ND	ND
Endrin aldehyde*	10 ppm (10,000 ppb)	ND	ND R	ND	ND	ND	ND
Heptachlor	0.10 ppm (100 ppb)	ND	ND R	ND	ND	ND	ND
Heptachlor epoxide	0.02 ppm (20 ppb)	ND	ND R	ND	ND	ND	ND
Methoxychlor*	10 ppm (10,000 ppb)	6.3 ug/kg J	ND R	ND	13 ug/kg J	7.5 ug/kg J	ND
Toxaphene*	10 ppm (10,000 ppb)	ND	ND R	ND	ND	ND	ND
Herbicides							
2,4-D	0.5 ppm (500 ppb)	ND	ND	ND	ND	ND	ND
2,4,5-TP (Silvex)	0.7 ppm (700 ppb)	ND	ND	ND	ND	ND	ND
2,3,5-T	1.9 ppm (1900 ppb)	ND	ND	ND	ND	ND	ND

Values expressed as ug/kg = ppb unless otherwise noted
ND = Not Detected
R = Data rejected during validation
J or E = Estimated, detected below method detection limit
B = Detected in Method Blank
* Endrin aldehyde, Methoxychlor and Toxaphene values are for Total Pesticides <10 ppm
Herbicides analysis on the B-1/MW-1 sample was collected from the 2' - 4' interval

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY ON SOIL SAMPLES, PCBS

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

PCB, ug/kg (PPB) Compound	Recommended NYSDEC Cleanup Objective*	B-1/MW-1 8' - 10' 07/31/02	B-17 8' - 12' 07/09/02	B-21 8' - 10' 07/24/02	B-25 9 - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	Garden Soil-N 0' - 0.5' 07/19/02
PCB Aroclor 1016	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	ND, <18
PCB Aroclor 1221	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	ND, <18
PCB Aroclor 1232	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	ND, <18
PCB Aroclor 1242	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	ND, <18
PCB Aroclor 1248	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	ND, <18
PCB Aroclor 1254	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	40 ppb
PCB Aroclor 1260	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	ND, <18

Results expressed as ug/kg = ppb unless otherwise noted
*10 ppm is the NYSDEC Cleanup Objective for subsurface soil
The surface soil cleanup objective is 1.0 ppm (1,000 ppb)
ND = Not Detected
D = Concentration detected in dilluted sample
J or E = Estimated, detected below method detection limit
B = Detected in Method Blank

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY ON SOIL SAMPLES, METALS AND CYANIDE

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

Metals, Total, Mg/Kg (ppm)	Recommended NYSDEC Cleanup Objective, ppm	Eastern USA Background Range, ppm	B-1/MW-1 0 - 10' 07/31/02	B-17 8' - 12' 07/09/02	B-21 8' - 10' 07/24/02	B-25 9' - 11' 07/23/02	B- 25D 9' - 11' 07/23/02	Garden Soil-N 0' - 0.5' 07/19/02
Aluminum	SB	33,000	6,630	6,760	7,690	6,380	7,140	8,020
Antimony	SB	N/A	ND, < 4 J	ND, <11.4 J	ND, <10.8 J	ND, <11.6 J	ND, <11.8 J	ND, <10.8
Arsenic	7.5 or SB	3-12	4.4	7.6	8.3	29.8	25	7.8
Barium	300 or SB	15-600	45.2	76 J	59.2 J	128 J	171 J	105
Beryllium	0.16 or SB	0-1.75	0.39 B	ND, <0.57	ND, 0.54	ND <0.58	ND, <0.59	ND, <0.54
Cadmium	1 or SB	0.1-1	ND, <0.03	ND, <0.57	ND,<0.54	ND, <0.58	ND , <0.59	ND, <0.54
Calcium	SB	130-35,000	10,800 E J	1,200	6,240	14,700	6,290	5,210
Chromium	10 or SB	1.5-40	10.4 E J	10.1	11	9.5	10.7	39.6
Cobalt	30 or SB	2.5-60	6.3 E J	7.3	6.8	8.8	10.1	7.8
Copper	25 or SB	1-50	20.3	24.6	21.7	18.2	19.2	38.4
Iron	2,000 or SB	2,000-550,000	15,600 E J	18,600	22,000	40,700	41,000	22,100
Lead	SB	rural, 4-61 ppm	11.1	12.4	8.1	9.9	9.9	22
Magnesium	SB	100-5,000	3,370	2,440	4,560	3,300	4,850	3,230
Maganese	SB	50-5,000	198 J	758	194	684	826	596
Mercury	0.1	0.001-0.2	ND, <0.005	ND, <0.12	ND, <0.022	ND, <0.023	ND, <0.025	ND, <0.10
Nickel	13 or SB	0.5-25	17.3 J	18	17	15.8	19.1	25.8
Potassium	SB	8,500-43,000	1,060	720 J	1110 J	991 J	1030 J	952
Selenium	2 or SB	0.1-3.9	ND, <0.45	ND, <3.4	ND, <3.2	ND, <3.5	ND , <3.6	ND, <3.2
Silver	SB	N/A	0.06 B	ND, <1.1	ND, <1.1	ND, <1.2	ND, <1.2	ND, <1.1
Sodium	SB	6,000-8,000	66.2	ND, <114	ND, <108	ND, <116	ND, <118	ND, <108
Thallium	SB	N/A	ND, <0.44	ND, <6.9	ND, <6.5	ND, <6.9	ND, <7.1	ND, <6.5
Vanadium	150 SB	1-300	15.0	10.8	12.2	9.8	10.9	13.1
Zinc	20 or SB	9-50	62.4 J	76.6 J	82.9 J	77.8 J	91.8 J	82.2
Cyanide, total, ug/g	N/A	N/A	ND, <0.5	ND, <0.5-R	ND, <0.5-R	ND, <0.5-R	ND, <0.5-R	ND, <0.50-R

SB = Site Background

Values are expressed as mg/Kg = ppm unless otherwise noted
ND = Not Detected
R = Data rejected during validation
J or E = Estimated, detected below method detection limit
B = Detected in Method Blank
Cyanide analysis on the B-1/MW-1 sample was collected from the 2' - 4' interval

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS

		Groundwater Monitoring Well and Sample Date								
VOC Compound	*NYSDEC Class GA Standard TOGS 1.1.1*	MW-1 09/04/02	MW-1D 09/04/02	MW-2 08/28/02	MW-3 08/28/92	MW-4 08/28/02	MW-5 08/28/02	MW-6 08/29/02	MW-7 08/29/02	MW-7D 08/29/02
Trichloroethene	5.0 ug/L	**380**	**320**	4.7J	2.3J	1.8J	**12**	2.4 J	**26**	**23**
cis-1,2-Dichloroethene	5.0 ug/L	**380**	**300**	**18**	**9.6**	2.0 J	1.7 J	**400**	**420**	**380**
trans-1,2-Dichloroethene	5.0 ugL	4J	4.0 J	ND	ND	ND	ND	3.4 J	ND	2.1 J
Vinyl chloride	2.0 ug/L	**4 J**	**3.2 J**	ND	**3.1J**	ND	ND	ND	**4 J**	**3.3 J**
Acetone	25.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	60.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (methyl chloride)	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane (hexamethylene)	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (ethylene dibro	6 x 10-4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND

Legend
All results ug/L
ND = Not Detected
J = Estimated
B = Detected Below Method Detection Limits
BDJ = Detected in Method blank
Bold = Exceed NYSDEC Class GA Standard

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS

		Groundwater Monitoring Well and Sample Date								
VOC Compound	*NYSDEC Class GA Standard TOGS 1.1.1*	MW-1 09/04/02	MW-1D 09/04/02	MW-2 08/28/02	MW-3 08/28/92	MW-4 08/28/02	MW-5 08/28/02	MW-6 08/29/02	MW-7 08/29/02	MW-7D 08/29/02
cis-1,3-Dichloropropene	0.4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	10.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	none	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NA: Not Listed	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Propylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Cymene (4-Isopropyltoluene)	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Butylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND

Legend
All results ug/L
ND = Not Detected
J = Estimated
B = Detected Below Method Detection Limits
BDJ = Detected in Method blank
Bold = Exceed NYSDEC Class GA Standard

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS

		Groundwater Monitoring Well and Sample Date							
VOC Compound	*NYSDEC Class GA Standard TOGS 1.1.1*	MW-8 08/28/02	MW-9 08/28/02	MW-10 08/28/02	MW-11 08/29/02	MW-12 08/29/02	MW-13 08/28/02	MW-14 08/29/02	MW-15 08/29/02
Trichloroethene	5.0 ug/L	1.4 J	4.2 J	2.6 J	**2300**	**9600**	**250**	**180**	**320**
cis-1,2-Dichloroethene	5.0 ug/L	ND	ND	ND	**2300**	**3000**	**69**	**130**	**380**
trans-1,2-Dichloroethene	5.0 ugL	ND	ND	ND	**16**	**28**	1.3 J	1.6 J	ND
Vinyl chloride	2.0 ug/L	ND	ND	ND	**31**	**15**	ND	**3.6 J**	ND
Acetone	25.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	60.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (methyl chloride)	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane (hexamethylene)	none	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (ethylene dibro	6 x 10-4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0 ug/L	ND	ND	ND	3.1 J	**8.3**	ND	ND	ND
1,2-Dichloropropane	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND

Legend
All results ug/L
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Bold = Exceed NYSDEC Class GA Standard

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS

Groundwater Monitoring Well and Sample Date

VOC Compound	*NYSDEC Class GA Standard TOGS 1.1.1*	MW-8 08/28/02	MW-9 08/28/02	MW-10 08/28/02	MW-11 08/29/02	MW-12 08/29/02	MW-13 08/28/02	MW-14 08/29/02	MW-15 08/29/02
cis-1,3-Dichloropropene	0.4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	none	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	10.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	none	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NA: Not Listed	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0 ug/L	ND	ND	ND	ND	1.0 J	ND	ND	ND
Toluene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluorethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
N-Propylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
p-Cymene (4-Isopropyltoluene)	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
N-Butylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND

Legend
All results ug/L
ND = Not Detected
J = Estimated
B = Detected Below Method Detection Limits
BDJ = Detected in Method blank
Bold = Exceed NYSDEC Class GA Standard

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS

		Groundwater Monitoring Well and Sample Date		
VOC Compound	*NYSDEC Class GA Standard TOGS 1.1.1*	Field Blank MW-1 FB 08/29/02	Trip Blank 08/29/02	Trip Blank 09/04/02
Trichloroethene	5.0 ug/L	ND	ND	ND
cis-1,2-Dichloroethene	5.0 ug/L	ND	ND	ND
trans-1,2-Dichloroethene	5.0 ugL	ND	ND	ND
Vinyl chloride	2.0 ug/L	ND	ND	ND
Acetone	25.0 ug/L	ND	ND	5.5 BJ
Benzene	1.0 ug/L	ND	ND	ND
Bromodichloromethane	50.0 ug/L	ND	ND	ND
Bromoform	50.0 ug/L	ND	ND	ND
Bromomethane	5.0 ug/L	ND	ND	ND
2-Butanone (MEK)	50.0 ug/L	ND	ND	ND
Carbon Disulfide	60.0 ug/L	ND	ND	ND
Carbon Tetrachloride	5.0 ug/L	ND	ND	ND
Chloromethane (methyl chloride)	5.0 ug/L	ND	ND	ND
Chlorobenzene	5.0 ug/L	ND	ND	ND
Chloroethane	5.0 ug/L	ND	ND	ND
Cyclohexane (hexamethylene)	none	ND	ND	ND
Chloroform	7.0 ug/L	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04 ug/L	ND	ND	ND
Dibromochloromethane	5.0 ug/L	ND	ND	ND
Dichlorodifluoromethane	5.0 ug/L	ND	ND	ND
1,2-Dibromoethane (ethylene dibro	6 x 10-4 ug/L	ND	ND	ND
1,2-Dichlorobenzene	3.0 ug/L	ND	ND	ND
1,3-Dichlorobenzene	3.0 ug/L	ND	ND	ND
1,4-Dichlorobenzene	3.0 ug/L	ND	ND	ND
1,1-Dichloroethane	5.0 ug/L	ND	ND	ND
1,2-Dichloroethane	0.6 ug/L	ND	ND	ND
1,1-Dichloroethene	5.0 ug/L	ND	ND	ND
1,2-Dichloropropane	1.0 ug/L	ND	ND	ND

Legend
All results ug/L
ND = Not Detected
J = Estimated
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BDJ = Detected in Method blank
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GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP INVESTIGATION V-00463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS

		Groundwater Monitoring Well and Sample Date		
VOC Compound	*NYSDEC Class GA Standard TOGS 1.1.1*	Field Blank MW-1 FB 08/29/02	Trip Blank 08/29/02	Trip Blank 09/04/02
cis-1,3-Dichloropropene	0.4 ug/L	ND	ND	ND
trans-1,3-Dichloropropene	0.4 ug/L	ND	ND	ND
Ethylbenzene	5.0 ug/L	ND	ND	ND
2-Hexanone	50.0 ug/L	ND	ND	ND
Isopropylbenzene	5.0 ug/L	ND	ND	ND
Methyl acetate	none	ND	ND	ND
Methylene chloride	5.0 ug/L	2.4 BJ	ND	2.7 BJ
Methyl tert butyl ether	10.0 ug/L	ND	ND	ND
4-Methyl-2-pentanone	none	ND	ND	ND
Methylcyclohexane	NA: Not Listed	ND	ND	ND
Styrene	5.0 ug/L	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0 ug/L	ND	ND	ND
Tetrachloroethene	5.0 ug/L	ND	ND	ND
Toluene	5.0 ug/L	ND	ND	2.1 BJ
1,2,4-Trichlorobenzene	5.0 ug/L	ND	ND	ND
1,1,1-Trichloroethane	5.0 ug/L	ND	ND	ND
1,1,2-Trichloroethane	1.0 ug/L	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluorethane	5.0 ug/L	ND	ND	ND
Trichlorofluoromethane	5.0 ug/L	ND	ND	ND
Total Xylenes	5.0 ug/L	ND	ND	ND
N-Propylbenzene	5.0 ug/L	ND	ND	ND
p-Cymene (4-Isopropyltoluene)	5.0 ug/L	ND	ND	ND
1,2,4-Trimethylbenzene	5.0 ug/L	ND	ND	ND
1,3,5-Trimethylbenzene	5.0 ug/L	ND	ND	ND
N-Butylbenzene	5.0 ug/L	ND	ND	ND
sec-Butylbenzene	5.0 ug/L	ND	ND	ND

Legend
All results ug/L
ND = Not Detected
J = Estimated
B = Detected Below Method Detection Limits
BDJ = Detected in Method blank
Bold = Exceed NYSDEC Class GA Standard

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-000463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS

SVOC Compound	*NYSDEC Class GA Standard TOGS 1.1.1*	*Method Detection Limit*	MW-1 09/04/02	MW-1D 09/04/02	MW-6 08/29/02	MW-12 08/29/02	Field Blank MW-1 FB 08/29/02
Acenaphthene	20 ug/L	10 ug/L	ND	ND	ND	ND	ND
Acenaphthylene	none	10 ug/L	ND	ND	ND	ND	ND
Anthracene	50 ug/L	10 ug/L	ND	ND	ND	ND	ND
Benao(a)anthracene	0.002 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Benzo(b)fluoranthrene	0.002 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Benzo(k)fluoranthrene	0.002 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Benzo(ghi)perylene	none	10 ug/L	ND	ND	ND	ND	ND
Benzo(a)pyrene	Non Detectable	10 ug/L	ND	ND	ND	ND	ND
Benzoic acid	none	48 ug/L	ND	ND	ND	ND	ND
Benzyl alcohol	none	19 ug/L	ND	ND	ND	ND	ND
Bis(2-chloroethoxy) methane	5.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
Bis(2-chloroethyl) ether	1.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
2,2'-Oxbis(1-Chloropropane)	not listed	10 ug/L	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	5.0 ug/L	10 ug/L	ND	2 J	6 J	12	ND
4-Bromophenyl phenyl ether	none	10 ug/L	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
4-Chloroaniline	5.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	1.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
2-Chloronaphthalene	10.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
2-Chlorophenol	1.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	none	10 ug/L	ND	ND	ND	ND	ND
Chrysene	0.002 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	none	10 ug/L	ND	ND	ND	ND	ND
Dibenzofuran	none	10 ug/L	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50.0 ug/L	10 ug/L	ND	ND	ND	ND	0.7 J
1,2-Dichlorobenzene	3.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
2,4-Dichlorophenol	5.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
Diethyl phthalate	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND

ND = Not Detected J = Estimated
All results ug/L (ppb)

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-000463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS

SVOC Compound	*NYSDEC Class GA Standard TOGS 1.1.1*	*Method Detection Limit*	MW-1 09/04/02	MW-1D 09/04/02	MW-6 08/29/02	MW-12 08/29/02	Field Blank MW-1 FB 08/29/02
4,6-Dinitro-2-methylphenol	1.0 ug/L	48 ug/L;24 ug/L for ASP	ND	ND	ND	ND	ND
2,4-Dinitrophenol	10.0 ug/L (guidance)	48 ug/L;24 ug/L for ASP	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
Di-n-octyl phthalate	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Fluoranthrene	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Fluorene	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04 ug/L	10 ug/L	ND	ND	ND	ND	ND
Hexachlorobutadine	0.5 ug/L	10 ug/L	ND	ND	ND	ND	ND
Hexachlorocyclopentadine	50 ug/L	10 ug/L	ND	ND	ND	ND	ND
Hexachloroethane	5.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Isophorone	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
2-Methylnaphthalene	4.7 ug/L	10 ug/L	ND	ND	ND	ND	ND
2-Methylphenol	1.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
4-Methylphenol	1.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
Naphthalene	10.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
2-Nitroaniline	5.0 ug/L	48 ug/L;24 ug/L for ASP	ND	ND	ND	ND	ND
3-Nitroaniline	5.0 ug/L	48 ug/L;24 ug/L for ASP	ND	ND	ND	ND	ND
4-Nitroaniline	5.0 ug/L	48 ug/L;24 ug/L for ASP	ND	ND	ND	ND	ND
Nitrobenzene	0.4 ug/L	10 ug/L	ND	ND	ND	ND	ND
2-Nitrophenol	1.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
4-Nitrophenol	1.0 ug/L	48 ug/L;24 ug/L for ASP	ND	ND	ND	ND	ND
N-nitrosodiphenylamine	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
N-Nitroso-Di-n-propylamine	none	10 ug/L	ND	ND	ND	ND	ND
Pentachlorophenol	1.0 ug/L	48 ug/L;24 ug/L for ASP	ND	ND	ND	ND	ND
Phenanthrene	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
Phenol	1.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
Pyrene	50.0 ug/L (guidance)	10 ug/L	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	1.0 ug/L	10 ug/L	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	1.0 ug/L	10 ug/L	ND	ND	ND	ND	ND

ND = Not Detected J = Estimated
All results ug/L (ppb)

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-000463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, METALS

			Groundwater Monitoring Well and Sample Date				
Metals, ug/L (ppb)	***NYSDEC Class GA Standard TOGS 1.1.1***	***Maximum Reporing Limit***	**MW-1 09/04/02**	**MW-1D 09/04/02**	**MW-6 08/29/02**	**MW-12 08/29/02**	**Field Blank MW-1 FB 08/29/02**
Aluminum	none established	0.20 mg/L	33.1 ug/L (0.0331 mg/L) J	0.32 mg/L-J	3.8 mg/L	ND	ND
Antimony	3 ug/L	0.020 mg/L	ND, <2.2 ug/L	ND	ND	ND	ND
Arsenic	25 ug/L	0.0070 mg/L	2.8 ug/L B	ND	ND	ND	ND
Barium	1,000 ug/L	0.0010 mg/L	342 ug/L (.432 mg/L)	0.32 mg/L	0.58 mg/L	0.40 mg/l	0.0010 mg/L
Beryllium	3 ug/L	0.0050 mg/L	ND, <0.30 mg/L	ND	ND	ND	ND
Cadmium	5 ug/L	0.0010 mg/L	ND, <0.30 mg/L	ND	ND	ND	ND
Calcium	none established	0.50 mg/L	81,000 ug/L (81 mg/L)	79.4 mg/L	98.2 mg/L	74.6 mg/L	ND
Chromium (total)	50 ug/L	0.0020 mg/L	ND, <0.60 ug/L	ND	0.0057 mg/L	ND	ND
Cobalt	none established	0.0050 mg/L	ND, <1.5 ug/L	ND	ND	ND	ND
Copper	200 ug/L	0.0050 mg/L	0.91 ug/L B	ND	0.0093	ND	ND
Iron	300 ug/L	0.050 mg/L	8,390 ug/L (8.39 mg/L)	8.0 mg/L	8.6 mg/L	7.4 mg/L	ND
Lead	25 ug/L	0.010 mg/L	2.3 ug/L J	ND	ND	ND	ND
Magnesium	25,000 ug/L	0.20 mg/L	16,600 ug/L (16.6 mg/L)	16.5 mg/L	15.9 mg/L	14.5 mg/L	ND
Maganese	300 ug/L	0.0030 mg/L	716 ug/L (0.716 mg/L)	0.71 mg/L	0.67 mg/L	0.86 mg/L	ND
Mercury	0.7 ug/L	0.00020 mg/L	ND, < 0.092 ug/L J	ND	ND	ND	ND
Nickel	100 ug/L	0.010 mg/L	ND, <0.47 ug/L	ND	ND	ND	ND
Potassium	none established	0.50 mg/L	2,570 ug/L B (2.57 mg/L)	2.6 mg/L	3.0 mg/L	1.1 mg/L	ND
Selenium	10 ug/L	0.010 mg/L	ND, <4.9 ug/L	ND	ND	ND	ND
Silver	50 ug/L	0.0030 mg/L	ND, <0.90 ug/L	ND	ND	ND	ND
Sodium	20,000 ug/L	1.0 mg/L	26,100 ug/L (26.1 mg/L)	26.1 mg/L	40.8 mg/L	35.3 mg/L	ND
Thallium	0.5 ug/L (guidance)	0.020 mg/L	5.6 ug/L J	ND	ND	ND	ND
Vanadium	none established	0.0050 mg/L	1.1 ug/L B	ND	0.0061 mg/L	ND	ND
Zinc	2,000 ug/L (guidance)	0.020 mg/L	3.0 ug/L B	ND	0.31 mg/L	ND	ND
Cyanide, total, ug/g	200 ug/L	0.010 mg/L	ND, <10 ug/L	ND	ND	ND	ND

ND = Not Detected
All Results ug/L, micrograms per liter (ppb) or mg/L, miligrams per liter (ppm)
J = Estimated, detected below method detection limit. ND-J = Detection Limit estimated based on data validation review
ND-R = Not Detected, but results not validated based on surrogate recoveries outside of acceptable range
B = Detected in Method Blank

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-000463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, PESTICIDES AND HERBICIDES

			Groundwater Monitoring Well and Sample Date				
Pesticides	***NYSDEC Class GA Standard TOGS 1.1.1***	***Maximum Reporting Limit***	**MW-1 09/04/02**	**MW-1D 09/04/02**	**MW-6 08/29/02**	**MW-12 08/29/02**	**Field Blank MW-1 FB 08/29/02**
Aldrin	ND	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Alpha-BHC	0.01 ug/L	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
beta-BHC	0.04 ug/L	0.050 ug/L	N/A	ND-R	ND-R	ND-R	ND
gamma-BHC (Lindane)	0.05 ug/L	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
delta-BHC	0.04 ug/L	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Chlordane	0.05 ug/L	0.50 ug/L	N/A	ND-R	ND-R	ND-R	ND
Alpha-Chlordane	0.05 ug/L (Chlordane)	0.050 ug/L	ND	NA	NA	NA	NA
gamma-Chlordane	0.05 ug/L (Chlordane)	0.050 ug/L	ND	NA	NA	NA	NA
4,4'-DDD	0.3 ug/L	0.050 ug/L	ND-J	ND-R	ND-R	ND-R	ND
4,4'-DDE	0.2 ug/L	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
4,4'-DDT	0.2 ug/L	0.050 ug/L	ND-J	ND-R	ND-R	ND-R	ND
Dieldrin	0.004 ug/L	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Endosulfan I	N/A	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Endosulfan II	N/A	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Endosulfan Sulfate	N/A	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Endrin	ND	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Endrin aldehyde	5.0 ug/L	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Endrin ketone	5.0 ug/L	0.10 ug/L	ND	NA	NA	NA	NA
Heptachlor	0.04 ug/L	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Heptachlor epoxide	0.03 ug/L	0.050 ug/L	ND	ND-R	ND-R	ND-R	ND
Methoxychlor	35 ug/L	0.050 ug/L	ND	NA	NA	NA	NA
Toxaphene	0.06 ug/L	0.99 ug/L	ND	ND-R	ND-R	ND-R	ND
Herbicides							
2,4-D	50 ug/L	0.48 ug/L	ND	ND	ND	ND	ND
2,4,5-TP (Silvex)	10 ug/L	0.48 ug/L	ND	ND	ND	ND	ND
2,4,5-T	35 ug/L	0.48 ug/L	ND	ND	ND	ND	ND

ND = Not Detected
All Results ug/L, micrograms per liter (ppb)
J = Estimated, detected below method detection limit. ND-J = Detection Limit estimated based on data validation review
ND-R = Not Detected, but results not validated based on surrogate recoveries outside of acceptable range
N/A = Not Applicable, No NYSDEC Class GA Standard or compound was not included in the analysis

GOWANDA DAY HABILITATION CENTER
VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-000463-9
LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, PCBs

PCB	*NYSDEC Class GA Standard TOGS 1.1.1*	*Maximum Reporting Limit*	**MW-1 09/04/02**	**MW-1D 09/04/02**	**MW-6 08/29/02**	**MW-12 08/29/02**	Field Blank MW-1 FB 08/29/02
PCB Aroclor 1016	5.0 ug/L	0.53 ug/L	ND	ND	ND-J	ND-J	ND
PCB Aroclor 1221	5.0 ug/L	0.53 ug/L	ND	ND	ND-J	ND-J	ND
PCB Aroclor 1232	5.0 ug/L	0.53 ug/L	ND	ND	ND-J	ND-J	ND
PCB Aroclor 1242	5.0 ug/L	0.53 ug/L	ND	ND	ND-J	ND-J	ND
PCB Aroclor 1248	5.0 ug/L	0.53 ug/L	ND	ND	ND-J	ND-J	ND
PCB Aroclor 1254	5.0 ug/L	0.53 ug/L	ND	ND	ND-J	ND-J	ND
PCB Aroclor 1260	5.0 ug/L	0.53 ug/L	ND	ND	ND-J	ND-J	ND

Legend
All results expressed as ug/L, micrograms per liter (ppb)
ND = Not Detected
J = Estimated, detected below method detection limit. ND-J = Detection Limit estimated based on data validation review

APPENDIX 5

APPENDIX 5
Chain-of-Custody Forms
And
Laboratory Analytical Reporting Package

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Bergmann Associates	Project Manager: Edward Jones	Date: 07/11/02	Chain of Custody Number: 100434
Address: 200 First Federal Plaza	Telephone Number (Area Code)/Fax Number: (585) 232-5135 (585) 232 4652	Lab Number	Page 1 of 1
City: Rochester / State: NY / Zip Code: 14614	Site Contact	Lab Contact: Brian Fischer	
Project Name and Location (State): Gowanda DAY Habilitation	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 5596.03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs-8260	Tot. Metals	TCL-SVOCs	PCBs	TCL-Pesticides	TCL-Herbicides	Special Instructions/ Conditions of Receipt
S070802 EJ 16 8-10	07/08/02	5[illegible] pm				X	X						X						
S070902 EJ 17 8-12	07/09/02	2[illegible] pm				X	X						X	X	X	X	X	X	
S070902EJ 22 4-6	7/09/02	3:30 pm				X	X						X						
S071002 EJ 18 5-6	7/10/02	8[illegible]0 AM				X	X						X						ASP
S071002 EJ 10 6-8	7/10/02	11 AM				X	X						X						
S071102 EJ 098-10	7/11/02	7[illegible]5 pm				X	X						X						
S071102 EJ 04 10-12	7/11/02	12:30				X	X						X						ASP
W 071102 EJ 04FB	7/11/02	1:00 pm		X						X			X						ASP
Trip Blank (ASP)																			ASP

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [ ] Other

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Edward Jones	07/11/02	2:55 pm	1. Received By: SR	7/11/02	14
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: VOC

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

0010801911

Chain of Custody Record

SEVERN TRENT SERVICES — **Severn Trent Laboratories, Inc.**

STL-4124 (1200)

Client: Bergmann Associates	Project Manager: Ed Jones	Date:	Chain of Custody Number: 100433
Address: 200 First Federal Plaza	Telephone Number (Area Code)/Fax Number: 585 ~~334~~ 232 5135	Lab Number:	Page 1 of 1
City: Rochester / State: NY / Zip Code: 14614	Site Contact:	Lab Contact:	
Project Name and Location (State): Gowanda DAY Habilitation	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): VOCs 8260	Special Instructions/ Conditions of Receipt
SO7102JM038-10	07/12/02	1100			X		X						X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	7/12/02	1545	1. Received By	7-12-02	15:45
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 8°

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

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[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1/98)

Client: Bergmann Associates	Project Manager: Ed JONES	Date: 7/19/02	Chain of Custody Number: 100432
Address: 200 First Federal Plaza 28 E. Main St	Telephone Number (Area Code)/Fax Number: (585) 232 5135	Lab Number:	Page ____ of ____
City: Rochester / State: NY / Zip Code: 14614	Site Contact: —	Lab Contact: Brian Fischer	
Project Name and Location (State): Gowanda Day Habilitation Ctr.	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No: 5596.03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs 8260	TCL Metals	TCL SVOCs	PCBs	TCL Pesticides	TCL Herbicides	Special Instructions/ Conditions of Receipt
S 07 15 02 EJ 13 10-12	7/15/02	3:20 pm				X	X						X						
S 07 16 02 EJ 12-14	7/16/02	2:15 pm				X	X						X						
S 07 17 02 EJ 11 9-11	7/17/02	11:0[illegible]				X	X						X						
S 07 18 02 EJ 14 10-12	7/18/02	9:30				X	X						X						
S 07 19 02 EJ 15 12-14	7/19/02	8:30 Am				X	X						X						ASP (TAL+1 BSF)
W 07 19 02 EJ 15 FB	7/19/02	10:00 Am		X						X			X						
TB 07 19 02	7/19/02	[illegible]		X						X			X						
SS 07 19 02 EJ G-M Garden-N	7/19/02	10:25 Am	[illegible]			X	X						X	X	X	X	X	X	
SS 07 19 02 EJ G-S	7/19/02	10:35 Am	[illegible]			X	X						X						

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Standard

QC Requirements (Specify):

1. Relinquished By: Edward Flores	Date: 07/19/02	Time: 15:21	1. Received By: SR	Date: 7/19/02	Time: 15:21
2. Relinquished By:	Date:	Time:	2. Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	1. Received By: 6°C	Date:	Time:

Comments:

DISTRIBUTION: White stays with the samples; CANARY returned to [illegible] with Report; PINK [illegible] Copy

000204

000193

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
Bergmann Associates	Edward Jones	07/26/02	133167
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 2
200 First federal plaza 28 East main St.	(585) 232 5135 x 409		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Rochester / NY / 14614	—	Brian Fischer	
Project Name and Location (State)	**Carrier/Waybill Number**		
Gowanda Day Hub; Installation CTT.			
Contract/Purchase Order/Quote No.			
Job#5596.03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	Analysis: Lees 8260 + TCL + STARS	SVOCs - TCL	TCL-metals	PCBs	TCL-Herbicides	TCL-pesticides	Special Instructions/ Conditions of Receipt
S072302 EJ 28 11-12	07/23/02	9:30				X		X							X						
S072302 EJ 26 11-12	07/23/02	11:00				X		X							X						
S072302 EJ 25 9-11	07/23/02	4:20 pm				X		X							X	X	X	X	X	X	2 JARS
S072302 EJ 25D 9-11	07/23/02	4:30 pm				X		X							X	X	X	X	X	X	2 JARS
~~07/23/02~~																					
S072402 EJ 21 8-10	07/24/02	8:00 AM				X	X	X							X	X	X	X	X	X	
S072402 EJ 08 9-10	07/24/02	11:40				X		X							X						
S072402 EJ 19 8-10	07/24/02	3:10 PM				X		X							X						
S072502 EJ 02 8-10	07/25/02	8:50				X		X							X						
S072502 EJ 23 10-11	07/25/02	1:40				X		X							X						
S072602 EJ 27 12-13	07/26/02	8:30				X		X							X						
S072502 EJ 23D 10-11	07/25/02	1:40				X		X							X						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1	Edward Jones	07/26/02	14:50			
2				STERLING FOR CO	7/26/02	1450
3						

Comments

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

205090

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Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: Bergmann Associates	Project Manager: Edward Jones	Date: 07/26/02	Chain of Custody Number: 133165
Address: 200 First Federal plaza, 28 East main St.	Telephone Number (Area Code)/Fax Number: (585) 232 5135 X 409	Lab Number:	Page 2 of 2
City: Rochester	State: NY	Zip Code: 14614	Site Contact:	Lab Contact: Brian Fischer
Project Name and Location (State): Gowanda Day Habilitation Ctr.	Carrier/Waybill Number:	Analysis (Attach list if more space is needed): TCL+STARS
Contract/Purchase Order/Quote No.: Job# 5596-03		

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	HNO3	HNO3	HCl	NaOH	ZnAc/NaOH	VOCs 8260	Special Instructions/ Conditions of Receipt
S072602EJ2012-14	07/26/02	11:20				X	X						X (8)	NDN ASP
W072602EJ20FB	07/26/02	11:45		X						X			X	2 VOA's
W072602EJ T.B. 07/17/02	07/17/02	—		X						X			X	1 VOA
0726														

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [ ] Other

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Edward Jones	07/26/02	14:50	1. Received By:		
2. Relinquished By:			2. Received By: FEDEX BUFFALO	7/26/02	1450
3. Relinquished By:			3. Received By:		

Comments:

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

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Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL 4124 (0901)

Client: Bergmann Associates	Project Manager: Edward Jones	Date: 08/01/02	Chain of Custody Number: 133041
Address: 200 first federal plaza 28 E. main st.	Telephone Number (Area Code)/Fax Number: (585) 232-5137 x 409	Lab Number:	Page ____ of ____
City: Rochester / State: NY / Zip Code: 14614	Site Contact: —	Lab Contact: Brian Fischer	
Project Name and Location (State): Gowanda Day Habilitation Ctr	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: Job #5596.03			

Analysis (Attach list if more space is needed): VOCs 8260C TCL; TCL-SVOCs; TCL-Metals; PCB's; TCL-Pesticides; TCL-Herbicides

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	VOCs	TCL-SVOCs	TCL-Metals	PCB's	TCL-Pesticides	TCL-Herbicides			Special Instructions
S073002EJ07 16-17-5	7/30/02	7:45 am				X	X						X								stranded non-ASP
S073002EJ06 18-20	7/30/02	12:40				X	X						X								ASP, MS, MS Dup
S073102EJ05 8-12	7/31/02	7:50				X	X						X								non-ASP
S073102EJ24 18-20	7/31/02	11:20				X	X						X								non-ASP
S073102EJ01 8-10	7/31/02	2:40				X	X						X	X	X	X	X	X	-	2	ASP, MS, MS Dup
S073102EJ01 2-4	7/31/02	2:10				X	X						X	—	HOLD	—	—	—	—	—	HOLD: clear will call
W073102EJ01FB	7/31/02	3:30		X				X	X	X	X		X	X	X	X	X	X	-	4	non ASP
Trip Blank	7/23/02			X						X			X								non ASP

4 Liters for Metals; 2 Plastics

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STANDARD

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Edward Jones	08/01/02	9:15 am	1. Received By		
2. Relinquished By			2. Received By: Cheryl Clem FedEx Buffalo	8/1/02	9:20
3. Relinquished By			3. Received By		

Comments: 6°C

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

0000204 0000198

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

TC

STL 4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
Bergmann Associates	Ed Jones	08/30/02	114623
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 2**
200 First Federal Plaza 28 E. Main St	(585) 232-5135		
City	**State** / **Zip Code**	**Site Contact**	**Lab Contact**
Rochester	NY / 14614		Brian Fischer
Project Name and Location (State)	**Carrier/Waybill Number**		
Gowanda Day Habilitation ctr			
Contract/Purchase Order/Quote No			
5596.03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs-TCL	SVOC	PCBs	Herbicides	Pesticides	TAL-Metals	Cyanide	TCLP-VOCs	TCLP-SVOCs	Flashpoint	pH	Special Instructions/ Conditions of Receipt
GW082902EJ-07D	08/29/02	13^26		X						X			X											SW 846 standard
GW082902EJ-11	08/29/02	15^20		X						X			X											↓
GW082902EJ-12	08/29/02	16^15		X						X	X		X	X	X	X	X	X	X					
GW082902EJ-01	08/29/02	17^20		X						X	X		X	X	X	X	X	X	X					ASP, MS, MSD
GW082902EJ-FB	08/29/02	18^15		X						X			X	X	X	X	X	X	X					standard SW 846
SO82902EJ-D1	08/29/02	4^45 pm				X														X	X	X	X	3 JARS each sample
SO82902EJ-D2	08/29/02	5^40 pm				X														X	X	X	X	standard
SO82902EJ-D3	08/29/02	5^50 pm				X														X	X	X	X	
TB Trip Blank	08/A/02			X						X			X											Standard SW 846
GW082902EJ-1D	08/29/02	17^20		X							X	X	X	X	X	X	X	X	X	X				Standard SW 846 : SHORT TAT

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Edward J Jones	08/30/02	9 40	1. Received By: STL Buffalo	08/30/02	09 40
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 3.06°C

00093

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Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

ST-4124 (0901)

Client: Bergmann Associates	Project Manager: Ed Jones	Date: 08/30/02	Chain of Custody Number: 114624
Address: 200 First Federal Plaza, 28 E. Main St.	Telephone Number (Area Code)/Fax Number: (585) 232-5135	Lab Number:	Page 1 of 2
City: Rochester, NY / State: NY / Zip Code: 14614	Site Contact: ←	Lab Contact: Brian Fischel	
Project Name and Location (State): Golden, NY 5596.03	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No:			

Analysis (Attach list if more space is needed): VOCs-TCL; SVOCs; PCBs; Herbicides; Pesticides; TAL-Metals; Cyanide

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	VOCs-TCL	SVOCs	PCBs	Herbicides	Pesticides	TAL-Metals	Cyanide	Special Instructions
GW 08 28 02 EJ-9	08/28/02	10:35		X						X			X							Standard SW846
GW 08 28 02 EJ-10	08/28/02	11:30		X						X			X							
GW 0828 02 EJ-04	08/28/02	12:55		X						X			X							
GW 08 28 02 EJ-08	08/28/02	13:15		X						X			X							
GW 08 28 02 EJ-03	08/28/02	14:20		X						X			X							
GW 08 28 0 2 EJ-05	08/28/02	14:35		X						X			X							
GW 08 28 02 EJ-13	08/28/02	15:40		X						X			X							
GW 08 28 02 EJ-02	08/28/02	16:30		X						X			X							
GW 08 29 02 EJ-06	08/29/02	9:30		X					X	X	X		X	X	X	X	X	X	X	STANDARD SW846
GW 08 29 02 EJ-15	08/29/02	11:40		X						X			X							ASP 08-15
GW 08 29 02 EJ-14	08/29/02	12:10		X						X			X							STANDARD SW846
GW 08 29 02 EJ-07	08/29/02	13:20		X						X			X							ASP 02 extra VOCs

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [ ] Other STANDARD

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Edward Jones	08/30/02	9:40	1. Received By: Jim Bayly STL Buffalo	08/30/02	09 40
2. Relinquished By:	Date	Time	2. Received By:	Date	Time
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments: 3.6°C

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

60094

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Bergmann Associates	Project Manager: Edward Jones	Date: 09/04/02	Chain of Custody Number: 099038
Address: 200 First federal plaza 28 E. Main St.	Telephone Number (Area Code)/Fax Number: (585) 232-5135 x 409	Lab Number:	Page 1 of 1
City: Rochester / State: NY / Zip Code: 14614	Site Contact: —	Lab Contact: Brian Fischer	
Project Name and Location (State): Gowanda DAy Habilitation	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 5596-03			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs - TCL	SVOCs	Total Metals	Cyanide	PCBs	Pesticides	Herbicides	Special Instructions/ Conditions of Receipt
GW090402EJ-01	09/04/02	11:00		X					X	X	X		X	X	X	X	X	X	X	ASP, MS, MSD
GW090402EJ-01D	09/04/02	11:00		X					X	X	X		X	X	X	X	X	X	X	standard SW846
T.B.				X					1	X			X	VOCs only						Standard SW846-VOC

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other STANDARD

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Edward Jones	09/04/02	13:38	1. Received By:	9-04-02	13:40
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments: 10°C

560000

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

SEVERN TRENT SERVICES

STL Buffalo
10 Hazelwood Drive
Suite 106
Amherst, NY 14228

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ANALYTICAL REPORT
Revised

Job#: A02-7056,A02-7130,A02-7365,A02-7638,A02-7821

STL Project#: NY2A8896
SDG#: 7056
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center
Task: SW8463 DELIVERABLES

SW846 SOIL SAMPLES

Mr. Edward Jones
Bergmann Associates
28 East Main Street
Rochester, NY 14614

STL Buffalo

for Brian J. Fischer
Project Manager

08/28/2002

This report contains 231 pages which are individually numbered.

SEVERN TRENT SERVICES

SAMPLE SUMMARY

000001

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A2705601	S070802EJ16 8-10	07/08/2002	17:00	07/11/2002	14:50
A2705602	S070902EJ17 8-12	07/09/2002	14:00	07/11/2002	14:50
A2705603	S070902EJ22 4-6	07/09/2002	15:30	07/11/2002	14:50
A2705604	S071002EJ10 6-8	07/10/2002	11:00	07/11/2002	14:50
A2705605	S071102EJ09 8-10	07/11/2002	07:15	07/11/2002	14:50
A2713001	S071202TM038-10	07/12/2002	11:00	07/12/2002	15:45
A2736501	S071502EJ13 10-12	07/15/2002	15:20	07/19/2002	15:21
A2736502	S071602EJ12 12-14	07/16/2002	14:15	07/19/2002	15:21
A2736503	S071702EJ11 9-11	07/17/2002	11:00	07/19/2002	15:21
A2736504	S071802EJ14 10-12	07/18/2002	09:30	07/19/2002	15:21
A2763803	S072302EJ25 9-11	07/23/2002	16:20	07/26/2002	14:50
A2763804	S072302EJ25D 9-11	07/23/2002	16:20	07/26/2002	14:50
A2763802	S072302EJ26 11-12	07/23/2002	11:00	07/26/2002	14:50
A2763801	S072302EJ28 11-12	07/23/2002	09:30	07/26/2002	14:50
A2763806	S072402EJ08 9-10	07/24/2002	14:00	07/26/2002	14:50
A2763807	S072402EJ19 8-10	07/24/2002	15:10	07/26/2002	14:50
A2763805	S072402EJ21 8-10	07/24/2002	08:00	07/26/2002	14:50
A2763808	S072502EJ02 8-10	07/25/2002	08:50	07/26/2002	14:50
A2763809	S072502EJ23 10-11	07/25/2002	13:40	07/26/2002	14:50
A2763811	S072502EJ23D 10-11	07/25/2002	13:40	07/26/2002	14:50
A2763812	S072602EJ20 12-14	07/26/2002	11:20	07/26/2002	14:50
A2763810	S072602EJ27 12-13	07/26/2002	08:30	07/26/2002	14:50
A2782101	S073002EJ07 16-17.5	07/30/2002	07:45	08/01/2002	09:20
A2782104	S073102EJ01 2-4	07/30/2002	14:10	08/01/2002	09:20
A2782102	S073102EJ05 8-13	07/30/2002	07:50	08/01/2002	09:20
A2782103	S073102EJ24 18-20	07/30/2002	11:20	08/01/2002	09:20
A2736508	SS071902EJ G-S	07/19/2002	10:35	07/19/2002	15:21
A2736507	SS071902EJ GARDEN-N	07/19/2002	10:25	07/19/2002	15:21
A2736506	TB071902	07/19/2002		07/19/2002	15:21
A2782106	TRIP BLANK	07/23/2002		08/01/2002	09:20
A2736505	W071902EJ15 FB	07/19/2002	08:30	07/19/2002	15:21
A2763813	W072602EJ20 FB	07/26/2002	11:45	07/26/2002	14:50
A2763814	W072602EJT.B.	07/26/2002		07/26/2002	14:50
A2782105	W073102EJ01FB	07/30/2002	15:30	08/01/2002	09:20

SEVERN TRENT SERVICES

000002

METHODS SUMMARY

Job#: A02-7056,A02-7130,A02-7365,A02-7638,A02-7821

STL Project#: NY2A8896
SDG#: 7056
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

PARAMETER	ANALYTICAL METHOD
BERG - SOIL METHOD 8260 - TCL VOAS + STARS	SW8463 8260
BERG -W- METH 8260 - TCL VOLATILE ORGANICS + STARS	SW8463 8260/5ML
BERG - W- METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	SW8463 8270
BERG -S- METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	SW8463 8270
BERG - S - METHOD 8082 - POLYCHLORINATED BIPHENYLS	SW8463 8082
BERG - S - SW8463 8081 - TCL PESTICIDES	SW8463 8081
BERG - S - SW8463 8151 HERBICIDES (3 CMPDS)	SW8463 8151
BERG - W - METHOD 8082 - POLYCHLORINATED BIPHENYLS	SW8463 8082
BERG - W - SW8463 8081 - TCL PESTICIDES	SW8463 8081
BERG - W - SW8463 8151 - HERBICIDES (3 CMPDS)	SW8463 8151
Aluminum - Total	SW8463 6010
Antimony - Total	SW8463 6010
Arsenic - Total	SW8463 6010
Barium - Total	SW8463 6010
Beryllium - Total	SW8463 6010
Cadmium - Total	SW8463 6010
Calcium - Total	SW8463 6010
Chromium - Total	SW8463 6010
Cobalt - Total	SW8463 6010
Copper - Total	SW8463 6010
Iron - Total	SW8463 6010
Lead - Total	SW8463 6010
Magnesium - Total	SW8463 6010
Manganese - Total	SW8463 6010
Mercury Total	SW8463 7470
Mercury Total	SW8463 7471
Nickel - Total	SW8463 6010
Potassium - Total	SW8463 6010
Selenium - Total	SW8463 6010
Silver - Total	SW8463 6010
Sodium - Total	SW8463 6010
Thallium Total	SW8463 6010
Vanadium - Total	SW8463 6010
Zinc - Total	SW8463 6010
Cyanide - Total	SW8463 9012
Cyanide - Total	SW8463 9012A

SEVERN TRENT SERVICES

000003

References:

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

NON-CONFORMANCE SUMMARY

Job#: A02-7056,A02-7130,A02-7365,A02-7638,A02-7821

STL Project#: NY2A8896
SDG#: 7056
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

General Comments

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

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

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

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

Sample Receipt Comments

A02-7056
Sample Cooler(s) were received at the following temperature(s); 6 °C
Sample Cooler(s) were received at the following temperature(s); 6°C.

A02-7130
Sample Cooler(s) were received at the following temperature(s); 8°C.

Sample was received at a temperature of 8°C. However, ice was present in the cooler and as the samples were collected the same day, it was not possible for the samples to cool to 4°C prior to receipt. There is no impact on the data.

A02-7365
Sample Cooler(s) were received at the following temperature(s); 6 °C
All samples were received in good condition.

A02-7638
Sample Cooler(s) were received at the following temperature(s); AMBIENT °C
Sample were received without ice present. However, samples had apparently been kept cool prior to receipt.

A02-7821
Sample Cooler(s) were received at the following temperature(s); 6 °C
All samples were received in good condition.

GC/MS Volatile Data

The analyte Methylene Chloride was detected in VBLK33 and VBLK34 at a level above the project established reporting limit. Samples had levels of Methylene Chloride less than ten times that of the Method Blank value. US EPA CLP National Functional Guidelines for Data Review suggests that all sample detections for Methylene Chloride should be considered a product of laboratory contamination and that the reporting limit be raised to the concentration found in the sample.

STL Buffalo internal validation forms are reported and included in this report as Appendix A.

The analytes Methylene Chloride and Acetone were detected in VBLK48 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analyte Methylene Chloride was detected in Method Blanks VBLK32 and VBLK33 at a level above the project established reporting limit. Samples had levels of Methylene Chloride less than ten times that of the Method Blank value. US EPA CLP National Functional Guidelines for Data Review suggests that all sample detections for Methylene Chloride should be considered a product of laboratory contamination and that the reporting limit be raised to the concentration found in the sample.

The analytes Acetone and Methylene Chloride were detected in Method Blanks VBLK36 and VBLK37 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analyte Carbon Disulfide was detected in Method Blank VBLK51 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analyte Acetone was detected in Method Blanks VBLK 44 and VBLK 46 at a level below the project established reporting limit. The analyte Toluene was also detected in the Method Blank VBLK 46 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The internal standard recoveries of Chlorobenzene D5, 1,4-Dichlorobenzene -D4, and 1,4-Difluorobenzene in sample S072302EJ25 9-11 were below quality control limits. Upon reanalysis, internal standard recovery of 1,4-Dichlorobenzene-D4 in sample S072302EJ25 9-11 RI was also below quality control limits. These similar results indicate potential matrix interference. Both sets of data are reported.

The analyte Methylene Chloride was detected in Method Blanks VBLK 44, VBLK 45 and VBLK 46 at a level above the project established reporting limit. Samples had levels of Methylene Chloride less than ten times that of the Method Blank value. US EPA CLP National Functional Guidelines for Data Review suggests that all sample detections for Methylene Chloride should be considered a product of laboratory contamination and that the reporting limit be raised to the concentration found in the sample.

The analytes Acetone, Methylene Chloride and Toluene were detected in Method Blank VBLK 63 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analytes 1,2,4-Trichlorobenzene, Methylene Chloride, Acetone, and Toluene were detected in the Method Blank VBLK62 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analytes Toluene and Methylene Chloride were detected in the Method Blank VBLK58 at a level below the project established reporting limit. The analyte Methylene Chloride was also detected in the Method Blank VBLK57 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

Sample S073002EJ07 16-17.5 exceeded control limits for all three Internal Standards (IS). The sample was reanalyzed using 1.0 gram of sample (DL), due to target analytes exceeding the linear range of the calibration curve, and the Internal Standards were now within control limits. Both sets of data are reported.

GC/MS Semivolatile Data

STL Buffalo internal validation forms are reported and included in this report as Appendix A.

The analyte Di-n-butyl phthalate was detected in the Method Blank A2B0681002 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analyte Di-n-butyl phthalate was detected in the Method Blanks A2B0721402 and A2B0746203 at a levels below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

All surrogate recoveries were below the laboratory quality control limits for sample S072302EJ25 9-11, S072302EJ25D 9-11, and S072402EJ21 8-10 due to water in the extract. The sample was re-extracted within hold time with compliant results. Only the results from the re-extraction are included in this report.

GC Extractable Data

For method 8081, the recovery of the surrogates Tetrachloro-m-xylene and Decachlorobiphenyl in sample S070902EJ17 8-12 was outside of established quality control limits due to heavy sample matrix. The recovery of all other quality control meets criteria. No corrective action was required.

STL Buffalo internal validation forms are reported and included in this report as Appendix A.

Sample GARDEN N was florisil treated to minimize matrix interferences. This sample was also diluted due to high positives of target compounds.

Sample SS071902EJ GARDEN-N was diluted prior to analysis for Method 8151 due to the coloration of the extract.

For method 8081, several analytes in the associated continuing calibration verifications exhibited a percent difference greater than 15% from the expected amount. The average of all analytes was within 15% and the associated laboratory quality control recoveries were compliant. No corrective action was required.

The recovery of the surrogate Decachlorobiphenyl in samples S072302EJ25 9-11, and S072302EJ25D 9-11 was outside of established quality control limits due to the sample matrix. The recovery of the surrogate Tetrachloro-m-xylene was within quality control limits, no corrective action was required.

Samples S072302EJ25 9-11 and S072302EJ25D 9-11 were florisil treated to minimize matrix interferences.

Metals Data

The LCS CLP Soils, A2B0648001, recoveries for Antimony, Iron and Vanadium were below quality control limits. However, these spikes were within the LCS Manufacturer Control Limits, therefore, no corrective action was necessary. In addition, the LCS, A2B0698401, recovery for Mercury was below quality control limits but within the LCS Manufacturer limits. No corrective action was necessary.

STL Buffalo internal validation forms are reported and included in this report as Appendix A.

The recovery of the Laboratory Control Sample, (A2B0687701), exhibited results below quality control limits for Total Aluminum, Total Antimony, Total Iron and Total Vanadium. However, the results were within the Manufacturer Quality Control Limits, therefore, no corrective action was necessary.

The analyte Iron was detected in the Method Blank (A2B0741802) at a level above the project established reporting limit. However, all samples had levels of Iron greater than ten times that of the Method Blank value, therefore, no corrective action was necessary.

The recovery of samples S072402EJ21 8-10 Matrix Spike and Matrix Spike Duplicate exhibited results below quality control limits for Aluminum, Antimony, Barium, Calcium, Iron, Magnesium, Manganese, Potassium and Zinc. The relative percent difference between the samples exceeded quality control criteria for Aluminum, Barium, Calcium and Magnesium. However, the LCS CLP Soils was compliant.

Revision Comments

Wet Chemistry Data (Revision)

Due to laboratory oversight, sample S070902EJ17 8-12 was analyzed past the EPA-recommended holding time for Cyanide analysis. The sample results should be considered estimated.

Due to laboratory oversight, sample SS071902EJ GARDEN-N was analyzed past the EPA-recommended holding time for Cyanide analysis. The sample results should be considered estimated.

Due to laboratory oversight, samples S072302EJ25 9-11, S072302EJ25D 9-11, and S072402EJ21 8-10 were analyzed past the EPA-recommended holding time for Cyanide analysis. The sample results should be considered estimated.

****

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.

000009

Client Sample ID	Lab Sample ID	Parameter (Inorganic)/Method (Organic)	Dilution	Code
SS071902EJ GARDEN-N	A2736507	8081	10.00	008
SS071902EJ GARDEN-N	A2736507	8151	4.00	010
SS071902EJ GARDEN-N	A2736507	8270	10.00	012
S072302EJ25 9-11	A2763803RE	8270	5.00	012
S072302EJ25D 9-11RED	A2763804DR	8270	2.00	008

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.
'	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.

Sample Data Package

Client ID		SD70802EJ16 8-10		SD70902EJ17 8-12		SD70902EJ22 4-6		SD71002EJ10 6-8	
Job No	Lab ID	A02-7056	A2705601	A02-7056	A2705602	A02-7056	A2705603	A02-7056	A2705604
Sample Date		07/08/2002		07/09/2002		07/09/2002		07/10/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/KG	ND 10 J	31	ND 8 J	26	ND 10 J	32	ND 16 J	29
Benzene	UG/KG	ND	6	ND	5	ND	6	ND	6
Bromodichloromethane	UG/KG	ND	6	ND	5	ND	6	ND	6
Bromoform	UG/KG	ND	6	ND	5	ND	6	ND	6
Bromomethane	UG/KG	ND	12	ND	10	ND	13	ND	12
2-Butanone	UG/KG	ND	31	ND	26	ND	32	ND	29
Carbon Disulfide	UG/KG	ND	6	ND	5	ND	6	ND	6
Carbon Tetrachloride	UG/KG	ND	6	ND	5	ND	6	ND	6
Chloromethane	UG/KG	ND	12	ND	10	ND	13	ND	12
Chlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
Chloroethane	UG/KG	ND	12	ND	10	ND	13	ND	12
Cyclohexane	UG/KG	ND	6	ND	5	ND	6	ND	6
Chloroform	UG/KG	ND	6	ND	5	ND	6	ND	6
1,2-Dibromo-3-chloropropane	UG/KG	ND	6	ND	5	ND	6	ND	6
Dibromochloromethane	UG/KG	ND	6	ND	5	ND	6	ND	6
Dichlorodifluoromethane	UG/KG	ND	6	ND	5	ND	6	ND	6
1,2-Dibromoethane	UG/KG	ND	6	ND	5	ND	6	ND	6
1,2-Dichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
1,3-Dichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
1,4-Dichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
1,1-Dichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	6
1,2-Dichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	6
1,1-Dichloroethene	UG/KG	ND	6	ND	5	ND	6	ND	6
cis-1,2-Dichloroethene	UG/KG	ND	6	ND	5	ND	6	ND	6
trans-1,2-Dichloroethene	UG/KG	ND	6	ND	5	ND	6	ND	6
1,2-Dichloropropane	UG/KG	ND	6	ND	5	ND	6	ND	6
cis-1,3-Dichloropropene	UG/KG	ND	6	ND	5	ND	6	ND	6
trans-1,3-Dichloropropene	UG/KG	ND	6	ND	5	ND	6	ND	6
Ethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
2-Hexanone	UG/KG	ND	12	ND	10	ND	13	ND	12
Isopropylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
Methyl acetate	UG/KG	ND	6	ND	5	ND	6	ND	6
Methylene chloride	UG/KG	ND 8 B	9 6	ND 8 B	8 5	ND 7 B	7 6	ND 9 B	9 6
Methyl tert butyl ether	UG/KG	ND	6	ND	5	ND	6	ND	6
4-Methyl-2-pentanone	UG/KG	ND	31	ND	26	ND	32	ND	29
Methylcyclohexane	UG/KG	ND	6	ND	5	ND	6	ND	6
Styrene	UG/KG	ND	6	ND	5	ND	6	ND	6
1,1,2,2-Tetrachloroethane	UG/KG	ND	6	ND	5	ND	6	ND	6
Tetrachloroethene	UG/KG	1 J	6	ND	5	ND	6	ND	6
Toluene	UG/KG	ND	6	ND	5	ND	6	ND	6
1,2,4-Trichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
1,1,1-Trichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	6
1,1,2-Trichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	6

27000

Client ID		S070802EJ16 8-10		S070902EJ17 8-12		S070902EJ22 4-6		S071002EJ10 6-8	
Job No / Lab ID		A02-7056 / A2705601		A02-7056 / A2705602		A02-7056 / A2705603		A02-7056 / A2705604	
Sample Date		07/08/2002		07/09/2002		07/09/2002		07/10/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/KG	ND	6	ND	5	ND	6	ND	6
Trichloroethene	UG/KG	ND	6	ND	5	ND	6	ND	6
Trichlorofluoromethane	UG/KG	ND	6	ND	5	ND	6	ND	6
Vinyl chloride	UG/KG	ND	12	ND	10	ND	13	ND	12
Total Xylenes	UG/KG	ND	18	ND	16	ND	19	ND	18
n-Propylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
p-Cymene	UG/KG	ND	6	ND	5	ND	6	ND	6
1,2,4-Trimethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
1,3,5-Trimethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
n-Butylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
sec-Butylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	6
IS/SURROGATE(S)									
Chlorobenzene-D5	%	86	50-200	90	50-200	88	50-200	89	50-200
1,4-Difluorobenzene	%	90	50-200	90	50-200	93	50-200	90	50-200
1,4-Dichlorobenzene-D4	%	67	50-200	74	50-200	68	50-200	75	50-200
Toluene-D8	%	102	78-118	95	78-118	97	78-118	99	78-118
p-Bromofluorobenzene	%	104	67-118	98	67-118	100	67-118	98	67-118
1,2-Dichloroethane-D4	%	90	63-133	81	63-133	82	63-133	82	63-133

000013

NA = Not Applicable ND = Not Detected

Client ID		S071102EJ09 8-10		S071202TH038-10		S071502EJ13 10-12		S071602EJ12 12-14	
Job No / Lab ID		A02-7056 / A2705605		A02-7130 / A2713001		A02-7365 / A2736501		A02-7365 / A2736502	
Sample Date		07/11/2002		07/12/2002		07/15/2002		07/16/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/KG	ND 9J	31	ND 30 B	30 27	ND 27 J	28	ND	3400
Benzene	UG/KG	ND	6	ND	5	ND	6	ND	680
Bromodichloromethane	UG/KG	ND	6	ND	5	ND	6	ND	680
Bromoform	UG/KG	ND	6	ND	5	ND	6	ND	680
Bromomethane	UG/KG	ND	12	ND	11	ND	11	ND	1400
2-Butanone	UG/KG	ND	31	ND	27	ND	28	ND	3400
Carbon Disulfide	UG/KG	ND	6	ND	5	ND	6	ND	680
Carbon Tetrachloride	UG/KG	ND	6	ND	5	ND	6	ND	680
Chloromethane	UG/KG	ND	12	ND	11	ND	11	ND	1400
Chlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
Chloroethane	UG/KG	ND	12	ND	11	ND	11	ND	1400
Cyclohexane	UG/KG	ND	6	ND	5	ND	6	ND	680
Chloroform	UG/KG	ND	6	ND	5	ND	6	ND	680
1,2-Dibromo-3-chloropropane	UG/KG	ND	6	ND	5	ND	6	ND	680
Dibromochloromethane	UG/KG	ND	6	ND	5	ND	6	ND	680
Dichlorodifluoromethane	UG/KG	ND	6	ND	5	ND	6	ND	680
1,2-Dibromoethane	UG/KG	ND	6	ND	5	ND	6	ND	680
1,2-Dichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
1,3-Dichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
1,4-Dichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
1,1-Dichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	680
1,2-Dichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	680
1,1-Dichloroethene	UG/KG	ND	6	ND	5	ND	6	ND	680
cis-1,2-Dichloroethene	UG/KG	ND	6	ND	5	3 J	6	ND	680
trans-1,2-Dichloroethene	UG/KG	ND	6	ND	5	ND	6	ND	680
1,2-Dichloropropane	UG/KG	ND	6	ND	5	ND	6	ND	680
cis-1,3-Dichloropropene	UG/KG	ND	6	ND	5	ND	6	ND	680
trans-1,3-Dichloropropene	UG/KG	ND	6	ND	5	ND	6	ND	680
Ethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
2-Hexanone	UG/KG	ND	12	ND	11	ND	11	ND	1400
Isopropylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
Methyl acetate	UG/KG	ND	6	ND	5	ND	6	ND	680
Methylene chloride	UG/KG	ND 8 B	8 6	ND 5 B	5	ND 8 B	8 6	ND	680
Methyl tert butyl ether	UG/KG	ND	6	ND	5	ND	6	ND	680
4-Methyl-2-pentanone	UG/KG	ND	31	ND	27	ND	28	ND	3400
Methylcyclohexane	UG/KG	ND	6	ND	5	ND	6	ND	680
Styrene	UG/KG	ND	6	ND	5	ND	6	ND	680
1,1,2,2-Tetrachloroethane	UG/KG	ND	6	ND	5	ND	6	ND	680
Tetrachloroethene	UG/KG	ND	6	ND	5	ND	6	ND	680
Toluene	UG/KG	ND	6	ND	5	ND	6	ND	680
1,2,4-Trichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
1,1,1-Trichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	680
1,1,2-Trichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	680

NA = Not Applicable ND = Not Detected

Client ID Job No / Lab ID Sample Date		S0711D2EJ09 8-10 A02-7056 A2705605 07/11/2002		S071202TM038-10 A02-7130 A2713001 07/12/2002		S071502EJ13 10-12 A02-7365 A2736501 07/15/2002		S071602EJ12 12-14 A02-7365 A2736502 07/16/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/KG	ND	6	ND	5	ND	6	ND	680
Trichloroethene	UG/KG	ND	6	3 J	5	6	6	3300	680
Trichlorofluoromethane	UG/KG	ND	6	ND	5	ND	6	ND	680
Vinyl chloride	UG/KG	ND	12	ND	11	ND	11	ND	1400
Total Xylenes	UG/KG	ND	18	2 J	16	ND	16	ND	2000
n-Propylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
p-Cymene	UG/KG	ND	6	ND	5	ND	6	ND	680
1,2,4-Trimethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
1,3,5-Trimethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
n-Butylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
sec-Butylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	680
IS/SURROGATE(S)									
Chlorobenzene-D5	%	86	50-200	90	50-200	89	50-200	77	50-200
1,4-Difluorobenzene	%	89	50-200	90	50-200	92	50-200	80	50-200
1,4-Dichlorobenzene-D4	%	64	50-200	74	50-200	84	50-200	61	50-200
Toluene-D8	%	98	78-118	98	78-118	96	78-118	102	78-118
p-Bromofluorobenzene	%	99	67-118	96	67-118	90	67-118	105	67-118
1,2-Dichloroethane-D4	%	88	63-133	92	63-133	89	63-133	116	63-133

000025

NA = Not Applicable ND = Not Detected

Client ID		S071702EJ11 9-11		S071802EJ14 10-12		S072302EJ25 9-11		S072302EJ25 9-11 RI	
Job No / Lab ID		A02-7365 / A2736503		A02-7365 / A2736504		A02-7638 / A2763803		A02-7638 / A2763803RI	
Sample Date		07/17/2002		07/18/2002		07/23/2002		07/23/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/KG	ND ~~54 BJ~~	140	ND ~~19 BJ~~	26	ND ~~45~~	45 ~~37~~	ND ~~51 B~~	51 ~~32~~
Benzene	UG/KG	ND	28	ND	5	ND	6	ND	6
Bromodichloromethane	UG/KG	ND	28	ND	5	ND	6	ND	6
Bromoform	UG/KG	ND	28	ND	5	ND	6	ND	6
Bromomethane	UG/KG	ND	57	ND	10	ND	12	ND	13
2-Butanone	UG/KG	ND	140	ND	26	ND	31	ND	32
Carbon Disulfide	UG/KG	ND	28	ND	5	ND	6	ND	6
Carbon Tetrachloride	UG/KG	ND	28	ND	5	ND	6	ND	6
Chloromethane	UG/KG	ND	57	ND	10	ND	12	ND	13
Chlorobenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
Chloroethane	UG/KG	ND	57	ND	10	ND	12	ND	13
Cyclohexane	UG/KG	ND	28	ND	5	ND	6	ND	6
Chloroform	UG/KG	ND	28	ND	5	ND	6	ND	6
1,2-Dibromo-3-chloropropane	UG/KG	ND	28	ND	5	ND	6	ND	6
Dibromochloromethane	UG/KG	ND	28	ND	5	ND	6	ND	6
Dichlorodifluoromethane	UG/KG	ND	28	ND	5	ND	6	ND	6
1,2-Dibromoethane	UG/KG	ND	28	ND	5	ND	6	ND	6
1,2-Dichlorobenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
1,3-Dichlorobenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
1,4-Dichlorobenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
1,1-Dichloroethane	UG/KG	ND	28	ND	5	ND	6	ND	6
1,2-Dichloroethane	UG/KG	ND	28	ND	5	ND	6	ND	6
1,1-Dichloroethene	UG/KG	ND	28	ND	5	ND	6	ND	6
cis-1,2-Dichloroethene	UG/KG	110	28	12	5	ND	6	ND	6
trans-1,2-Dichloroethene	UG/KG	ND	28	ND	5	ND	6	ND	6
1,2-Dichloropropane	UG/KG	ND	28	ND	5	ND	6	ND	6
cis-1,3-Dichloropropene	UG/KG	ND	28	ND	5	ND	6	ND	6
trans-1,3-Dichloropropene	UG/KG	ND	28	ND	5	ND	6	ND	6
Ethylbenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
2-Hexanone	UG/KG	ND	57	ND	10	ND	12	ND	13
Isopropylbenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
Methyl acetate	UG/KG	ND	28	ND	5	ND	6	ND	6
Methylene chloride	UG/KG	ND ~~43 B~~	63 ~~28~~	ND ~~42 B~~	12 ~~5~~	ND ~~22 B~~	~~22 B~~	ND ~~18 B~~	18 ~~6~~
Methyl tert butyl ether	UG/KG	ND	28	ND	5	ND	6	ND	6
4-Methyl-2-pentanone	UG/KG	ND	140	ND	26	ND	31	ND	32
Methylcyclohexane	UG/KG	ND	28	ND	5	ND	6	ND	6
Styrene	UG/KG	ND	28	ND	5	ND	6	ND	6
1,1,2,2-Tetrachloroethane	UG/KG	ND	28	ND	5	ND	6	ND	6
Tetrachloroethene	UG/KG	ND	28	ND	5	ND	6	ND	6
Toluene	UG/KG	ND	28	ND	5	ND	6	ND	6
1,2,4-Trichlorobenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
1,1,1-Trichloroethane	UG/KG	ND	28	ND	5	ND	6	ND	6
1,1,2-Trichloroethane	UG/KG	ND	28	ND	5	ND	6	ND	6

Client ID Job No / Lab ID Sample Date		S071702EJ11 9-11 A02-7365 / A2736503 07/17/2002		S071802EJ14 10-12 A02-7365 / A2736504 07/18/2002		S072302EJ25 9-11 A02-7638 / A2763803 07/23/2002		S072302EJ25 9-11 RE A02-7638 / A2763803RE 07/23/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/KG	ND	28	ND	5	ND	6	ND	6
Trichloroethene	UG/KG	480	28	79	5	4 J	6	4 J	6
Trichlorofluoromethane	UG/KG	ND	28	ND	5	ND	6	ND	6
Vinyl chloride	UG/KG	ND	57	ND	10	ND	12	ND	13
Total Xylenes	UG/KG	ND	85	ND	16	ND	18	ND	19
n-Propylbenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
p-Cymene	UG/KG	ND	28	ND	5	ND	6	ND	6
1,2,4-Trimethylbenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
1,3,5-Trimethylbenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
n-Butylbenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
sec-Butylbenzene	UG/KG	ND	28	ND	5	ND	6	ND	6
IS/SURROGATE(S)									
Chlorobenzene-D5	%	93	50-200	97	50-200	30 *	50-200	54	50-200
1,4-Difluorobenzene	%	94	50-200	96	50-200	29 *	50-200	53	50-200
1,4-Dichlorobenzene-D4	%	87	50-200	101	50-200	27 *	50-200	49 *	50-200
Toluene-D8	%	94	78-118	94	78-118	92	78-118	88	78-118
p-Bromofluorobenzene	%	89	67-118	84	67-118	86	67-118	76	67-118
1,2-Dichloroethane-D4	%	85	63-133	87	63-133	102	63-133	89	63-133

000047

NA = Not Applicable ND = Not Detected

Client ID		S072302EJ250 9-11		S072302EJ26 11-12		S072302EJ28 11-12		S072402EJ08 9-10	
Job No	Lab ID	A02-7638	A2763804	A02-7638	A2763802	A02-7638	A2763801	A02-7638	A2763806
Sample Date		07/23/2002		07/23/2002		07/23/2002		07/24/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/KG	ND ~~40 B~~	~~40~~ 30	ND ~~14 BJ~~	27	ND ~~12 J~~	28	ND ~~14 BJ~~	25
Benzene	UG/KG	ND	6	ND	5	ND	6	ND	5
Bromodichloromethane	UG/KG	ND	6	ND	5	ND	6	ND	5
Bromoform	UG/KG	ND	6	ND	5	ND	6	ND	5
Bromomethane	UG/KG	ND	12	ND	11	ND	11	ND	10
2-Butanone	UG/KG	ND	30	ND	27	ND	28	ND	25
Carbon Disulfide	UG/KG	ND	6	ND	5	ND	6	ND	5
Carbon Tetrachloride	UG/KG	ND	6	ND	5	ND	6	ND	5
Chloromethane	UG/KG	ND	12	ND	11	ND	11	ND	10
Chlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
Chloroethane	UG/KG	ND	12	ND	11	ND	11	ND	10
Cyclohexane	UG/KG	ND	6	ND	5	ND	6	ND	5
Chloroform	UG/KG	ND	6	ND	5	ND	6	ND	5
1,2-Dibromo-3-chloropropane	UG/KG	ND	6	ND	5	ND	6	ND	5
Dibromochloromethane	UG/KG	ND	6	ND	5	ND	6	ND	5
Dichlorodifluoromethane	UG/KG	ND	6	ND	5	ND	6	ND	5
1,2-Dibromoethane	UG/KG	ND	6	ND	5	ND	6	ND	5
1,2-Dichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,3-Dichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,4-Dichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,1-Dichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	5
1,2-Dichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	5
1,1-Dichloroethene	UG/KG	ND	6	ND	5	ND	6	ND	5
cis-1,2-Dichloroethene	UG/KG	6	6	28	5	ND	6	ND	5
trans-1,2-Dichloroethene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,2-Dichloropropane	UG/KG	ND	6	ND	5	ND	6	ND	5
cis-1,3-Dichloropropene	UG/KG	ND	6	ND	5	ND	6	ND	5
trans-1,3-Dichloropropene	UG/KG	ND	6	ND	5	ND	6	ND	5
Ethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
2-Hexanone	UG/KG	ND	12	ND	11	ND	11	ND	10
Isopropylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
Methyl acetate	UG/KG	ND	6	ND	5	ND	6	ND	5
Methylene chloride	UG/KG	ND ~~23 B~~	~~23~~ 6	ND ~~26 B~~	~~26~~ 5	ND ~~10 B~~	~~10~~ 6	ND ~~12 B~~	~~12~~ 5
Methyl tert butyl ether	UG/KG	ND	6	ND	5	ND	6	ND	5
4-Methyl-2-pentanone	UG/KG	ND	30	ND	27	ND	28	ND	25
Methylcyclohexane	UG/KG	ND	6	ND	5	ND	6	ND	5
Styrene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,1,2,2-Tetrachloroethane	UG/KG	ND	6	ND	5	ND	6	ND	5
Tetrachloroethene	UG/KG	ND	6	ND	5	ND	6	ND	5
Toluene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,2,4-Trichlorobenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,1,1-Trichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	5
1,1,2-Trichloroethane	UG/KG	ND	6	ND	5	ND	6	ND	5

Client ID		S072302EJ25D 9-11		S072302EJ26 11-12		S072302EJ28 11-12		S072402EJ08 9-10	
Job No / Lab ID		A02-7638 / A2763804		A02-7638 / A2763802		A02-7638 / A2763801		A02-7638 / A2763806	
Sample Date		07/23/2002		07/23/2002		07/23/2002		07/24/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/KG	ND	6	ND	5	ND	6	ND	5
Trichloroethene	UG/KG	11	6	160	5	6	6	ND	5
Trichlorofluoromethane	UG/KG	ND	6	ND	5	ND	6	ND	5
Vinyl chloride	UG/KG	ND	12	ND	11	ND	11	ND	10
Total Xylenes	UG/KG	ND	18	ND	16	ND	16	ND	15
n-Propylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
p-Cymene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,2,4-Trimethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,3,5-Trimethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
n-Butylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
sec-Butylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
IS/SURROGATE(S)									
Chlorobenzene-D5	%	59	50-200	71	50-200	94	50-200	68	50-200
1,4-Difluorobenzene	%	56	50-200	69	50-200	92	50-200	67	50-200
1,4-Dichlorobenzene-D4	%	53	50-200	66	50-200	85	50-200	64	50-200
Toluene-D8	%	93	78-118	94	78-118	92	78-118	96	78-118
p-Bromofluorobenzene	%	81	67-118	81	67-118	84	67-118	84	67-118
1,2-Dichloroethane-D4	%	94	63-133	90	63-133	86	63-133	91	63-133

000019

NA = Not Applicable ND = Not Detected

Client ID			S072402EJ19 8-10		S072402EJ21 8-10		S072502EJ02 8-10		S072502EJ23 10-11	
Job No	Lab ID		A02-7638 A2763807		A02-7638 A2763805		A02-7638 A2763808		A02-7638 A2763809	
Sample Date			07/24/2002		07/24/2002		07/25/2002		07/25/2002	
Analyte	Units		Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/KG		~~ND 28 J~~	29	~~ND 28 BJ~~	27	~~ND 45 B~~	~~65 31~~	~~ND 29~~	~~29 27~~
Benzene	UG/KG		ND	6	ND	5	ND	6	ND	5
Bromodichloromethane	UG/KG		ND	6	ND	5	ND	6	ND	5
Bromoform	UG/KG		ND	6	ND	5	ND	6	ND	5
Bromomethane	UG/KG		ND	12	ND	11	ND	12	ND	11
2-Butanone	UG/KG		ND	29	ND	27	10 J	31	ND	27
Carbon Disulfide	UG/KG		ND	6	ND	5	ND	6	ND	5
Carbon Tetrachloride	UG/KG		ND	6	ND	5	ND	6	ND	5
Chloromethane	UG/KG		ND	12	ND	11	ND	12	ND	11
Chlorobenzene	UG/KG		ND	6	ND	5	ND	6	ND	5
Chloroethane	UG/KG		ND	12	ND	11	ND	12	ND	11
Cyclohexane	UG/KG		ND	6	ND	5	ND	6	ND	5
Chloroform	UG/KG		ND	6	ND	5	ND	6	ND	5
1,2-Dibromo-3-chloropropane	UG/KG		ND	6	ND	5	ND	6	ND	5
Dibromochloromethane	UG/KG		ND	6	ND	5	ND	6	ND	5
Dichlorodifluoromethane	UG/KG		ND	6	ND	5	ND	6	ND	5
1,2-Dibromoethane	UG/KG		ND	6	ND	5	ND	6	ND	5
1,2-Dichlorobenzene	UG/KG		ND	6	ND	5	ND	6	ND	5
1,3-Dichlorobenzene	UG/KG		ND	6	ND	5	ND	6	ND	5
1,4-Dichlorobenzene	UG/KG		ND	6	ND	5	ND	6	ND	5
1,1-Dichloroethane	UG/KG		ND	6	ND	5	ND	6	ND	5
1,2-Dichloroethane	UG/KG		ND	6	ND	5	ND	6	ND	5
1,1-Dichloroethene	UG/KG		ND	6	ND	5	ND	6	ND	5
cis-1,2-Dichloroethene	UG/KG		ND	6	ND	5	12	6	ND	5
trans-1,2-Dichloroethene	UG/KG		ND	6	ND	5	ND	6	ND	5
1,2-Dichloropropane	UG/KG		ND	6	ND	5	ND	6	ND	5
cis-1,3-Dichloropropene	UG/KG		ND	6	ND	5	ND	6	ND	5
trans-1,3-Dichloropropene	UG/KG		ND	6	ND	5	ND	6	ND	5
Ethylbenzene	UG/KG		ND	6	ND	5	ND	6	ND	5
2-Hexanone	UG/KG		ND	12	ND	11	ND	12	ND	11
Isopropylbenzene	UG/KG		ND	6	ND	5	ND	6	ND	5
Methyl acetate	UG/KG		ND	6	ND	5	ND	6	ND	5
Methylene chloride	UG/KG		~~ND 11 B~~	~~11 6~~	~~ND 16 B~~	~~16 5~~	~~ND 15 B~~	~~15 6~~	~~ND 13 B~~	~~13 5~~
Methyl tert butyl ether	UG/KG		ND	6	ND	5	ND	6	ND	5
4-Methyl-2-pentanone	UG/KG		ND	29	ND	27	ND	31	ND	27
Methylcyclohexane	UG/KG		ND	6	ND	5	ND	6	ND	5
Styrene	UG/KG		ND	6	ND	5	ND	6	ND	5
1,1,2,2-Tetrachloroethane	UG/KG		ND	6	ND	5	ND	6	ND	5
Tetrachloroethene	UG/KG		ND	6	ND	5	ND	6	ND	5
Toluene	UG/KG		ND	6	ND	5	ND	6	ND	5
1,2,4-Trichlorobenzene	UG/KG		ND	6	ND	5	ND	6	ND	5
1,1,1-Trichloroethane	UG/KG		ND	6	ND	5	ND	6	ND	5
1,1,2-Trichloroethane	UG/KG		ND	6	ND	5	ND	6	ND	5

020030

NA = Not Applicable ND = Not Detected

Client ID Job No Lab ID Sample Date		SD72402EJ19 8-10 A02-7638 A2763807 07/24/2002		SD72402EJ21 8-10 A02-7638 A2763805 07/24/2002		SD72502EJ02 8-10 A02-7638 A2763808 07/25/2002		SD72502EJ23 10-11 A02-7638 A2763809 07/25/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/KG	ND	6	ND	5	ND	6	ND	5
Trichloroethene	UG/KG	ND	6	ND	5	8	6	ND	5
Trichlorofluoromethane	UG/KG	ND	6	ND	5	ND	6	ND	5
Vinyl chloride	UG/KG	ND	12	ND	11	ND	12	ND	11
Total Xylenes	UG/KG	ND	17	ND	16	ND	18	ND	16
n-Propylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
p-Cymene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,2,4-Trimethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
1,3,5-Trimethylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
n-Butylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
sec-Butylbenzene	UG/KG	ND	6	ND	5	ND	6	ND	5
----------!S/SURROGATE(S)----------									
Chlorobenzene-D5	%	93	50-200	103	50-200	68	50-200	74	50-200
1,4-Difluorobenzene	%	90	50-200	104	50-200	65	50-200	72	50-200
1,4-Dichlorobenzene-D4	%	84	50-200	93	50-200	61	50-200	66	50-200
Toluene-D8	%	93	78-118	94	78-118	96	78-118	89	78-118
p-Bromofluorobenzene	%	84	67-118	82	67-118	81	67-118	81	67-118
1,2-Dichloroethene-D4	%	87	63-133	90	63-133	90	63-133	86	63-133

T20002

NA = Not Applicable ND = Not Detected

Client ID		S072502EJ23D 10-11		S072602EJ20 12-14		S072602EJ27 12-13		S073002EJ07 16-17.5	
Job No / Lab ID		A02-7638	A2763811	A02-7638	A2763812	A02-7638	A2763810	A02-7821	A2782101
Sample Date		07/25/2002		07/26/2002		07/26/2002		07/30/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/KG	~~ND 24 J~~	30	~~ND 34 B~~	~~34 28~~	~~ND 19 BJ~~	~~27 27~~	ND ~~J~~	27
Benzene	UG/KG	ND	6	ND	6	ND	5	ND	5
Bromodichloromethane	UG/KG	ND	6	ND	6	ND	5	ND	5
Bromoform	UG/KG	ND	6	ND	6	ND	5	ND	5
Bromomethane	UG/KG	ND	12	ND	11	ND	11	ND	11
2-Butanone	UG/KG	ND	30	ND	28	ND	27	ND	27
Carbon Disulfide	UG/KG	ND	6	ND	6	ND	5	ND	5
Carbon Tetrachloride	UG/KG	ND	6	ND	6	ND	5	ND	5
Chloromethane	UG/KG	ND	12	ND	11	ND	11	ND	11
Chlorobenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
Chloroethane	UG/KG	ND	12	ND	11	ND	11	ND	11
Cyclohexane	UG/KG	ND	6	2 J	6	ND	5	ND	5
Chloroform	UG/KG	ND	6	ND	6	ND	5	ND	5
1,2-Dibromo-3-chloropropane	UG/KG	ND	6	ND	6	ND	5	ND	5
Dibromochloromethane	UG/KG	ND	6	ND	6	ND	5	ND	5
Dichlorodifluoromethane	UG/KG	ND	6	ND	6	ND	5	ND	5
1,2-Dibromoethane	UG/KG	ND	6	ND	6	ND	5	ND	5
1,2-Dichlorobenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
1,3-Dichlorobenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
1,4-Dichlorobenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
1,1-Dichloroethane	UG/KG	ND	6	ND	6	ND	5	ND	5
1,2-Dichloroethene	UG/KG	ND	6	ND	6	ND	5	ND	5
1,1-Dichloroethene	UG/KG	ND	6	ND	6	ND	5	ND	5
cis-1,2-Dichloroethene	UG/KG	ND	6	ND	6	65	5	~~550 200 E~~	5
trans-1,2-Dichloroethene	UG/KG	ND	6	ND	6	ND	5	ND ~~J~~	5
1,2-Dichloropropane	UG/KG	ND	6	ND	6	ND	5	ND	5
cis-1,3-Dichloropropene	UG/KG	ND	6	ND	6	ND	5	ND	5
trans-1,3-Dichloropropene	UG/KG	ND	6	ND	6	ND	5	ND	5
Ethylbenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
2-Hexanone	UG/KG	ND	12	ND	11	ND	11	ND	11
Isopropylbenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
Methyl acetate	UG/KG	ND	6	ND	6	ND	5	ND	5
Methylene chloride	UG/KG	~~ND 12 B~~	~~12 6~~	~~ND 14 B~~	~~14 6~~	~~ND 13 B~~	~~13 5~~	~~ND 6 B~~	~~6 5~~
Methyl tert butyl ether	UG/KG	ND	6	ND	6	ND	5	ND	5
4-Methyl-2-pentanone	UG/KG	ND	30	ND	28	ND	27	ND	27
Methylcyclohexane	UG/KG	ND	6	ND	6	ND	5	ND	5
Styrene	UG/KG	ND	6	ND	6	ND	5	ND	5
1,1,2,2-Tetrachloroethane	UG/KG	ND	6	ND	6	ND	5	ND	5
Tetrachloroethene	UG/KG	ND	6	ND	6	ND	5	ND	5
Toluene	UG/KG	ND	6	ND	6	ND	5	ND	5
1,2,4-Trichlorobenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
1,1,1-Trichloroethane	UG/KG	ND	6	ND	6	ND	5	ND	5
1,1,2-Trichloroethane	UG/KG	ND	6	ND	6	ND	5	ND	5

000025

NA = Not Applicable ND = Not Detected

Client ID Job No Lab ID Sample Date		S072502EJ23D 10-11 A02-7638 A2763811 07/25/2002		S072602EJ20 12-14 A02-7638 A2763812 07/26/2002		S072602EJ27 12-13 A02-7638 A2763810 07/26/2002		S073002EJ07 16-17.5 A02-7821 A2782101 07/30/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/KG	ND	6	ND	6	ND	5	ND J	5
Trichloroethene	UG/KG	ND	6	ND	6	130	5	330 ~~110~~	5
Trichlorofluoromethane	UG/KG	ND	6	ND	6	ND	5	ND J	5
Vinyl chloride	UG/KG	ND	12	ND	11	ND	11	ND	11
Total Xylenes	UG/KG	ND	18	ND	16	ND	16	ND	16
n-Propylbenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
p-Cymene	UG/KG	ND	6	ND	6	ND	5	ND	5
1,2,4-Trimethylbenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
1,3,5-Trimethylbenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
n-Butylbenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
sec-Butylbenzene	UG/KG	ND	6	ND	6	ND	5	ND	5
IS/SURROGATE(S)									
Chlorobenzene-D5	%	92	50-200	103	50-200	70	50-200	30 *	50-200
1,4-Difluorobenzene	%	89	50-200	102	50-200	67	50-200	30 *	50-200
1,4-Dichlorobenzene-D4	%	80	50-200	94	50-200	63	50-200	26 *	50-200
Toluene-D8	%	92	78-118	94	78-118	94	78-118	93	78-118
p-Bromofluorobenzene	%	82	67-118	85	67-118	81	67-118	79	67-118
1,2-Dichloroethane-D4	%	85	63-133	94	63-133	90	63-133	104	63-133

000023

NA = Not Applicable ND = Not Detected

Client ID		S073002EJ07 16-17.5		S073102EJ01 2-4		S073102EJ01 2-4		S073102EJ05 8-13	
Job No Lab ID		A02-7821 A2782101DL		A02-7821 A2782104		A02-7821 A2782104DL		A02-7821 A2782102	
Sample Date		07/30/2002		07/30/2002		07/30/2002		07/30/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/KG	ND	120	ND	33	1600 BDJ	4000	ND 25 J	26
Benzene	UG/KG	ND	25	ND	7	ND	810	ND	5
Bromodichloromethane	UG/KG	ND	25	ND	7	ND	810	ND	5
Bromoform	UG/KG	ND	25	ND	7	ND	810	ND	5
Bromomethane	UG/KG	ND	50	ND	13	ND	1600	ND	10
2-Butanone	UG/KG	ND	120	ND	33	ND	4000	ND	26
Carbon Disulfide	UG/KG	ND	25	ND	7	ND	810	ND	5
Carbon Tetrachloride	UG/KG	ND	25	ND	7	ND	810	ND	5
Chloromethane	UG/KG	ND	50	ND	13	ND	1600	ND	10
Chlorobenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
Chloroethane	UG/KG	ND	50	ND	13	ND	1600	ND	10
Cyclohexane	UG/KG	ND	25	ND	7	ND	810	ND	5
Chloroform	UG/KG	ND	25	ND	7	ND	810	ND	5
1,2-Dibromo-3-chloropropane	UG/KG	ND	25	ND	7	ND	810	ND	5
Dibromochloromethane	UG/KG	ND	25	ND	7	ND	810	ND	5
Dichlorodifluoromethane	UG/KG	ND	25	ND	7	ND	810	ND	5
1,2-Dibromoethane	UG/KG	ND	25	ND	7	ND	810	ND	5
1,2-Dichlorobenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
1,3-Dichlorobenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
1,4-Dichlorobenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
1,1-Dichloroethane	UG/KG	ND	25	ND	7	ND	810	ND	5
1,2-Dichloroethane	UG/KG	ND	25	ND	7	ND	810	ND	5
1,1-Dichloroethene	UG/KG	ND	25	ND	7	ND	810	ND	5
cis-1,2-Dichloroethene	UG/KG	550 D	25	940 ~~400 E~~	7	940 D	810	7	5
trans-1,2-Dichloroethene	UG/KG	ND	25	10	7	ND	810	ND	5
1,2-Dichloropropane	UG/KG	ND	25	ND	7	ND	810	ND	5
cis-1,3-Dichloropropene	UG/KG	ND	25	ND	7	ND	810	ND	5
trans-1,3-Dichloropropene	UG/KG	ND	25	ND	7	ND	810	ND	5
Ethylbenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
2-Hexanone	UG/KG	ND	50	ND	13	ND	1600	ND	10
Isopropylbenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
Methyl acetate	UG/KG	ND	25	ND	7	ND	810	ND	5
Methylene chloride	UG/KG	50 BD	25	ND ~~41 B~~	1J ~~7~~	470 BDJ	810	~~ND 8 B~~	~~8~~ 5
Methyl tert butyl ether	UG/KG	ND	25	ND	7	ND	810	ND	5
4-Methyl-2-pentanone	UG/KG	ND	120	ND	33	ND	4000	ND	26
Methylcyclohexane	UG/KG	ND	25	ND	7	ND	810	ND	5
Styrene	UG/KG	ND	25	ND	7	ND	810	ND	5
1,1,2,2-Tetrachloroethane	UG/KG	ND	25	ND	7	ND	810	ND	5
Tetrachloroethene	UG/KG	ND	25	ND	7	ND	810	ND	5
Toluene	UG/KG	ND	25	ND	7	200 BDJ	810	ND	5
1,2,4-Trichlorobenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
1,1,1-Trichloroethane	UG/KG	ND	25	ND	7	ND	810	ND	5
1,1,2-Trichloroethane	UG/KG	ND	25	ND	7	ND	810	ND	5

Client ID Job No Lab ID Sample Date		S073002EJ07 16-17.5 A02-7821 A27821010L 07/30/2002		S073102EJ01 2-4 A02-7821 A27821040L 07/30/2002		S073102EJ01 2-4 A02-7821 A27821040L 07/30/2002		S073102EJ05 8-13 A02-7821 A2782102 07/30/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/KG	ND	25	ND	7	ND	810	ND	5
Trichloroethene	UG/KG	330 D	25	4), oa 2500 E	7	14000 D	810	5	5
Trichlorofluoromethane	UG/KG	ND	25	ND	7	ND	810	ND	5
Vinyl chloride	UG/KG	ND	50	ND	13	ND	1600	ND	10
Total Xylenes	UG/KG	ND	75	ND	20	ND	2400	ND	16
n-Propylbenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
p-Cymene	UG/KG	ND	25	ND	7	ND	810	ND	5
1,2,4-Trimethylbenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
1,3,5-Trimethylbenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
n-Butylbenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
sec-Butylbenzene	UG/KG	ND	25	ND	7	ND	810	ND	5
IS/SURROGATE(S)									
Chlorobenzene-D5	%	82	50-200	79	50-200	98	50-200	93	50-200
1,4-Difluorobenzene	%	85	50-200	80	50-200	102	50-200	91	50-200
1,4-Dichlorobenzene-D4	%	71	50-200	69	50-200	89	50-200	82	50-200
Toluene-D8	%	101	78-118	96	78-118	92	78-118	94	78-118
p-Bromofluorobenzene	%	82	67-118	78	67-118	76	67-118	81	67-118
1,2-Dichloroethane-D4	%	91	63-133	98	63-133	92	63-133	95	63-133

S26002S

Client ID		SO73102EJ24 1B-20		SO73102EJ24 1B-20		SS071902EJ G-S		SS071902EJ GARDEN-N	
Job No	Lab ID	A02-7821	A2782103	A02-7821	A2782103DL	A02-7365	A2736508	A02-7365	A2736507
Sample Date		07/30/2002		07/30/2002		07/19/2002		07/19/2002	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/KG	~~ND~~ 27	27	ND	130	ND	27	ND	26
Benzene	UG/KG	ND	5	ND	25	ND	5	ND	5
Bromodichloromethane	UG/KG	ND	5	ND	25	ND	5	ND	5
Bromoform	UG/KG	ND	5	ND	25	ND	5	ND	5
Bromomethane	UG/KG	ND	11	ND	50	ND	11	ND	10
2-Butanone	UG/KG	ND	27	ND	130	ND	27	ND	26
Carbon Disulfide	UG/KG	3 J	5	ND	25	ND	5	ND	5
Carbon Tetrachloride	UG/KG	ND	5	ND	25	ND	5	ND	5
Chloromethane	UG/KG	ND	11	ND	50	ND	11	ND	10
Chlorobenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
Chloroethane	UG/KG	ND	11	ND	50	ND	11	ND	10
Cyclohexane	UG/KG	ND	5	ND	25	ND	5	ND	5
Chloroform	UG/KG	ND	5	ND	25	ND	5	ND	5
1,2-Dibromo-3-chloropropane	UG/KG	ND	5	ND	25	ND	5	ND	5
Dibromochloromethane	UG/KG	ND	5	ND	25	ND	5	ND	5
Dichlorodifluoromethane	UG/KG	ND	5	ND	25	ND	5	ND	5
1,2-Dibromoethane	UG/KG	ND	5	ND	25	ND	5	ND	5
1,2-Dichlorobenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
1,3-Dichlorobenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
1,4-Dichlorobenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
1,1-Dichloroethane	UG/KG	ND	5	ND	25	ND	5	ND	5
1,2-Dichloroethane	UG/KG	ND	5	ND	25	ND	5	ND	5
1,1-Dichloroethene	UG/KG	ND	5	ND	25	ND	5	ND	5
cis-1,2-Dichloroethene	UG/KG	700 ~~420 E~~	5	700 D	25	ND	5	ND	5
trans-1,2-Dichloroethene	UG/KG	3 J	5	ND	25	ND	5	ND	5
1,2-Dichloropropane	UG/KG	ND	5	ND	25	ND	5	ND	5
cis-1,3-Dichloropropene	UG/KG	ND	5	ND	25	ND	5	ND	5
trans-1,3-Dichloropropene	UG/KG	ND	5	ND	25	ND	5	ND	5
Ethylbenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
2-Hexanone	UG/KG	ND	11	ND	50	ND	11	ND	10
Isopropylbenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
Methyl acetate	UG/KG	ND	5	ND	25	ND	5	ND	5
Methylene chloride	UG/KG	~~ND 12 B~~	~~12~~ 5	40 BD	25	~~ND 5 B~~	5	~~ND 7 B~~	~~7~~ 5
Methyl tert butyl ether	UG/KG	ND	5	ND	25	ND	5	ND	5
4-Methyl-2-pentanone	UG/KG	ND	27	ND	130	ND	27	ND	26
Methylcyclohexane	UG/KG	ND	5	ND	25	ND	5	ND	5
Styrene	UG/KG	ND	5	ND	25	ND	5	ND	5
1,1,2,2-Tetrachloroethane	UG/KG	ND	5	ND	25	ND	5	ND	5
Tetrachloroethene	UG/KG	ND	5	ND	25	ND	5	ND	5
Toluene	UG/KG	ND	5	ND	25	ND	5	ND	5
1,2,4-Trichlorobenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
1,1,1-Trichloroethane	UG/KG	ND	5	ND	25	ND	5	ND	5
1,1,2-Trichloroethane	UG/KG	ND	5	ND	25	ND	5	ND	5

926050

NA = Not Applicable ND = Not Detected

Client ID		SO73102EJ24 18-20		SO73102EJ24 18-20		SS071902EJ G-S		SS071902EJ GARDEN-N	
Job No / Lab ID		A02-7821	A2782103	A02-7821	A2782103DL	A02-7365	A2736508	A02-7365	A2736507
Sample Date		07/30/2002		07/30/2002		07/19/2002		07/19/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/KG	ND	5	ND	25	ND	5	ND	5
Trichloroethene	UG/KG	910 D ~~460 E~~	5	910 D	25	1 J	5	1 J	5
Trichlorofluoromethane	UG/KG	ND	5	ND	25	ND	5	ND	5
Vinyl chloride	UG/KG	ND	11	ND	50	ND	11	ND	10
Total Xylenes	UG/KG	ND	16	ND	76	ND	16	ND	16
n-Propylbenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
p-Cymene	UG/KG	ND	5	ND	25	ND	5	ND	5
1,2,4-Trimethylbenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
1,3,5-Trimethylbenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
n-Butylbenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
sec-Butylbenzene	UG/KG	ND	5	ND	25	ND	5	ND	5
——(S/SURROGATE(S)—									
Chlorobenzene-D5	%	85	50-200	74	50-200	87	50-200	84	50-200
1,4-Difluorobenzene	%	86	50-200	76	50-200	88	50-200	86	50-200
1,4-Dichlorobenzene-D4	%	72	50-200	64	50-200	80	50-200	75	50-200
Toluene-D8	%	100	78-118	100	78-118	96	78-118	100	78-118
p-Bromofluorobenzene	%	83	67-118	79	67-118	92	67-118	93	67-118
1,2-Dichloroethane-D4	%	93	63-133	92	63-133	90	63-133	100	63-133

Client ID		W071902EJ15 FB		W072602EJ20 FB		W073102EJ01FB			
Job No	Lab ID	A02-7565	A2736505	A02-7638	A2763813	A02-7821	A2782105		
Sample Date		07/19/2002		07/26/2002		07/30/2002			
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	16 J	25	ND	25	7.8 J	25	NA	
Benzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Bromodichloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Bromoform	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Bromomethane	UG/L	ND	10	ND	10	ND	10	NA	
2-Butanone	UG/L	ND	10	ND	10	ND	10	NA	
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Carbon Tetrachloride	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Chloromethane	UG/L	ND	10	ND	10	ND	10	NA	
Chlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Chloroethane	UG/L	ND	10	ND	10	ND	10	NA	
Cyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Chloroform	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Dichlorodifluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,2-Dibromoethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,4-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,1-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,2-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,1-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
cis-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
trans-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,2-Dichloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Ethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
2-Hexanone	UG/L	ND	10	ND	10	ND	10	NA	
Isopropylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Methyl acetate	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Methylene chloride	UG/L	3.0 BJ	5.0	3.5 BJ	5.0	2.0 BJ	5.0	NA	
Methyl tert butyl ether	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
4-Methyl-2-pentanone	UG/L	ND	10	ND	10	ND	10	NA	
Methylcyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Styrene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Tetrachloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Toluene	UG/L	ND	5.0	4.8 J	5.0	2.3 J	5.0	NA	
1,2,4-Trichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	

Client ID		W071902EJ15 FB		W072602EJ20 FB		W073102EJ01FB			
Job No	Lab ID	A02-7365	A2736505	A02-7638	A2763813	A02-7821	A2782105		
Sample Date		07/19/2002		07/26/2002		07/30/2002			
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Trichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Trichlorofluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Vinyl chloride	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
Total Xylenes	UG/L	ND	15	ND	15	ND	15	NA	
n-Propylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
p-Cymene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,2,4-Trimethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
1,3,5-Trimethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
n-Butylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
sec-Butylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	NA	
----IS/SURROGATE(S)----									
Chlorobenzene-D5	%	85	50-200	92	50-200	79	50-200	NA	
1,4-Difluorobenzene	%	88	50-200	92	50-200	82	50-200	NA	
1,4-Dichlorobenzene-D4	%	74	50-200	84	50-200	70	50-200	NA	
Toluene-D8	%	98	77-122	97	77-122	96	77-122	NA	
p-Bromofluorobenzene	%	89	73-120	88	73-120	77	73-120	NA	
1,2-Dichloroethane-D4	%	87	76-136	83	76-136	86	76-136	NA	

NA = Not Applicable ND = Not Detected

Client ID		WD73102EJD1FB							
Job No	Lab ID	A02-7821	A2782105						
Sample Date		07/30/2002							
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	
Benzo(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(ghi)perylene	UG/L	ND	10	NA		NA		NA	
Benzo(a)pyrene	UG/L	ND	10	NA		NA		NA	
Benzoic acid	UG/L	ND	49	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	
Dibenzo(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	49	NA		NA		NA	
2,4-Dinitrophenol	UG/L	ND	49	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	

Client ID		W073102EJ01FB							
Job No	Lab ID	A02-7B21	A27B2105						
Sample Date		07/30/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Hexachloroethane	UG/L	ND	10	NA		NA		NA	
Indeno(1,2,3-cd)pyrene	UG/L	ND	10	NA		NA		NA	
Isophorone	UG/L	ND	10	NA		NA		NA	
2-Methylnaphthalene	UG/L	ND	10	NA		NA		NA	
2-Methylphenol	UG/L	ND	10	NA		NA		NA	
4-Methylphenol	UG/L	ND	10	NA		NA		NA	
Naphthalene	UG/L	ND	10	NA		NA		NA	
2-Nitroaniline	UG/L	ND	49	NA		NA		NA	
3-Nitroaniline	UG/L	ND	49	NA		NA		NA	
4-Nitroaniline	UG/L	ND	49	NA		NA		NA	
Nitrobenzene	UG/L	ND	10	NA		NA		NA	
2-Nitrophenol	UG/L	ND	10	NA		NA		NA	
4-Nitrophenol	UG/L	ND	49	NA		NA		NA	
N-nitrosodiphenylamine	UG/L	ND	10	NA		NA		NA	
N-Nitroso-Di-n-propylamine	UG/L	ND	10	NA		NA		NA	
Pentachlorophenol	UG/L	ND	49	NA		NA		NA	
Phenanthrene	UG/L	ND	10	NA		NA		NA	
Phenol	UG/L	ND	10	NA		NA		NA	
Pyrene	UG/L	ND	10	NA		NA		NA	
1,2,4-Trichlorobenzene	UG/L	ND	10	NA		NA		NA	
2,4,5-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
2,4,6-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	101	50-200	NA		NA		NA	
Naphthalene-D8	%	95	50-200	NA		NA		NA	
Acenaphthene-D10	%	89	50-200	NA		NA		NA	
Phenanthrene-D10	%	95	50-200	NA		NA		NA	
Chrysene-D12	%	93	50-200	NA		NA		NA	
Perylene-D12	%	82	50-200	NA		NA		NA	
Nitrobenzene-D5	%	68	24-125	NA		NA		NA	
2-Fluorobiphenyl	%	91	25-125	NA		NA		NA	
p-Terphenyl-d14	%	98	19-152	NA		NA		NA	
Phenol-D5	%	30	10-110	NA		NA		NA	
2-Fluorophenol	%	38	20-120	NA		NA		NA	
2,4,6-Tribromophenol	%	103	28-152	NA		NA		NA	

NA = Not Applicable ND = Not Detected

Client ID		SO70902EJ17 8-12		SO72302EJ25 9-11		SO72302EJ25D 9-11		SO72302EJ25D 9-11RED	
Job No / Lab ID		A02-7056 / A2705602		A02-7638 / A2763803RE		A02-7638 / A2763804RE		A02-7638 / A2763804DR	
Sample Date		07/09/2002		07/23/2002		07/23/2002		07/23/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acenaphthene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Acenaphthylene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Anthracene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Benzo(a)anthracene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Benzo(b)fluoranthene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Benzo(k)fluoranthene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Benzo(ghi)perylene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Benzo(a)pyrene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Benzoic acid	UG/KG	ND	1900	ND	8900	ND	1800	ND	3700
Benzyl alcohol	UG/KG	ND	390	ND	1800	ND	380	ND	760
Bis(2-chloroethoxy) methane	UG/KG	ND	390	ND	1800	ND	380	ND	760
Bis(2-chloroethyl) ether	UG/KG	ND	390	ND	1800	ND	380	ND	760
2,2'-Oxybis(1-Chloropropane)	UG/KG	ND	390	ND	1800	ND	380	ND	760
Bis(2-ethylhexyl) phthalate	UG/KG	2400	390	ND	1800	ND	380	ND	760
4-Bromophenyl phenyl ether	UG/KG	ND	390	ND	1800	ND	380	ND	760
Butyl benzyl phthalate	UG/KG	ND	390	1700 J	1800	7300 ~~7200 E~~	380	7300 D	760
4-Chloroaniline	UG/KG	ND	390	ND	1800	ND	380	ND	760
4-Chloro-3-methylphenol	UG/KG	ND	390	ND	1800	ND	380	ND	760
2-Chloronaphthalene	UG/KG	ND	390	ND	1800	ND	380	ND	760
2-Chlorophenol	UG/KG	ND	390	ND	1800	ND	380	ND	760
4-Chlorophenyl phenyl ether	UG/KG	ND	390	ND	1800	ND	380	ND	760
Chrysene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Dibenzo(a,h)anthracene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Dibenzofuran	UG/KG	ND	390	ND	1800	ND	380	ND	760
Di-n-butyl phthalate	UG/KG	ND	390	ND	1800	ND ~~22 BJ~~	380	ND	760
1,2-Dichlorobenzene	UG/KG	ND	390	ND	1800	ND	380	ND	760
1,3-Dichlorobenzene	UG/KG	ND	390	ND	1800	ND	380	ND	760
1,4-Dichlorobenzene	UG/KG	ND	390	ND	1800	ND	380	ND	760
3,3'-Dichlorobenzidine	UG/KG	ND	780	ND	3700	ND	760	ND	1500
2,4-Dichlorophenol	UG/KG	ND	390	ND	1800	ND	380	ND	760
Diethyl phthalate	UG/KG	ND	390	ND	1800	ND	380	ND	760
2,4-Dimethylphenol	UG/KG	ND	390	ND	1800	ND	380	ND	760
Dimethyl phthalate	UG/KG	ND	390	ND	1800	ND	380	ND	760
4,6-Dinitro-2-methylphenol	UG/KG	ND	1900	ND	8900	ND	1800	ND	3700
2,4-Dinitrophenol	UG/KG	ND	1900	ND	8900	ND	1800	ND	3700
2,4-Dinitrotoluene	UG/KG	ND	390	ND	1800	ND	380	ND	760
2,6-Dinitrotoluene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Di-n-octyl phthalate	UG/KG	3100	390	98 J	1800	640	380	570 DJ	760
Fluoranthene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Fluorene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Hexachlorobenzene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Hexachlorobutadiene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Hexachlorocyclopentadiene	UG/KG	ND	390	ND	1800	ND	380	ND	760

NA = Not Applicable ND = Not Detected

230050

Client ID		S070902EJ17 8-12		S072302EJ25 9-11		S072302EJ25D 9-11		S072302EJ25D 9-11RED	
Job No / Lab ID		A02-7056	A2705602	A02-7638	A2763803RE	A02-7638	A2763804RE	A02-7638	A2763804DR
Sample Date		07/09/2002		07/23/2002		07/23/2002		07/23/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Hexachloroethane	UG/KG	ND	390	ND	1800	ND	380	ND	760
Indeno(1,2,3-cd)pyrene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Isophorone	UG/KG	ND	390	ND	1800	ND	380	ND	760
2-Methylnaphthalene	UG/KG	ND	390	ND	1800	ND	380	ND	760
2-Methylphenol	UG/KG	ND	390	ND	1800	ND	380	ND	760
4-Methylphenol	UG/KG	ND	390	ND	1800	ND	380	ND	760
Naphthalene	UG/KG	ND	390	ND	1800	ND	380	ND	760
2-Nitroaniline	UG/KG	ND	1900	ND	8900	ND	1800	ND	3700
3-Nitroaniline	UG/KG	ND	1900	ND	8900	ND	1800	ND	3700
4-Nitroaniline	UG/KG	ND	1900	ND	8900	ND	1800	ND	3700
Nitrobenzene	UG/KG	ND	390	ND	1800	ND	380	ND	760
2-Nitrophenol	UG/KG	ND	390	ND	1800	ND	380	ND	760
4-Nitrophenol	UG/KG	ND	1900	ND	8900	ND	1800	ND	3700
N-nitrosodiphenylamine	UG/KG	ND	390	ND	1800	ND	380	ND	760
N-Nitroso-Di-n-propylamine	UG/KG	ND	390	ND	1800	ND	380	ND	760
Pentachlorophenol	UG/KG	ND	1900	ND	8900	ND	1800	ND	3700
Phenanthrene	UG/KG	ND	390	ND	1800	ND	380	ND	760
Phenol	UG/KG	ND	390	ND	1800	ND	380	ND	760
Pyrene	UG/KG	ND	390	ND	1800	ND	380	ND	760
1,2,4-Trichlorobenzene	UG/KG	ND	390	ND	1800	ND	380	ND	760
2,4,5-Trichlorophenol	UG/KG	ND	940	ND	4400	ND	920	ND	1800
2,4,6-Trichlorophenol	UG/KG	ND	390	ND	1800	ND	380	ND	760
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	52	50-200	102	50-200	99	50-200	92	50-200
Naphthalene-D8	%	63	50-200	96	50-200	96	50-200	87	50-200
Acenaphthene-D10	%	66	50-200	93	50-200	96	50-200	86	50-200
Phenanthrene-D10	%	66	50-200	95	50-200	103	50-200	90	50-200
Chrysene-D12	%	63	50-200	90	50-200	98	50-200	91	50-200
Perylene-D12	%	63	50-200	85	50-200	93	50-200	92	50-200
Nitrobenzene-D5	%	72	21-120	62	21-120	76	21-120	75	21-120
2-Fluorobiphenyl	%	73	27-128	90	27-128	98	27-128	102	27-128
p-Terphenyl-d14	%	89	41-139	102	41-139	109	41-139	118	41-139
Phenol-D5	%	111	18-139	67	18-139	79	18-139	79	18-139
2-Fluorophenol	%	108	25-121	55	25-121	67	25-121	70	25-121
2,4,6-Tribromophenol	%	85	34-147	68	34-147	100	34-147	108	34-147

000033

NA = Not Applicable ND = Not Detected

Client ID		SO72402EJ21 8-10		SS071902EJ GARDEN-N					
Job No	Lab ID	A02-7638	A2763805RE	A02-7365	A2736507				
Sample Date		07/24/2002		07/19/2002					
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acenaphthene	UG/KG	ND	360	ND	3400	NA		NA	
Acenaphthylene	UG/KG	ND	360	ND	3400	NA		NA	
Anthracene	UG/KG	ND	360	ND	3400	NA		NA	
Benzo(a)anthracene	UG/KG	ND	360	ND	3400	NA		NA	
Benzo(b)fluoranthene	UG/KG	ND	360	ND	3400	NA		NA	
Benzo(k)fluoranthene	UG/KG	ND	360	ND	3400	NA		NA	
Benzo(ghi)perylene	UG/KG	ND	360	ND	3400	NA		NA	
Benzo(a)pyrene	UG/KG	ND	360	ND	3400	NA		NA	
Benzoic acid	UG/KG	ND	1800	ND	16000	NA		NA	
Benzyl alcohol	UG/KG	ND	360	ND	3400	NA		NA	
Bis(2-chloroethoxy) methane	UG/KG	ND	360	ND	3400	NA		NA	
Bis(2-chloroethyl) ether	UG/KG	ND	360	ND	3400	NA		NA	
2,2'-Oxybis(1-Chloropropane)	UG/KG	ND	360	ND	3400	NA		NA	
Bis(2-ethylhexyl) phthalate	UG/KG	38 J	360	ND	3400	NA		NA	
4-Bromophenyl phenyl ether	UG/KG	ND	360	ND	3400	NA		NA	
Butyl benzyl phthalate	UG/KG	ND	360	ND	3400	NA		NA	
4-Chloroaniline	UG/KG	ND	360	ND	3400	NA		NA	
4-Chloro-3-methylphenol	UG/KG	ND	360	ND	3400	NA		NA	
2-Chloronaphthalene	UG/KG	ND	360	ND	3400	NA		NA	
2-Chlorophenol	UG/KG	ND	360	ND	3400	NA		NA	
4-Chlorophenyl phenyl ether	UG/KG	ND	360	ND	3400	NA		NA	
Chrysene	UG/KG	ND	360	ND	3400	NA		NA	
Dibenzo(a,h)anthracene	UG/KG	ND	360	ND	3400	NA		NA	
Dibenzofuran	UG/KG	ND	360	ND	3400	NA		NA	
Di-n-butyl phthalate	UG/KG	ND	360	ND	3400	NA		NA	
1,2-Dichlorobenzene	UG/KG	ND	360	ND	3400	NA		NA	
1,3-Dichlorobenzene	UG/KG	ND	360	ND	3400	NA		NA	
1,4-Dichlorobenzene	UG/KG	ND	360	ND	3400	NA		NA	
3,3'-Dichlorobenzidine	UG/KG	ND	730	ND	6800	NA		NA	
2,4-Dichlorophenol	UG/KG	ND	360	ND	3400	NA		NA	
Diethyl phthalate	UG/KG	ND	360	ND	3400	NA		NA	
2,4-Dimethylphenol	UG/KG	ND	360	ND	3400	NA		NA	
Dimethyl phthalate	UG/KG	ND	360	ND	3400	NA		NA	
4,6-Dinitro-2-methylphenol	UG/KG	ND	1800	ND	16000	NA		NA	
2,4-Dinitrophenol	UG/KG	ND	1800	ND	16000	NA		NA	
2,4-Dinitrotoluene	UG/KG	ND	360	ND	3400	NA		NA	
2,6-Dinitrotoluene	UG/KG	ND	360	ND	3400	NA		NA	
Di-n-octyl phthalate	UG/KG	ND	360	ND	3400	NA		NA	
Fluoranthene	UG/KG	ND	360	210 J	3400	NA		NA	
Fluorene	UG/KG	ND	360	ND	3400	NA		NA	
Hexachlorobenzene	UG/KG	ND	360	ND	3400	NA		NA	
Hexachlorobutadiene	UG/KG	ND	360	ND	3400	NA		NA	
Hexachlorocyclopentadiene	UG/KG	ND	360	ND	3400	NA		NA	

0000034

NA = Not Applicable ND = Not Detected

Client ID		SO72402EJ21 8-10		SS071902EJ GARDEN-N					
Job No	Lab ID	A02-7638	A2763805RE	A02-7365	A2736507				
Sample Date		07/24/2002		07/19/2002					
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Hexachloroethane	UG/KG	ND	360	ND	3400	NA		NA	
Indeno(1,2,3-cd)pyrene	UG/KG	ND	360	ND	3400	NA		NA	
Isophorone	UG/KG	ND	360	ND	3400	NA		NA	
2-Methylnaphthalene	UG/KG	ND	360	ND	3400	NA		NA	
2-Methylphenol	UG/KG	ND	360	ND	3400	NA		NA	
4-Methylphenol	UG/KG	ND	360	ND	3400	NA		NA	
Naphthalene	UG/KG	ND	360	ND	3400	NA		NA	
2-Nitroaniline	UG/KG	ND	1800	ND	16000	NA		NA	
3-Nitroaniline	UG/KG	ND	1800	ND	16000	NA		NA	
4-Nitroaniline	UG/KG	ND	1800	ND	16000	NA		NA	
Nitrobenzene	UG/KG	ND	360	ND	3400	NA		NA	
2-Nitrophenol	UG/KG	ND	360	ND	3400	NA		NA	
4-Nitrophenol	UG/KG	ND	1800	ND	16000	NA		NA	
N-nitrosodiphenylamine	UG/KG	ND	360	ND	3400	NA		NA	
N-Nitroso-Di-n-propylamine	UG/KG	ND	360	ND	3400	NA		NA	
Pentachlorophenol	UG/KG	ND	1800	ND	16000	NA		NA	
Phenanthrene	UG/KG	ND	360	ND	3400	NA		NA	
Phenol	UG/KG	ND	360	ND	3400	NA		NA	
Pyrene	UG/KG	ND	360	ND	3400	NA		NA	
1,2,4-Trichlorobenzene	UG/KG	ND	360	ND	3400	NA		NA	
2,4,5-Trichlorophenol	UG/KG	ND	880	ND	8300	NA		NA	
2,4,6-Trichlorophenol	UG/KG	ND	360	ND	3400	NA		NA	
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	108	50-200	99	50-200	NA		NA	
Naphthalene-D8	%	104	50-200	91	50-200	NA		NA	
Acenaphthene-D10	%	104	50-200	88	50-200	NA		NA	
Phenanthrene-D10	%	111	50-200	91	50-200	NA		NA	
Chrysene-D12	%	105	50-200	89	50-200	NA		NA	
Perylene-D12	%	94	50-200	62	50-200	NA		NA	
Nitrobenzene-D5	%	69	21-120	41	21-120	NA		NA	
2-Fluorobiphenyl	%	86	27-128	66	27-128	NA		NA	
p-Terphenyl-d14	%	99	41-139	85	41-139	NA		NA	
Phenol-D5	%	70	18-139	47	18-139	NA		NA	
2-Fluorophenol	%	62	25-121	36	25-121	NA		NA	
2,4,6-Tribromophenol	%	93	34-147	62	34-147	NA		NA	

S30090

NA = Not Applicable ND = Not Detected

Client ID		W073102EJ01FB							
Job No	Lab ID	A02-7821	A2782105						
Sample Date		07/30/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aldrin	UG/L	ND	0.048	NA		NA		NA	
alpha-BHC	UG/L	ND	0.048	NA		NA		NA	
beta-BHC	UG/L	ND	0.048	NA		NA		NA	
gamma-BHC (Lindane)	UG/L	ND	0.048	NA		NA		NA	
delta-BHC	UG/L	ND	0.048	NA		NA		NA	
Chlordane	UG/L	ND	0.48	NA		NA		NA	
4,4'-DDD	UG/L	ND	0.048	NA		NA		NA	
4,4'-DDE	UG/L	ND	0.048	NA		NA		NA	
4,4'-DDT	UG/L	ND	0.048	NA		NA		NA	
Dieldrin	UG/L	ND	0.048	NA		NA		NA	
Endosulfan I	UG/L	ND	0.048	NA		NA		NA	
Endosulfan II	UG/L	ND	0.048	NA		NA		NA	
Endosulfan Sulfate	UG/L	ND	0.048	NA		NA		NA	
Endrin	UG/L	ND	0.048	NA		NA		NA	
Endrin aldehyde	UG/L	ND	0.048	NA		NA		NA	
Heptachlor	UG/L	ND	0.048	NA		NA		NA	
Heptachlor epoxide	UG/L	ND	0.048	NA		NA		NA	
Methoxychlor	UG/L	ND	0.048	NA		NA		NA	
Toxaphene	UG/L	ND	0.96	NA		NA		NA	
SURROGATE(S)									
Tetrachloro-m-xylene	%	82	36-132	NA		NA		NA	
Decachlorobiphenyl	%	56	28-132	NA		NA		NA	

930000

NA = Not Applicable ND = Not Detected

Client ID		S070902EJ17 8-12		S072302EJ25 9-11		S072302EJ250 9-11		S072402EJ21 8-10	
Job No	Lab ID	A02-7056	A2705602	A02-7638	A2763803	A02-7638	A2763804	A02-7638	A2763805
Sample Date		07/09/2002		07/23/2002		07/23/2002		07/24/2002	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aldrin	UG/KG	ND R	1.9	ND	1.8	ND	1.9	ND	1.8
alpha-BHC	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
beta-BHC	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
gamma-BHC (Lindane)	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
delta-BHC	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
Chlordane	UG/KG	ND	19	ND	18	ND	19	ND	18
4,4'-DDD	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
4,4'-DDE	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
4,4'-DDT	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
Dieldrin	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
Endosulfan I	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
Endosulfan II	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
Endosulfan Sulfate	UG/KG	ND	1.9	18 J	1.8	13 J	1.9	ND	1.8
Endrin	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
Endrin aldehyde	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
Heptachlor	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
Heptachlor epoxide	UG/KG	ND	1.9	ND	1.8	ND	1.9	ND	1.8
Methoxychlor	UG/KG	ND	1.9	13 J	1.8	7.5 J	1.9	ND	1.8
Toxaphene	UG/KG	ND	38	ND	36	ND	38	ND	36
SURROGATE(S)									
Tetrachloro-m-xylene	%	2.0 *	32-130	91	32-130	88	32-130	82	32-130
Decachlorobiphenyl	%	0 *	36-153	246 *	36-153	178 *	36-153	82	36-153

NA = Not Applicable ND = Not Detected

Client ID		SS071902EJ GARDEN-N							
Job No	Lab ID	A02-7365	A2736507						
Sample Date		07/19/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aldrin	UG/KG	ND	18	NA		NA		NA	
alpha-BHC	UG/KG	ND	18	NA		NA		NA	
beta-BHC	UG/KG	ND	18	NA		NA		NA	
gamma-BHC (Lindane)	UG/KG	ND	18	NA		NA		NA	
delta-BHC	UG/KG	ND	18	NA		NA		NA	
Chlordane	UG/KG	ND	180	NA		NA		NA	
4,4'-DDD	UG/KG	ND	18	NA		NA		NA	
4,4'-DDE	UG/KG	28	18	NA		NA		NA	
4,4'-DDT	UG/KG	520	18	NA		NA		NA	
Dieldrin	UG/KG	37	18	NA		NA		NA	
Endosulfan I	UG/KG	ND	18	NA		NA		NA	
Endosulfan II	UG/KG	ND	18	NA		NA		NA	
Endosulfan Sulfate	UG/KG	ND	18	NA		NA		NA	
Endrin	UG/KG	ND	18	NA		NA		NA	
Endrin aldehyde	UG/KG	ND	18	NA		NA		NA	
Heptachlor	UG/KG	ND	18	NA		NA		NA	
Heptachlor epoxide	UG/KG	ND	18	NA		NA		NA	
Methoxychlor	UG/KG	ND	18	NA		NA		NA	
Toxaphene	UG/KG	ND	350	NA		NA		NA	
SURROGATE(S)									
Tetrachloro-m-xylene	%	0 D	32-130	NA		NA		NA	
Decachlorobiphenyl	%	0 D	36-153	NA		NA		NA	

NA = Not Applicable ND = Not Detected

Client ID		WO73102EJ01FB							
Job No	Lab ID	AD2-7821	A2782105						
Sample Date		07/30/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aroclor 1016	UG/L	ND	0.48	NA		NA		NA	
Aroclor 1221	UG/L	ND	0.48	NA		NA		NA	
Aroclor 1232	UG/L	ND	0.48	NA		NA		NA	
Aroclor 1242	UG/L	ND	0.48	NA		NA		NA	
Aroclor 1248	UG/L	ND	0.48	NA		NA		NA	
Aroclor 1254	UG/L	ND	0.48	NA		NA		NA	
Aroclor 1260	UG/L	ND	0.48	NA		NA		NA	
SURROGATE(S)									
Tetrachloro-m-xylene	%	74	36-132	NA		NA		NA	
Decachlorobiphenyl	%	66	28-132	NA		NA		NA	

630060

NA = Not Applicable ND = Not Detected

Client ID		SO70902EJ17 8-12		SO72302EJ25 9-11		SO72302EJ25D 9-11		SO72402EJ21 8-10	
Job No / Lab ID		A02-7056 / A2705602RE		A02-7638 / A2763803		A02-7638 / A2763804		A02-7638 / A2763805RE	
Sample Date		07/09/2002		07/23/2002		07/23/2002		07/24/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aroclor 1016	UG/KG	ND	20	ND	18	ND	20	ND	19
Aroclor 1221	UG/KG	ND	20	ND	18	ND	20	ND	19
Aroclor 1232	UG/KG	ND	20	ND	18	ND	20	ND	19
Aroclor 1242	UG/KG	ND	20	ND	18	ND	20	ND	19
Aroclor 1248	UG/KG	ND	20	ND	18	ND	20	ND	19
Aroclor 1254	UG/KG	ND	20	ND	18	ND	20	ND	19
Aroclor 1260	UG/KG	ND	20	ND	18	ND	20	ND	19
SURROGATE(S)									
Tetrachloro-m-xylene	%	82	32-148	47	32-148	48	32-148	84	32-148
Decachlorobiphenyl	%	126	36-153	52	36-153	61	36-153	84	36-153

Client ID		SS071902EJ GARDEN-N							
Job No / Lab ID		A02-7365 / A2736507							
Sample Date		07/19/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aroclor 1016	UG/KG	ND	18	NA		NA		NA	
Aroclor 1221	UG/KG	ND	18	NA		NA		NA	
Aroclor 1232	UG/KG	ND	18	NA		NA		NA	
Aroclor 1242	UG/KG	ND	18	NA		NA		NA	
Aroclor 1248	UG/KG	ND	18	NA		NA		NA	
Aroclor 1254	UG/KG	40	18	NA		NA		NA	
Aroclor 1260	UG/KG	ND	18	NA		NA		NA	
SURROGATE(S)									
Tetrachloro-m-xylene	%	83	32-148	NA		NA		NA	
Decachlorobiphenyl	%	84	36-153	NA		NA		NA	

000040

NA = Not Applicable ND = Not Detected

Client ID		WO73102EJ01FB							
Job No	Lab ID	A02-7821	A2782105						
Sample Date		07/30/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
2,4-D	UG/L	ND	0.47	NA		NA		NA	
2,4,5-TP (Silvex)	UG/L	ND	0.47	NA		NA		NA	
2,4,5-T	UG/L	ND	0.47	NA		NA		NA	
SURROGATE(S)									
Dichlorophenyl Acetic Acid	%	101	17-133	NA		NA		NA	

NA = Not Applicable ND = Not Detected

Client ID Job No Lab ID Sample Date		SO70902EJ17 8-12 A02-7056 A2705602 07/09/2002		SO72302EJ25 9-11 A02-7638 A2763803 07/23/2002		SO72302EJ25D 9-11 A02-7638 A2763804 07/23/2002		SO72402EJ21 8-10 A02-7638 A2763805 07/24/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
2,4-D	UG/KG	ND	20	ND	19	ND	19	ND	18
2,4,5-TP (Silvex)	UG/KG	ND	20	ND	19	ND	19	ND	18
2,4,5-T	UG/KG	ND	20	ND	19	ND	19	ND	18
SURROGATE(S)									
Dichlorophenyl Acetic Acid	%	76	17-133	96	17-133	94	17-133	85	17-133

Client ID Job No Lab ID Sample Date		SS071902EJ GARDEN-N A02-7365 A2736507 07/19/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
2,4-D	UG/KG	ND	72	NA		NA		NA	
2,4,5-TP (Silvex)	UG/KG	ND	72	NA		NA		NA	
2,4,5-T	UG/KG	ND	72	NA		NA		NA	
SURROGATE(S)									
Dichlorophenyl Acetic Acid	%	51	17-133	NA		NA		NA	

250000

NA = Not Applicable ND = Not Detected

Client ID		MW73102EJ01FB							
Job No	Lab ID	A02-7821	A2782105						
Sample Date		07/30/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aluminum - Total	MG/L	ND	0.20	NA		NA		NA	
Antimony - Total	MG/L	ND	0.020	NA		NA		NA	
Arsenic - Total	MG/L	ND	0.0070	NA		NA		NA	
Barium - Total	MG/L	0.0012	0.0010	NA		NA		NA	
Beryllium - Total	MG/L	ND	0.0050	NA		NA		NA	
Cadmium - Total	MG/L	ND	0.0010	NA		NA		NA	
Calcium - Total	MG/L	ND	0.50	NA		NA		NA	
Chromium - Total	MG/L	ND	0.0020	NA		NA		NA	
Cobalt - Total	MG/L	ND	0.0050	NA		NA		NA	
Copper - Total	MG/L	ND	0.0050	NA		NA		NA	
Iron - Total	MG/L	0.20	0.050	NA		NA		NA	
Lead - Total	MG/L	ND	0.010	NA		NA		NA	
Magnesium - Total	MG/L	ND	0.20	NA		NA		NA	
Manganese - Total	MG/L	ND	0.0030	NA		NA		NA	
Mercury - Total	MG/L	ND	0.00020	NA		NA		NA	
Nickel - Total	MG/L	ND	0.010	NA		NA		NA	
Potassium - Total	MG/L	ND	0.50	NA		NA		NA	
Selenium - Total	MG/L	ND	0.010	NA		NA		NA	
Silver - Total	MG/L	ND	0.0030	NA		NA		NA	
Sodium - Total	MG/L	ND	1.0	NA		NA		NA	
Thallium - Total	MG/L	ND	0.020	NA		NA		NA	
Vanadium - Total	MG/L	ND	0.0050	NA		NA		NA	
Zinc - Total	MG/L	ND	0.020	NA		NA		NA	

000043

NA = Not Applicable ND = Not Detected

Client ID		S070902EJ17 8-12		S072302EJ25 9-11		S072302EJ25D 9-11		S072402EJ21 8-10	
Job No	Lab ID	A02-7056	A2705802	A02-7638	A2763803	A02-7638	A2763804	A02-7638	A2763805
Sample Date		07/09/2002		07/23/2002		07/23/2002		07/24/2002	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aluminum - Total	MG/KG	6760	22.9	6380	23.2	7140	23.7	7690	21.7
Antimony - Total	MG/KG	ND J	11.4	ND J	11.6	ND J	11.8	ND J	10.8
Arsenic - Total	MG/KG	7.6	1.1	29.8	1.2	25.0	1.2	8.3	1.1
Barium - Total	MG/KG	76.0 J	1.1	128 J	1.2	171 J	1.2	59.2 J	1.1
Beryllium - Total	MG/KG	ND	0.57	ND	0.58	ND	0.59	ND	0.54
Cadmium - Total	MG/KG	ND	0.57	ND	0.58	ND	0.59	ND	0.54
Calcium - Total	MG/KG	1200	114	14700	116	6290	118	6240	108
Chromium - Total	MG/KG	10.1	2.3	9.5	2.3	10.7	2.4	11.0	2.2
Cobalt - Total	MG/KG	7.3	2.3	8.8	2.3	10.1	2.4	6.8	2.2
Copper - Total	MG/KG	24.6	2.3	18.2	2.3	19.2	2.4	21.7	2.2
Iron - Total	MG/KG	18600	17.2	40700	17.4	41000	17.8	22000	16.2
Lead - Total	MG/KG	12.4	5.7	9.9	5.8	9.9	5.9	8.1	5.4
Magnesium - Total	MG/KG	2440	22.9	3300	23.2	4850	23.7	4560	21.7
Manganese - Total	MG/KG	758	1.1	684	1.2	826	1.2	194	1.1
Mercury - Total	MG/KG	ND	0.12	ND	0.023	ND	0.025	ND	0.022
Nickel - Total	MG/KG	18.0	2.3	15.8	2.3	19.1	2.4	17.0	2.2
Potassium - Total	MG/KG	720 J	229	991 J	232	1030 J	237	1110 J	217
Selenium - Total	MG/KG	ND	3.4	ND	3.5	ND	3.6	ND	3.2
Silver - Total	MG/KG	ND	1.1	ND	1.2	ND	1.2	ND	1.1
Sodium - Total	MG/KG	ND	114	ND	116	ND	118	ND	108
Thallium - Total	MG/KG	ND	6.9	ND	6.9	ND	7.1	ND	6.5
Vanadium - Total	MG/KG	10.8	1.1	9.8	1.2	10.9	1.2	12.2	1.1
Zinc - Total	MG/KG	76.6 J	1.1	77.8 J	1.2	91.8 J	1.2	82.9 J	1.1

NA = Not Applicable ND = Not Detected

Client ID		SS071902EJ GARDEM-N							
Job No	Lab ID	A02-7365	A2736507						
Sample Date		07/19/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aluminum - Total	MG/KG	8020	21.7	NA		NA		NA	
Antimony - Total	MG/KG	ND	10.8	NA		NA		NA	
Arsenic - Total	MG/KG	7.8	1.1	NA		NA		NA	
Barium - Total	MG/KG	105	1.1	NA		NA		NA	
Beryllium - Total	MG/KG	ND	0.54	NA		NA		NA	
Cadmium - Total	MG/KG	ND	0.54	NA		NA		NA	
Calcium - Total	MG/KG	5210	108	NA		NA		NA	
Chromium - Total	MG/KG	39.6	2.2	NA		NA		NA	
Cobalt - Total	MG/KG	7.8	2.2	NA		NA		NA	
Copper - Total	MG/KG	38.4	2.2	NA		NA		NA	
Iron - Total	MG/KG	22100	16.3	NA		NA		NA	
Lead - Total	MG/KG	22.0	5.4	NA		NA		NA	
Magnesium - Total	MG/KG	3230	21.7	NA		NA		NA	
Manganese - Total	MG/KG	596	1.1	NA		NA		NA	
Mercury - Total	MG/KG	ND	0.10	NA		NA		NA	
Nickel - Total	MG/KG	25.8	2.2	NA		NA		NA	
Potassium - Total	MG/KG	952	217	NA		NA		NA	
Selenium - Total	MG/KG	ND	3.2	NA		NA		NA	
Silver - Total	MG/KG	ND	1.1	NA		NA		NA	
Sodium - Total	MG/KG	ND	108	NA		NA		NA	
Thallium - Total	MG/KG	ND	6.5	NA		NA		NA	
Vanadium - Total	MG/KG	13.1	1.1	NA		NA		NA	
Zinc - Total	MG/KG	82.2	1.1	NA		NA		NA	

S760000

NA = Not Applicable ND = Not Detected

Client ID		S070902EJ17 8-12		S072302EJ25 9-11		S072302EJ25D 9-11		S072402EJ21 8-10	
Job No / Lab ID		A02-7056	A2705602	A02-7638	A2763803	A02-7638	A2763804	A02-7638	A2763805
Sample Date		07/09/2002		07/23/2002		07/23/2002		07/24/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Cyanide - Total	UG/G	~~ND~~ R	0.50	~~ND~~ R	0.50	~~ND~~ R	0.50	~~ND~~ R	0.50

Client ID		S5071902EJ GARDEN-N		W073102EJ01FB					
Job No / Lab ID		A02-7365	A2736507	A02-7821	A2782105				
Sample Date		07/19/2002		07/30/2002					
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Cyanide - Total	UG/G	~~ND~~ R	0.50	NA		NA		NA	
Cyanide - Total	NG/L	NA		ND J	0.010	NA		NA	

970000

NA = Not Applicable ND = Not Detected

SEVERN TRENT SERVICES

STL Buffalo
10 Hazelwood Drive
Suite 106
Amherst, NY 14228

Tel: 716 691 2600
Fax: 716 691 7991
www.stlinc.com

ANALYTICAL REPORT
Revised

Job#: A02-7059,A02-7362,A02-7816

STL Project#: NY2A8896
SDG#: 7059
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center
Task: ASP00 LEVEL IV DELIVERABLES

ASP SOIL SAMPLES

Mr. Edward Jones
Bergmann Associates
28 East Main Street
Rochester, NY 14614

STL Buffalo

Brian J. Fischer
Project Manager

Susan L. Mazur
Laboratory Director

10/31/2002

This report contains 1607 pages which are individually numbered.

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STL Buffalo
10 Hazelwood Drive
Suite 106
Amherst, NY 14228

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

September 25, 2002

Mr. Edward Jones
Bergmann Associates
28 East Main Street
Rochester, NY 14614

RE: **Revision** for SDG 7059

Dear Mr. Jones:

Please find enclosed the revised analytical report concerning the samples recently submitted by your firm. The revised pages have been numbered for replacement and insertion into the original report. The pertinent information regarding these analyses is listed below:

Project: Gowanda Day Habilitation Center
SDG#: 7059
Task: ASP00 DELIVERABLES

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 Bergmann Associates with environmental testing services. We look forward to serving you in the future.

Sincerely,

STL Buffalo

Brian J. Fischer
Program Manager

BJF/rtv

I.D. #A02-7059.rev
#NY2A8896

SEVERN TRENT SERVICES

STL Buffalo
10 Hazelwood Drive
Suite 106
Amherst, NY 14228

Tel: 716 691 2600
Fax: 716 691 7991
www.stlinc.com

October 30, 2002

Mr. Edward Jones
Bergmann Associates
28 East Main Street
Rochester, NY 14614

RE: **REVISION** for SDG 7059 SOIL ASP

Dear Mr. Jones:

Please find enclosed the **revised** analytical report concerning Herbicides data for the samples submitted by your firm. The revised pages have been numbered for replacement and insertion into the original report. Herbicides raw data have been numbered for insertion at the end of the original report (vs. following PCB raw data). The pertinent information regarding these analyses is listed below:

Project : Gowanda Day Habilitation Center
SDG : 7059
Task : ASP00 Level IV Deliverables

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 Bergmann Associates 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. #A02-7059.rev3
#NY2A8896

SEVERN TRENT STL

January 14, 2003

Mr. Edward Jones
Bergmann Associates
28 East Main Street
Rochester, NY 14614

RE: **REVISION** for SDG 7059

Dear Mr. Jones:

Please find enclosed the **revised** pages concerning Pesticide, PCB, and Herbicide data for the samples submitted by your firm. The revised pages have been numbered for replacement and insertion into the original report. The pertinent information regarding these analyses is listed below:

Project : Gowanda Day Habilitation Center
SDG : 7059
Task : ASP00 Level IV Deliverables

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 Bergmann Associates with environmental testing services. We look forward to serving you in the future.

Sincerely,

STL Buffalo

Brian J. Fischer
Program Manager

BJF/stc
Enclosure
cc: J. Harry - Data Validation Services

I.D. #A02-7059.rev4
#NY2A8896

Severn Trent Laboratories, Inc.
STL Buffalo • 10 Hazelwood Drive, Suite 106, Amherst NY 14228
Tel 716 691 2600 Fax 716 691 7991 • www.stl-inc.com

A part of Severn Trent Plc

SAMPLE DATA SUMMARY PACKAGE

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A2705901	S071002EJ18 5-6	07/10/2002	08:40	07/11/2002	14:50
A2705902	S071102EJ04 10-12	07/11/2002	12:30	07/11/2002	14:50
A2736201	S071902EJ15 12-14	07/19/2002	08:30	07/19/2002	15:21
A2781601	S073002EJ06 18-20	07/30/2002	12:40	08/01/2002	09:20
A2781601MS	S073002EJ06 18-20	07/30/2002	12:40	08/01/2002	09:20
A2781601SD	S073002EJ06 18-20	07/30/2002	12:40	08/01/2002	09:20
A2782104	S073102EJ01 2-4	07/30/2002	14:10	08/01/2002	09:20
A2782104MD	S073102EJ01 2-4	07/30/2002	14:10	08/01/2002	09:20
A2782104MS	S073102EJ01 2-4	07/30/2002	14:10	08/01/2002	09:20
A2782104SD	S073102EJ01 2-4	07/30/2002	14:10	08/01/2002	09:20
A2781602	S073102EJ01 8-10	07/31/2002	14:20	08/01/2002	09:20
A2781602MS	S073102EJ01 8-10	07/31/2002	14:20	08/01/2002	09:20
A2781602SD	S073102EJ01 8-10	07/31/2002	14:20	08/01/2002	09:20
A2705904	TRIP BLANK	07/11/2002		07/11/2002	14:50
A2705903	W071102EJ04 FB	07/11/2002	13:00	07/11/2002	14:50

SEVERN TRENT SERVICES

METHODS SUMMARY

0000093

Job#: A02-7059,A02-7362,A02-7816

STL Project#: NY2A8896
SDG#: 7059
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

PARAMETER	ANALYTICAL METHOD	
BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS	ASP00	8260
BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS	ASP00	8260/5ML
BERG - S - ASP 2000- METHOD 8270 SEMIVOLATILES	ASP00	8270
BERG - S - ASP00 - 8151 - HERBICIDES (3 CMPDS)	ASP00	8151
BERG - S - ASP00 8081 PESTICIDES	ASP00	8081
BERG - S - ASP00 8082 - POLYCHLORINATED BIPHENYLS	ASP00	8082
Aluminum - Total	ASP00	6010
Antimony - Total	ASP00	6010
Arsenic - Total	ASP00	6010
Barium - Total	ASP00	6010
Beryllium - Total	ASP00	6010
Cadmium - Total	ASP00	6010
Calcium - Total	ASP00	6010
Chromium - Total	ASP00	6010
Cobalt - Total	ASP00	6010
Copper - Total	ASP00	6010
Iron - Total	ASP00	6010
Lead - Total	ASP00	6010
Magnesium - Total	ASP00	6010
Manganese - Total	ASP00	6010
Mercury - Total	ASP00	7471
Nickel - Total	ASP00	6010
Potassium - Total	ASP00	6010
Selenium - Total	ASP00	6010
Silver - Total	ASP00	6010
Sodium - Total	ASP00	6010
Thallium - Total	ASP00	6010
Vanadium - Total	ASP00	6010
Zinc - Total	ASP00	6010
Cyanide - Total	ASP00	9012
Leachable pH	ASP00	9045

References:

ASP00 "Analytical Services Protocol". New York State Department of Conservation, June 2000.

SEVERN TRENT SERVICES

NON-CONFORMANCE SUMMARY

000311

Job#: A02-7059,A02-7362,A02-7816

STL Project#: NY2A8896
SDG#: 7059
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

General Comments

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

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

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

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

Sample Receipt Comments

A02-7059
Sample Cooler(s) were received at the following temperature(s); 6°C.
A02-7362
Sample Cooler(s) were received at the following temperature(s); 6 °C
All samples were received in good condition.
A02-7816
Sample Cooler(s) were received at the following temperature(s); 6 °C
All samples were received in good condition.

GC/MS Volatile Data

The client required compound list included analytes that are not found on the standard method specified ASP Protocol compound list. At this time the laboratory does not have a standard available that has those additional compounds, that does not also contain analytes that would interfere with the ASP Protocol required Internal Standards (specifically Bromochloromethane). Therefore, some of the specified analytes were analyzed as modified additional list compounds and were then manually entered into the laboratory generated forms. (There were no positive detects for any of these additional compounds in any of the samples)

The analyte Methylene Chloride was detected in the Volatile Holding Blank (A2705905), VBLK45 and VBLK46 at a level below the project established reporting limit. No corrective action is necessary for any values in Blanks that are below the requested reporting limits.

The analyte Acetone was detected in VBLK46 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analyte 1,2,4-Trichlorobenzene was detected in VBLK45 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

All water samples were preserved to a PH less than 2.

Initial calibration standard curve A2I0000735-1 exhibited the %RSD of six compounds as greater than 15%. However, the mean RSD of all compounds is 8.43%. As a result no corrective action was required.

Initial calibration standard curve A2I0000751-1 exhibited the %RSD of Bromoform as above quality control limits. However, ASP00 protocol allows for the %RSD of up to two analytes to exceed quality control limits. As a result no corrective action was required.

Initial calibration standard curve A2I0000711-1 exhibited the %RSD of four compounds as above quality control limits. However, the mean RSD of all compounds is 6.80%. As a result no corrective action was required.

Continuing calibration standards A2C0003427-1 and A2C0003498-1 exhibited the %D of 1,2,4-Trichlorobenzene as above quality control limits. However, ASP00 protocol allows for the %D of up to two analytes per standard to exceed quality control limits. As a result no corrective action was required.

The analyte Methylene Chloride was detected in the Method Blank VBLK33 at a level below the project established reporting limit. The analytes Methylene Chloride and Acetone were detected in the Method Blank VBLK31 at levels below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analytes Methylene Chloride and Acetone were detected in the Volatile Holding Blank (A2736202) at a level below the project established reporting limit. No corrective action is necessary for any values in Volatile Holding Blanks that are below the requested reporting limits.

The analytes Acetone, Toluene, and Methylene Chloride were detected in the Method Blanks VBLK72, VBLK73, VBLK74 and the Volatile Holding Blank (A2781603) at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The recoveries of Benzene, Chlorobenzene, Toluene, and Trichloroethene in the MS and MSD of sample S073002EJ06 18-20 were below quality control limits. Also the %RPD of Trichloroethene was above quality control limits. The associated MSB exhibited compliant recoveries for all spiking compounds.

Sample S073102EJ01 8-10 MS exhibited the spike recovery of Chlorobenzene as below quality control limits. S073102EJ01 8-10 SD exhibited the spike recovery of Trichloroethene as below quality control limits. Also the %RPD of Trichloroethene was above quality control limits. The associated MSB exhibited compliant recoveries for all spiking compounds.

STL Buffalo internal validation reports have been printed and are included in this report as Appendix A.

GC/MS Semivolatile Data

The spike recovery for Pentachlorophenol was above the method defined quality control limits in the Matrix Spike Blank A2B0740901. Since the results were biased high and the analyte was not detected in the samples, no corrective action was required.

The spike recovery for 2,4-dinitrotoluene was below the method defined quality control limits in the Matrix Spike S073102EJ01 8-10 and in the Matrix Spike Duplicate S073102EJ01 8-10. Since the Matrix Spike Blank was compliant, no corrective action was required.

The surrogate recoveries were diluted out of sample S073102EJ01 8-10.

Samples S073102EJ01 8-10, S073102EJ01 8-10 MS and S073102EJ01 8-10 SD were not homogenous and required different dilutions due to varying degrees of extract viscocity.

Samples A2B0740901 an A2B0740902 had 80ng of internal standard added instead of the required 40ng. The calculations on the reports were adjusted. The data was not affected.

STL Buffalo internal validation reports have been printed and are included in this report as Appendix A.

GC Extractable Data

The continuing calibration verification for Aroclor 1260 analyzed after the field samples for Method 8082 (PCB) analysis was slightly outside the quality control limit of less than or equal to 15 percent difference. All other Aroclor continuing calibration verification analyses were compliant. There were no hits for Aroclor 1260 in the associated samples; no corrective action was taken.

Samples S073102EJ01 8-10 and the associated matrix spike and matrix spike duplicate analyzed for Method 8081 (Pesticides) were florisil treated to minimize matrix interferences.

The surrogates in the associated Continuing Calibration Verifications and samples S073102EJ01 8-10 and the associated matrix spike and matrix spike duplicate were calculated using the average calibration factor.

A few compounds for the Continuing Calibration Verifications for Method 8081 slightly exceeded the quality control limit of less than or equal to 15 percent difference. The average percent difference across all analytes was compliant as well as surrogate and spike recovery data. No corrective action was indicated.

STL Buffalo internal validation reports have been printed and are included in this report as Appendix A.

SEVERN TRENT SERVICES

000097

Metals Data

The following elements are not contained in the CLP spiking solution for samples S073102EJ01 8-10 Matrix Spike and Matrix Spike Duplicate: Aluminum, Calcium, Magnesium, Potassium, and Sodium.

The recovery of Antimony fell below the QC limits in sample S073102EJ01 8-10 Matrix Spike and Matrix Spike Duplicate. The recovery of Manganese and Zinc fell above the QC limits in sample S073102EJ01 8-10 Matrix Spike. The recovery of Barium fell above the QC limits in sample S073102EJ01 Matrix Spike Duplicate. The LFB was acceptable for all elements.

The recovery of Iron fell below the QC limits in sample S073102EJ01 8-10 Matrix Spike and fell above the QC limits in S073102EJ01 8-10 Matrix Spike Duplicate. The sample results were more than four times greater than the spike added, therefore, no qualifiers are needed. The LFB was acceptable.

The analytes Aluminum and Zinc were detected in the Method Blank at a level above the project established reporting limit. However, all samples had levels of Aluminum and Zinc greater than ten times that of the Method Blank value, therefore, no corrective action was necessary.

STL Buffalo internal validation reports have been printed and are included in this report as Appendix A.

Wet Chemistry Data

STL Buffalo internal validation reports have been printed and are included in this report as Appendix A.

Revision Comments

Due to laboratory oversight, samples W073102EJ01FB and S073102EJ01 2-4 were analyzed past the EPA-recommended holding time for Cyanide. The sample results should be considered estimated.

SEVERN TRENT SERVICES

****

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.

"I certify that this package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package and electronic deliverable has been authorized by the Laboratory Director or her designee, as verified by the following signature."

Susan L. Mazur
Laboratory Director

8/28/2001
Date

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

Client No.
S071002SB18 5-6

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2705901

Sample wt/vol: 5.19 (g/mL) G Lab File ID: F4589.RR

Level: (low/med) LOW Date Samp/Recv: 07/10/2002 07/11/2002

% Moisture: not dec. 40.8 Heated Purge: Y Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	21	B U
71-43-2	Benzene	16	U
75-27-4	Bromodichloromethane	16	U
75-25-2	Bromoform	16	U
74-83-9	Bromomethane	16	U
78-93-3	2-Butanone	16	U
75-15-0	Carbon Disulfide	16	U
56-23-5	Carbon Tetrachloride	16	U
74-87-3	Chloromethane	16	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	16	U
110-82-7	Cyclohexane	16	U
67-66-3	Chloroform	16	U
96-12-8	1,2-Dibromo-3-chloropropane	160	U
124-48-1	Dibromochloromethane	16	U
75-71-8	Dichlorodifluoromethane	16	U
106-93-4	1,2-Dibromoethane	16	U
95-50-1	1,2-Dichlorobenzene	16	U
541-73-1	1,3-Dichlorobenzene	16	U
106-46-7	1,4-Dichlorobenzene	16	U
75-34-3	1,1-Dichloroethane	16	U
107-06-2	1,2-Dichloroethane	16	U
75-35-4	1,1-Dichloroethene	16	U
156-59-2	cis-1,2-Dichloroethene	16	U
156-60-5	trans-1,2-Dichloroethene	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
100-41-4	Ethylbenzene	16	U
591-78-6	2-Hexanone	16	U
98-82-8	Isopropylbenzene	16	U
79-20-9	Methyl acetate	16	U
75-09-2	Methylene chloride	28	Br U
1634-04-4	Methyl tert butyl ether	16	U

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

000910
Client No.

S071002EJ18 5-6

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2705901

Sample wt/vol: 5.19 (g/mL) G Lab File ID: F4589.RR

Level: (low/med) LOW Date Samp/Recv: 07/10/2002 07/11/2002

% Moisture: not dec. 40.8 Heated Purge: Y Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-10-1	4-Methyl-2-pentanone	16	U
108-87-2	Methylcyclohexane	16	U
100-42-5	Styrene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
127-18-4	Tetrachloroethene	16	U
108-88-3	Toluene	16	U
120-82-1	1,2,4-Trichlorobenzene	16	U
71-55-6	1,1,1-Trichloroethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	16	U
79-01-6	Trichloroethene	16	U
75-69-4	Trichlorofluoromethane	16	U
75-01-4	Vinyl chloride	16	U
1330-20-7	Total Xylenes	16	U
103-65-1	n-Propylbenzene	16	U
99-87-6	p-Cymene	16	U
95-63-6	1,2,4-Trimethylbenzene	16	U
108-67-8	1,3,5-Trimethylbenzene	16	U
104-51-8	n-Butylbenzene	16	U
135-98-8	sec-Butylbenzene	16	U

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS
TENTATIVELY IDENTIFIED COMPOUNDS

000011

Client No

S071002EJ18 5-6

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2705901

Sample wt/vol: 5.19 (g/mL) G Lab File ID: F4589.RR

Level: (low/med) LOW Date Samp/Recv: 07/10/2002 07/11/20

% Moisture: not dec. 40.8 Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 110-54-3	~~HEXANE~~	3.21	~~14~~	~~BJN~~

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

000012

Client No.

S071102EJ04 10-12

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2705902

Sample wt/vol: 5.01 (g/mL) G Lab File ID: F4590.RR

Level: (low/med) LOW Date Samp/Recv: 07/11/2002 07/11/2002

% Moisture: not dec. 12.2 Heated Purge: Y Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	11 5	U U
71-43-2	Benzene	11	U
75-27-4	Bromodichloromethane	11	U
75-25-2	Bromoform	11	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	11	U
56-23-5	Carbon Tetrachloride	11	U
74-87-3	Chloromethane	11	U
108-90-7	Chlorobenzene	11	U
75-00-3	Chloroethane	11	U
110-82-7	Cyclohexane	11	U
67-66-3	Chloroform	11	U
96-12-8	1,2-Dibromo-3-chloropropane	110	U
124-48-1	Dibromochloromethane	11	U
75-71-8	Dichlorodifluoromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
95-50-1	1,2-Dichlorobenzene	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
75-34-3	1,1-Dichloroethane	11	U
107-06-2	1,2-Dichloroethane	11	U
75-35-4	1,1-Dichloroethene	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
100-41-4	Ethylbenzene	11	U
591-78-6	2-Hexanone	11	U
98-82-8	Isopropylbenzene	11	U
79-20-9	Methyl acetate	11	U
75-09-2	Methylene chloride	12	B U
1634-04-4	Methyl tert butyl ether	11	U

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ANALYSIS DATA SHEET

000013

Client No.

S071102EJ04 10-12

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2705902

Sample wt/vol: 5.01 (g/mL) G Lab File ID: F4590.RR

Level: (low/med) LOW Date Samp/Recv: 07/11/2002 07/11/2002

% Moisture: not dec. 12.2 Heated Purge: Y Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-10-1	4-Methyl-2-pentanone	11	U
108-87-2	Methylcyclohexane	11	U
100-42-5	Styrene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
127-18-4	Tetrachloroethene	11	U
108-88-3	Toluene	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
71-55-6	1,1,1-Trichloroethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
79-01-6	Trichloroethene	11	U
75-69-4	Trichlorofluoromethane	11	U
75-01-4	Vinyl chloride	11	U
1330-20-7	Total Xylenes	11	U
103-65-1	n-Propylbenzene	11	U
99-87-6	p-Cymene	11	U
95-63-6	1,2,4-Trimethylbenzene	11	U
108-67-8	1,3,5-Trimethylbenzene	11	U
104-51-8	n-Butylbenzene	11	U
135-98-8	sec-Butylbenzene	11	U

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TENTATIVELY IDENTIFIED COMPOUNDS

000014

Client No.

S071102EJ04 10-12

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: ____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2705902

Sample wt/vol: 5.01 (g/mL) G Lab File ID: F4590.RR

Level: (low/med) LOW Date Samp/Recv: 07/11/2002 07/11/2002

% Moisture: not dec. 12.2 Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN	1.43	6	J
2. 110-54-3	~~HEXANE~~	~~3.22~~	8	~~BJN~~

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000015

Client No: S071902EJ15 12-14

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2736201

Sample wt/vol: 5.08 (g/mL) G Lab File ID: Q5394.RR

Level: (low/med) LOW Date Samp/Recv: 07/19/2002 07/19/2002

% Moisture: not dec. 10.0 Heated Purge: Y Date Analyzed: 07/23/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	11	U
71-43-2	Benzene	11	U
75-27-4	Bromodichloromethane	11	U
75-25-2	Bromoform	11	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	11	U
56-23-5	Carbon Tetrachloride	11	U
74-87-3	Chloromethane	11	U
108-90-7	Chlorobenzene	11	U
75-00-3	Chloroethane	11	U
110-82-7	Cyclohexane	11	U
67-66-3	Chloroform	11	U
96-12-8	1,2-Dibromo-3-chloropropane	110	U
124-48-1	Dibromochloromethane	11	U
75-71-8	Dichlorodifluoromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
95-50-1	1,2-Dichlorobenzene	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
75-34-3	1,1-Dichloroethane	11	U
107-06-2	1,2-Dichloroethane	11	U
75-35-4	1,1-Dichloroethene	11	U
156-59-2	cis-1,2-Dichloroethene	7	J
156-60-5	trans-1,2-Dichloroethene	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
100-41-4	Ethylbenzene	11	U
591-78-6	2-Hexanone	11	U
98-82-8	Isopropylbenzene	11	U
79-20-9	Methyl acetate	11	U
75-09-2	Methylene chloride	11 20	BU
1634-04-4	Methyl tert butyl ether	11	U

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000015

Client No.

S071902E715 12-14

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2736201

Sample wt/vol: 5.08 (g/mL) G Lab File ID: Q5394.RR

Level: (low/med) LOW Date Samp/Recv: 07/19/2002 07/19/2002

% Moisture: not dec. 10.0 Heated Purge: Y Date Analyzed: 07/23/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-10-1	4-Methyl-2-pentanone	11	U
108-87-2	Methylcyclohexane	11	U
100-42-5	Styrene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
127-18-4	Tetrachloroethene	11	U
108-88-3	Toluene	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
71-55-6	1,1,1-Trichloroethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
79-01-6	Trichloroethene	51	
75-69-4	Trichlorofluoromethane	11	U
75-01-4	Vinyl chloride	11	U
1330-20-7	Total Xylenes	11	U
103-65-1	n-Propylbenzene	11	U
99-87-6	p-Cymene	11	U
95-63-6	1,2,4-Trimethylbenzene	11	U
108-67-8	1,3,5-Trimethylbenzene	11	U
104-51-8	n-Butylbenzene	11	U
135-98-8	sec-Butylbenzene	11	U

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TENTATIVELY IDENTIFIED COMPOUNDS

000017

Client No.

S071902EJ15 12-14

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2736201

Sample wt/vol: 5.08 (g/mL) G Lab File ID: 05394.RR

Level: (low/med) LOW Date Samp/Recv: 07/19/2002 07/19/2002

% Moisture: not dec. 10.0 Date Analyzed: 07/23/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 110-54-3	~~HEXANE~~	2.85	~~7~~	~~JN~~

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BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

000013

Client No.

S073002EJ06 18-20

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781601

Sample wt/vol: 5.00 (g/mL) G Lab File ID: F4947.RR

Level: (low/med) LOW Date Samp/Recv: 07/30/2002 08/01/2002

% Moisture: not dec. 9.3 Heated Purge: Y Date Analyzed: 08/02/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	11 6	BJ U
71-43-2	Benzene	11	U J
75-27-4	Bromodichloromethane	11	U
75-25-2	Bromoform	11	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	11	U
56-23-5	Carbon Tetrachloride	11	U
74-87-3	Chloromethane	11	U
108-90-7	Chlorobenzene	11	U J
75-00-3	Chloroethane	11	U
110-82-7	Cyclohexane	11	U
67-66-3	Chloroform	11	U
96-12-8	1,2-Dibromo-3-chloropropane	110	U
124-48-1	Dibromochloromethane	11	U
75-71-8	Dichlorodifluoromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
95-50-1	1,2-Dichlorobenzene	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
75-34-3	1,1-Dichloroethane	11	U
107-06-2	1,2-Dichloroethane	11	U
75-35-4	1,1-Dichloroethene	11	U
156-59-2	cis-1,2-Dichloroethene	190	
156-60-5	trans-1,2-Dichloroethene	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
100-41-4	Ethylbenzene	11	U
591-78-6	2-Hexanone	11	U
98-82-8	Isopropylbenzene	11	U
79-20-9	Methyl acetate	11	U
75-09-2	Methylene chloride	11 5	BJ U
1634-04-4	Methyl tert butyl ether	11	U

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ANALYSIS DATA SHEET

000019

Client No.: SB73002EJ06 18-20

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781601

Sample wt/vol: 5.00 (g/mL) G Lab File ID: F4947.RR

Level: (low/med) LOW Date Samp/Recv: 07/30/2002 08/01/2002

% Moisture: not dec. 9.3 Heated Purge: Y Date Analyzed: 08/02/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-10-1	4-Methyl-2-pentanone	11	U
108-87-2	Methylcyclohexane	11	U
100-42-5	Styrene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
127-18-4	Tetrachloroethene	11	U
108-88-3	Toluene	11	U J
120-82-1	1,2,4-Trichlorobenzene	11	U
71-55-6	1,1,1-Trichloroethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
79-01-6	Trichloroethene	44	J
75-69-4	Trichlorofluoromethane	11	U
75-01-4	Vinyl chloride	11	U
1330-20-7	Total Xylenes	11	U
103-65-1	n-Propylbenzene	11	U
99-87-6	p-Cymene	11	U
95-63-6	1,2,4-Trimethylbenzene	11	U
108-67-8	1,3,5-Trimethylbenzene	11	U
104-51-8	n-Butylbenzene	11	U
135-98-8	sec-Butylbenzene	11	U

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TENTATIVELY IDENTIFIED COMPOUNDS

000320

Client No.

S073002EJ06 18-20

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: ____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781601

Sample wt/vol: 5.00 (g/mL) G Lab File ID: F4947.RR

Level: (low/med) LOW Date Samp/Recv: 07/30/2002 08/01/2002

% Moisture: not dec. 9.3 Date Analyzed: 08/02/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NO.	Compound Name	RT	Est. Conc.	Q
1.		UNKNOWN	1.43	10	J
2.		UNKNOWN	1.67	7	J
3.	110-54-3	~~HEXANE~~	3.22	~~16~~	~~BJN~~

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000021

Client No
S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602

Sample wt/vol: 5.01 (g/mL) G Lab File ID: F4948.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2002 08/01/20 2

% Moisture: not dec. 13.3 Heated Purge: Y Date Analyzed: 08/02/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	12 ~~8~~	~~B~~ U
71-43-2	Benzene	12	U
75-27-4	Bromodichloromethane	12	U
75-25-2	Bromoform	12	U
74-83-9	Bromomethane	12	U
78-93-3	2-Butanone	12	U
75-15-0	Carbon Disulfide	12	U
56-23-5	Carbon Tetrachloride	12	U
74-87-3	Chloromethane	12	U
108-90-7	Chlorobenzene	12	U
75-00-3	Chloroethane	12	U
110-82-7	Cyclohexane	12	U
67-66-3	Chloroform	12	U
96-12-8	1,2-Dibromo-3-chloropropane	120	U
124-48-1	Dibromochloromethane	12	U
75-71-8	Dichlorodifluoromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
95-50-1	1,2-Dichlorobenzene	12	U
541-73-1	1,3 Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
75-34-3	1,1-Dichloroethane	12	U
107-06-2	1,2-Dichloroethane	12	U
75-35-4	1,1-Dichloroethene	12	U
156-59-2	cis 1,2-Dichloroethene	170	
156-60-5	trans-1,2-Dichloroethene	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
100-41-4	Ethylbenzene	12	U
591-78-6	2-Hexanone	12	U
98-82-8	Isopropylbenzene	12	U
79-20-9	Methyl acetate	12	U
75-09-2	Methylene chloride	12 ~~10~~	~~B~~ U
1634 04-4	Methyl tert butyl ether	12	U

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000022

Client No.

S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602

Sample wt/vol: 5.01 (g/mL) G Lab File ID: F4948.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2002 08/01/2002

% Moisture: not dec. 13.3 Heated Purge: Y Date Analyzed: 08/02/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-10-1	4-Methyl-2-pentanone	12	U
108-87-2	Methylcyclohexane	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
127-18-4	Tetrachloroethene	12	U
108-88-3	Toluene	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
71-55-6	1,1,1-Trichloroethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	12	U
79-01-6	Trichloroethene	3600 990	~~E~~
75-69-4	Trichlorofluoromethane	12	U
75-01-4	Vinyl chloride	5	J
1330-20-7	Total Xylenes	12	U
103-65-1	n-Propylbenzene	12	U
99-87-6	p-Cymene	12	U
95-63-6	1,2,4-Trimethylbenzene	12	U
108-67-8	1,3,5-Trimethylbenzene	12	U
104-51-8	n-Butylbenzene	12	U
135-98-8	sec-Butylbenzene	12	U

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TENTATIVELY IDENTIFIED COMPOUNDS

000023

Client No.

S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602

Sample wt/vol: 5.01 (g/mL) G Lab File ID: F4948.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2002 08/01/ 00

% Moisture: not dec. 13.3 Date Analyzed: 08/02/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

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Client No: S073102EJ01 8-10 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602DL

Sample wt/vol: 4.05 (g/mL) G Lab File ID: F4973.RR

Level: (low/med) MED Date Samp/Recv: 07/31/2002 08/01/2002

% Moisture: not dec. 13.3 Heated Purge: N Date Analyzed: 08/06/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	260	BDJ
71-43-2	Benzene	1400	U
75-27-4	Bromodichloromethane	1400	U
75-25-2	Bromoform	1400	U
74-83-9	Bromomethane	1400	U
78-93-3	2-Butanone	1400	U
75-15-0	Carbon Disulfide	1400	U
56-23-5	Carbon Tetrachloride	1400	U
74-87-3	Chloromethane	1400	U
108-90-7	Chlorobenzene	1400	U
75-00-3	Chloroethane	1400	U
110-82-7	Cyclohexane	1400	U
67-66-3	Chloroform	1400	U
96-12-8	1,2-Dibromo-3-chloropropane	14000	U
124-48-1	Dibromochloromethane	1400	U
75-71-8	Dichlorodifluoromethane	1400	U
106-93-4	1,2-Dibromoethane	1400	U
95-50-1	1,2-Dichlorobenzene	1400	U
541-73-1	1,3-Dichlorobenzene	1400	U
106-46-7	1,4-Dichlorobenzene	1400	U
75-34-3	1,1-Dichloroethane	1400	U
107-06-2	1,2-Dichloroethane	1400	U
75-35-4	1,1-Dichloroethene	1400	U
156-59-2	cis-1,2-Dichloroethene	180	DJ
156-60-5	trans-1,2-Dichloroethene	1400	U
78-87-5	1,2-Dichloropropane	1400	U
10061-01-5	cis-1,3-Dichloropropene	1400	U
10061-02-6	trans-1,3-Dichloropropene	1400	U
100-41-4	Ethylbenzene	1400	U
591-78-6	2-Hexanone	1400	U
98-82-8	Isopropylbenzene	1400	U
79-20-9	Methyl acetate	1400	U
75-09-2	Methylene chloride	720	BDJ
1634-04-4	Methyl tert butyl ether	1400	U

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BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

000025

Client No

S073102EJ01 8-10 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602DL

Sample wt/vol: 4.05 (g/mL) G Lab File ID: F4973.RR

Level: (low/med) MED Date Samp/Recv: 07/31/2002 08/01/20 2

% Moisture: not dec. 13.3 Heated Purge: N Date Analyzed: 08/06/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-10-1	4-Methyl-2-pentanone	1400	U
108-87-2	Methylcyclohexane	1400	U
100-42-5	Styrene	1400	U
79-34-5	1,1,2,2-Tetrachloroethane	1400	U
127-18-4	Tetrachloroethene	1400	U
108-88-3	Toluene	180	BDJ
120-82-1	1,2,4-Trichlorobenzene	1400	U
71-55-6	1,1,1-Trichloroethane	1400	U
79-00-5	1,1,2-Trichloroethane	1400	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1400	U
79-01-6	Trichloroethene	3600	D
75-69-4	Trichlorofluoromethane	1400	U
75-01-4	Vinyl chloride	1400	U
1330-20-7	Total Xylenes	1400	U
103-65-1	n-Propylbenzene	1400	U
99-87-6	p-Cymene	1400	U
95-63-6	1,2,4-Trimethylbenzene	1400	U
108-67-8	1,3,5-Trimethylbenzene	1400	U
104-51-8	n-Butylbenzene	1400	U
135-98-8	sec-Butylbenzene	1400	U

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TENTATIVELY IDENTIFIED COMPOUNDS

000026

Client No

S073102EJ01 8-10 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602DL

Sample wt/vol: 4.05 (g/mL) G Lab File ID: F4973.RR

Level: (low/med) MED Date Samp/Recv: 07/31/2002 08/01/200

% Moisture: not dec. 13.3 Date Analyzed: 08/06/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN	1.88	1100	J
2.	UNKNOWN	2.19	840	J
3. 110-54-3	HEXANE	3.21	1300	BJN

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ANALYSIS DATA SHEET

000027

Client No.

TRIP BLANK

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) WATER Lab Sample ID: A2705904

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: P4573.RR

Level: (low/med) LOW Date Samp/Recv: 07/11/2002 07/11/2002

% Moisture: not dec. _____ Heated Purge: Y Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	6	BJ
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	5	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
74-87-3	Chloromethane	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	5	U
110-82-7	Cyclohexane	10	U
67-66-3	Chloroform	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
124-48-1	Dibromochloromethane	5	U
75-71-8	Dichlorodifluoromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
95-50-1	1,2-Dichlorobenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	25	U
98-82-8	Isopropylbenzene	5	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	4	BJ
1634-04-4	Methyl tert butyl ether	10	U

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ANALYSIS DATA SHEET

000028

Client No.

TRIP BLANK

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) WATER Lab Sample ID: A2705904

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F4573.RR

Level: (low/med) LOW Date Samp/Recv: 07/11/2002 07/11/2002

% Moisture: not dec. _____ Heated Purge: Y Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-10-1	4-Methyl-2-pentanone	25	U
108-87-2	Methylcyclohexane	10	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
79-01-6	Trichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
75-01-4	Vinyl chloride	5	U
1330-20-7	Total Xylenes	5	U
103-65-1	n-Propylbenzene	5	U
99-87-6	p-Cymene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
104-51-8	n-Butylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
TENTATIVELY IDENTIFIED COMPOUNDS

000023

Client No.

TRIP BLANK

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) WATER Lab Sample ID: A2705904

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F4573.RR

Level: (low/med) LOW Date Samp/Recv: 07/11/2002 07/11/200

% Moisture: not dec. _____ Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 110-54-3	HEXANE	3.21	7	BJN

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000039

Client No.

W071102EJ04 FB

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) WATER Lab Sample ID: A2705903

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F4572.RR

Level: (low/med) LOW Date Samp/Recv: 07/11/2002 07/11/2002

% Moisture: not dec. _____ Heated Purge: Y Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	3	J
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	5	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
74-87-3	Chloromethane	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	5	U
110-82-7	Cyclohexane	10	U
67-66-3	Chloroform	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
124-48-1	Dibromochloromethane	5	U
75-71-8	Dichlorodifluoromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
95-50-1	1,2-Dichlorobenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	25	U
98-82-8	Isopropylbenzene	5	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	3	BJ
1634-04-4	Methyl tert butyl ether	10	U

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ANALYSIS DATA SHEET

000031

Client No.

W071102EJ04 FB

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: ____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) WATER Lab Sample ID: A2705903

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F4572.RR

Level: (low/med) LOW Date Samp/Recv: 07/11/2002 07/11/2002

% Moisture: not dec. _____ Heated Purge: Y Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-10-1	4-Methyl-2-pentanone	25	U
108-87-2	Methylcyclohexane	10	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
79-01-6	Trichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
75-01-4	Vinyl chloride	5	U
1330-20-7	Total Xylenes	5	U
103-65-1	n-Propylbenzene	5	U
99-87-6	p-Cymene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
104-51-8	n-Butylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
TENTATIVELY IDENTIFIED COMPOUNDS

000032

Client No.

W071102EJ04 FB

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) WATER Lab Sample ID: A2705903

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F4572.RR

Level: (low/med) LOW Date Samp/Recv: 07/11/2002 07/11/2002

% Moisture: not dec. _____ Date Analyzed: 07/20/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 110-54-3	HEXANE	3.21	6	BJN

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BERG - S - ASP 2000- METHOD 8270 SEMIVOLATILES
ANALYSIS DATA SHEET

Client No.

S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602

Sample wt/vol: 30.47 (g/mL) G Lab File ID: Z52632.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2002 08/01/200

% Moisture: 12.4 decanted: (Y/N) N Date Extracted: 08/05/2002

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2002

Injection Volume: 2.00 (uL) Dilution Factor: 25.00

GPC Cleanup: (Y/N) N pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	9300	U
108-95-2	Phenol	9300	U
111-44-4	Bis(2-chloroethyl) ether	9300	U
95-57-8	2-Chlorophenol	9300	U
95-48-7	2-Methylphenol	9300	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	9300	U
98-86-2	Acetophenone	9300	U
106-44-5	4-Methylphenol	9300	U
621-64-7	N-Nitroso-Di-n-propylamine	9300	U
67-72-1	Hexachloroethane	9300	U
98-95-3	Nitrobenzene	9300	U
78-59-1	Isophorone	9300	U
88-75-5	2-Nitrophenol	9300	U
105-67-9	2,4-Dimethylphenol	9300	U
111-91-1	Bis(2-chloroethoxy) methane	9300	U
120-83-2	2,4-Dichlorophenol	9300	U
91-20-3	Naphthalene	9300	U
106-47-8	4-Chloroaniline	9300	U
87-68-3	Hexachlorobutadiene	9300	U
105-60-2	Caprolactam	9300	U
59-50-7	4-Chloro-3-methylphenol	9300	U
91-57-6	2-Methylnaphthalene	9300	U
77-47-4	Hexachlorocyclopentadiene	9300	U
88-06-2	2,4,6-Trichlorophenol	9300	U
95-95-4	2,4,5-Trichlorophenol	9300	U
92-52-4	Biphenyl	9300	U
91-58-7	2-Chloronaphthalene	9300	U
88-74-4	2-Nitroaniline	22000	U
131-11-3	Dimethyl phthalate	9300	U
208-96-8	Acenaphthylene	9300	U
606-20-2	2,6-Dinitrotoluene	9300	U
99-09-2	3-Nitroaniline	22000	U

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ANALYSIS DATA SHEET

006034

Client No.

S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602

Sample wt/vol: 30.47 (g/mL) G Lab File ID: Z52632.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2002 08/01/2002

% Moisture: 12.4 decanted: (Y/N) N Date Extracted: 08/05/2002

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2002

Injection Volume: 2.00 (uL) Dilution Factor: 25.00

GPC Cleanup: (Y/N) N pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	9300	U
51-28-5	2,4-Dinitrophenol	22000	U J
100-02-7	4-Nitrophenol	22000	U
132-64-9	Dibenzofuran	9300	U
121-14-2	2,4-Dinitrotoluene	9300	U J
84-66-2	Diethyl phthalate	9300	U
7005-72-3	4-Chlorophenyl phenyl ether	9300	U
86-73-7	Fluorene	9300	U
100-01-6	4-Nitroaniline	22000	U
534-52-1	4,6-Dinitro-2-methylphenol	22000	U
86-30-6	N-nitrosodiphenylamine	9300	U
101-55-3	4-Bromophenyl phenyl ether	9300	U
118-74-1	Hexachlorobenzene	9300	U
1912-24-9	Atrazine	9300	U
87-86-5	Pentachlorophenol	22000	U
85-01-8	Phenanthrene	590	J
120-12-7	Anthracene	9300 ~~560~~	U ~~J~~
86-74-8	Carbazole	9300	U
84-74-2	Di-n-butyl phthalate	9300	U
206-44-0	Fluoranthene	700	J
129-00-0	Pyrene	480	J
85-68-7	Butyl benzyl phthalate	9300	U
91-94-1	3,3'-Dichlorobenzidine	9300	U
56-55-3	Benzo(a)anthracene	9300	U
218-01-9	Chrysene	270	J
117-81-7	Bis(2-ethylhexyl) phthalate	9300	U
117-84-0	Di-n-octyl phthalate	9300	U
205-99-2	Benzo(b)fluoranthene	9300	U
207-08-9	Benzo(k)fluoranthene	9300	U
50-32-8	Benzo(a)pyrene	9300	U
193-39-5	Indeno(1,2,3-cd)pyrene	9300	U
53-70-3	Dibenzo(a,h)anthracene	9300	U

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000035

Client No.

S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A0781602

Sample wt/vol: 30.47 (g/mL) G Lab File ID: Z52632.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2002 08/01/20

% Moisture: 12.4 decanted: (Y/N) N Date Extracted: 08/05/2002

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2002

Injection Volume: 2.00 (uL) Dilution Factor: 25.00

GPC Cleanup: (Y/N) N pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
191-24-2	Benzo(ghi)perylene	9300	U

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TENTATIVELY IDENTIFIED COMPOUNDS

000036

Client No.

S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602

Sample wt/vol: 30.47 (g/mL) G Lab File ID: Z52632.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2002 08/01/200

% Moisture: 12.4 decanted: (Y/N) N Date Extracted: 08/05/2002

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2002

Injection Volume: 2.00 (uL) Dilution Factor: 25.00

GPC Cleanup: (Y/N) N pH: 8.1

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN	25.53	2100	J

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Client Id: S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602

Sample wt/vol: 30.80 (g/mL) G Lab File ID: RA19372.TX0

% Moisture: 12.4 decanted: (Y/N) N Date Samp/Recv: 07/31/2002 08/01/2002

Extraction: (SepF/Cont/Sonc/Soxh): SONC Date Extracted: 08/03/2002

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/14/2002

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.9	U
319-85-7	beta-BHC	8.9	U
319-86-8	delta-BHC	8.9	U
58-89-9	gamma-BHC (Lindane)	8.9	U
76-44-8	Heptachlor	8.9	U
309-00-2	Aldrin	8.9	U
1024-57-3	Heptachlor epoxide	8.9	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	18	U
72-55-9	4,4'-DDE	18	U
72-20-8	Endrin	18	U
33213-65-9	Endosulfan II	18	U
72-54-8	4,4'-DDD	18	U
1031-07-8	Endosulfan Sulfate	18	U
50-29-3	4,4'-DDT	18	U
72-43-5	Methoxychlor	6.3	J
53494-70-5	Endrin ketone	18	U
7421-93-4	Endrin aldehyde	36	U
5103-71-9	alpha-Chlordane	44	U
5103-74-2	gamma-Chlordane	44	U
8001-35-2	Toxaphene	180	U

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - S - ASP00 8082 - POLYCHLORINATED BIPHENYLS
ANALYSIS DATA SHEET

Client No: S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: ____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2781602

Sample wt/vol: 30.53 (g/mL) G Lab File ID: SA05150.TX0

% Moisture: 12.4 decanted: (Y/N) N Date Samp/Recv: 07/31/2002 08/01/200

Extraction: (SepF/Cont/Sonc/Soxh): SONC Date Extracted: 08/03/2002

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/06/2002

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor 1016	90	U
11104-28-2	Aroclor 1221	90	U
11141-16-5	Aroclor 1232	90	U
53469-21-9	Aroclor 1242	90	U
12672-29-6	Aroclor 1248	90	U
11097-69-1	Aroclor 1254	90	U
11096-82-5	Aroclor 1260	90	U

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - S - ASP00 - 8151 - HERBICIDES (3 CMPDS)
ANALYSIS DATA SHEET

000038A

Client N.

S073102EJ01 2-4

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix: (soil/water) SOIL Lab Sample ID: A2782104

Sample wt/vol: 30.37 (g/mL) G Lab File ID: MA67018.TX0

% Moisture: 25.6 decanted: (Y/N) N Date Samp/Recv: 07/30/2002 08/01/20 2

Extraction: (SepF/Cont/Sonc/Soxh): SONC Date Extracted: 08/09/2002

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/13/2002

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
93-76-5	2,4,5-T	23 420	U
93-72-1	2,4,5-TP (Silvex)	23 420	U
94-75-7	2,4-D	23 1100	U

FORM I - GC EXT

BERGMANN ASSOCIATES, INC.

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

S073102EJ01 8-10

Contract: NY01-449

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: 7059

Matrix (soil/water): SOIL Lab Sample ID: AD218810

Level (low/med): LOW Date Received: 8/1/02

% Solids: 88

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6630			P
7440-36-0	Antimony	0.60	U	N J	P
7440-38-2	Arsenic	4.4			P
7440-39-3	Barium	45.2		N	P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.03	U		P
7440-70-2	Calcium	10800		E J	P
7440-47-3	Chromium	10.4		E J	P
7440-48-4	Cobalt	6.3		E J	P
7440-50-8	Copper	20.3			P
7439-89-6	Iron	15600		E J	P
7439-92-1	Lead	11.1			P
7439-95-4	Magnesium	3370			P
7439-96-5	Manganese	198		N* J	P
7440-02-0	Nickel	17.3		E J	P
7440-09-7	Potassium	1060		E J	P
7782-49-2	Selenium	0.45	U		P
7440-22-4	Silver	0.06	B		P
7439-97-6	Mercury	0.005	U		CV
7440-23-5	Sodium	66.2	B		P
7440-28-0	Thallium	0.44	U		P
7440-62-2	Vanadium	15.0			P
7440-66-6	Zinc	62.4		NE J	P

Color Before: BROWN Clarity Before: N/A Texture: MUD

Color After: YELLOW Clarity After: CLDY/F Artifacts:

Comments:

Bergmann Associates, Inc.
Bergmann Assoc. - Gowanda Day Habilitation Center
Wet Chemistry Analysis

000010

Client Sample No.

S073002EJ06 18-20

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix (soil/water): SOIL Lab Sample ID: A2781601

% Solids: 90.7 Date Samp/Recv: 07/30/2002 08/01/2002

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Leachable pH	S.U.	9.45				9045	08/13/200

Comments:

FORM I - WC

Bergmann Associates, Inc. 000041
Bergmann Assoc. - Gowanda Day Habilitation Center
Wet Chemistry Analysis

Client Sample No.: S073102EJ01 8-10

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: ____ SAS No.: _____ SDG No.: 7059

Matrix (soil/water): SOIL Lab Sample ID: A2781602

% Solids: 87.6 Date Samp/Recv: 07/31/2002 08/01/2002

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Leachable pH	S.U.	8.11				9045	08/13/2002

Comments:

Bergmann Associates, Inc.
Bergmann Assoc. - Gowanda Day Habilitation Center
Wet Chemistry Analysis

Client Sample No.: S073102EJ01 2-4

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix (soil/water): SOIL Lab Sample ID: A2782104

% Solids: 0.0 Date Samp/Recv: 07/30/2002 (31) 08/01/2002

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Cyanide - Total	UG/KG	500 4000	U	J		9012	08/24/2002

Comments:

Bergmann Associates, Inc.
Bergmann Assoc. - Gowanda Day Habilitation Center
Wet Chemistry Analysis

000012

Client Sample No.

S073102EJ01 2-4

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7059

Matrix (soil/water): SOIL Lab Sample ID: A2782104

Solids: 0.0 Date Samp/Recv: 07/30/2002 08/01/2002

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Cyanide - Total	UG/KG	10000	U			9012	08/24/2002

Comments:

FORM I - WC

SEVERN TRENT SERVICES

STL Buffalo
10 Hazelwood Drive
Suite 106
Amherst, NY 14228

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

ANALYTICAL REPORT

Job#: A02-8664,A02-8763

STL Project#: NY2A8896
SDG#: 8664
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center
Task: SW8463 DELIVERABLES

SW846 Groundwater Samples

Mr. Edward Jones
Bergmann Associates
28 East Main Street
Rochester, NY 14614

STL Buffalo

Brian J. Fischer
Project Manager

09/20/2002

This report contains 117 pages which are individually numbered.

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A2866408	TRIP BLANK	08/29/2002		08/30/2002	09:40
A2876302	TRIP BLANK	09/04/2002		09/05/2002	13:40
A2866417	W082802EJ-02	08/28/2002	16:30	08/30/2002	09:40
A2866414	W082802EJ-03	08/28/2002	14:20	08/30/2002	09:40
A2866412	W082802EJ-04	08/28/2002	12:55	08/30/2002	09:40
A2866415	W082802EJ-05	08/28/2002	14:35	08/30/2002	09:40
A2866413	W082802EJ-08	08/28/2002	13:15	08/30/2002	09:40
A2866411	W082802EJ-10	08/28/2002	11:30	08/30/2002	09:40
A2866416	W082802EJ-13	08/28/2002	15:40	08/30/2002	09:40
A2866410	W082802EJ-9	08/28/2002	13:25	08/30/2002	09:40
A2866418	W082902EJ-06	08/29/2002	09:30	08/30/2002	09:40
A2866401	W082902EJ-07D	08/29/2002	13:20	08/30/2002	09:40
A2866402	W082902EJ-11	08/29/2002	15:20	08/30/2002	09:40
A2866403	W082902EJ-12	08/29/2002	16:15	08/30/2002	09:40
A2866419	W082902EJ-14	08/29/2002	12:10	08/30/2002	09:40
A2866404	W082902EJ-FB	08/29/2002	18:15	08/30/2002	09:40
A2876301	W090402EJ-01D	09/04/2002	11:00	09/05/2002	13:40

METHODS SUMMARY

000002

Job#: A02-8664,A02-8763

STL Project#: NY2A8896
SDG#: 8664
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

PARAMETER	ANALYTICAL METHOD
BERG -W- METH 8260 - TCL VOLATILE ORGANICS + STARS	SW8463 8260/5ML
BERG - W- METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	SW8463 8270
BERG - W - METHOD 8082 - POLYCHLORINATED BIPHENYLS	SW8463 8082
BERG - W - SW8463 8081 - TCL PESTICIDES	SW8463 8081
BERG - W - SW8463 8151 - HERBICIDES (3 CMPDS)	SW8463 8151
Aluminum - Total	SW8463 6010
Antimony - Total	SW8463 6010
Arsenic - Total	SW8463 6010
Barium - Total	SW8463 6010
Beryllium - Total	SW8463 6010
Cadmium - Total	SW8463 6010
Calcium - Total	SW8463 6010
Chromium - Total	SW8463 6010
Cobalt - Total	SW8463 6010
Copper - Total	SW8463 6010
Iron - Total	SW8463 6010
Lead - Total	SW8463 6010
Magnesium - Total	SW8463 6010
Manganese - Total	SW8463 6010
Mercury - Total	SW8463 7470
Nickel - Total	SW8463 6010
Potassium - Total	SW8463 6010
Selenium - Total	SW8463 6010
Silver - Total	SW8463 6010
Sodium - Total	SW8463 6010
Thallium - Total	SW8463 6010
Vanadium - Total	SW8463 6010
Zinc - Total	SW8463 6010
Cyanide - Total	SW8463 9012

References:

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

000004

NON-CONFORMANCE SUMMARY

Job#: A02-8664,A02-8763

STL Project#: NY2A8896
SDG#: 8664
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

General Comments

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

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

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

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

Sample Receipt Comments

A02-8664
Sample Cooler(s) were received at the following temperature(s); 3@6 °C
One amber was broken for point W082902EJ-1D.

A02-8763
Sample Cooler(s) were received at the following temperature(s); 10 °C
Sample(s) were received at a temperature of >10°C. However, ice was present in the cooler and as the samples were collected the same day, it was not possible for the samples to cool to 4°C prior to receipt.

STL Buffalo internal validation reports are included in this report as Appendix A.

GC/MS Volatile Data

The analytes Acetone, Methylene Chloride and Toluene were detected in the Method Blank (VBLK96) at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

GC/MS Semivolatile Data

The percent difference of analyte 2,4-Dinitrophenol was below laboratory control limits in the Continuing Calibration Verification A2C0004446. All samples should be considered biased low for this analyte.

The relative percent difference between the Matrix Spike Blank A2B0849101 and the Matrix Spike Blank Duplicate A2B0849102 exceeded quality control criteria for 1,2,4-Trichlorobenzene, Acenaphthene, Pentachlorophenol, and Pyrene. However, all individual recoveries were compliant.

GC Extractable Data

For method 8082, the recovery of the surrogate Decachlorobiphenyl in samples W082902EJ-12 and W082902EJ-06 are outside of established quality control limits due to matrix interferences, the recovery of the surrogate Tetrachloro-m-xylene was within quality control limits, no corrective action was required.

For method 8082, the recovery of the surrogate Tetrachloro-m-xylene in sample A2B0859403 is slightly outside of established quality control limits, the recovery of the surrogate Decachlorobiphenyl was within quality control criteria. No corrective action was required.

For method 8081, the recovery of the surrogate Decachlorobiphenyl in samples W082902EJ-12 and W082902EJ-06 are outside of established quality control limits. The recovery of the surrogate Tetrachloro-m-xylene was also out of limits for W082902EJ-06 due to matrix interferences. This is fairly consistent with the 8082 results, no corrective action is required.

The recovery of surrogate Decachlorobiphenyl for the Method 8081 (Pesticide) analysis of sample W090402EJ-01D was outside of established quality control limits. The recovery of surrogate Tetrachloro-m-xylene was within quality control limits; no corrective action was required.

Metals Data

The recovery of sample W090402EJ 01D Matrix Spike exhibited results below quality control limits for Iron. The recovery of sample W090402EJ-01D Matrix Spike Duplicate exhibited results below quality control limits for Calcium and Iron. The relative percent difference between the samples exceeded quality control criteria for Calcium and Iron. However, the LFB (A2B0859201) was compliant.

Wet Chemistry Data

No deviations from protocol were encountered during the analytical procedures.

****

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.

Client Sample ID	Lab Sample ID	Parameter (Inorganic)/Method (Organic)	Dilution	Code
W082902EJ-07DDL	A28664010L	8260/5ML	2.00	008
W082902EJ-11DL	A28664020L	8260/5ML	40.00	008
W082902EJ-12DL	A28664030L	8260/5ML	50.00	008
W082802EJ-13DL	A28664160L	8260/5ML	2.00	008
W082902EJ-06DL	A28664180L	8260/5ML	4.00	008
W090402EJ-01DDL	A28763010L	8260/5ML	4.00	008

000006

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

000007

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

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 exceeded. 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

Sample Data Package

Client ID		W082802EJ-02		W082802EJ-03		W082802EJ-04		W082802EJ-05	
Job No	Lab ID	A02-8664	A2866417	A02-8664	A2866414	A02-8664	A2866412	A02-8664	A2866415
Sample Date		08/28/2002		08/28/2002		08/28/2002		08/28/2002	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	25	ND	25	ND	25	ND	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	5.0	ND	5.0	ND	5.0	ND	5.0
Bromomethane	UG/L	ND	10	ND	10	ND	10	ND	10
2-Butanone	UG/L	ND	10	ND	10	ND	10	ND	10
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
Chloromethane	UG/L	ND	10	ND	10	ND	10	ND	10
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
Cyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chloroform	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Dichlorodifluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dibromoethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,4-Dichlorobenzene	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
cis-1,2-Dichloroethene	UG/L	18	5.0	9.6	5.0	2.0 J	5.0	1.7 J	5.0
trans-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichloropropane	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
Isopropylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methyl acetate	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methylene chloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methyl tert butyl ether	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
Methylcyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Styrene	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
1,2,4-Trichlorobenzene	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

000009

NA = Not Applicable ND = Not Detected

Client ID		W082802EJ-02		W082802EJ-03		W082802EJ-04		W082802EJ-05	
Job No	Lab ID	A02-8664	A2866417	A02-8664	A2866414	A02-8664	A2866412	A02-8664	A2866415
Sample Date		08/28/2002		08/28/2002		08/28/2002		08/28/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Trichloroethene	UG/L	4.7 J	5.0	2.3 J	5.0	1.8 J	5.0	12	5.0
Trichlorofluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Vinyl chloride	UG/L	ND	5.0	3.1 J	5.0	ND	5.0	ND	5.0
Total Xylenes	UG/L	ND	15	ND	15	ND	15	ND	15
n-Propylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
p-Cymene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2,4-Trimethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,3,5-Trimethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
n-Butylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
sec-Butylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	98	50-200	98	50-200	98	50-200	99	50-200
1,4-Difluorobenzene	%	96	50-200	96	50-200	95	50-200	98	50-200
1,4-Dichlorobenzene-D4	%	95	50-200	95	50-200	95	50-200	96	50-200
Toluene-D8	%	101	77-122	100	77-122	99	77-122	101	77-122
p-Bromofluorobenzene	%	99	73-120	99	73-120	100	73-120	100	73-120
1,2-Dichloroethane-D4	%	100	76-136	100	76-136	100	76-136	100	76-136

000040

NA = Not Applicable ND = Not Detected

Client ID		W082802EJ-08		W082802EJ-10		W082802EJ-13		W082802EJ-13DL	
Job No	Lab ID	A02-8664	A2866413	A02-8664	A2866411	A02-8664	A2866416	A02-8664	A2866416DL
Sample Date		08/28/2002		08/28/2002		08/28/2002		08/28/2002	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	25	ND	25	ND	25	ND	50
Benzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Bromodichloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Bromoform	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Bromomethane	UG/L	ND	10	ND	10	ND	10	ND	20
2-Butanone	UG/L	ND	10	ND	10	ND	10	ND	20
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Carbon Tetrachloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Chloromethane	UG/L	ND	10	ND	10	ND	10	ND	20
Chlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Chloroethane	UG/L	ND	10	ND	10	ND	10	ND	20
Cyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Chloroform	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Dichlorodifluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,2-Dibromoethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,4-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,1-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,2-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,1-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
cis-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	69	5.0	64 D	10
trans-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	1.3 J	5.0	ND	10
1,2-Dichloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Ethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
2-Hexanone	UG/L	ND	10	ND	10	ND	10	ND	20
Isopropylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Methyl acetate	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Methylene chloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND 5.0 BDJ	10
Methyl tert butyl ether	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
4-Methyl-2-pentanone	UG/L	ND	10	ND	10	ND	10	ND	20
Methylcyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Styrene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Tetrachloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Toluene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,2,4-Trichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10

0000111

NA = Not Applicable ND = Not Detected

Client ID		W082802EJ-08		W082802EJ-10		W082802EJ-13		W082802EJ-13DL	
Job No	Lab ID	A02-8664	A2866413	A02-8664	A2866411	A02-8664	A2866416	A02-8664	A28664160L
Sample Date		08/28/2002		08/28/2002		08/28/2002		08/28/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Trichloroethene	UG/L	1.4 J	5.0	2.6 J	5.0	250 ~~250 E~~	5.0	250 D	10
Trichlorofluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Vinyl chloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
Total Xylenes	UG/L	ND	15	ND	15	ND	15	ND	30
n-Propylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
p-Cymene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,2,4-Trimethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
1,3,5-Trimethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
n-Butylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
sec-Butylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	10
IS/SURROGATE(S)									
Chlorobenzene-D5	%	98	50-200	106	50-200	99	50-200	88	50-200
1,4-Difluorobenzene	%	97	50-200	105	50-200	96	50-200	88	50-200
1,4-Dichlorobenzene-D4	%	97	50-200	104	50-200	96	50-200	96	50-200
Toluene-D8	%	101	77-122	93	77-122	99	77-122	104	77-122
p-Bromofluorobenzene	%	100	73-120	91	73-120	98	73-120	96	73-120
1,2-Dichloroethane-D4	%	99	76-136	91	76-136	100	76-136	92	76-136

27000142

NA = Not Applicable ND = Not Detected

Client ID		W082802EJ-9		W082902EJ-06		W082902EJ-06DL		W082902EJ-07D	
Job No	Lab ID	A02-8664	A2866410	A02-8664	A2866418	A02-8664	A2866418DL	A02-8664	A2866401
Sample Date		08/28/2002		08/29/2002		08/29/2002		08/29/2002	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	25	ND	25	ND	100	ND	25
Benzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Bromodichloromethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Bromoform	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Bromomethane	UG/L	ND	10	ND	10	ND	40	ND	10
2-Butanone	UG/L	ND	10	ND	10	ND	40	ND	10
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Carbon Tetrachloride	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Chloromethane	UG/L	ND	10	ND	10	ND	40	ND	10
Chlorobenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Chloroethane	UG/L	ND	10	ND	10	ND	40	ND	10
Cyclohexane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Chloroform	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Dichlorodifluoromethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,2-Dibromoethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,4-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,1-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,2-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,1-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
cis-1,2-Dichloroethene	UG/L	ND	5.0	400 ~~440 E~~	5.0	400 D	20	380 ~~370 E~~	5.0
trans-1,2-Dichloroethene	UG/L	ND	5.0	3.4 J	5.0	ND	20	2.1 J	5.0
1,2-Dichloropropane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Ethylbenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
2-Hexanone	UG/L	ND	10	ND	10	ND	40	ND	10
Isopropylbenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Methyl acetate	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Methylene chloride	UG/L	ND	5.0	ND	5.0	14 BDJ	20	ND	5.0
Methyl tert butyl ether	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
4-Methyl-2-pentanone	UG/L	ND	10	ND	10	ND	40	ND	10
Methylcyclohexane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Styrene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Tetrachloroethene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Toluene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,2,4-Trichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0

NA = Not Applicable ND = Not Detected

Client ID		W082802EJ-9		W082902EJ-06		W082902EJ-06DL		W082902EJ-07D	
Job No / Lab ID		A02-8664	A2866410	A02-8664	A2866418	A02-8664	A2866418DL	A02-8664	A2866401
Sample Date		08/28/2002		08/29/2002		08/29/2002		08/29/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Trichloroethene	UG/L	4.2 J	5.0	2.4 J	5.0	ND	20	23	5.0
Trichlorofluoromethane	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
Vinyl chloride	UG/L	ND	5.0	ND	5.0	ND	20	3.2 J	5.0
Total Xylenes	UG/L	ND	15	ND	15	ND	60	ND	15
n-Propylbenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
p-Cymene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,2,4-Trimethylbenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
1,3,5-Trimethylbenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
n-Butylbenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
sec-Butylbenzene	UG/L	ND	5.0	ND	5.0	ND	20	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	103	50-200	98	50-200	86	50-200	108	50-200
1,4-Difluorobenzene	%	101	50-200	96	50-200	87	50-200	107	50-200
1,4-Dichlorobenzene-D4	%	100	50-200	95	50-200	78	50-200	105	50-200
Toluene-D8	%	97	77-122	100	77-122	101	77-122	97	77-122
p-Bromofluorobenzene	%	96	73-120	98	73-120	91	73-120	96	73-120
1,2-Dichloroethane-D4	%	96	76-136	100	76-136	92	76-136	95	76-136

000034

NA = Not Applicable ND = Not Detected

Client ID		W082902EJ-07DL		W082902EJ-11		W082902EJ-11DL		W082902EJ-12	
Job No / Lab ID		A02-8664	A2866401DL	A02-8664	A2866402	A02-8664	A2866402DL	A02-8664	A2866403
Sample Date		08/29/2002		08/29/2002		08/29/2002		08/29/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	50	ND	25	ND	1000	ND	25
Benzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Bromodichloromethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Bromoform	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Bromomethane	UG/L	ND	20	ND	10	ND	400	ND	10
2-Butanone	UG/L	ND	20	ND	10	ND	400	ND	10
Carbon Disulfide	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Carbon Tetrachloride	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Chloromethane	UG/L	ND	20	ND	10	ND	400	ND	10
Chlorobenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Chloroethane	UG/L	ND	20	ND	10	ND	400	ND	10
Cyclohexane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Chloroform	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,2-Dibromo-3-chloropropane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Dibromochloromethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Dichlorodifluoromethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,2-Dibromoethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,2-Dichlorobenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,3-Dichlorobenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,4-Dichlorobenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,1-Dichloroethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,2-Dichloroethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,1-Dichloroethene	UG/L	ND	10	3.1 J	5.0	ND	200	8.3	5.0
cis-1,2-Dichloroethene	UG/L	380 D	10	2300 ~~1600~~ E	5.0	2300 D	200	3600 ~~4000~~ E	5.0
trans-1,2-Dichloroethene	UG/L	ND	10	16	5.0	ND	200	28	5.0
1,2-Dichloropropane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
cis-1,3-Dichloropropene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
trans-1,3-Dichloropropene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Ethylbenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
2-Hexanone	UG/L	ND	20	ND	10	ND	400	ND	10
Isopropylbenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Methyl acetate	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Methylene chloride	UG/L	5.8 BDJ	10	ND	5.0	140 BDJ	200	ND	5.0
Methyl tert butyl ether	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
4-Methyl-2-pentanone	UG/L	ND	20	ND	10	ND	400	ND	10
Methylcyclohexane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Styrene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,1,2,2-Tetrachloroethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Tetrachloroethene	UG/L	ND	10	ND	5.0	ND	200	1.0 J	5.0
Toluene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,2,4-Trichlorobenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,1,1-Trichloroethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,1,2-Trichloroethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0

STL Buffalo

NA = Not Applicable ND = Not Detected

Client ID Job No / Lab ID Sample Date		W082902EJ-07DDL A02-8664 / A2866403DL 08/29/2002		W082902EJ-11 A02-8664 / A2866402 08/29/2002		W082902EJ-11DL A02-8664 / A2866402DL 08/29/2002		W082902EJ-12 A02-8664 / A2866403 08/29/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Trichloroethene	UG/L	23 D	10	2300 ~~1500~~ E	5.0	2300 D	200	9600 ~~2600~~ E	5.0
Trichlorofluoromethane	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
Vinyl chloride	UG/L	3.3 DJ	10	31	5.0	ND	200	15	5.0
Total Xylenes	UG/L	ND	30	ND	15	ND	600	ND	15
n-Propylbenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
p-Cymene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,2,4-Trimethylbenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
1,3,5-Trimethylbenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
n-Butylbenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
sec-Butylbenzene	UG/L	ND	10	ND	5.0	ND	200	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	88	50-200	105	50-200	93	50-200	106	50-200
1,4-Difluorobenzene	%	90	50-200	106	50-200	93	50-200	107	50-200
1,4-Dichlorobenzene-D4	%	80	50-200	100	50-200	105	50-200	100	50-200
Toluene-D8	%	101	77-122	101	77-122	101	77-122	100	77-122
p-Bromofluorobenzene	%	92	73-120	98	73-120	95	73-120	99	73-120
1,2-Dichloroethane-D4	%	92	76-136	99	76-136	90	76-136	97	76-136

000016

NA = Not Applicable ND = Not Detected

Client ID		W082902EJ-12DL		W082902EJ-14		W082902EJ-FB		W090402EJ-010	
Job No	Lab ID	A02-8664	A2866403DL	A02-8664	A2866419	A02-8664	A2866404	A02-8763	A2876301
Sample Date		08/29/2002		08/29/2002		08/29/2002		09/04/2002	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	1200	ND	25	ND	25	ND 5.2 BJ	25
Benzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Bromodichloromethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Bromoform	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Bromomethane	UG/L	ND	500	ND	10	ND	10	ND	10
2-Butanone	UG/L	ND	500	ND	10	ND	10	ND	10
Carbon Disulfide	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Carbon Tetrachloride	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Chloromethane	UG/L	ND	500	ND	10	ND	10	ND	10
Chlorobenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Chloroethane	UG/L	ND	500	ND	10	ND	10	ND	10
Cyclohexane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Chloroform	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,2-Dibromo-3-chloropropane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Dibromochloromethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Dichlorodifluoromethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,2-Dibromoethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,2-Dichlorobenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,3-Dichlorobenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,4-Dichlorobenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,1-Dichloroethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,2-Dichloroethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,1-Dichloroethene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
cis-1,2-Dichloroethene	UG/L	3000 D	250	130	5.0	ND	5.0	300 350 E	5.0
trans-1,2-Dichloroethene	UG/L	ND	250	1.6 J	5.0	ND	5.0	4.0 J	5.0
1,2-Dichloropropene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
cis-1,3-Dichloropropene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
trans-1,3-Dichloropropene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Ethylbenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
2-Hexanone	UG/L	ND	500	ND	10	ND	10	ND	10
Isopropylbenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Methyl acetate	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Methylene chloride	UG/L	170 BDJ	250	ND	5.0	2.4 BJ	5.0	ND 2.5 BJ	5.0
Methyl tert butyl ether	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
4-Methyl-2-pentanone	UG/L	ND	500	ND	10	ND	10	ND	10
Methylcyclohexane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Styrene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,1,2,2-Tetrachloroethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Tetrachloroethene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Toluene	UG/L	ND	250	ND	5.0	ND	5.0	ND 1.9 BJ	5.0
1,2,4-Trichlorobenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,1,1-Trichloroethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,1,2-Trichloroethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0

T0000

NA = Not Applicable ND = Not Detected

Client ID		W082902EJ-12DL		W082902EJ-14		W082902EJ-FB		W090402EJ-01D	
Job No / Lab ID		A02-8664	A2866403DL	A02-8664	A2866419	A02-8664	A2866404	A02-8763	A2876301
Sample Date		08/29/2002		08/29/2002		08/29/2002		09/04/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Trichloroethene	UG/L	9600 D	250	180	5.0	ND	5.0	320 400 E	5.0
Trichlorofluoromethane	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
Vinyl chloride	UG/L	ND	250	3.6 J	5.0	ND	5.0	4.2 J	5.0
Total Xylenes	UG/L	ND	750	ND	15	ND	15	ND	15
n-Propylbenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
p-Cymene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,2,4-Trimethylbenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
1,3,5-Trimethylbenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
n-Butylbenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
sec-Butylbenzene	UG/L	ND	250	ND	5.0	ND	5.0	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	87	50-200	99	50-200	93	50-200	88	50-200
1,4-Difluorobenzene	%	88	50-200	98	50-200	94	50-200	90	50-200
1,4-Dichlorobenzene-D4	%	79	50-200	93	50-200	102	50-200	82	50-200
Toluene-D8	%	100	77-122	100	77-122	105	77-122	102	77-122
p-Bromofluorobenzene	%	93	73-120	97	73-120	97	73-120	95	73-120
1,2-Dichloroethane-D4	%	93	76-136	100	76-136	91	76-136	95	76-136

000018

NA = Not Applicable ND = Not Detected

Client ID		W090402EJ-0130L							
Job No	Lab ID	A02-8763	A2876301DL						
Sample Date		09/04/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	28 BDJ	100	NA		NA		NA	
Benzene	UG/L	ND	20	NA		NA		NA	
Bromodichloromethane	UG/L	ND	20	NA		NA		NA	
Bromoform	UG/L	ND	20	NA		NA		NA	
Bromomethane	UG/L	ND	40	NA		NA		NA	
2-Butanone	UG/L	ND	40	NA		NA		NA	
Carbon Disulfide	UG/L	ND	20	NA		NA		NA	
Carbon Tetrachloride	UG/L	ND	20	NA		NA		NA	
Chloromethane	UG/L	ND	40	NA		NA		NA	
Chlorobenzene	UG/L	ND	20	NA		NA		NA	
Chloroethane	UG/L	ND	40	NA		NA		NA	
Cyclohexane	UG/L	ND	20	NA		NA		NA	
Chloroform	UG/L	ND	20	NA		NA		NA	
1,2-Dibromo-3-chloropropane	UG/L	ND	20	NA		NA		NA	
Dibromochloromethane	UG/L	ND	20	NA		NA		NA	
Dichlorodifluoromethane	UG/L	ND	20	NA		NA		NA	
1,2-Dibromoethane	UG/L	ND	20	NA		NA		NA	
1,2-Dichlorobenzene	UG/L	ND	20	NA		NA		NA	
1,3-Dichlorobenzene	UG/L	ND	20	NA		NA		NA	
1,4-Dichlorobenzene	UG/L	ND	20	NA		NA		NA	
1,1-Dichloroethane	UG/L	ND	20	NA		NA		NA	
1,2-Dichloroethane	UG/L	ND	20	NA		NA		NA	
1,1-Dichloroethene	UG/L	ND	20	NA		NA		NA	
cis-1,2-Dichloroethene	UG/L	300 D	20	NA		NA		NA	
trans-1,2-Dichloroethene	UG/L	ND	20	NA		NA		NA	
1,2-Dichloropropane	UG/L	ND	20	NA		NA		NA	
cis-1,3-Dichloropropene	UG/L	ND	20	NA		NA		NA	
trans-1,3-Dichloropropene	UG/L	ND	20	NA		NA		NA	
Ethylbenzene	UG/L	ND	20	NA		NA		NA	
2-Hexanone	UG/L	ND	40	NA		NA		NA	
Isopropylbenzene	UG/L	ND	20	NA		NA		NA	
Methyl acetate	UG/L	ND	20	NA		NA		NA	
Methylene chloride	UG/L	16 BDJ	20	NA		NA		NA	
Methyl tert butyl ether	UG/L	ND	20	NA		NA		NA	
4-Methyl-2-pentanone	UG/L	ND	40	NA		NA		NA	
Methylcyclohexane	UG/L	ND	20	NA		NA		NA	
Styrene	UG/L	ND	20	NA		NA		NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	20	NA		NA		NA	
Tetrachloroethene	UG/L	ND	20	NA		NA		NA	
Toluene	UG/L	ND	20	NA		NA		NA	
1,2,4-Trichlorobenzene	UG/L	ND	20	NA		NA		NA	
1,1,1-Trichloroethane	UG/L	ND	20	NA		NA		NA	
1,1,2-Trichloroethane	UG/L	ND	20	NA		NA		NA	

Client ID		W090402EJ-0100L							
Job No	Lab ID	A02-8763	A28763010L						
Sample Date		09/04/2002							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	20	NA		NA		NA	
Trichloroethene	UG/L	320 D	20	NA		NA		NA	
Trichlorofluoromethane	UG/L	ND	20	NA		NA		NA	
Vinyl chloride	UG/L	ND	20	NA		NA		NA	
Total Xylenes	UG/L	ND	60	NA		NA		NA	
n-Propylbenzene	UG/L	ND	20	NA		NA		NA	
p-Cymene	UG/L	ND	20	NA		NA		NA	
1,2,4-Trimethylbenzene	UG/L	ND	20	NA		NA		NA	
1,3,5-Trimethylbenzene	UG/L	ND	20	NA		NA		NA	
n-Butylbenzene	UG/L	ND	20	NA		NA		NA	
sec-Butylbenzene	UG/L	ND	20	NA		NA		NA	
IS/SURROGATE(S)									
Chlorobenzene-D5	%	86	50-200	NA		NA		NA	
1,4-Difluorobenzene	%	86	50-200	NA		NA		NA	
1,4-Dichlorobenzene-D4	%	96	50-200	NA		NA		NA	
Toluene-D8	%	103	77-122	NA		NA		NA	
p-Bromofluorobenzene	%	95	73-120	NA		NA		NA	
1,2-Dichloroethane-D4	%	91	76-136	NA		NA		NA	

000326

Client ID		WD82902EJ-06		WD82902EJ-12		WD82902EJ-F8		WD90402EJ-01D	
Job No	Lab ID	A02-8664	A2866418	A02-8664	A2866403	A02-8664	A2866404	A02-8763	A2876301
Sample Date		08/29/2002		08/29/2002		08/29/2002		09/04/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acenaphthene	UG/L	ND	10	ND	10	ND	10	ND	9
Acenaphthylene	UG/L	ND	10	ND	10	ND	10	ND	9
Anthracene	UG/L	ND	10	ND	10	ND	10	ND	9
Benzo(a)anthracene	UG/L	ND	10	ND	10	ND	10	ND	9
Benzo(b)fluoranthene	UG/L	ND	10	ND	10	ND	10	ND	9
Benzo(k)fluoranthene	UG/L	ND	10	ND	10	ND	10	ND	9
Benzo(ghi)perylene	UG/L	ND	10	ND	10	ND	10	ND	9
Benzo(a)pyrene	UG/L	ND	10	ND	10	ND	10	ND	9
Benzoic acid	UG/L	ND	48	ND	48	ND	48	ND	47
Benzyl alcohol	UG/L	ND	19	ND	19	ND	19	ND	19
Bis(2-chloroethoxy) methane	UG/L	ND	10	ND	10	ND	10	ND	9
Bis(2-chloroethyl) ether	UG/L	ND	10	ND	10	ND	10	ND	9
2,2'-Oxybis(1-Chloropropane)	UG/L	ND	10	ND	10	ND	10	ND	9
Bis(2-ethylhexyl) phthalate	UG/L	6 J	10	12	10	ND	10	2 J	9
4-Bromophenyl phenyl ether	UG/L	ND	10	ND	10	ND	10	ND	9
Butyl benzyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	9
4-Chloroaniline	UG/L	ND	10	ND	10	ND	10	ND	9
4-Chloro-3-methylphenol	UG/L	ND	10	ND	10	ND	10	ND	9
2-Chloronaphthalene	UG/L	ND	10	ND	10	ND	10	ND	9
2-Chlorophenol	UG/L	ND	10	ND	10	ND	10	ND	9
4-Chlorophenyl phenyl ether	UG/L	ND	10	ND	10	ND	10	ND	9
Chrysene	UG/L	ND	10	ND	10	ND	10	ND	9
Dibenzo(a,h)anthracene	UG/L	ND	10	ND	10	ND	10	ND	9
Dibenzofuran	UG/L	ND	10	ND	10	ND	10	ND	9
Di-n-butyl phthalate	UG/L	ND J-	10	ND J-	10	0.7 J	10	ND 0.5 J-	9
1,2-Dichlorobenzene	UG/L	ND	10	ND	10	ND	10	ND	9
1,3-Dichlorobenzene	UG/L	ND	10	ND	10	ND	10	ND	9
1,4-Dichlorobenzene	UG/L	ND	10	ND	10	ND	10	ND	9
3,3'-Dichlorobenzidine	UG/L	ND	19	ND	19	ND	19	ND	19
2,4-Dichlorophenol	UG/L	ND	10	ND	10	ND	10	ND	9
Diethyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	9
2,4-Dimethylphenol	UG/L	ND	10	ND	10	ND	10	ND	9
Dimethyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	9
4,6-Dinitro-2-methylphenol	UG/L	ND	48	ND	48	ND	48	ND	47
2,4-Dinitrophenol	UG/L	ND J-	48	ND J-	48	ND J-	48	ND J-	47
2,4-Dinitrotoluene	UG/L	ND	10	ND	10	ND	10	ND	9
2,6-Dinitrotoluene	UG/L	ND	10	ND	10	ND	10	ND	9
Di-n-octyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	9
Fluoranthene	UG/L	ND	10	ND	10	ND	10	ND	9
Fluorene	UG/L	ND	10	ND	10	ND	10	ND	9
Hexachlorobenzene	UG/L	ND	10	ND	10	ND	10	ND	9
Hexachlorobutadiene	UG/L	ND	10	ND	10	ND	10	ND	9
Hexachlorocyclopentadiene	UG/L	ND	10	ND	10	ND	10	ND	9

Client ID Job No Sample Date	Lab ID	W082902EJ-06 A02-8664 08/29/2002	A2866418	W082902EJ-12 A02-8664 08/29/2002	A2866403	W082902EJ-FB A02-8664 08/29/2002	A2866404	W090402EJ-01D A02-8763 09/04/2002	A2876301
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Hexachloroethane	UG/L	ND	10	ND	10	ND	10	ND	9
Indeno(1,2,3-cd)pyrene	UG/L	ND	10	ND	10	ND	10	ND	9
Isophorone	UG/L	ND	10	ND	10	ND	10	ND	9
2-Methylnaphthalene	UG/L	ND	10	ND	10	ND	10	ND	9
2-Methylphenol	UG/L	ND	10	ND	10	ND	10	ND	9
4-Methylphenol	UG/L	ND	10	ND	10	ND	10	ND	9
Naphthalene	UG/L	ND	10	ND	10	ND	10	ND	9
2-Nitroaniline	UG/L	ND	48	ND	48	ND	48	ND	47
3-Nitroaniline	UG/L	ND	48	ND	48	ND	48	ND	47
4-Nitroaniline	UG/L	ND	48	ND	48	ND	48	ND	47
Nitrobenzene	UG/L	ND	10	ND	10	ND	10	ND	9
2-Nitrophenol	UG/L	ND	10	ND	10	ND	10	ND	9
4-Nitrophenol	UG/L	ND	48	ND	48	ND	48	ND	47
N-nitrosodiphenylamine	UG/L	ND	10	ND	10	ND	10	ND	9
N-Nitroso-Di-n-propylamine	UG/L	ND	10	ND	10	ND	10	ND	9
Pentachlorophenol	UG/L	ND	48	ND	48	ND	48	ND	47
Phenanthrene	UG/L	ND	10	ND	10	ND	10	ND	9
Phenol	UG/L	ND	10	ND	10	ND	10	ND	9
Pyrene	UG/L	ND	10	ND	10	ND	10	ND	9
1,2,4-Trichlorobenzene	UG/L	ND	10	ND	10	ND	10	ND	9
2,4,5-Trichlorophenol	UG/L	ND	10	ND	10	ND	10	ND	9
2,4,6-Trichlorophenol	UG/L	ND	10	ND	10	ND	10	ND	9
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	110	50-200	112	50-200	116	50-200	86	50-200
Naphthalene-D8	%	114	50-200	114	50-200	120	50-200	81	50-200
Acenaphthene-D10	%	116	50-200	116	50-200	123	50-200	79	50-200
Phenanthrene-D10	%	121	50-200	121	50-200	121	50-200	87	50-200
Chrysene-D12	%	119	50-200	122	50-200	123	50-200	88	50-200
Perylene-D12	%	114	50-200	121	50-200	122	50-200	78	50-200
Nitrobenzene-D5	%	77	24-125	84	24-125	84	24-125	90	24-125
2-Fluorobiphenyl	%	81	25-125	84	25-125	92	25-125	100	25-125
p-Terphenyl-d14	%	36	19-152	30	19-152	98	19-152	80	19-152
Phenol-D5	%	29	10-110	32	10-110	32	10-110	33	10-110
2-Fluorophenol	%	42	20-120	46	20-120	46	20-120	44	20-120
2,4,6-Tribromophenol	%	77	28-152	78	28-152	84	28-152	118	28-152

220002

NA = Not Applicable ND = Not Detected

Client ID		W082902EJ-06		W082902EJ-12		W082902EJ-FB		W090402EJ-01D	
Job No	Lab ID	A02-8664	A2866418	A02-8664	A2866403	A02-8664	A2866404	A02-8763	A2876301
Sample Date		08/29/2002		08/29/2002		08/29/2002		09/04/2002	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aldrin	UG/L	ND R	0.050	ND R	0.049	ND	0.047	ND J	0.048
alpha-BHC	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
beta-BHC	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
gamma-BHC (Lindane)	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
delta-BHC	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Chlordane	UG/L	ND	0.50	ND	0.49	ND	0.47	ND	0.48
4,4'-DDD	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
4,4'-DDE	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
4,4'-DDT	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Dieldrin	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Endosulfan I	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Endosulfan II	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Endosulfan Sulfate	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Endrin	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Endrin aldehyde	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Heptachlor	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Heptachlor epoxide	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Methoxychlor	UG/L	ND	0.050	ND	0.049	ND	0.047	ND	0.048
Toxaphene	UG/L	ND	0.99	ND	0.98	ND	0.94	ND	0.95
SURROGATE(S)									
Tetrachloro-m-xylene	%	31 *	36-132	46	36-132	74	36-132	58	36-132
Decachlorobiphenyl	%	6.0 *	28-132	4.0 *	28-132	114	28-132	20 *	28-132

000023

NA = Not Applicable ND = Not Detected

Client ID Job No Lab ID Sample Date		WGB2902EJ-06 A02-B664 A2866418 08/29/2002		WG82902EJ-12 A02-B664 A2866403 08/29/2002		WG82902EJ-FB A02-B664 A2866404 08/29/2002		WG90402EJ-01D A02-B763 A2876301 09/04/2002	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aroclor 1016	UG/L	ND J	0.53	ND J	0.52	ND	0.52	ND	0.48
Aroclor 1221	UG/L	ND	0.53	ND	0.52	ND	0.52	ND	0.48
Aroclor 1232	UG/L	ND	0.53	ND	0.52	ND	0.52	ND	0.48
Aroclor 1242	UG/L	ND	0.53	ND	0.52	ND	0.52	ND	0.48
Aroclor 1248	UG/L	ND	0.53	ND	0.52	ND	0.52	ND	0.48
Aroclor 1254	UG/L	ND	0.53	ND	0.52	ND	0.52	ND	0.48
Aroclor 1260	UG/L	ND	0.53	ND	0.52	ND	0.52	ND	0.48
SURROGATE(S)									
Tetrachloro-m-xylene	%	43	36-132	52	36-132	84	36-132	47	36-132
Decachlorobiphenyl	%	22 *	28-132	20 *	28-132	88	28-132	30	28-132

NA = Not Applicable ND = Not Detected

Client ID Job No Sample Date	Lab ID	W082902EJ-06 A02-8664 08/29/2002	A2866418	W082902EJ-12 A02-8664 08/29/2002	A2866403	W082902EJ-FB A02-8664 08/29/2002	A2866404	W090402EJ-01D A02-8763 09/04/2002	A2876301
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
2,4-D	UG/L	ND	0.48	ND	0.48	ND	0.48	ND	0.49
2,4,5-TP (Silvex)	UG/L	ND	0.48	ND	0.48	ND	0.48	ND	0.49
2,4,5-T	UG/L	ND	0.48	ND	0.48	ND	0.48	ND	0.49
SURROGATE(S)									
Dichlorophenyl Acetic Acid	%	106	17-133	119	17-133	114	17-133	120	17-133

NA = Not Applicable ND = Not Detected

Client ID		W082902EJ-06		W082902EJ-12		W082902EJ-FB		W090402EJ-01D	
Job No	Lab ID	A02-8664	A2866418	A02-8664	A2866403	A02-8664	A2866404	A02-8763	A2876301
Sample Date		08/29/2002		08/29/2002		08/29/2002		09/04/2002	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aluminum - Total	MG/L	3.8	0.20	ND	0.20	ND	0.20	0.32 J	0.20
Antimony - Total	MG/L	ND	0.020	ND	0.020	ND	0.020	ND	0.020
Arsenic - Total	MG/L	ND	0.0070	ND	0.0070	ND	0.0070	ND	0.0070
Barium - Total	MG/L	0.58	0.0010	0.40	0.0010	0.011	0.0010	0.32	0.0010
Beryllium - Total	MG/L	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050
Cadmium - Total	MG/L	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Calcium - Total	MG/L	98.2	0.50	74.6	0.50	ND	0.50	79.4	0.50
Chromium - Total	MG/L	0.0057	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
Cobalt - Total	MG/L	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050
Copper - Total	MG/L	0.0093	0.0050	ND	0.0050	ND	0.0050	ND	0.0050
Iron - Total	MG/L	8.6	0.050	7.4	0.050	ND	0.050	8.0	0.050
Lead - Total	MG/L	ND	0.010	ND	0.010	ND	0.010	ND	0.010
Magnesium - Total	MG/L	15.9	0.20	14.5	0.20	ND	0.20	16.5	0.20
Manganese - Total	MG/L	0.67	0.0030	0.86	0.0030	ND	0.0030	0.71	0.0030
Mercury - Total	MG/L	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020
Nickel - Total	MG/L	ND	0.010	ND	0.010	ND	0.010	ND	0.010
Potassium - Total	MG/L	3.0	0.50	1.1	0.50	ND	0.50	2.6	0.50
Selenium - Total	MG/L	ND	0.010	ND	0.010	ND	0.010	ND	0.010
Silver - Total	MG/L	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030
Sodium - Total	MG/L	40.8	1.0	35.3	1.0	ND	1.0	26.1	1.0
Thallium - Total	MG/L	ND	0.020	ND	0.020	ND	0.020	ND	0.020
Vanadium - Total	MG/L	0.0061	0.0050	ND	0.0050	ND	0.0050	ND	0.0050
Zinc - Total	MG/L	0.031	0.020	ND	0.020	ND	0.020	ND	0.020

920903

Client ID Job No Sample Date	Lab ID	W082902EJ-06 A02-8664 08/29/2002	A2866418	W082902EJ-12 A02-8664 08/29/2002	A2866403	W082902EJ-FB A02-8664 08/29/2002	A2866404	W090402EJ-010 A02-8763 09/04/2002	A2876301
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Cyanide - Total	MG/L	ND	0.010	ND	0.010	ND	0.010	ND	0.010

420000

NA = Not Applicable ND = Not Detected

SEVERN TRENT SERVICES

STL Buffalo
10 Hazelwood Drive
Suite 106
Amherst, NY 14228

Tel 716 691 2600
Fax 716 691 7991
www.stlinc.com

ANALYTICAL REPORT

Job#: A02 8673,A02-8761

STL Project#: NY2A8896
SDG#: 083002
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center
Task: ASP00 LEVEL IV DELIVERABLES

ASP GROUNDWATER Samples

Mr. Edward Jones
Bergmann Associates
28 East Main Street
Rochester, NY 14614

STL Buffalo

Brian J. Fischer
Project Manager

Susan L. Marx
Laboratory Director

09/23/2002

This report contains 132 pages which are individually numbered.

SEVERN TRENT STL

January 14, 2003

Mr. Edward Jones
Bergmann Associates
28 East Main Street
Rochester, NY 14614

RE: **REVISION** for SDG 083002

Dear Mr. Jones:

Please find enclosed the revised pages concerning Pesticide, PCB, and Herbicide data for the samples submitted by your firm. The revised pages have been numbered for replacement and insertion into the original report. The pertinent information regarding these analyses is listed below:

Project : Gowanda Day Habilitation Center
SDG : 083002
Task : ASP00 Level IV Deliverables

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 Bergmann Associates with environmental testing services. We look forward to serving you in the future.

Sincerely,

STL Buffalo

Brian J. Fischer
Program Manager

BJF/stc
Enclosure
cc: J. Harry - Data Validation Services

I.D. #083002
#NY2A8896

Severn Trent Laboratories, Inc.
STL Buffalo • 10 Hazelwood Drive, Suite 106, Amherst, NY 14228
Tel 716 691 2600 Fax 716 691 7991 • www.stlinc.com

A part of Severn Trent plc

SAMPLE DATA SUMMARY PACKAGE

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A2867303	W082902EJ-07	08/29/2002	13:20	08/30/2002	09:40
A2867302	W082902EJ-15	08/29/2002	11:40	08/30/2002	09:40
A2876101	W090402EJ-01	09/04/2002	11:00	09/05/2002	11:00
A2876101MS	W090402EJ-01	09/04/2002	11:00	09/05/2002	11:00
A2876101SD	W090402EJ-01	09/04/2002	11:00	09/05/2002	11:00

METHODS SUMMARY

Job#: A02-8673,A02-8761

STL Project#: NY2A8896
SDG#: 083002
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

PARAMETER	ANALYTICAL METHOD	
BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS	ASP00	8260/5ML
BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES	ASP00	8270
BERG - W - ASP00 - 8081 PESTICIDES	ASP00	8081
BERG - W - ASP00 - 8151 - HERBICIDES (3 CMPDS)	ASP00	8151
BERG - W - ASP00 8082 - POLYCHLORINATED BIPHENYLS	ASP00	8082
Aluminum - Total	ASP00	6010
Antimony - Total	ASP00	6010
Arsenic - Total	ASP00	6010
Barium - Total	ASP00	6010
Beryllium - Total	ASP00	6010
Cadmium - Total	ASP00	6010
Calcium - Total	ASP00	6010
Chromium - Total	ASP00	6010
Cobalt - Total	ASP00	6010
Copper - Total	ASP00	6010
Iron - Total	ASP00	6010
Lead - Total	ASP00	6010
Magnesium - Total	ASP00	6010
Manganese - Total	ASP00	6010
Mercury - Total	ASP00	7470
Nickel - Total	ASP00	6010
Potassium - Total	ASP00	6010
Selenium - Total	ASP00	6010
Silver - Total	ASP00	6010
Sodium - Total	ASP00	6010
Thallium - Total	ASP00	6010
Vanadium - Total	ASP00	6010
Zinc - Total	ASP00	6010
Cyanide - Total	ASP00	9012

References:

ASP00 "Analytical Services Protocol", New York State Department of Conservation, June 2000.

NON-CONFORMANCE SUMMARY

Job#: A02-8673,A02-8761

STL Project#: NY2A8896
SDG#: 083002
Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

General Comments

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

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

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

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

Sample Receipt Comments

A02-8673
Sample Cooler(s) were received at the following temperature(s); 3@6 °C
All samples were received in good condition.
A02-8761
Sample Cooler(s) were received at the following temperature(s); 10 °C
Sample(s) were received at a temperature of >10°C. However, ice was present in the cooler and as the samples were collected the same day, it was not possible for the samples to cool to 4°C prior to receipt.

STL Buffalo internal validation forms are reported and included in this report as Appendix A.

GC/MS Volatile Data

The analytes Toluene, Methylene Chloride, and Acetone were detected in the Method Blank VBLK09 and the Volatile Holding Blank (VHB) at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

Samples W082902EJ-07 and W082902EJ-15 both exhibited a PH 7. All other samples were preserved to a PH less than 2.

The analyte Methylene Chloride was detected in the Method Blanks VBLK11 and VBLK12 and the Volatile Holding Blank (VHB) at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The spike recovery of Trichloroethene in the MS and MSD of sample W090402EJ-01 exceeded QC limits. The recovery of Trichloroethene was effected by its elevated concentration in sample W090402EJ-01 relative to the amount spiked. The associated MSB exhibited compliant recoveries for all spiking compounds.

The relative percent difference between the Matrix Spike and the Matrix Spike duplicate of sample W090402EJ-01 exceeded quality control limits for Toluene and Trichloroethene.

The spike recovery of Trichloroethene in W090402EJ-01 MSDL was above quality control limits. The recovery of Trichloroethene was effected by its elevated concentration in sample W090402EJ-01 DL relative to the amount spiked. The associated MSB exhibited compliant recoveries for all spiking compounds.

Continuing calibration standard curves A2C0004441-1 and A2C0004442-1 both exhibited the %D of 1,1-Dichloroethene as above quality control limits. ASP00 protocol allows for the %D of up to two analytes per standard to exceed quality control limits. As a result no corrective action was required.

GC/MS Semivolatile Data

The analyte Bis(2-ethylhexyl) phthalate was detected in the Method Blank A2B0862603 at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

Spiking compounds 4-Nitrophenol in the Matrix Spike Blank A2B0862601 and 4-Nitrophenol, 2,4-Dinitrotoluene and Pentachlorophenol the Matrix Spike Blank Duplicate A2B0862602 were above the method defined quality control limits. Since the results were biased high and the analytes were not detected in the samples, no corrective action was performed.

Spiking compound 4-Nitrophenol was above the method defined quality control limits in the Matrix Spike W090402EJ-01 MS. Since the results were biased high and the analytes were not detected in the samples, no corrective action was performed.

GC Extractable Data

For Method 8081 (Pesticides) the percent difference for 4,4'-DDT in the continuing calibration verification analyzed after the samples was slightly greater than 15% from the expected amount (19.6%). The average of all analytes was within 15% and the associated laboratory quality control recoveries were compliant. No corrective action was indicated.

The recovery of surrogate Decachlorobiphenyl for the Method 8081 (Pesticide) analysis of sample W090402EJ-01, W090402EJ-01 MS and W090402EJ-01 MSD was outside of established quality control limits, indicating a matrix effect. The recovery of surrogate Tetrachloro-m-xylene was within quality control limits; no corrective action was required.

For Method 8081 (Pesticide) analysis the percent recovery of a few compounds in the matrix spike and matrix spike duplicate of sample W090402EJ-01 exceeded established quality control limits. The recovery of all compounds in the associated matrix spike blank and matrix spike blank duplicate were compliant with quality control limits, indicating sample matrix effects.

The recovery of surrogate Decachlorobiphenyl for the Method 8082 (PCB) analysis of sample W090402EJ-01 and W090402EJ-01 MSD was outside of established quality control limits, indicating a matrix effect. The recovery of surrogate Tetrachloro-m-xylene was within quality control limits; no corrective action was required.

For Method 8082 (PCB) analysis the percent recovery of Aroclor 1260 in the matrix spike and matrix spike duplicate of sample W090402EJ-01 exceeded established quality control limits. The recovery of the compounds in the associated matrix spike blank and matrix spike blank duplicate was compliant with quality control limits, indicating sample matrix effects.

Metals Data

No deviations from protocol were encountered during the analytical procedures.

Wet Chemistry Data

No deviations from protocol were encountered during the analytical procedures.

****

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.

"I certify that this package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package and electronic deliverable has been authorized by the Laboratory Director or her designee, as verified by the following signature."

for Susan L. Mazur
Laboratory Director

9/24/02
Date

RESUBMISSION COMMUNICATIONS

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION
AND
ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
W082902EJ-07	A2867303	ASP00	-	-	-	-	-
W082902EJ-15	A2867302	ASP00	-	-	-	-	-
W090402EJ-01	A2876101	ASP00	ASP00	-	ASP00	ASP00	ASP00

NYSDEC-1

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
W082902EJ-07	WATER	08/29/2002	08/30/2002		09/04/2002
W082902EJ-15	WATER	08/29/2002	08/30/2002	-	09/04/2002
W090402EJ-01	WATER	09/04/2002	09/05/2002	-	09/06/2002

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
B\N-A ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
W090402EJ-01	WATER	09/04/2002	09/05/2002	09/09/2002	09/11/2002

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PESTICIDE/PCB ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
W090402EJ-01	WATER	09/04/2002	09/05/2002	09/06/2002	09/06

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYTICAL SUMMARY
INORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	METALS REQUESTED	DATE RECEIVED AT LAB	DATE DIGESTED	DATE ANALYZED
W090402EJ-01	WATER	ASP TME	09/05/2002	09/05-06/2002	09/06-07/2002

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
ORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEAN UP	DIL/CONC FACTOR
W082902EJ-07	WATER	ASP00	-	AS REQUIRED	AS REQUIRED
W082902EJ-15	WATER	ASP00	-	AS REQUIRED	AS REQUIRED
W090402EJ-01	WATER	ASP00	SEPF	AS REQUIRED	AS REQUIRED

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

LAEORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
W082902EJ-01	WATER	ASP00	ASP00	AS REQUIRED	AS REQUIRED
W090402EJ-01	WATER	ASP00	ASP00	AS REQUIRED	AS REQUIRED

Dilution Log w/Code Information
For Project MY2A8896, Task 1, SDG 083002

000014

Client Sample ID	Lab Sample ID	Parameter (Inorganic)/Method (Organic)	Dilution	Code
W082902EJ-15	A2867302	8260/5ML	2.00	008
W082902EJ-15 DL	A2867302DL	8260/5ML	4.00	008
W082902EJ-07 DL	A2867303DL	8260/5ML	5.00	008
W090402EJ-01 MSDL	A2876101A	8260/5ML	4.00	008
W090402EJ-01 SDDL	A2876101B	8260/5ML	4.00	008
W090402EJ-01 DL	A2876101DL	8260/5ML	4.00	008

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
'	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
L	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

000016

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

Client No.: W082902EJ-07

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867303

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5310.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	5	U
78-93-3	2-Butanone	25	U J
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
74-87-3	Chloromethane	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	5	U
110-82-7	Cyclohexane	10	U
67-66-3	Chloroform	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U J
124-48-1	Dibromochloromethane	5	U
75-71-8	Dichlorodifluoromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
95-50-1	1,2-Dichlorobenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	420 ~~470~~	~~E~~
156-60-5	trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	25	U J
98-82-8	Isopropylbenzene	5	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	5 ~~10~~ 2	~~B~~ U
1634-04-4	Methyl tert butyl ether	10	U

Edit all "5U" to "10U"

FORM I - GC/MS VOA

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

000017

Client No.: W082902EJ-07

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867303

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5310.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-10-1	4-Methyl-2-pentanone	25	U J
108-87-2	Methylcyclohexane	10	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5 J	~~B~~ U
120-82-1	1,2,4-Trichlorobenzene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
79-01-6	Trichloroethene	26	
75-69-4	Trichlorofluoromethane	5	U
75-01-4	Vinyl chloride	4	J
1330-20-7	Total Xylenes	5	U
103-65-1	n-Propylbenzene	5	U
99-87-6	p-Cymene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
104-51-8	n-Butylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U

all "5u" to "10 u"

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
TENTATIVELY IDENTIFIED COMPOUNDS

000018

Client N

W082902EJ-07

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867303

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5310.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	~~UNKNOWN~~	1.43	~~17~~	~~BJ~~
2.	~~UNKNOWN HYDROCARBON~~	2.23	~~9~~	~~BJ~~

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

000019

Client No.

W082902EJ-07 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867303DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5314.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	120	U
71-43-2	Benzene	25	U
75-27-4	Bromodichloromethane	25	U
75-25-2	Bromoform	25	U
74-83-9	Bromomethane	25	U
78-93-3	2-Butanone	120	U
75-15-0	Carbon Disulfide	25	U
56-23-5	Carbon Tetrachloride	25	U
74-87-3	Chloromethane	25	U
108-90-7	Chlorobenzene	25	U
75-00-3	Chloroethane	25	U
110-82-7	Cyclohexane	50	U
67-66-3	Chloroform	25	U
96-12-8	1,2-Dibromo-3-chloropropane	25	U
124-48-1	Dibromochloromethane	25	U
75-71-8	Dichlorodifluoromethane	25	U
106-93-4	1,2-Dibromoethane	25	U
95-50-1	1,2-Dichlorobenzene	25	U
541-73-1	1,3-Dichlorobenzene	25	U
106-46-7	1,4-Dichlorobenzene	25	U
75-34-3	1,1-Dichloroethane	25	U
107-06-2	1,2-Dichloroethane	25	U
75-35-4	1,1-Dichloroethene	25	U
156-59-2	cis-1,2-Dichloroethene	420	D
156-60-5	trans-1,2-Dichloroethene	25	U
78-87-5	1,2-Dichloropropane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
100-41-4	Ethylbenzene	25	U
591-78-6	2-Hexanone	120	U
98-82-8	Isopropylbenzene	25	U
79-20-9	Methyl acetate	50	U
75-09-2	Methylene chloride	22	BDJ
1634-04-4	Methyl tert butyl ether	50	U

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ANALYSIS DATA SHEET

Client No.: W082902EJ-07 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867303DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5314.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-10-1	4-Methyl-2-pentanone	120	U
108-87-2	Methylcyclohexane	50	U
100-42-5	Styrene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
127-18-4	Tetrachloroethene	25	U
108-88-3	Toluene	9	BDJ
120-82-1	1,2,4-Trichlorobenzene	25	U
71-55-6	1,1,1-Trichloroethane	25	U
79-00-5	1,1,2-Trichloroethane	25	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50	U
79-01-6	Trichloroethene	24	DJ
75-69-4	Trichlorofluoromethane	25	U
75-01-4	Vinyl chloride	25	U
1330-20-7	Total Xylenes	25	U
103-65-1	n-Propylbenzene	25	U
99-87-6	p-Cymene	25	U
95-63-6	1,2,4-Trimethylbenzene	25	U
108-67-8	1,3,5-Trimethylbenzene	25	U
104-51-8	n-Butylbenzene	25	U
135-98-8	sec-Butylbenzene	25	U

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TENTATIVELY IDENTIFIED COMPOUNDS

Client No.: W082902EJ-07 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867303DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5314.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NO.	Compound Name	RT	Est. Conc.	Q
1.		UNKNOWN	1.43	29	BJ
2.		UNKNOWN HYDROCARBON	2.23	28	BJ

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ANALYSIS DATA SHEET

Client No. W082902EJ-15

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867302

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5313.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	50	U
71-43-2	Benzene	10	U
75-27-4	Bromodichloromethane	10	U
75-25-2	Bromoform	10	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	50	U J
75-15-0	Carbon Disulfide	10	U
56-23-5	Carbon Tetrachloride	10	U
74-87-3	Chloromethane	10	U
108-90-7	Chlorobenzene	10	U
75-00-3	Chloroethane	10	U
110-82-7	Cyclohexane	20	U
67-66-3	Chloroform	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U J
124-48-1	Dibromochloromethane	10	U
75-71-8	Dichlorodifluoromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
75-34-3	1,1-Dichloroethane	10	U
107-06-2	1,2-Dichloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	390 ~~410~~	~~E~~
156-60-5	trans-1,2-Dichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
100-41-4	Ethylbenzene	10	U
591-78-6	2-Hexanone	50	U J
98-82-8	Isopropylbenzene	10	U
79-20-9	Methyl acetate	20	U
75-09-2	Methylene chloride	10 ~~5~~	~~B~~ U
1634-04-4	Methyl tert butyl ether	20	U

Edit all "10 u" TO "20 u"

000023

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

Client No.: W082902EJ-15

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867302

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5313.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-10-1	4-Methyl-2-pentanone	50	UJ
108-87-2	Methylcyclohexane	20	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
127-18-4	Tetrachloroethene	10	U
108-88-3	Toluene	10 ~~5~~	~~BJ~~ U
120-82-1	1,2,4-Trichlorobenzene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20	U
79-01-6	Trichloroethene	320 350	E
75-69-4	Trichlorofluoromethane	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	10	U
103-65-1	n-Propylbenzene	10	U
99-87-6	p-Cymene	10	U
95-63-6	1,2,4-Trimethylbenzene	10	U
108-67-8	1,3,5-Trimethylbenzene	10	U
104-51-8	n-Butylbenzene	10	U
135-98-8	sec-Butylbenzene	10	U

all "10U" to "20U"

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
TENTATIVELY IDENTIFIED COMPOUNDS

Client N

W082902EJ-15

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867302

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5313.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	~~UNKNOWN~~	1.43	~~10~~	~~BJ~~
2.	UNKNOWN	1.68	12	J
3.	~~UNKNOWN HYDROCARBON~~	2.23	~~23~~	~~BJ~~
4.	~~UNKNOWN~~	3.22	~~12~~	BJ

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

000025

Client No.

W082902EJ-15 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867302DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5316.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	100	U
71-43-2	Benzene	20	U
75-27-4	Bromodichloromethane	20	U
75-25-2	Bromoform	20	U
74-83-9	Bromomethane	20	U
78-93-3	2-Butanone	100	U
75-15-0	Carbon Disulfide	20	U
56-23-5	Carbon Tetrachloride	20	U
74-87-3	Chloromethane	20	U
108-90-7	Chlorobenzene	20	U
75-00-3	Chloroethane	20	U
110-82-7	Cyclohexane	40	U
67-66-3	Chloroform	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
124-48-1	Dibromochloromethane	20	U
75-71-8	Dichlorodifluoromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
75-34-3	1,1-Dichloroethane	20	U
107-06-2	1,2-Dichloroethane	20	U
75-35-4	1,1-Dichloroethene	20	U
156-59-2	cis-1,2-Dichloroethene	380	D
156-60-5	trans-1,2-Dichloroethene	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
100-41-4	Ethylbenzene	20	U
591-78-6	2-Hexanone	100	U
98-82-8	Isopropylbenzene	20	U
79-20-9	Methyl acetate	40	U
75-09-2	Methylene chloride	21	BDJ
1634-04-4	Methyl tert butyl ether	40	U

BERGMANN ASSOCIATES, INC.
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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

Client No.: W082902EJ-15 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867302DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5316.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-10-1	4-Methyl-2-pentanone	100	U
108-87-2	Methylcyclohexane	40	U
100-42-5	Styrene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
127-18-4	Tetrachloroethene	20	U
108-88-3	Toluene	4	BDJ
120-82-1	1,2,4-Trichlorobenzene	20	U
71-55-6	1,1,1-Trichloroethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	40	U
79-01-6	Trichloroethene	320	D
75-69-4	Trichlorofluoromethane	20	U
75-01-4	Vinyl chloride	20	U
1330-20-7	Total Xylenes	20	U
103-65-1	n-Propylbenzene	20	U
99-87-6	p-Cymene	20	U
95-63-6	1,2,4-Trimethylbenzene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
104-51-8	n-Butylbenzene	20	U
135-98-8	sec-Butylbenzene	20	U

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

W082902EJ-15 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2867302DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5316.RR

Level: (low/med) LOW Date Samp/Recv: 08/29/2002 08/30/2002

% Moisture: not dec. _____ Date Analyzed: 09/04/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	110-54-3	HEXANE	3.22	27	BJN

000028

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

Client No.: W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: ____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5332.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/06/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	10 ~~5~~	~~J~~ U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	5	U
78-93-3	2-Butanone	25	U J
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
74-87-3	Chloromethane	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	5	U
110-82-7	Cyclohexane	10	U
67-66-3	Chloroform	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U J
124-48-1	Dibromochloromethane	5	U
75-71-8	Dichlorodifluoromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
95-50-1	1,2-Dichlorobenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	380	~~E~~
156-60-5	trans-1,2-Dichloroethene	4	J
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	25	U J
98-82-8	Isopropylbenzene	5	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	5 ~~1~~	~~B~~ U
1634-04-4	Methyl tert butyl ether	10	U

Edit all "5u" to "10u"

FORM I - GC/MS VOA

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

Client No.: W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5332.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/06/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-10-1	4-Methyl-2-pentanone	25	U J
108-87-2	Methylcyclohexane	10	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108 88 3	Toluene	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
79-01-6	Trichloroethene	350 ~~430~~	~~E~~
75-69-4	Trichlorofluoromethane	5	U
75-01-4	Vinyl chloride	4	J
1330-20-7	Total Xylenes	5	U
103-65-1	n-Propylbenzene	5	U
99-87-6	p-Cymene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
104-51-8	n-Butylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U

all "5u" to "10 u"

BERGMANN ASSOCIATES, INC.
BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER
BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.: W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5332.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: not dec. _____ Date Analyzed: 09/06/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	~~UNKNOWN HYDROCARBON~~	2.05	~~14~~	~~BJ~~

000031

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

Client No.: W090402EJ-01 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5336.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/06/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	100	U
71-43-2	Benzene	20	U
75-27-4	Bromodichloromethane	20	U
75-25-2	Bromoform	20	U
74-83-9	Bromomethane	20	U
78-93-3	2-Butanone	100	U
75-15-0	Carbon Disulfide	20	U
56-23-5	Carbon Tetrachloride	20	U
74-87-3	Chloromethane	20	U
108-90-7	Chlorobenzene	20	U
75-00-3	Chloroethane	20	U
110-82-7	Cyclohexane	40	U
67-66-3	Chloroform	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
124-48-1	Dibromochloromethane	20	U
75-71-8	Dichlorodifluoromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
75-34-3	1,1-Dichloroethane	20	U
107-06-2	1,2-Dichloroethane	20	U
75-35-4	1,1-Dichloroethene	20	U
156-59-2	cis-1,2-Dichloroethene	380	D
156-60-5	trans-1,2-Dichloroethene	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
100-41-4	Ethylbenzene	20	U
591-78-6	2-Hexanone	100	U
98-82-8	Isopropylbenzene	20	U
79-20-9	Methyl acetate	40	U
75-09-2	Methylene chloride	10	BDT
1634-04-4	Methyl tert butyl ether	40	U

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

Client No.: W090402EJ-01 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5336.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/06/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-10-1	4-Methyl-2-pentanone	100	U
108-87-2	Methylcyclohexane	40	U
100-42-5	Styrene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
127-18-4	Tetrachloroethene	20	U
108-88-3	Toluene	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
71-55-6	1,1,1-Trichloroethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	40	U
79-01-6	Trichloroethene	380	D
75-69-4	Trichlorofluoromethane	20	U
75-01-4	Vinyl chloride	4	DJ
1330-20-7	Total Xylenes	20	U
103-65-1	n-Propylbenzene	20	U
99-87-6	p-Cymene	20	U
95-63-6	1,2,4-Trimethylbenzene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
104-51-8	n-Butylbenzene	20	U
135-98-8	sec-Butylbenzene	20	U

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BERG - W - EPA ASP00-METHOD 8260 VOLATILES + STARS
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.: W090402EJ-01 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F5336.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: not dec. _____ Date Analyzed: 09/06/2002

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NO.	Compound Name	RT	Est. Conc.	Q
1.		UNKNOWN	2.05	34	BJ
2.	110-54-3	HEXANE	3.21	20	JN

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BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES
ANALYSIS DATA SHEET

000034

Client No.

W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 1040.0 (g/mL) ML Lab File ID: Z52915.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: _____ decanted: (Y/N) N Date Extracted: 09/09/2002

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/11/2002

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
95-57-8	2-Chlorophenol	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	25 ~~10~~	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
92-52-4	Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	24	U
131-11-3	Dimethyl phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	24	U

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BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES
ANALYSIS DATA SHEET

000035

Client No.

W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 1040.0 (g/mL) ML Lab File ID: Z52915.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: _____ decanted: (Y/N) N Date Extracted: 09/09/2002

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/11/2002

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	24	U
100-02-7	4-Nitrophenol	24	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethyl phthalate	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	24	U
534-52-1	4,6-Dinitro-2-methylphenol	24	U
86-30-6	N-nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	24	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butyl phthalate	10 ~~0.8~~	~~J~~ U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butyl benzyl phthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10 ~~3~~	~~BJ~~ U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U

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BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES
ANALYSIS DATA SHEET

000036

Client No.

W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 1040.0 (g/mL) ML Lab File ID: Z52915.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: _____ decanted: (Y/N) N Date Extracted: 09/09/2002

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/11/2002

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
191-24-2	Benzo(ghi)perylene	10	U

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BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES
TENTATIVELY IDENTIFIED COMPOUNDS

000037

Client No.

W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 1040.0 (g/mL) ML Lab File ID: Z52915.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2002 09/05/2002

% Moisture: _____ decanted: (Y/N) N Date Extracted: 09/09/2002

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/11/2002

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

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BERG - W - ASP00 - 8081 PESTICIDES
ANALYSIS DATA SHEET

000038

Client No.: W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 1000.00 (g/mL) ML Lab File ID: RA20088.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: 09/04/2002 09/05/2002

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/05/2002

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/07/2002

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.20	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	1.0	U

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BERG - W - ASP00 8082 - POLYCHLORINATED BIPHENYLS
ANALYSIS DATA SHEET

000039

Client No.: W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 1040.00 (g/mL) ML Lab File ID: LA07205.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: 09/04/2002 09/05/2002

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/06/2002

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/06/2002

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor 1016	0.48	U
11104-28-2	Aroclor 1221	0.48	U
11141-16-5	Aroclor 1232	0.48	U
53469-21-9	Aroclor 1242	0.48	U
12672-29-6	Aroclor 1248	0.48	U
11097-69-1	Aroclor 1254	0.48	U J
11096-82-5	Aroclor 1260	0.48	U

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BERG - W - ASP00 - 8151 - HERBICIDES (3 CMPDS)
ANALYSIS DATA SHEET

000040

Client N

W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix: (soil/water) WATER Lab Sample ID: A2876101

Sample wt/vol: 1000.00 (g/mL) ML Lab File ID: MA67304.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: 09/04/2002 09/05/2002

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/06/2002

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/13/2002

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
93-76-5	2,4,5-T	2.0	U
93-72-1	2,4,5-TP (Silvex)	2.0	U
94-75-7	2,4-D	10	U

Bergmann Associates, Inc.

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

W090402EJ-01

Contract: NY01-449

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: 083002

Matrix (soil/water): WATER Lab Sample ID: AD224983

Level (low/med): LOW Date Received: 9/5/02

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	33.1	U	J	P
7440-36-0	Antimony	2.2	U		P
7440-38-2	Arsenic	2.8	B		P
7440-39-3	Barium	342			P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	81000			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.5	U		P
7440-50-8	Copper	0.91	B		P
7439-89-6	Iron	8390			P
7439-92-1	Lead	2.3	B	J	P
7439-95-4	Magnesium	16600			P
7439-96-5	Manganese	716			P
7440-02-0	Nickel	4.7	U		P
7440-09-7	Potassium	2570	B		P
7782-49-2	Selenium	4.9	U		P
7439-97-6	Mercury	0.092	U	J	CV
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	26100			P
7440-28-0	Thallium	5.6	B	J	P
7440-62-2	Vanadium	1.1	B		P
7440-66-6	Zinc	3.0	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: NONE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

Bergmann Associates, Inc. 000042
Bergmann Assoc. - Gowanda Day Habilitation Center
Wet Chemistry Analysis

Client Sample No.: W090402EJ-01

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 083002

Matrix (soil/water): WATER Lab Sample ID: A2876101

% Solids: 0.0 Date Samp/Recv: 09/04/2002 09/05/2002

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Cyanide - Total	UG/L	10	U			9012	09/12/200

Comments:

APPENDIX 6

APPENDIX 6
Data Usability and Summary Report

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, N. Y. 12853
Phone 518-251-4429
Facsimile 518-251-4428

February 26, 2003

Edward Jones
Bergmann Associates
200 lst Federal Plaza
28 E. Main St.
Rochester, NY 14614

RE: **D**ata **U**sability **S**ummary **R**eport for Gowanda Day Habilitation site
STL-Buffalo SDG/Package Nos. 7056, 7059, 8664, and 083002

Dear Mr. Jones:

Review has been completed for the data packages generated by Severn Trent Laboratories that pertain to soil samples collected 7/8/02 through 7/31/02 and aqueous samples collected 8/28/02 through 9/4/02 at the Gowanda site.

Five soil samples were processed for TCL and STARS volatiles, TCL semivolatiles, TCL pesticides, TCL PCBs, three herbicides, and TAL metals/CN, four of them by USEPA SW846 methods, and one by the 2000 NYSDEC ASP. Seven aqueous samples were processed for TCL and STARS volatiles, TCL semivolatiles, TCL pesticides, TCL PCBs, three herbicides, and TAL metals/CN, six of them by USEPA SW846 methods, and one by the 2000 NYSDEC ASP. Twenty seven soil samples were processed for TCL and STARS volatiles, twenty three of them by USEPA SW846 methods, and four by the 2000 NYSDEC ASP. Twelve aqueous samples were processed for TCL and STARS volatiles, ten of them by USEPA SW846 methods, and two by the 2000 NYSDEC ASP. Sample matrix spikes, and equipment and trip blanks were also processed.

The field samples processed by NYSDEC 2000 ASP were reported with full laboratory deliverables, for which this DUSR review was performed. That review involves review of all summary form information and sample raw data. Full validation of all QC results has not been performed. The remaining samples were processed by USEPA SW846 methodologies, and reduced, summary level data packages were produced. The summary forms in those data packages were reviewed, and any observed anomalies in QC are also discussed within this narrative. The data have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional

Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Instrumental Tunes and IDLs (ASP only)
* Calibration/CRI/CRA Standards (ASP only)
* ICP Interference Check Standards (ASP only)
* ICP Serial Dilution Correlations (ASP only)

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR review level.

In summary, although much of the data is usable as reported, or usable with minor qualification as estimated, several data gaps involving rejected data points are observed:

- Pesticide data for two aqueous samples are not usable due to apparent matrix effect
- PCB and pesticide data for one soil sample are not usable due to apparent matrix effect
- Cyanide results for five soils are not usable due to holding time violations
- There is a low bias to other sample pesticide and PCB results due to apparent matrix effect

Although usable cyanide results could be obtained with sample recollection, it is possible that the pesticide and PCB for the affected samples may not improve with resampling. These issues, and others of interest, are discussed in the following sections.

Copies of the laboratory case narratives, sample summaries, and resubmission communications are attached to this text, and should be reviewed in conjunction with this report. Sample report forms from the data summary packages and laboratory revisions are also attached, and reflect final samples results with validation qualifiers/edits in red ink, as detailed below. It should be noted that the samples processed by SW846 (SDGs 7056 and 8664) reflect only the qualifiers evident with summary package review.

The following text discusses quality issues of concern.

Data Completeness

Original ASP data packages did not include data for the herbicide processing, which was provided on request. There is no narrative discussion regarding the herbicide analyses. Also resubmitted were standard QC summary forms for the ASP herbicide, PCB, and pesticide processing, and pesticide IDLs.

Results for cyanide in one soil sample were corrected by the laboratory to revise the reporting limit, and that value has been additionally lowered upon validation (revised form attached). Results for two soil samples were revised by the laboratory to reflect the correct date of collection.

The summary level data packages (8664 and 7056), compiled for the samples processed by SW846, include laboratory narratives that are not signed. The laboratory deliverables for the SW846 summary packages do not allow for correlation between organic method blanks and associated samples (no blank analysis dates provided).

The report forms for matrix spikes should indicate MS or MSD in the client ID to avoid confusion with the actual sample result report forms.

Copies of resubmission communication letters are attached; raw data items have been enclosed with the data packages.

General

Aqueous field duplicate correlations for all analytes on sample 090402EJ01 were acceptable, with the exception of that for aluminum, with results showing nondetection at 33 ug/L, and detection at 320 ug/L. Results for that element in the parent sample and its duplicate are qualified estimated. Field duplicate correlations for volatiles on aqueous sample W082902EJ-07 and soil sample S072302EJ-25 were acceptable.

Matrix spike accuracy and precision evaluations were generally acceptable, with the exception of those for a few metals in soil, noted specifically below.

Due to limited sample volume of S073102EJ-01 8-10, the ASP herbicide analysis of the soil was conducted on sample S073102EJ-01 2-4.

TCL Volatiles by ASP CLP and SW846

Aqueous samples processed by ASP were reported with an incorrect reporting limit of 5 ug/L. Sample reporting limits are to be raised to 10 ug/L (i.e. 10 U), multiplied by dilution factor, to match the low calibration standard concentration, and detected values between 5 and 10 ppb are to be flagged as estimated ("J").

Surrogate and internal standard recoveries were acceptable for all project samples, with the exception of those for S073002EJ07 16-17.5, which showed recoveries of 27% to 30% for all three internal standards. The initial results for the sample should be used, with all analyte values qualified estimated ("J" or "UJ"), with a low bias, with the exception of the results for cis-1,2-dichloroethene and trichloroethene, which are derived from an acceptable dilution analysis. The reinjection result for S072302EJ25 9-11 should be used, as the initial shows outlying internal standard responses.

Holding times were met for all project samples, and instrument tunes (ASP review only) were acceptable.

Due to presence in associated method, trip, and/or equipment blanks, detected results for methylene chloride, acetone, and toluene are considered external contamination, and edited to nondetection ("U") at either the CRDL, or the originally reported concentration, whichever is greater:

Results for sample analytes initially reported with the "E" flag are to be derived from the dilution ("-DL") analyses of the samples. They are the following:

Sample ID	Analyte	Results, ppb
S073002EJ-0716-17	cis-1,2-dichloroethene	550
	trichloroethene	330
S073102EJ-012-4	cis-1,2-dichloroethene	940
	trichloroethene	14000
S073102EJ-01 8-10	trichloroethene	3600
S073102EJ-24 18-20	cis-1,2-dichloroethene	700
	trichloroethene	910
W082802EJ-13	trichloroethene	250
W082902EJ-06	cis-1,2-dichloroethene	400
W082902EJ-07	cis-1,2-dichloroethene	420
W082902EJ-07D	cis-1,2-dichloroethene	380
W082902EJ-11	cis-1,2-dichloroethene	2300
	trichloroethene	2300
W082902EJ-12	cis-1,2-dichloroethene	3000
	trichloroethene	9600
W082902EJ-15	cis-1,2-dichloroethene	380
	trichloroethene	320
W090402EJ-01	cis-1,2-dichloroethene	380
	trichloroethene	380
W090402EJ-01D	cis-1,2-dichloroethene	300
	trichloroethene	320

Unless noted specifically within this text, results for all analytes other than those noted above can be derived from the initial analyses of the samples.

Soil matrix spikes of S073102EJ-01 show acceptable accuracy and precision, with the exception of one slightly low recovery, not significantly affecting sample reported results. The soil matrix spikes of S073002EJ-06 18-20 show outlying recoveries for four of the five analytes evaluated, indicating possible matrix effect. That for trichloroethene is very poor, and inconsistent. Results for the following analytes in the parent sample are to be considered estimated ("J"), with a possible low bias: benzene, trichloroethene, toluene, and chlorobenzene. Other analyte results should be used with caution.

Aqueous matrix spikes of W090402EJ-01 shows acceptable accuracy and precision in the initial and dilution analyses (there was one elevated duplicate correlation for an analyte not detected in the parent sample, not affecting reported results).

Calibrations standards were evaluated for the samples reported by ASP processing, and show responses not significantly affecting reported results, with the exception of those for 2-butanone, 2-hexanone, 4-methyl-2-pentanone, and 1,2-dibromo-3-chloropropane, results for which are to be qualified estimated ("UJ" or "J") in the aqueous samples in SDG 83002.

The standard summary form for the 7/21/02 analysis for STARS compounds utilized incorrect mean RRF values. Actual %D values were reviewed and found acceptable.

Tentatively Identified Compounds (TICs) flagged as "B" by the laboratory, or identified as hexane, carbon dioxide, or system artifacts, are considered external contamination (indicated by presence in associated blanks), and results should be rejected as sample components.

Semivolatile Analyses by ASP CLP or SW846

Surrogate and internal standard recoveries were acceptable, although two control samples (blank and MSB) were doubly spiked with the internal standards. Associated sample results are not affected.

The result for anthracene in S073102EJ-01 8-10 is to be edited to nondetection at the CRDL due to misidentification (the response is that of phenathrene, also reported).

Due to presence in associated method or rinse blanks, results for di-n-butylphthalate in the aqueous samples and in S072302EJ25D 9-11 are considered external contamination, and edited to nondetection ("U") at either the CRDL, or the originally reported concentration, whichever is greater.

Due to presence in associated method or rinse blanks, results for bis(2-ethylhexyl)phthalate in aqueous sample in SDG 83002 is considered external contamination, and edited to nondetection ("U") at either the CRDL, or the originally reported concentration, whichever is greater.

The result for butylbenzylphthalate in S072302EJ25D 9-11, initially eported with the "E" flag, is to be derived from the dilution ("-DL") analyses of the sample (7300 ug/kg).

Calibrations standards were evaluated for the samples processed by ASP, and show acceptable responses, with the exception of the following:

a) 2,4-dinitrophenol results in the aqueous samples processed by SW846 are to be qualified estimated ("UJ") with a low bias (based on lab case narrative comment).
b) 2,4-dinitrophenol results in S073102EJ-01 is to be qualified estimated ("UJ") with a low bias
c) The reporting limit for caprolactum in the aqueous sample in SDG 83002 ids to be edited upward to 25 ug/L (25 U) due to poor response in low concentration calibration standard.

Nondetected results are not qualified for elevated responses in associated continuing calibration standards.

Soil matrix spikes of S073102EJ-01 8-10 show low recoveries for 2,4-dinitrotoluene (16% and 17%); the result for that analyte in the parent sample is qualified estimated ("UJ"), with a low bias. The matrix spikes of aqueous sample W090402EJ-01, the associated spiked blank, and the soil matrix spikes, show one to three slightly elevated recoveries or duplicate correlation for analytes not detected in the project samples; results are unaffected.

Tentatively Identified Compounds (TICs) flagged as "B" by the laboratory are considered external contamination (indicated by presence in associated blanks), and results should be rejected as sample components. Those identified as aldol condensates, flagged by the laboratory as "A", are analysis artifacts, and are similarly rejected. Results for alkane TICs in the samples were reported with the case narrative in original data submissions, but were omitted from the revised packages.

TCL Pesticide/PCB and Herbicide Analyses by CLP and SW846

Reporting limits for herbicides in the soil sample were reported unnecessarily high and have been edited on the attached report form.

Due to very poor recovery of surrogate standards (below 10%), results for the pesticides in samples W082902EJ-06, W082902EJ-12, and S070902EJ-17 8-12 are rejected ("R") (all report nondetection). Bergmann Associates should have been notified by the laboratory regarding these failures.

Due to low recovery of surrogate standard DCB (20% to 22%), the reporting limit results for the pesticides in sample W090402EJ-01D, and for the PCBs in samples W082902EJ-06 and W082902EJ-12 are qualified estimated ("UJ") (all report nondetection). It is noted that a pesticide/PCB method blank also exhibited low surrogate TCX recovery (20%), indicating a processing, rather than matrix, effect.

Pesticide/PCB detections in S072392EJ-25 9-11 and S072302EJ-25D 9-11 are qualified as estimated ("J") with a high bias due to elevated surrogate recoveries (178% and 246%).

The detection of methoxychlor in S073102EJ-01 8-10 is qualified as tentative in identiciation ("N") due to poor dual column correlation; the laboratory should have flagged this analyte as "P".

Herbicide matrix spikes of W090402EJ-01 and S073102EJ 8-10 show acceptable recoveries and duplicate correlations.

Matrix spikes of pesticides and Aroclor 1254 in S073102EJ-01 8-10 also show acceptable accuracy and precision.

Matrix spikes of W090402EJ-01 show outlying recoveries for pesticides 4,4'-DDD and 4,4'-DDT, and for Aroclor 1260 (all between 35% and 47%). Results for those analytes in the parent sample are qualified estimated.

Laboratory control samples spiked with all pesticide, herbicide, or Aroclor 1660 analytes show acceptable recoveries.

TAL Metals/CN by CLP-M and SW846

The cyanide reporting limit for the soil sample in SDG 7059 is unnecessarily high (10 mg/kg), The limit has been lowered to 0.5 mg/kg.

Cyanide results in the following soils are rejected ("R") due to outlying holding time (31 to 46 days): S070902EJ-17 8-12, S071902EJ-GARDEN-N, S072302EJ-25 9-11, S072302EJ-25D 9-11, and S072402EJ-21 8-10.

The cyanide results in S073102EJ-01 8-10 and in the 7/31/02 field blank, are qualified estimated ("UJ"), with a very low bias due to holding time exceedence (24 and 25 days from collection).

ICP serial dilution evaluations for the aqueous sample W090402WJ-01 shows acceptable correlations. That for the soil S073102EJ-01 8-10 shows numerous outliers, all above the 10%D limit; all but one are below 12%D. The affected elements are as follows, and are qualified estimated ("J") in the sample. The bias is not expected to be great: calcium, chromium, cobalt, iron, nickel, potassium, and zinc

Soil concentrations of barium and iron were above the action level required due to low level field blank contamination.

The aqueous matrix spikes of W090402EJ-01 show acceptable recoveries.

Soil matrix spikes of S072402EJ-21 8-10 show low recoveries (32% to 69%) for antimony, barium, potassium, and zinc. Results for those four analytes in the soils processed by SW846 are to be qualified estimated ("J" or "UJ").

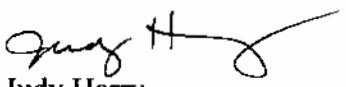
Soil matrix spikes of S073102EJ-01 8-10 show outlying recoveries (49% to 1190%) for antimony, manganese, and zinc. Results for those three analytes in the parent samples are qualified estimated ("J" or "UJ").

Cyanide matrix spikes of W090402EJ-01 and S073102EJ-01 2-4 show acceptable accuracy and precision.

Due to low recoveries (65% to 78%) of CRI/CRA standards, results for mercury and thallium in W090402EJ-01 are qualified estimated, with a low bias, on the attached forms. Due to elevated recoveries (131 to 169%), the lead in the same sample is qualified estimated, with a high bias. No corrective laboratory action is required for CRI/CRA results.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,



Judy Harry