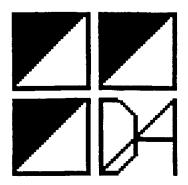
SITE INVESTIGATION REPORT

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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April 2003

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

SITE INVESTIGATION

1.0 <u>INTRODUCTION</u>

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 ½ 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 <u>Field Screening of Test Boring Soil Samples</u>

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	Ali 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	Ali 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, Refusa
B-26	07/23/2002	MacroCore	18.9 ppm, 3'-4'	11'-12': PID=3.9 ppm	11 feet	>16 feet, Refus
B-27	07/26/2002	MacroCore	3.4 ppm, 12'-13'	12'-13'; PID=3.4 ppm	12 feet	>17 feet, Refusa
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	Date	Construction	Well	Elevation of the Top	Approximate	Well Screen	Depth to
Number	Completed	Material	Dia.	of Well Casing, Feet,	Depth to	Interval	Underlying
				Mean Sea Level	Groundwater		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-A¹, presented on Figure 6, and on cross-section B-B¹, 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-A¹ presents subsurface overburden characteristics in an easterly-westerly direction. Cross-section B-B¹ presents the subsurface characteristics in a southerly to northerly direction. The B-B¹ 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

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.

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.

The average hydraulic gradient in the down-gradient direction varies from 0.028 feet/foot to 0.0241 feet/foot along the B-B¹ 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	1.319×10^{-3}	3.739
MW-9	1.403×10^{-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 $K = 1.236 \times 10^{-3} \text{ cm/sec} = 3.504 \text{ ft/day}$

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-B¹, approximately along flow axis

Down-gradient direction beneath the building slab, direct down-gradient direction,

I = 0.0241 ft/foot

 $V_S = (3.504 \text{ ft/day } *0.0241 \text{ft/foot})/0.3 = 0.281 \text{ ft/day}$

3.3 <u>Laboratory Analysis Summary, Soil Samples</u>

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 <u>Laboratory Analysis Summary, Groundwater Samples</u>

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.

Boring/Well Number, Sample Collection Interval and Sample Date

		Boring/we	il Number	, Sample C	ollection	nterval and	l Sample L	ate		
	NYSDEC	B-1/MW-1	B-1/MW-1	B-1/MW-1 B-1/MW-1 B-2/MW-2 B-3/MW-3 B-4/MW-4 B-5/MW-5 B-6	B-3/MW-3	B-4/MW-4	B-5/MW-5	B-6/MW-6	B-7/MW-7	B-8/MW-8
	Recommended	2' - 4'	8' - 10'	8' - 10'	8'- 10'	10' - 12'	8' - 13'	18' - 20'	16' - 17.5'	9' - 10'
VOC Compound	Cleanup Objective	07/30/02	07/31/02	07/25/02	07/12/02	07/11/02	07/31/02	07/30/02	07/30/02	07/24/02
Trichloroethene	0.7 ppm (700 ppb)	14000 D	3600 D	8	3 J	QΝ	5	44 J	330 D	QN
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	940 D	170	12	ND	QΝ	7	190	550 D	Q
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	10	ΩN	QN	ND	QN	ND	ON	QN	ON
Vinyl chloride	0.2 ppm (200 ppb)	ND	5 J	QN	ND	QN	ND	QN	Ð	QN
Acetone	0.2 ppm (200 ppb)	QΝ	QN	QN	QN	QN	ND	QN	QN	QN
Benzene	0.06 ppm (6 ppb)	ON	ON	QN	QΝ	QN	ND	QN	QN	S
Bromodichloromethane		QN	QN	GN	QN	GN	ON	QN	Q	QN
Bromoform		QN	ON	QN	QN	ON	QN	ND	QN	S
Bromomethane		QN	ON	QN	QN	ΩN	QN	QN	QN	S
2-Butanone	0.3 ppm (300 ppb)	QN	QN	10 J	QN	ΩN	QN	Q.	Q	S
Carbon Tetrachloride	0.6 ppm (600 ppb)	ΩN	QN	QN	ΟN	QN	QN	QN	2	Ð
Carbon Disulfide	2.7 ppm (2700 ppb)	QN	ND	QN	ND	QN	ON	QN	S	9
Chloromethane		ON	ND	GN	ND	ΠN	QN	QN	Q	Q.
Chlorobenzene	1.7 ppm (1700 ppb)	ND	ND	QN	QN	QN	GN	QN	QN	S
Chloroethane	(1.9 ppm (1900 ppb)	ON	ND	ON	QN	ΩN	QN	ΩN	QN	S S
Cyclohexane		ND	QN	GΝ	QN	ΠN	QN	QN	9	2
Chloroform	0.3 ppm (300 ppb)	QN	QN	QN	ND	ΩN	QN	QN	QN	Q.
1,2-Dibromo-3-chloropropane		ND	QN	ΩN	QN	QN	ND	ND	QV	Q
Dibromochloromethane		QN	ON	ND	ND	ΠN	QN	QN	Q	9
Dichlorodifluoromethane		QN	QN	Q	ND	QN	QN	QN	QN	QN
1,2-Dibromoethane		QN	QN	QN	ND	QN	QN	ND	QN	QN
1,2-Dichlorobenzene	(ddd 0067) mdd 6.7	ND	QN	QN	QN	ΩN	QN	QN	QN	Q
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	QN	QN	ND	ΠN	ND	QN	QN	2
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	QN	QN	QN	QN	QN	QN	QN	QΝ	QN
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	QN	Q	Q	ND	ON	ND.	ON	QN
1,2-Dichloroethane	0.3 ppm (300 ppb)	QN	QN	QN	QN	QN	QN	QN	ΔN	QN
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ON	QN	ND	QN	ND	QN	QN	Q
Described and a Control of		7 11 " F " 7		41.1	1	P - 7 - L		1,		

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 and estimated concentration in diluted sample

Sive Investigation Report Gowanda Day Habilitation Center VCA Site Investigation

April 2003

Boring/Well Number, Sample Collection Interval and Sample Date

		DOI HIG/ WC	bonnig wen inunter, sample Conection interval and sample Date	, Sample C	Olicelloli	חוכו אמו מווג	Januare L	Jaic		
	NYSDEC	B-1/MW-1	B-1/MW-1	B-2/MW-2	B-3/MW-3	B-4/MW-4	B-5/MW-5	B-6/MW-6	2-WW/2-8	B-8/MW-8
	Recommended	2' - 4'	8' - 10'	8' - 10'	8'- 10'	10' - 12'	8' - 13'	18, – 50,	16' - 17.5'	9' - 10'
VOC Compound	Cleanup Objective	07/30/02	07/31/02	07/25/02	07/12/02	07/11/02	07/31/02	07/30/05	07/30/02	07/24/02
1,2-Dichloropropane		QN	QN	QN	ND	QN	ND	QN	QN	N
cis-1,2-Dichloropropene		ΩN	QN	QN	ND	QN	ΩN	GN	. dn	ND
trans-1,2-Dichloropropene		QN	QN	QN	ND	QΝ	an	ΩN	ΩN	ND
Ethylbenzene	5.5 ppm (5500 ppb)	QN	QN	QN	ND	QN	an	ΩN	ΠN	ND
2-Hexanone		QN	QN	QΝ	ND	_ QN	QN	QN	QN	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ND	QN	GΝ	ND	GN	QN	QN	QN	ND
Methyl acetate		ΟN	QN	QN	ND	QN	an	QN	QN	ND
Methylene Chloride	0.1 ppm (100 ppb)	QN	QN	QN	ND	an	GN	QΝ	QN	QN
Methyl tert butyl ether	0.12 ppm (120 ppb)	QN	QN	QN	ND	QN	ND	QN	QN	ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ΟN	ΩN	ΩN	ND	ΩN	QN	QN	QN	ND
Methylcyclohexane		QN	ΠN	an	ND	QN	GN	QN	QN	ND
Styrene		QN	ΟN	ΩN	QN	ďΝ	ΩN	QN	ΩN	QN
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	QN	QN	QN	ND	dN	QN	QN	QN	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	QN	ND	QN	QN	ND
Toluene	1.5 ppm (1500 ppb)	QN	ON	ND	ND	QN	QN	QN	QN	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	GN	QN	ND	ND	ND	ND	ON	QN	QN
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	QN	QN	ND	ND	ND	ON	QN	ND	DN
1,1,2-Trichloroethane		QN	ΟN	ND	ON	QN	QN	ND	QN	ND
1,1,2-Trichloro-1,2,2-trifluor		QN	QN	ND	QN	Q	QN	ON	QN	ND
Trichlorofluoromethane		QN	QN	GN	ΩN	QN	ND	QN	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	Q	αN	QN	2 J	QN	QN	QN	QN	QN
n-Propylbenzene	14 ppm (14000 ppb)	QN	QN	ON	ΩN	ND	QN	Q	QN	ND
P-Cymene		QN	QN	QN	QN	ND	Q.	Q	QN	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	QN	QN	QN	αN	QN	QN	ON	QN	QN
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	QN	QN	QN	QN	QN	ON	QN	QN	ON
n-Butylbenzene		QN	QN	QN	QN	QN	Q	Q	Q	QN
sec-Butylbenzene		QN	Q	QN	QN	QN	QN	QN	ND	QN

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

April 2003

Boring/Well Number, Sample Collection Interval and Sample Date

		Boring/ wel.	i Number, Sa	imple Collec	tion Interval	ind Sample Da	ite		
	NYSDEC	B-9/MW-9	B-10/MW-10	B-11/MW-11	B-12/MW-12	B-9/MW-9 B-10/MW-10 B-11/MW-11 B-12/MW-12 B-13/MW-13	B-14	B-15	B-16
	Recommended	8' – 10'	.89	9'-11'	12' - 14'	10' - 12'	10' - 12'	12' - 14'	8' - 10'
VOC Compound	Cleanup Objective	07/11/02	07/10/02	07/17/02	07/16/02	07/15/02	07/18/02	07/19/02	07/08/02
Trichloroethene	0.7 ppm (700 ppb)	GN	QN	480	3300	9	79	51	QN
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	QN	ΔN	110	QN	3.1	12	۲ ک	QN
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	QN	QN	ND	DN	ND	ON	ΟN	QN
Vinyl chloride	0.2 ppm (200 ppb)	QN	ND	QN	QN	ND	ND	QN	QN
Acetone	0.2 ppm (200 ppb)	QN	ND	QN	ND	ND	QN	QΝ	ND
Benzene	0.06 ppm (6 ppb)	QN	ON	ND	QN	QN	QN	QN	ND
Bromodichloromethane		ΟN	QN	ON	QN	QN	QN	QN	QN
Bromoform		ON	. QN	ND	QN	ND	ND	QN	ND
Bromomethane		ND	QN	QN	QN	ND	ND	QN	ON
2-Butanone	0.3 ppm (300 ppb)	QN	ND	ND	QN	QN	ND	GN	QN
Carbon Tetrachloride	0.6 ppm (600 ppb)	QN	QN	QN	QN	QN	ND	QN	QN
Carbon Disulfide	2.7 ppm (2700 ppb)	QN	ND	ND	ND	ON	QN	QN	QN
Chloromethane		QN	ND	ND	ND	QN	ND	QN	ND
Chlorobenzene	1.7 ppm (1700 ppb)	QN	ND	QN	ND	ND	QN	QN	QN
Chloroethane	1.9 ppm (1900 ppb)	QN	ND	ON	ON	QN	ND	QN	QN
Cyclohexane		QN	ND	ND	ND	QN	ΩN	QN	QN
Chloroform	0.3 ppm (300 ppb)	ND	ND	ND	ND	ΝĐ	ND	QΝ	ND
1,2-Dibromo-3-chloropropane		QN	ND	QN	QN	QN	QN	GN	ND
Dibromochloromethane		QN	QN	QN	ND	UN	QN	QN	QN
Dichlorodifluoromethane		QN	ND	ND	QN	QN	QN	QN	QN
1,2-Dibromoethane		QN	QN	Q	ON	QN	ND	QN	QN
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ΩN	ND	ND	ND	ND	QN	QN	QN
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	ND	ND	QN	QN	ND	QN	QN	QN
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	QN	QN	ΩN	ΩN	ND	QN	ND	QN
1,1-Dichloroethane	0.2 ppm (200 ppb)	ND	ND	Ν̈́D	ΝD	ND	ND	QN	ND
1,2-Dichloroethane	(300 ppb) (300 ppb)	QN	QN	QN	CN	ND	QN	QN	QN
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ND	QN	ND	ND	QN	QN	QN
			-				-		

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 and estimated concentration in diluted sample

April 2003

Boring/Well Number, Sample Collection Interval and Sample Date

	NYSDEC	B-9/MW-9	B-10/MW-10	B-11/MW-11	B-12/MW-12	B-13/MW-13	B-14	B-15	B-16
	Recommended	8' - 10'	.89	9' - 11'	12' - 14'	10' - 12'	10' - 12'	12' - 14'	8' - 10'
VOC Compound	Cleanup Objective	07/11/02	07/10/02	07/17/02	07/16/02	07/15/02	07/18/02	07/19/02	07/08/02
1,2-Dichtoropropane		QN	GΝ	ΩN	QN	ND	QN	QN	QN
cis-1,2-Dichloropropene		QN	QN	ΩN	QN	ND	QN	ON	ND
trans-1,2-Dichloropropene		ΠN	QN	QN	ND	ND	QN	QN	QN
Ethylbenzene	5.5 ppm (5500 ppb)	ND	QN	QN .	QN	ND	QN	QN	ND
2-Hexanone		QN	QN	QN	ΩN	QN	QN	QN	QN
Isopropylbenzene	5.0 ppm (500 ppb)	QN	GN	ΩN	QΝ	ND	QN	QN	ON N
Methyl acetate		QN	QN	GN	ND	ND	QN	QN	QN
Methylene Chloride	0.1 ppm (100 ppb)	QN	ΩN	ΠN	QN	QN	QN	QN	Q
Methyl tert butyl ether	0.12 ppm (120 ppb)	QN	ND	QΝ	ND	ND	ND	ON	ND ND
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	QN	ND	QN	ND	ND	QN	ON	QN
Methylcyclohexane		ND	QN	QN	ND	ND	ND	QN	ND
Styrene		QN	ND	GN	ND	ND	ND	QN	ND
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	QN	ND	ON	ND	ND	ND	ON	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	ND	ND	ND	ND	QN	ND	QN	1 ا
Toluene	1.5 ppm (1500 ppb)	ND	QN	ΩN	QN	QN	QN	ND	QN
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ND	ND	ND	ND	QN	ND	ND	ND
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	ON	QN	QN	ND	QN	ND	ND	QN
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ON	ON
1,1,2-Trichloro-1,2,2-trifluor		ND	QN	ND	ND	ND	ND	QN	ND
Trichlorofluoromethane		DN	QN	QN	Q	QN	Q.	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	ND	ND	DN	ND	ON	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	QN	QN	QN	QN	ND	QN	_ QN	QN
P-Cymene		QN	ND	ND	ON	Q	Q.	ND	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	DN	QN	QN	QN.	QN	9	QN	ND
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ON	ΩN	ON	QN	QN	S S	ON	ND
n-Butylbenzene		QN	QN	QN	QN	ND	ND	QN	ND
sec-Butylbenzene		QN	Q	QN	ND	QN	QN	Q	QN

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

April 2003

Boring/Well Number, Sample Collection Interval and Sample Date

		9	ALL IVALIED	CI, Campri	COUNTING	ו דוורו אמו מ	and Sample Date	Dalc		
	NYSDEC	B-17	B-18	B-17 B-18 B-19 B-20 B-21	B-20	B-21	B-22	B-23	B- 23D	B-24
	Recommended	8' - 12'	5. 6,	8'- 10'	12' - 14'	8' - 10'	4'-6'	10'-11'	10' - 11'	18' - 20'
VOC Compound	Cleanup Objective	07/09/02	07/10/02	07/24/02	07/26/02	07/24/02	07/09/02	07/25/02	07/25/02	07/31/02
Trichloroethene	0.7 ppm (700 ppb)	QN	ND	UN	QN	DN	QN	QN	QN	910 D
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	ND	ND	ND	QN	QN	QN	Q.	Z00 D
Trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	Q	ND	ND	QN	ON	ND	QN	QN	3 J
Vinyl chloride	0.2 ppm (200 ppb)	QN	ΩN	ND	QN	ND	ND	ND	QN	QN
Acetone	0.2 ppm (200 ppb)	ND	QN	ND	ND	QN	ND	ND	Q.	Q
Benzene	0.06 ppm (6 ppb)	QN	ĠΝ	ND	ND	QN	ND	ND	QN	9
Bromodichloromethane		Q	ΟN	QN	QN	Z	ND	ΠN	QN	2
Bromoform		QN.	QN	QN	QN .	ND	QN	ND	QN	S
Bromomethane		2	QN	ND	ND	ND	ND	ND	QN	QN
2-Butanone	0.3 ppm (300 ppb)	ND	QN	ND	ND	ND	ON	aN	2	QN
Carbon Tetrachloride	0.6 ррт (600 ррь)	ND	ΠN	ND	ND	QN	QN	QΝ	Q	QN
Carbon Disulfide	2.7 ppm (2700 ppb)	QN	ΩN	QN	ND	ND	GN	QN	Q	31
Chloromethane		Q	QN	ND	ND	ND	ND	ΠN	QN	Q
Chlorobenzene	1.7 ppm (1700 ppb)	2	2	g	Ð	QN	ND	ND	QN	QN
Chloroethane	1.9 ppm (1900 ppb)	Q	Q	QN	ND	ND	ND	ΩN	QN	QN
Cyclohexane		ND	ND	ND	2.3	QN	QN	QN	Q	9
Chloroform	0.3 ppm (300 ppb)	ND	QN	ND	ND	ND	ND	QN	QN	S
1,2-Dibromo-3-chloropropane		2	2	ND	ND	ND	ND	ND	QN	QN
Dibromochloromethane		2	Q	ND	ND	ND	ND	ND	QN	QN
Dichlorodifluoromethane		Q	9	QN	ND	ND	ND	QN	QN	ON
1,2-Dibromoethane		ON.	ND	ND	ND	ON	ND ,	QN	QN	QN
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)	ND	QN	ND	ND	ND	ON	ΠN	QN	Q
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	Q	Q	ND	QN	ND	ND	ON	QN	Q
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	Q	Q.	Q	QN	ND	ND	QN	QN	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	<u>N</u>	2	2	Ð	QN	2	ND	QN	QN
1,2-Dichloroethane	0.3 ppm (300 ppb)	QN	2	QV	2	QN	S	ΩN	Q	QN
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	Q.	ON	QN ND	ND	ND	ON	QΝ	QN

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 and estimated concentration in diluted sample

April 2003

Boring/Well Number, Sample Collection Interval and Sample Date

	В	oring/wei	boring/well Number,		ollection	Sample Collection Interval and Sample Date	1 Sample 1	Jate		
	NYSDEC	B-17	B-18	B-19	B-20	B-21	B-22	B-23	B- 23D	B-24
	Recommended	8' - 12'	9 - 9	8' - 10'	12' - 14'	8' - 10'	4' - 6'	10,-11,	10' - 11'	18' – 20'
VOC Compound	Cleanup Objective	07/09/02	07/10/02	07/24/02	07/26/02	07/24/02	07/09/02	07/25/02	07/25/02	07/31/02
1,2-Dichloropropane		QN	ND	QN	QN	QN.	QN	QN	QN	QN
cis-1,2-Dichloropropene		QN	ND	ND	ND	۵N	QN	QN	ON	ND
Trans-1,2-Dichloropropene		GN	ND	QN	ND	ND	ND	ON	QN	ON O
Ethylbenzene	5.5 ppm (5500 ppb)	QN	DN	QN	ND	ON	ND	ΠN	QN	ΩN
2-Hexanone		QN	QN	ND	ND	QN	QN	ΠN	QN	ND
Isopropylbenzene	5.0 ppm (500 ppb)	QN	ND	QN	ND	ND	ND	ΟN	Q.	ND
Methyl acetate		QN	ON	QN	ND	QN	ON	QΝ	QN	ND
Methylene Chloride	0.1 ppm (100 ppb)	ON	ND	QN	ND	ND	ND	QN	QN	ND
Methyl tert butyl ether	0.12 ppm (120 ppb)	QN	ND	ND	ND	QN	ND	QN	QN	QN
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ND	ΩN	ND	ND
Methylcyclohexane		QN	QN	QN	QN	DN	ND	QN	ON	QN
Styrene		QN	ND	QN	QN	ND	ND	QN	Ð	Q
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	GN	QN	QN	QN	ND	ND	QN	QN	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	QN	ND	ON	QN	ND	ND	ND	ND	ND
Toluene	1.5 ppm (1500 ppb)	ΩN	ON	ON	QN	QN	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	DN	ND	ND	ND	ND	ND	ND	QN	QN
1,1,1-Trichtoroethane	0.8 ppm (800 ppb)	ND	ND	ND	ND	ND	ND	QN	QN	QN
1,1,2-Trichtoroethane		QN	ND	QN	ND	ND	ND .	QN	QN	QN
1,1,2-Trichloro-1,2,2-trifluor		QN	DN	ND	ND	DN	ND	QN	QN	QN
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	QN	QN
total Xylenes	1.2 ppm (1200 ppb)	QN	ND	ND	ND	QN	ND	ND	ΟN	QN
n-Propylbenzene	14 ppm (14000 ppb)	QN	ND	ND	ND	ND	ND	ND	QN	QN
P-Cymene		ND	QN	ND	ON	QN	ND	QN	QN	ND
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ON	ND	ND	ND	ND	ND	QN	ND	QN
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	QN	ND	ND	ND	ND	ND	QN	QN	ND
n-Butylbenzene		Q	2	Q.	ND	QN	ND	QN	Ð	ND
sec-Butylbenzene		QN	QN	QN	DN	QN	QN	QN	QN	QN

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

April 2003

Boring/Well Number, Sample Collection Interval and Sample Date

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

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

BDJ

April 2003

Boring/Well Number, Sample Collection Interval and Sample Date

	NVCDEC	B-25 B-250	חבים	90'0	2.37	B-28	D-29 Cordon Coll N	S lies and S
		3 3	7	3 7	1 7	2	מוו מבוו במווים	O IIOO IIOO
	Recommended	.L16		71-12	12 13.	71' - 12'	00.5	00.5
VOC Compound	Cleanup Objective	07/23/02	07/23/02	07/23/02	07/26/02	07/23/02	07/19/02	07/19/02
1,2-Dichloropropane		ΩN	QN	QN	QN	ON	QN	QN
cis-1,2-Dichloropropene		QN	an	ΩN	ΠN	QN	QN	QN
trans-1,2-Dichloropropene		QN	QN	ND	ND	ND	QN	QN
Ethylbenzene	5.5 ppm (5500 ppb)	QN	QN	ND	ND	ND	QN	QN
2-Hexanone		QN	ON	ND	ND	ND	QN	QN
Isopropylbenzene	5.0 ppm (500 ppb)	QN	QN	ND	ND	ND	QN	ΩN
Methyl acetate		QN	QN	QN	QN	ON	an	ΩN
Methylene Chloride	0.1 ppm (100 ppb)	QN	QN	٩	QN	QN	GN	GN
Methyl tert butyl ether	0.12 ppm (120 ppb)	QN	ND	ND	GN	QN	ΩN	GΝ
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	QN	QN	ND	QN	QN	QΝ	QN
Methylcyclohexane		QN	QΝ	QN	QN	ND	QN	QN
Styrene		GN	QN	QN	ΩN	QN	GN	QN
1,1,2,2-Tetrachloroethane	0.6 ppm (600 ppb)	QN	ND	ND	ON	ND	<u>ON</u>	QN
Tetrachloroethene	.* .	QN	ND	ND	ND	ND	ND	QΝ
Toluene	1.5 ppm (1500 ppb)	QN	ND	ND	ND	ND	ND	QN
1,2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	QN	QN	QN	ND	ND	GN	QΝ
1,1,1-Trichloroethane	0.8 ppm (800 ppb)	QN	QN	ND	ON	ND	QN	QN
1,1,2-Trichloroethane		QN	ND	ND	ΟN	ND	QN	QN
1,1,2-Trichloro-1,2,2-trifluor		QN	ND	QN	ON	ND	QN	GN
Trichlorofluoromethane		QN	ND	ND	ON	ND	ND	ΩN
total Xylenes	1.2 ppm (1200 ppb)	QN	ND	ND	ΩN	ND	QN	ΩN
n-Propylbenzene	14 ppm (14000 ppb)	QN	ND	ND	ΠN	ND	QN	QN
P-Cymene		QN	ND	ΩN	ΠN	ND	QN	GN
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	QN	ND	ND	ΩN	ND	GN	GN .
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	QN	ND	ND	αN	ND	QN	QN
n-Butylbenzene	***************************************	QN	ND	ND	QΝ	ND	QN	QN
sec-Butylbenzene		QN	QN	ND	QN	ND	QN	QN

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

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VOC LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES TABLE 7

Groundwater Monitoring Well and Sampling Date

		Croundwa	roundwater Monitoring		well and Sampling Date	ing Date				
	NYSDEC	MW-1	Q1-WM	MW-2	MW-3	MW-4	MW-5	MW-6	Z-MM	MW-7D
	Class GA Standard									
VOC Compound	T0GS 1.1.1	09/04/02	09/04/02	08/28/02	08/28/92	08/28/02	08/28/02	08/29/02	08/29/02	08/29/02
Trichloroethene	5.0 ug/L	380	320	4.7.3	2.3J	1.8J	12	2.4 J	56	23
cis-1,2-Dichtoroethene	5.0 ug/L	380	300	18	9.6	2.0 J	1.7.1	400	420	380
trans-1,2-Dichloroethene	5.0 ugL	4.)	4.0 J	ND	ND	ND	ND	3.4 J	Q	2.1 J
Vinyl chloride	2.0 ug/L	4 J	3.2 J	ΠN	3.1J	ON	QN	QN	4 J	3.3 J
Acetone	25.0 ug/L	5 J	QN	QN	ND	ON	QN	QΝ	Q	QN
Benzene	1.0 ug/L	QN	GN	QN	GN	QN	QN	QN	QN	Q
Bromodichloromethane	50.0 ug/L	QN	QN	QN	ND	ND	ON	QN	QN	Q
Bromoform	50.0 ug/L	QN	QN	ND	ND	QN	QN	QN	GN	Q
Bromomethane	5.0 ug/L	ND	ND	QN	ND	ND	ON	ΠN	QN	S
2-Butanone (MEK)	50.0 ug/L	ND	ND	ND	ND	ND	QN	αN	QN	QN
Carbon Disulfide	60.0 ng/L	ND	ON	QN	QN .	ND	ND	GN	QN	2
Carbon Tetrachloride	5.0 ug/L	ND	ND	ND	ND	ND	QN	ΠN	QN	QN
Chloromethane (methyl chloride)	5.0 ug/L	ND	ON	ND	ND	ND	ND	ND	QN	QN
Chlorobenzene	5.0 ug/L	ND	ND	ND	QN	QN	GN	αN	Q	Q
Chloroethane	5.0 ug/L	ND	ND	ND	QN	ND	QN	ΩN	QN	QN
Cyclohexane (hexamethylene)	none: Table 3	ND	QN	ND	ND	QN	GN	QN	QN	9
Chloroform	7.0 ng/L	ND	QN	ND	ND	ND	QN	QN	GN	QN
1,2-Dibromo-3-chloropropane	0.04 ug/L	ND	QN	ND	ND	ND	QN	ΩN	QN	QN
Dibromochloromethane	5.0 ug/L	2	ND	ND	ND	ND	ND	QN	ΠN	QN
Dichlorodifluoromethane	5.0 ug/L	ND	ND	ND	ND	ND	ND	αN	GN	Q
1,2-Dibromoethane (ethytene dibromide)	6×10-4 ug/L	ON.	QN	QN	QN	QN	QN	QΝ	QN	QN
1,2-Dichlorobenzene	3.0 ug/L	QN	QN	ND	ND	ND	QN	QN	QN	Q
1,3-Dichlorobenzene	3.0 ug/L	ND	ND	ND	ND	ND	QN	αN	QΝ	QN
1,4-Dichlorobenzene	3.0 ug/L	ND	QN	ND	ND	ND	DN	ΟN	QΝ	QN
1,1-Dichloroethane	5.0 ug/L	N	ND ND	ND	ND	ND	ND	QN	QΝ	QN

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 and estimated concentration in diluted sample

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VOC LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES TABLE 7 Continued

Groundwater Monitoring Well and Sampling Date

		Groundwar	oundwater Monitoring well	ing well a	and Sampining Date	ng Date				
	NYSDEC	MW-1	MW-1D	MW-2	MW-3	MW-4	MW-5	MW-6	V-WM	MW-7D
	Class GA Standard									
VOC Compound	TOGS 1.1.1	09/04/02	09/04/02	08/28/02	08/28/92	08/28/02	08/28/02	08/29/02	08/29/02	08/29/02
cis-1,3-Dichloropropene	0.4 ng/L	QN	GN	QN	QN	ΠN	QN	GN	QΝ	QN
trans-1,3-Dichloropropene	0.4 ug/L	ΠN	ND	UN	QN	ND	QN	QN	QN	Q
Ethylbenzene	5.0 ug/L	ΠN	QN	ND	ND	ND	ND	ND	QN	QN
2-Hexanone	50.0 ug/L	ND	QN	ΝD	QN	ND	ΟN	ND	QN	Q.
Isopropylbenzene	5.0 ug/L	QN	QN	ND	QN	ND	QN	ON	QN	Q.
Methyl acetate	none: Table 3	ON	QN	ND	ND	ND	QΝ	ON	QN	QN
Methylene chloride	5.0 ug/L	ΩN	QN	ND	ND	QN	QN	ND	ΠN	ND
Methyl tert butyl ether	10.0 ug/L	QN	QN	ND	QN	ND	QN	QN	QN	QN
4-Methyl-2-pentanone	none: Table 3	ΩN	ND	ND	ND	QN	QN	ND	ΠN	Q
Methylcyclohexane	NA: Not Listed	QN	_ QN	ND	QN	QN	QN	QN	QN	Q.
Styrene	5.0 ug/L	ON	QN	ND	ND	QN	QN	QN	QN	S.
1,1,2,2-Tetrachloroethane	5.0 ug/L	QN	ΠN	QN	QN	ON	QN	ND	QN	S _N
Tetrachloroethene	5.0 ug/L	QN	ND	ND	DN	ND	ND	QN	ΠN	QN
Toluene	5.0 ug/L	QN	DN	ND	ND	ND	ND	ND	ΠN	QN
je	5.0 ug/L	QN	QN	ND	ND	ND	ND	QN	GN	QN
	5.0 ug/L	QN	ON	ND	QN	ND	QN	ΟN	QN	QN
1,1,2-Trichloroethane	1.0 ug/L	GN	GN	ΠN	QN	ND	ND	QN	QN	Ð
1,1,2-Trichloro-1,2,2-trifluorethane	5.0 ug/L	QΝ	QN	ND	ND	ND	ND	QN	QN	QN
Trichlorofluoromethane	5.0 ug/L	QN	N	Q	Q	ND	QN	ND	QΝ	QN
	5.0 ug/L	Q	Q	Q	2	QN	S	ND	QN	QN
N-Propylbenzene	5.0 ug/L	ND	QN	ND	QN	ND	ND	ND	QN	2
ropyltoluene)	5.0 ug/L	QN	ND	ND	QN	ND	QN	QN	QN	Q
	5.0 ug/L	QN	ΩN	ND	ND.	ND	ND	ND	QN	2
enzene	5.0 ug/L	QN	ΩN	ND	QN	QN	QN	ND	QN	QN
N-Butylbenzene	5.0 ug/L	QN	QN	ND	QN	QN	QN	ΠN	QN	Q
sec-Butylbenzene	5.0 ug/L	QΝ	ΠN	QN	QN	QN	QN	ΩN	QN	QN
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

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VOC LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES **TABLE 7 Continued**

	NYSDEC	8-WM	WW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15
	Class GA Standard								
VOC Compound	TOGS 1.1.1	08/28/02	08/28/02	08/28/02	08/29/02	08/29/02	08/28/02	08/29/02	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	QN	QN	QN	2300	3000	69	130	380
trans-1,2-Dichloroethene	5.0 ugL	GN	ND	ND	16	28	1.3 J	1.6 J	Q.
Vinyl chloride	2.0 ug/L	GΝ	QN	ON	31	15	QN	3.6 J	QN
Acetone	25.0 ug/L	GN	ND	QN	ND	QN	QN	2	9
	1.0 ug/L	ΠN	ND	ND	QN	QN	Q	QN	9
oromethane	50.0 ug/L	αN	QN	ND	ND	ND	QN	Q	Q.
	50.0 ug/L	QN	ND	ND	ND	ND	QN	QN	QN
	5.0 ug/L	QN	ND	ND	ND	ND	QN	QN	Q.
Ŷ	50.0 ng/L	9	ND	ND	ND	ND	QN	ΩN	QN
	60.0 ng/L	QN	ND	QN	ND	QN	QN	QN	2
	5.0 ug/L	ND	ND	ND	ND	Q.	QN	QN.	Q.
(methyl chloride)	5.0 ug/L	ND	ND	ND	QN	ND	Q.	S	QN
9	5.0 ug/L	ND	DN	ND	UD	ND	QN	2	Q.
	5.0 ug/L	Q.	ND	ND	ND	QN	QN	2	S
Cyclohexane (hexamethylene)	none: Table 3	QN	ND	ND	ND	QN	QN	QN	2
	7.0 ug/L	ND	ND	QN	QN	QN	QN	QN	QN
opane	0.04 ug/L	QΝ	ND	QN	ND	9	Q	Q.	Q
	5.0 ug/L	UD	ND	JUD	ND	QN	QN	QN	QN
hane	5.0 ug/ L	ND	ND	ND	ND	ND	ND	QN	Q.
	6 x 10-4 ug/L	QN	QN	Q	QN	QN	Q	S	QN
	3.0 ug/L	ON	ON	QN	ND	QN	QN	2	Q
	3.0 ug/L	ND	ND	QN	ΩN	QN	Q.	S	2
ē	3.0 ug/L	QN	ND	ND	QN	QN	2	Q.	S
	5.0 ug/L	Q	ND	QN	ND	QN	QN	S	Q.
	0.6 ug/L	2	S D	ND	ND	QΝ	QN	Q.	Q
	5.0 ug/L	QN	ND	ND	3.1 J	8.3	QN	QN	QV
1,2-Dichloropropane	1.0 ng/L	QN	ON.	QN	QN	QN	QN	QN	QN
7					,				

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

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VOC LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES TABLE 7 Continued

	NYSDEC	MW-8	6-WW	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15
	Class GA Standard								
VOC Compound	TOGS 1.1.1	08/28/02	08/28/02	08/28/02	08/29/02	08/29/02	08/28/02	08/29/02	08/29/02
2-Hexanone	50.0 ug/L	ND	QN						
ne	5.0 ug/L	ND	ND	ND	QN	QN	QN	QN	QN
Methyl acetate	none: Table 3	ND	QN	QN	QN	QN	QN	QN	N
	5.0 ug/L	ND	ND	QN	QN	QN	QN	9	QN
Methyl tert butyl ether	10.0 ug/L	QN	Q	QN	9	QN	Q	Q	QV
4-Methyl-2-pentanone	none: Table 3	QN	QN	ND	QN	QN	2	QN	QN
yclohexane	NA: Not Listed	ON	ON	ΟN	QN	QN	QN	Q	Q
	5.0 ug/L	QN	QN	ΠN	QN	QN	QN	QN	QN
1,1,2,2-Tetrachloroethane	5.0 ug/L	ND	QN	ΟN	QN	QN.	QN	Q	QN
Tetrachloroethene	5.0 ug/L	QN	QN	ΠN	QN	1.0 J	QN	QN	ON.
	5.0 ug/L	QN	QN	ND	QN	Q.	GN	Q	QN
9	5.0 ug/L	ND	QN	ND	QN	2	9	2	QN
	5.0 ug/L	ND	ON	ND	ND	QN	QN	2	QN
1,1,2-Trichloroethane	1.0 ug/L	QN	QN	ND	QN	QN	Q.	QN	QN
1,1,2-Trichloro-1,2,2-trifluorethane 5.0 ug/L	5.0 ug/L	ND	QN	ND	ND	QN	QN	GN	S
methane	5.0 ug/L	Q	ND	ON	QN	QN	QN	QN	QN.
	5.0 ug/L	ND	ND	ND	QN	QN	QN	QN.	S
	5.0 ug/L	ND	QN	ND	ΠN	ΩN	QN	Q.	2
oluene)	5.0 ug/L	QN	QN	ND	QN	QN	QN	QN	QN
	5.0 ug/L	QN	ND	ND	ND	QN	QN	Q.	9
enzene	5.0 ug/L	ND	ND	QN	QN	QN	Ð	ND N	Q
	5.0 ug/L	QN	ND	QN	QN	QN	QN	Ð	QN
	5.0 ug/L	Q	QN	QN	QN	QN	QN	ON	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

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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 <u>Hydrogeologic Setting</u>

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)											
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-A¹ and B-B¹. 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	Subsurface soil at source
	soil particles	areas
	Vertical migration	Groundwater
Contaminated	Groundwater flow	Groundwater downgradient
Groundwater	Volatilization	Vadose zone
	Extraction via pumping	Water supply systems
	Discharge to Thatcher Creek or	Surface soil
	Cattaraugus Creek	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 <u>RECOMMENDATIONS</u>

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 offsite 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.

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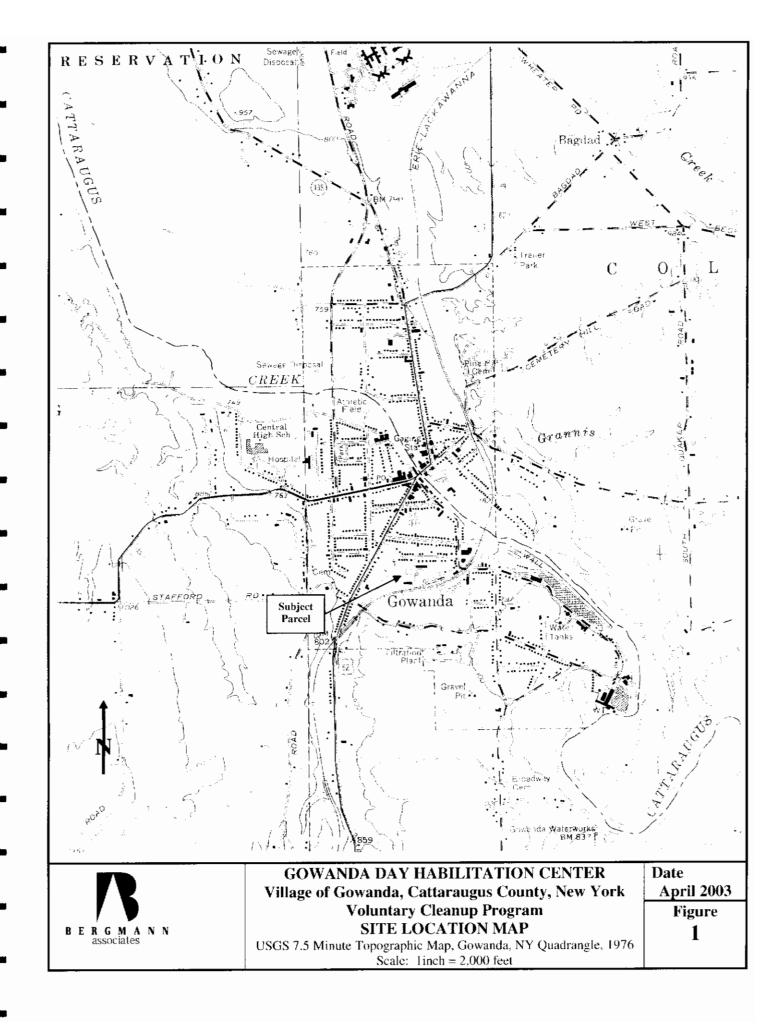
New York State Department of Environmental Conservation, Division of Water, Technical and Operational Guidance Series 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitation, dated June 1998, with April 2000 Addendum.

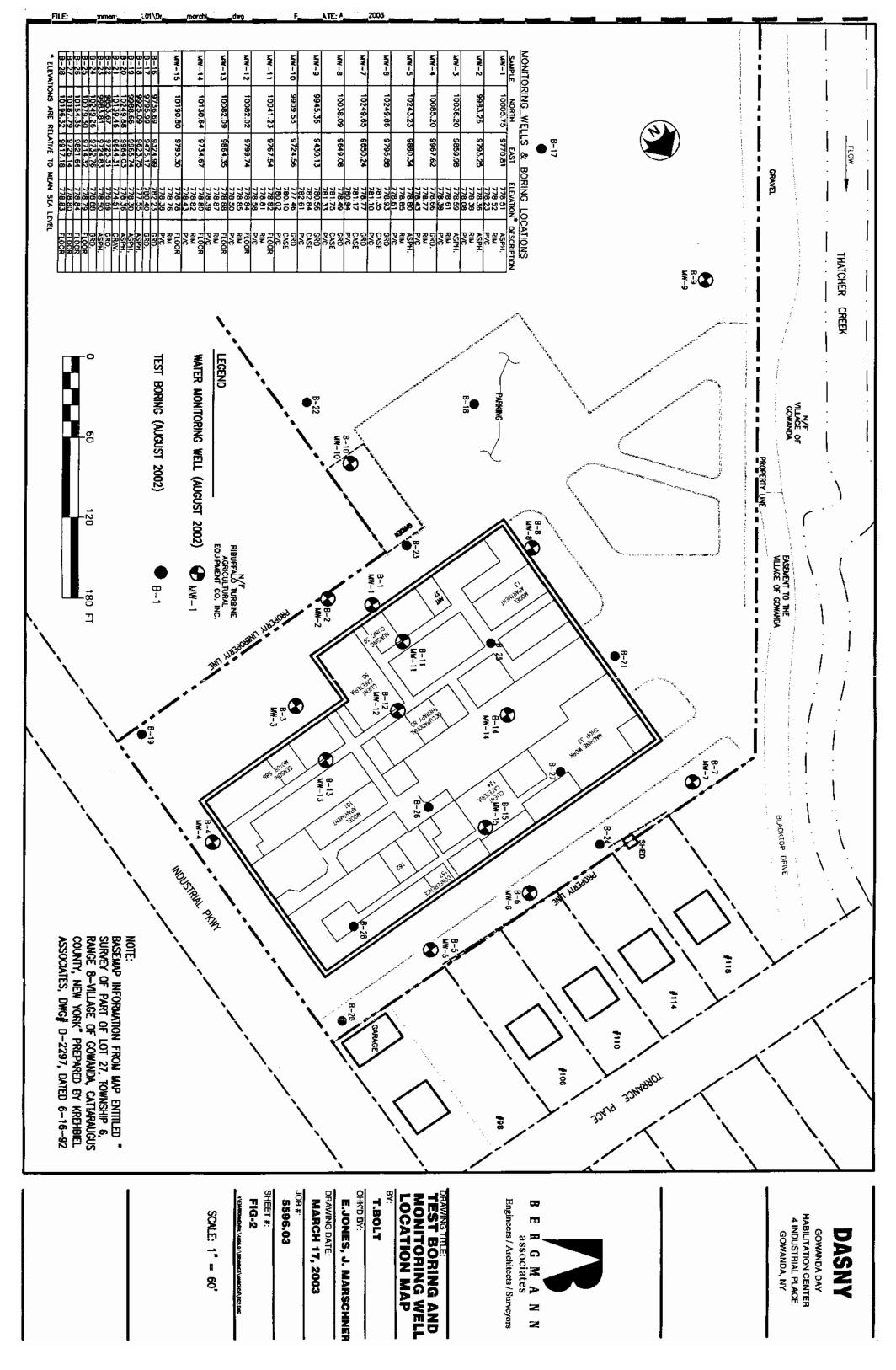
New York State Museum Map and Chart Series #15, "Geologic Map of New York, Niagara Sheet, 1970.

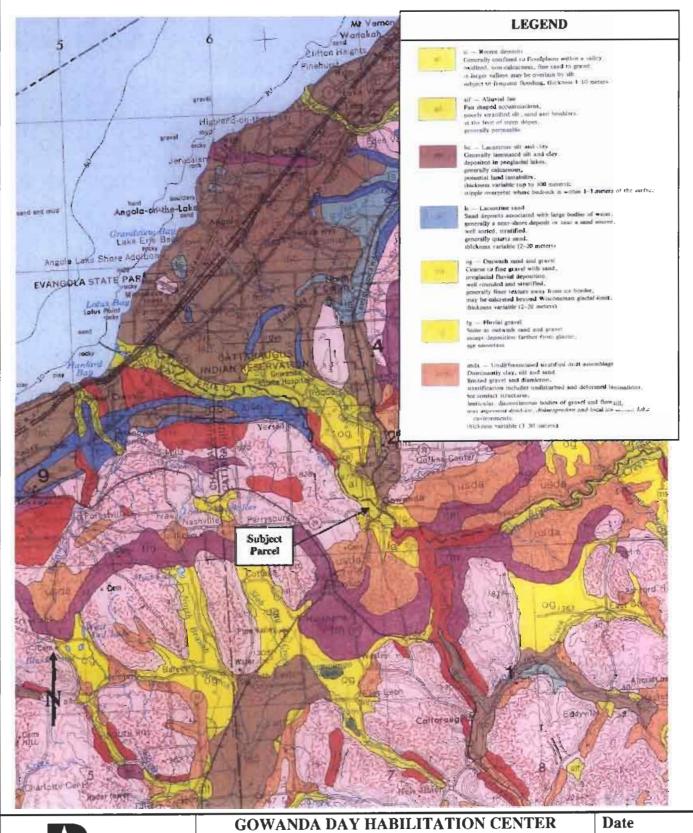
New York State Museum Map and Chart Series #40, "Surficial Geologic Map of New York, Niagara Sheet, 1988.

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

FIGURES





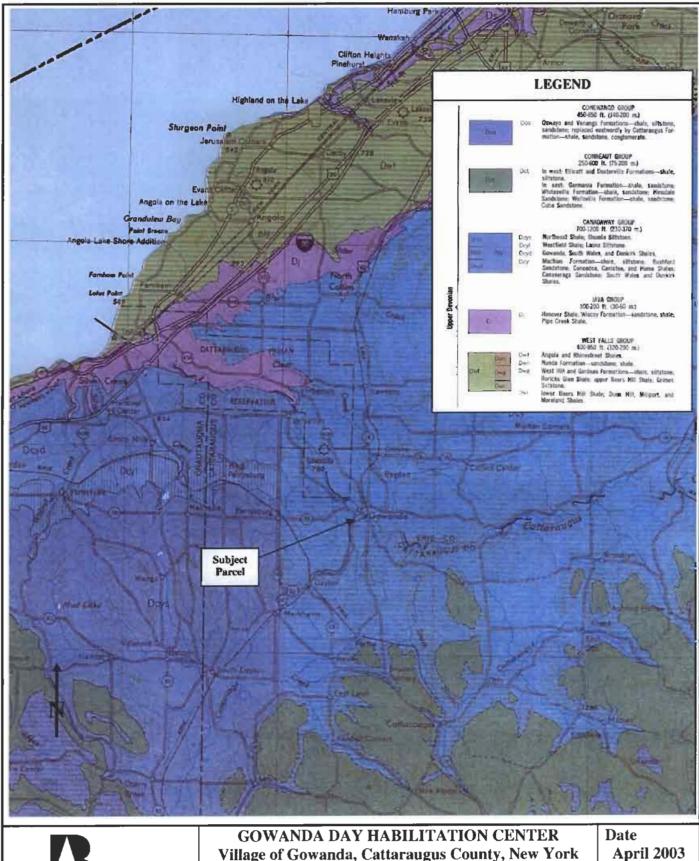


B E R G M A N N associates

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

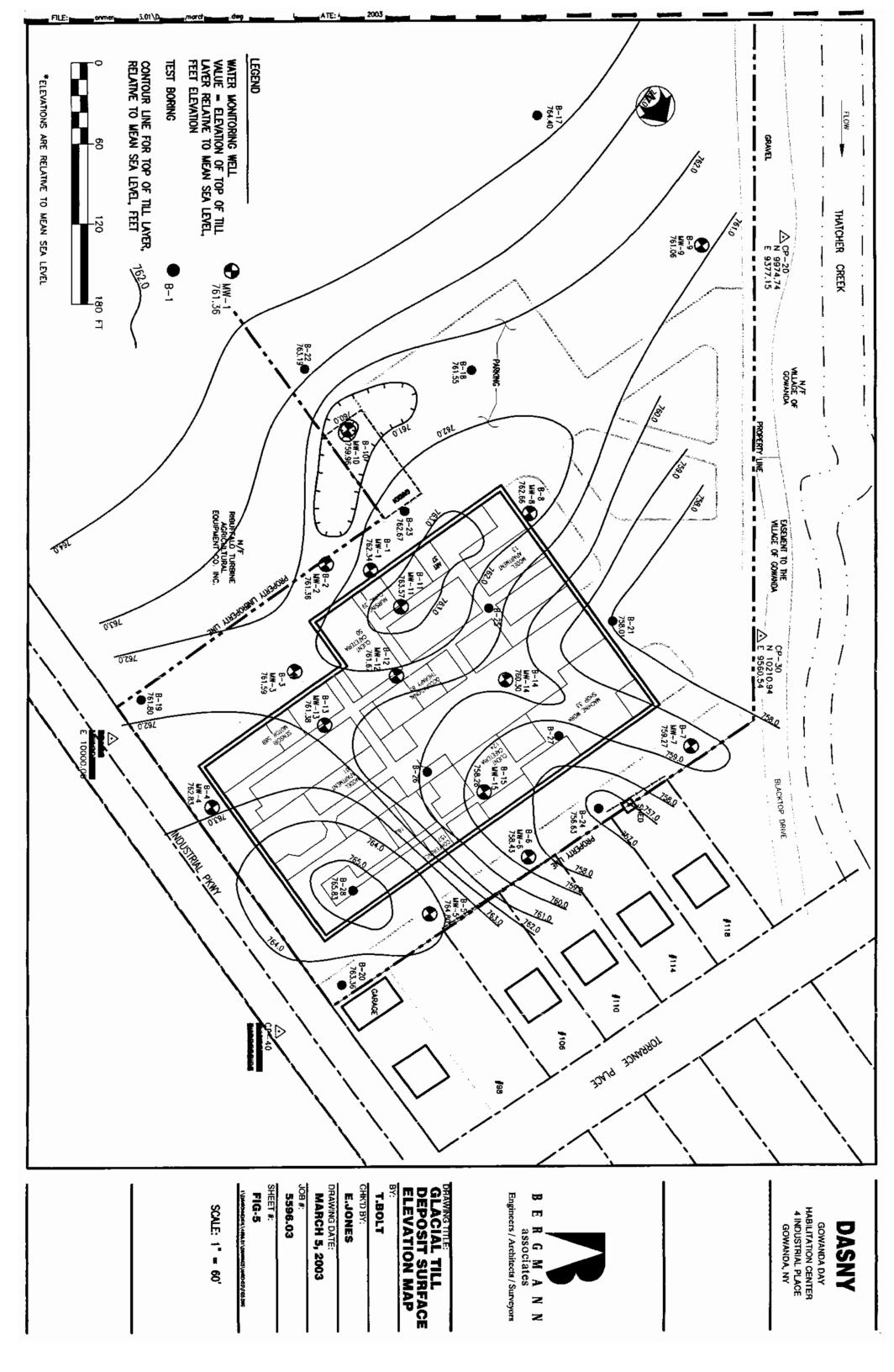
Figure 3

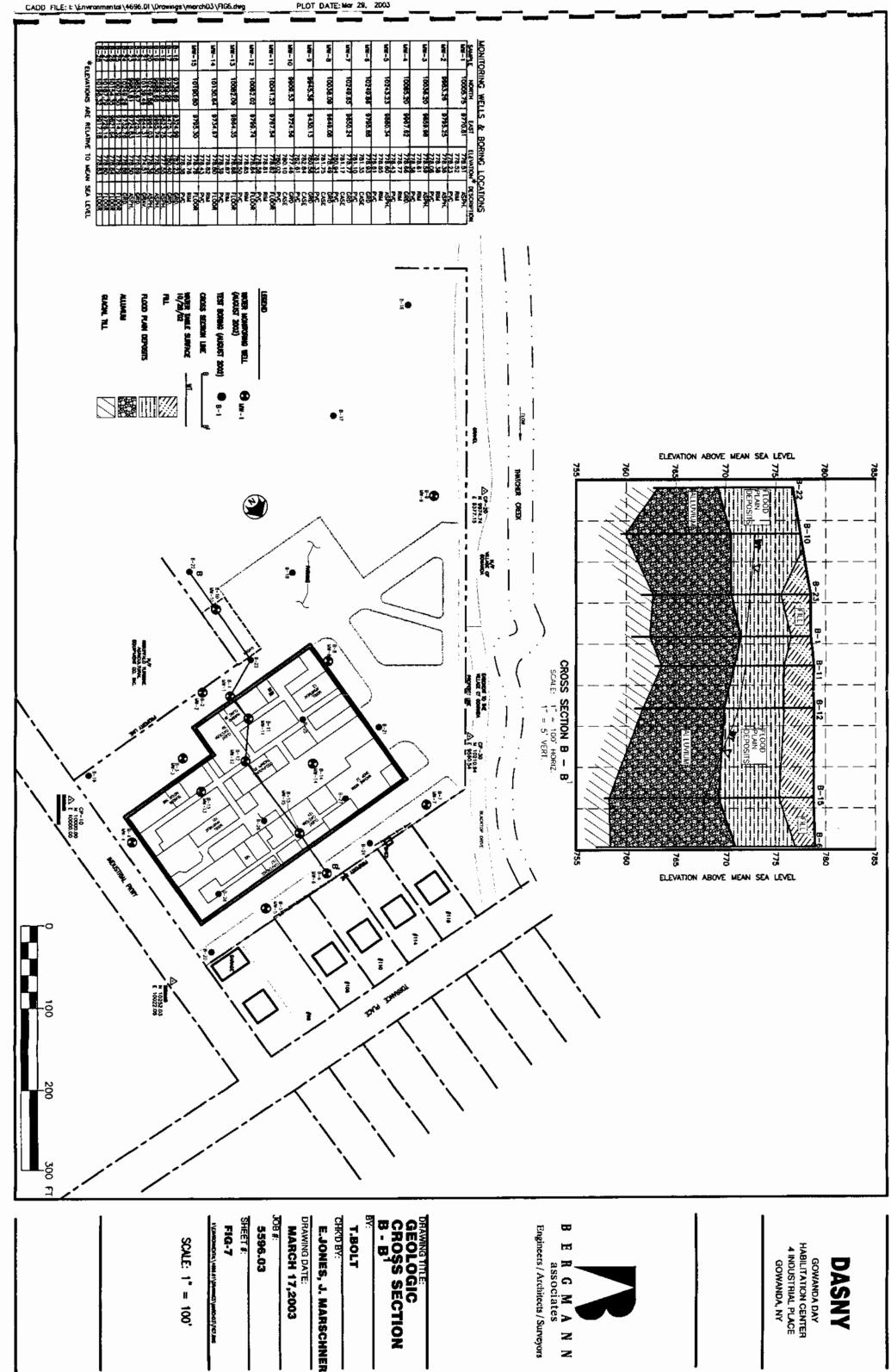


B E R G M A N N associates

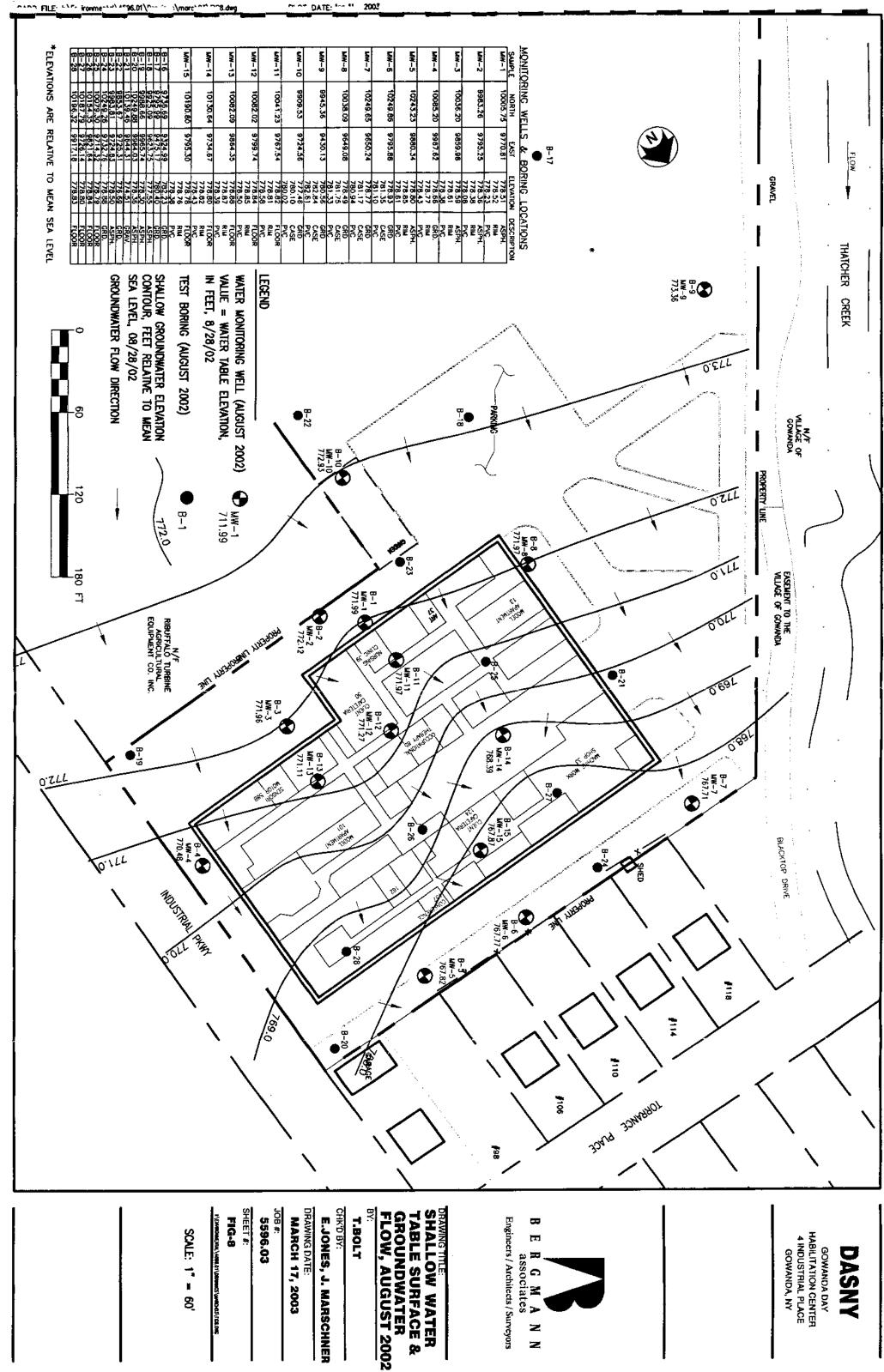
GOWANDA DAY HABILITATION CENTER
Village of Gowanda, Cattaraugus County, New York
Voluntary Cleanup Program
BEDROCK GEOLOGY MAP

Geologic Map of New York, Niagara Sheet, 1970 Approximate Scale: 1:250,000 (1 inch = 4 miles) Figure 4

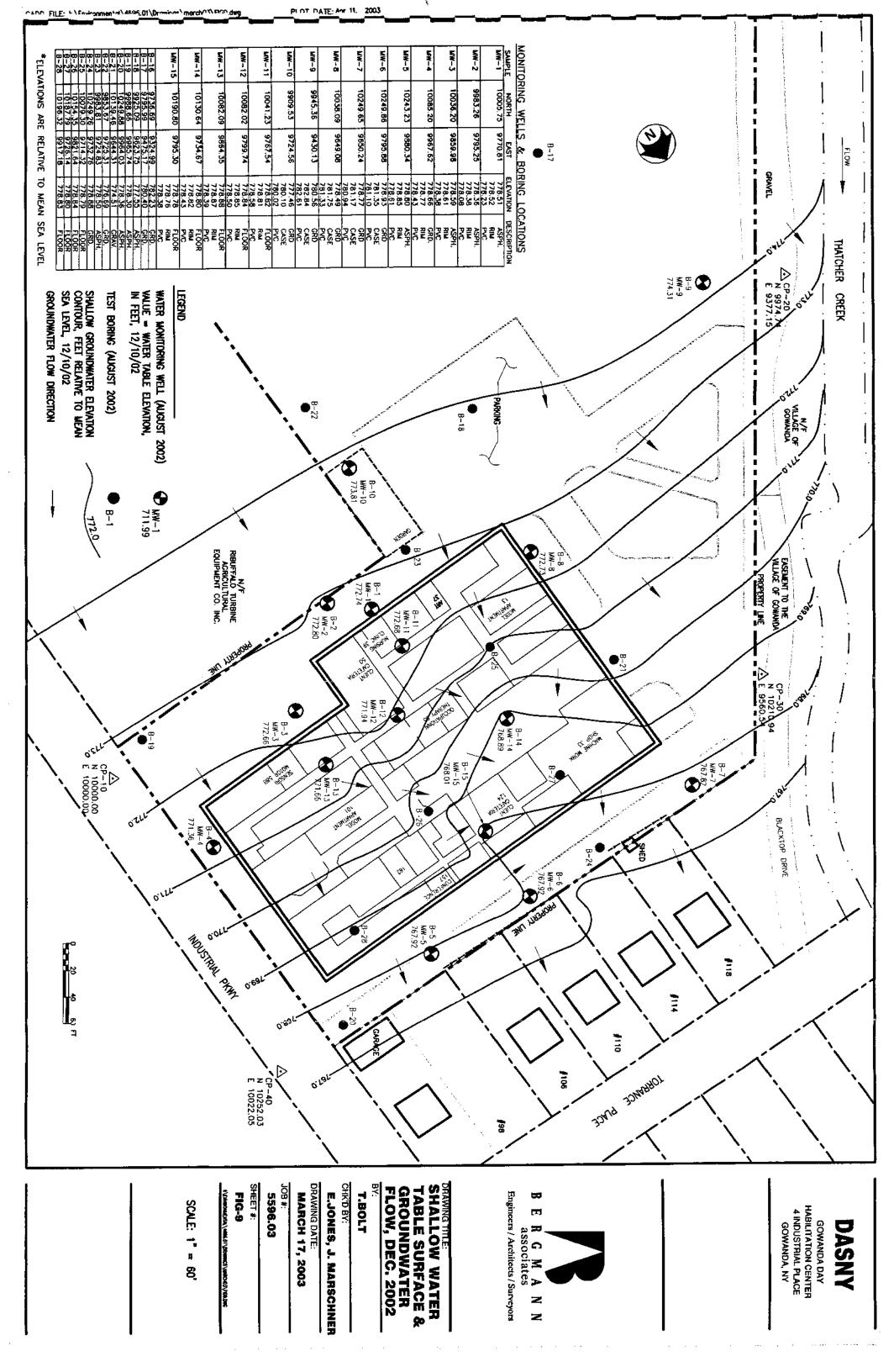


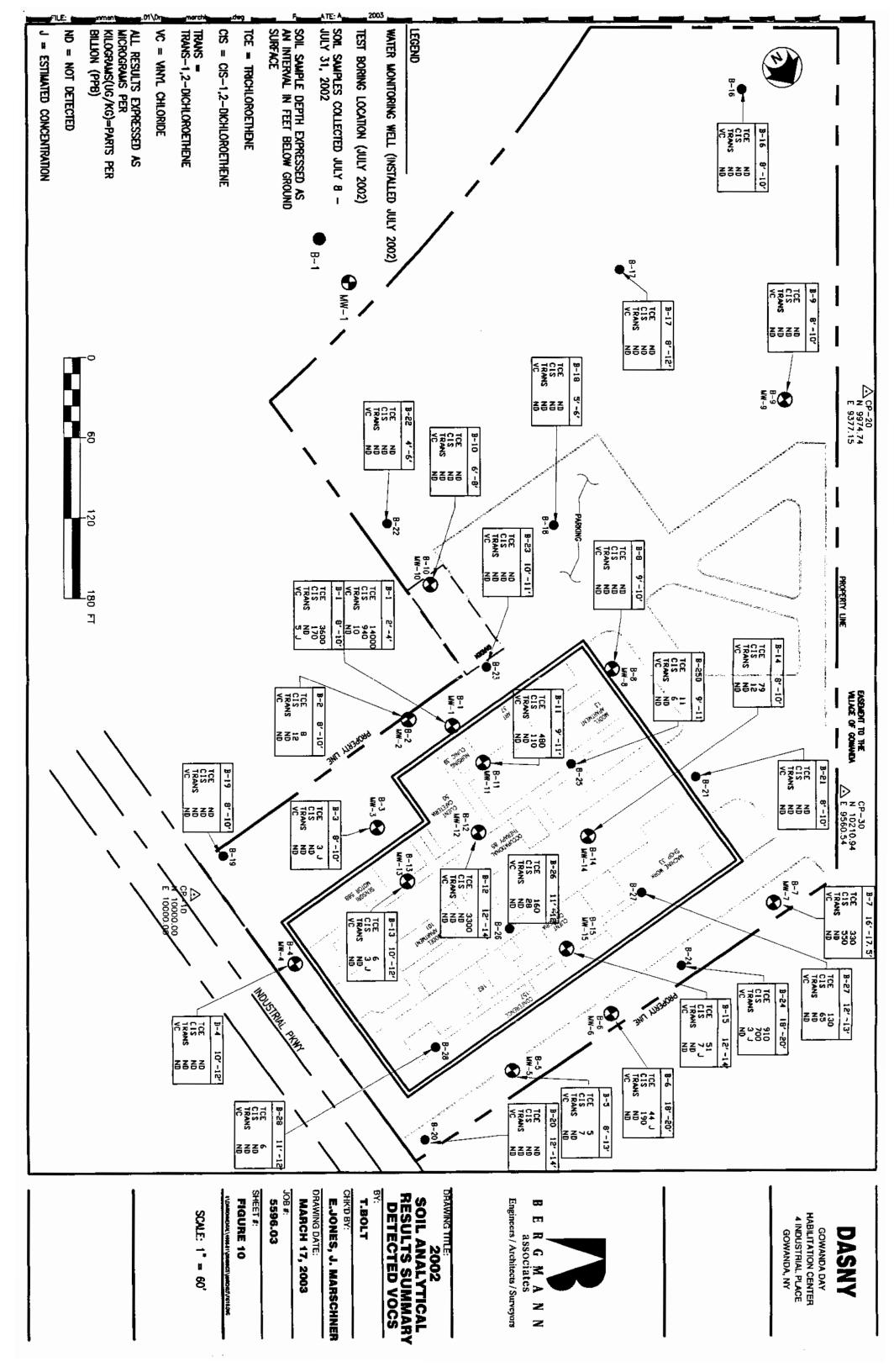


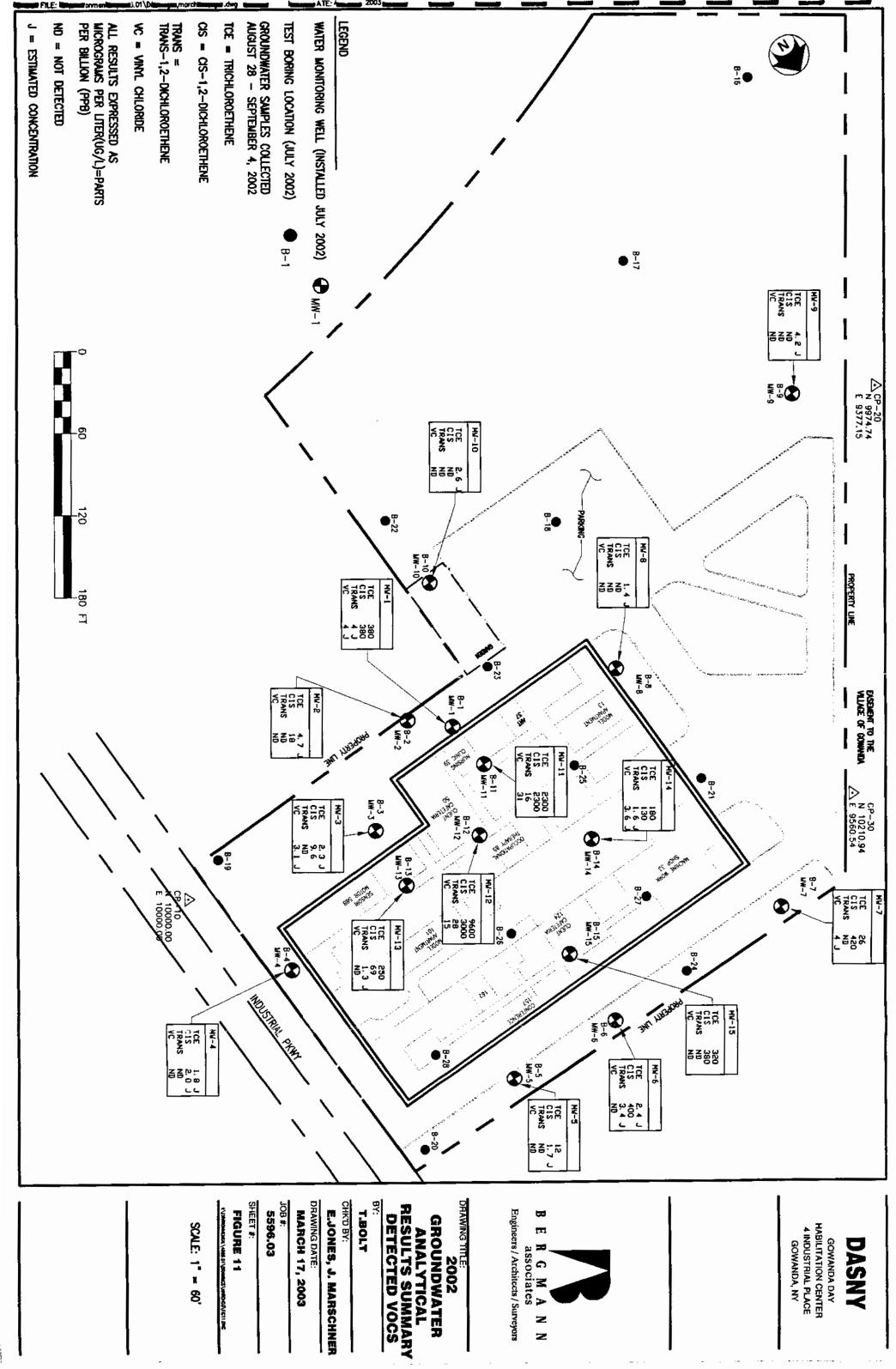
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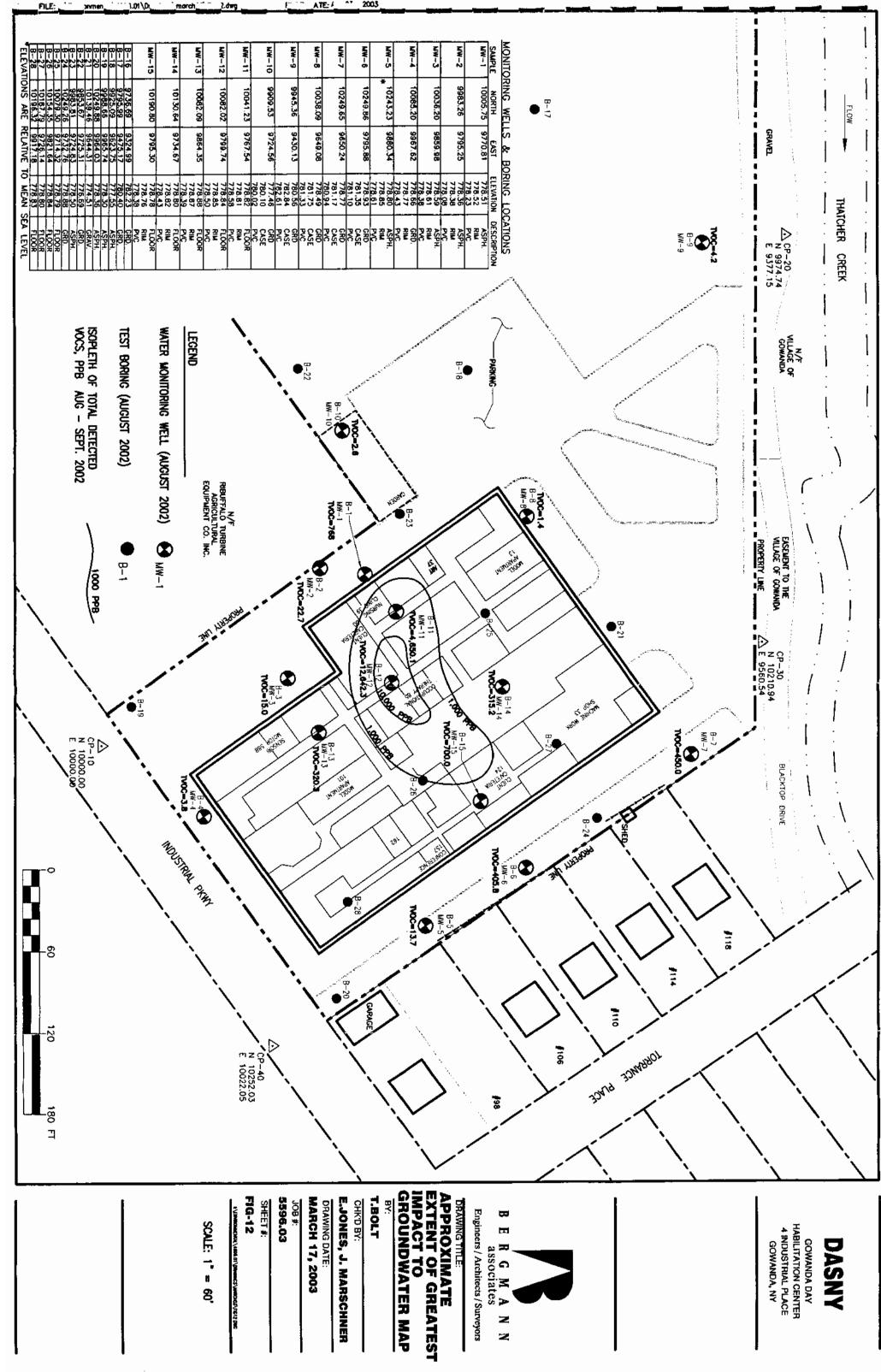


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HABILITATION CENTER GOWANDA DAY

APPENDIX 1 Boring Logs and Well Construction Details

DRILLING LOG



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

PR	PROJECT: Gowanda Day Habilitati			tion Ce	ion Center Pro			t No:	5596.03	3 Page No.	1of	1		
_ Sta	ırı Dat	e:	07/31/	02	Finish !	Date:	07/31/	02	Top of	f Well:	N/A	V/A Boring No: B-1/MW-1		
 Dri	iller:		Steven	Larami	e, Geolo	gic NY	/NorthS	tar	Boring	Location:	In asphalt a	 djacent to sou	building.	
Ins	Inspector: Edward Jones, Bergma										ring Drilling): Approximately 8.0 feet			
	Drilling Method: 4-1/4 inch Hollow Ste.						rs, CME	-55 rig	-		_	Approx. 8	•	-
	marks								-			auger pull ba		
		Interv			to 4.5 f						2" dia. PVC			18.0 ft to 3.5 ft
			1.0 feet				2107.21				Conditions:		· · · · · · · · · · · · · · · · · · ·	rees in morning
000				roadway	hov ins	stalled over the monitori								in the afternoon
	-	130301	O grade	Toadway	y DOX IIIS	stanco (over the	momeon	ing wei	1.	Ι	Warmer &	scancicu ian	Field Screening
• DE	DEPTH BLO		OWS ON SAMPLER				SAMPL						for VOCs, ppm	
	0		6"/12"		18"/24"	N	NO.	Depth	Type	Recovery	4	FORMATIC		using PID
		23	9	ŀ		16	1	0-2'	soil	42%	Asphalt Surfa	ace	0.5	
•				7	5]	1		GRAVEL an	d F-C Sand Fi	ll to 2' 2.0	4.1 ppm
		6	2			5	2	2'-4'	soil	75%		ottled M. Stiff		
				3	3		<u> </u>	1		İ	1	 Partings evi 		176 ppm
• 🖵	5	5	4			7	3	4'-6'	soil	83%	4	some F. Sand.		
ŀ			<u> </u>	3	4		<u> </u>					itered. moist a		131 ppm
		1	WH		*****	1	4	6'-8'	soil	13%		Sand 7', then Gr		
			 	1	WH	0	 	0, 10,		7607		GRAVEL Som		19.6 ppm
	10	2	4	4	14	8	5	8'-10'	soil	75%	-	ose F-M GRA nd, tr. Silt WT		31.0 ppm
	10	5	7	-	14	15	6	10'-12'	soil	67%	-1			31.0 ppin
			 	8	15	1.5	-	10-12	3011	0770	1	ame, M. Dense, Trace Silt, Wet at 8' ame, saturated at 10'. Petroleum odor		
		22	18	+ "	1.5	30	7	12'-14'	soil	67%	Same Gravel, becomes Dense		6.5 ppm	
			10	12	11		 	~	""	V	Grayish brow			2.1 ppm
.	15	29	22		· · · · · · · · · · · · · · · · · · ·	36	8	14'-16'	soil	25%	Same Gray-Brown Gravel, some Sand			
			1	14	17					1	Same gravel (to 16'2", then (Clay 16'2"	2.8 ppm
		18	25			57	9	16'-18'	soil	100%	Damp Gray F	lard CLAY an	d Silt	16.0 ppm
	ļ		<u> </u>	32	40]			Trace pebbles	s. TILL	18'	3.5 ppm
							ļ <u>-</u>	4						
<u> </u>	20						ļ		<u> </u>		4 ~	nated at 18.0 fe		
•	ļ	-					├ ──	-			•	nonitoring wel	I	
			ļ				 	┨			installed in te	st boring płaced in dru	ıme	
	- 1			-	_		-	-			An cuttings	praced in ord	uns.	Ì
•	25			-	 		 	1			l Minirae 2000	PID with 10.6	Sev Jamn	
							 				1	n soil samples	-	
			1				<u> </u>	1 1]					
•			<u> </u>				1	1						
]						
1	1				T		T	1	1	i	I			I.

MONITORING WELL B-1/MW-1 Grade Elevation: 778.51 Protective Roadway Box Elevation: 778.23' Concrete Grout Top of 1.0 Filter Sand inside Roadway Box PVC Riser Top of Bentonite seal 2" Dia. Sch 40 PVC Solid Wall Casing Bentonite pellet seal, 3.5' to 1.0' Top of Sandpack 4.5 Threaded bushing, top of PVC well screen at 4.5' Top of Screen Approximate Depth to Groundwater, assumed at 8' 2" Dia. PVC Slotted Well Screen 00N or equivalent Sand Pack 0.010 inch slot size well screen 90% Retention 8" Auger Hole into Overburden 2" Dia PVC threaded bottom cap 16.5 18.0 See attached Boring Log 8" Diameter NOT TO SCALE Well Screen Length: 12.0 Depth to bottom of Well Screen: 16.5' Depth to Bottom of Borehole: 18.0" NOT TO SCALE Elevation for Top of Well Riser (TOR) and Grade Elevation are in feet, relative to Mean Sea Level **GOWANDA DAY HABILITATION CENTER** Date Installed: 4 INDUSTRIAL PLACE, GOWANDA, NEW YORK 31-Jul-02 MONITORING WELL CONSTRUCTION DETAIL BERGMANN associates MW-1

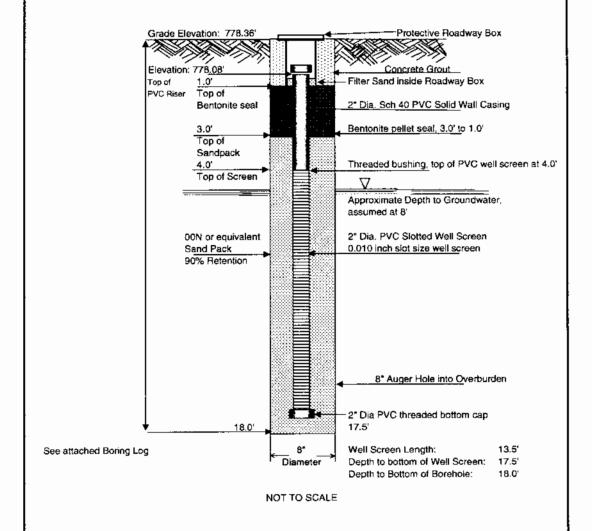


BORING/WELL NUMBER: Test Boring B-2/MW-2

30

	PROJEC	T:	Gowan	da Day	Habilita	tion Ce	nter _		Projec	t No:	5596.03 Page No1of	<u>i</u>
	Start Dat	e:	07/25/0	02	Finish	Date:	07/25/	02	Top of	f Well:	N/A Boring No: B-2/MW-2	
•	Driller:		Steven	Larami	e, Geolo	gic NY	/NorthS	tar	Boring	Location:	In asphalt lot south side building, at pro	operty line.
	Inspector	Γ:	Edward	f Jones,	Bergma	nn Asso	ociates		Water	Level (Duri	ing Drilling): Approximately 8.0 feet	
	Drilling N	1ethod:	4-1/4 is	nch Hol	low Ster	n Auger	rs, CME	-55 rig	Water	Level (Post	Drilling): Approx. 8 feet below gra-	de
•	Remarks	:	Advanc	ced test	borings	via Hol	low Ste	m Auger	s. Mon	itoring well	installed via auger pull back method.	
	Screened	Interva			to 4.0 f							18.0 ft to 3.0 ft
	Seal:	3.0 to 3	.0 feet					• · ·		Weather C	Conditions: Sunny, 60 degree F in the	morning
•				roadway	box ins	stalled o	over the	monitori	ng well	t.		
			. 2		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>			<u></u>		1	Field Screening
	DEPTH	BLO	WS ON	SAMPI	LER			SAMPI	Æ		SOIL AND ROCK	for VOCs, ppm
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Туре	Recovery	INFORMATION	using PID
		28	10			20		0-2'	soil	42%	Asphalt surface 6'	" , ,
				10	5			1	i			0.1 ppm
•		3	4	<u> </u>		8	2	2'-4'	soil	92%	Damp Mottled BR & GR M. Stiff SILT,	
	ا ا			4	4	<u> </u>		1	[. .	-0.07	1	0.5 ppm
_	5	3	3	<u> </u>	_	7	3	4'-6'	soil	58%	Same, M. Stiff	2
		11/11	33/77	4	3	,	4	6'-8'		060	1	0.2 ppm
		WH	WH	WH	WH]	-4-	1 0-0	soil	96%	Same mottled SILT, some F. Sand becomes Wet at 8', V, Soft 8.0' (0.3 ppm
_	1 1	WH	WH	WIT	WIL	- 6	5	8'-10'	soil	21%	Wet Brown Loose F-M GRAVEL.	0.5 ppm
•	10	** 11	7711	6	9	V	,	1 8-10	3011	217.		0.3 ppm
	H 1	12	8	, v	<u> </u>	16	6	10'-12'	soil	50%	Same, grayish-brown, M. Dense	··· · · · · · · · · · · · · · · · · ·
_			<u> </u>	8	15							0.3 ppm
•		18	14			32	7	12'-14'	soil	79%	Same, saturated, Dense	••
				. 18	14			1		1	l le	0.2 ppm
_	15	1	2			10	8	14'-16'	soil	50%	Identical, Loose	
•				- 8	11		<u> </u>]				ND
		. 23	22		- 0	59	9	16'-18'	soil	100%	Same to 17', Dense 17'	115
_				37	50		 	┇		i		ND
	20			<u> </u>	 			-			Gravel. Laminated, TILL 18' Boring terminated at 18.0 feet	
	20			!			 	-			2" diameter monitoring well	
_							-	-			installed in test boring.	
-								1			maded in test bornig.	
	1							1			All cuttings placed in drums.	
	25				-			1				
											Minirae 2000 PID with 10.6 ev lamp	
								1			used to screen soil samples for VOCs	

MONITORING WELL B-2/MW-2



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



GOWANDA DAY HABILITATION CENTER
4 INDUSTRIAL PLACE, GOWANDA, NEW YORK

Date Installed: 25-Jul-02

MONITORING WELL CONSTRUCTION DETAIL MW-2



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

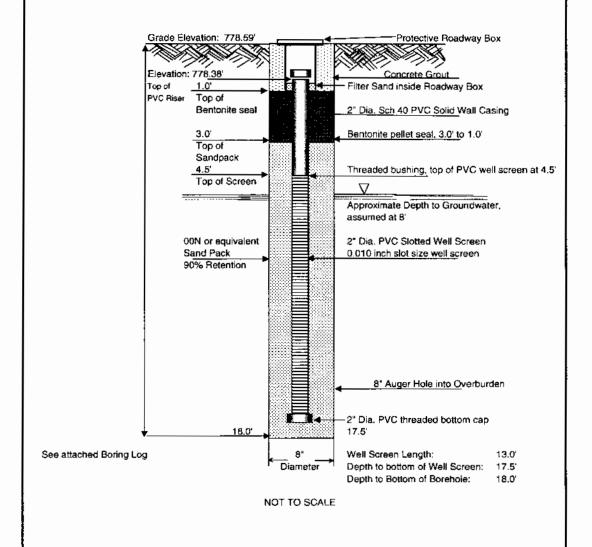
of 1
IW-3
side of the building
) feet
ow grade
hod.
ack: 18.0 ft to 3.0 ft
in the morning
1

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER SAMPLE							Field Screen			
					N	INTO			In	SOIL AND ROCK	for VOCs, ppr
. 0	0"/6"	6"/12"	12"/18"	18"/24"		NO.	Depth		Recovery	INFORMATION	using PID
	27	7		1.2	16	1	0-2	soil	29%	Asphalt surface, Fill to 2'2" 6.0'	4
ļ		ļ.,.	9	12			.			F-C Sand, F. Gravel, Concrete 2'2"	14.1 ppm
ļ	11	- 11		ļ	43	2	2'-4'	soil	46%	Damp Tan Dense F-M SAND with Silt,	
_[32	21	-	<u> </u>	ļ			Trace Gravel	2.2 ppm
5	28	14			22	3	4'-6'	soil	8%	Same, M. Dense	
1		<u> </u>	8	10			1		i		8.0 ppm
Į	3	5	ļ	<u> </u>	14	. 4	6'-8'	soil	88%	Moist GrBr. Stiff SILT, inter-layered	
L			9	8			Į			with Fine Sand. Wet at 8' 8.0'	21.0 ppm
L	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]		İ	Boring terminated at 18.0 feet	
										2" diameter monitoring well	
ſ							1			installed in test boring.	
r							1			_	
						Î				All cuttings placed in drums.	
25							1 1			_ '	
										Minirae 2000 PID with 10.6 ev lamp	
t										used to screen soil samples for VOCs	
F										The state of the s	
-							i				
30		· · · ·								,	
.70											

N=No. of Blows to Drive

MONITORING WELL B-3/MW-3



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



GOWANDA DAY HABILITATION CENTER
4 INDUSTRIAL PLACE, GOWANDA, NEW YORK

Date Installed: 12-Jul-02

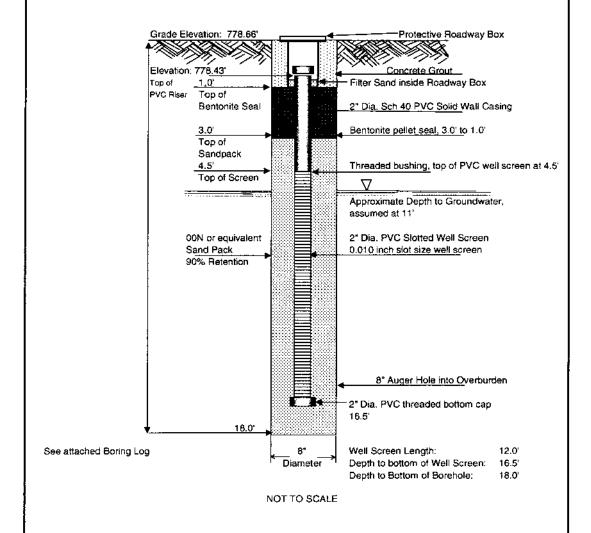
MONITORING WELL CONSTRUCTION DETAIL MW-3



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

PROJEC	T:	Gowan	da Day	Habilita	tion Cer	nter		Project	No:	5596.03 Page No1of	1
Start Dat	te:	07/11/0	02	Finish 1	Date:	07/11/0	02	Top of	Well:	N/A Boring No: B-4/MW-4	_
Driller:		Steven	Larami	e, Geolo	gic NY	/NorthSt	tar	Boring	Location:	In asphalt parking lot, east side of the	building
Inspecto	Γ:	Edward	d Jones,	Bergma	nn Asso	ciates		Water	Level (Duri	ing Drilling): Approximately 11" feet	
-							-55 rig	Water	Level (Post	Drilling): Approx. 6 feet below g	rade
Remarks								•		installed via auger pull back method.	
Screened				to 4.6 f						2" dia. PVC Sandpack:	18.0 ft to 3.0 f
Seal:		1.0 feet		•						Conditions: Sunny, 75 degree F in th	e morning
		o grade	roadway	box ins	- stalled o	ver the	monitori	ing well			
	1 14311 (o grade	1044.43	, 00% 11%				<u></u>	·	1	Field Screenin
DEPTH	BLO	WS ON	SAMPI	LER	•		SAMPI	LE		SOIL AND ROCK	for VOCs, ppn
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth			INFORMATION	using PID
	22	8			12	1	0-2'	soil	21%	Asphalt Surface 0.5	4
	4 2]	i		Damp Grown F-C SAND and Gravel	ND
					6	2	2'-4'	soil	21%	Fill to 3.5'	
_		<u> </u>	4	5				١.,	400		ND
5 2		3	1 2	ļ	6	3	4'-6'	soil	42%	Damp Gr-Br. Loose Fine SAND	ND
	3	5	3	4	13	4	6'-8'	soil	38%	and Silt Damp Br. M. Stiff SILT, some F. Sand 7'	IND.
	3	3	8	8	13		10-8	Son	3670	Damp Brown M. Dense F-M GRAVEL,	ND
	6	10	, ·		18	5	8'-10'	soil	25%	some F-C Sand, Trace Silt	
10		1.0	8	5		 	1 * * * * * * * * * * * * * * * * * * *			Same, M. Dense, V. Moist to wet	ND
-	12	10	<u> </u>		24	6	10'-12'	soil	50%	Dame, M. Dense, Wet at 11'10"	
		1	14	10]	ļ	[ND
	9	9			25	7	12'-14'	soil	100%	Same, Gray and Brown, M. Dense	
			16	14		<u> </u>		l			ND
15	2	14		<u> </u>	22	8	14'-16'	soil	92%	Same, saturated, M. Dense	
	1.5	21	8	14	47	9	16'-18'	a a i l	83%	Same Gravel to 15'10" 15'10' Damp Gray Hard Silty-CLAY,	- IND
	15	21	26	43	/	- 9	10-18	soil	0.376		· ND
		 	20	 ~		 	1			The Gravet Bullinger 1122	1```
20		 	 	 		1	1			Boring terminated at 18.0 feet	
			<u> </u>				1			2" diameter monitoring well	
]			installed in test boring.	
]				
				ļ <u> </u>		1	1			All cuttings placed in drums.	!
25			<u> </u>			Ļ—	ļ				
	<u></u>	ļ		ļ <u> </u>	ļ	├	į		1	Minirae 2000 PID with 10.6 ev lamp	
		-	-				1			used to screen soil samples for VOCs	
				 		 	-				
30	<u> </u>		-	 		 	1				
			an of L1-	L	luores :	\	t Space	12"	h o 1/0 lb	Hammer dropped 30" each blow.	

MONITORING WELL B-4/MW-4



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



GOWANDA DAY HABILITATION CENTER
4 INDUSTRIAL PLACE, GOWANDA, NEW YORK

MONITORING WELL CONSTRUCTION DETAIL

MW-4

Date installed: 11-Jul-02

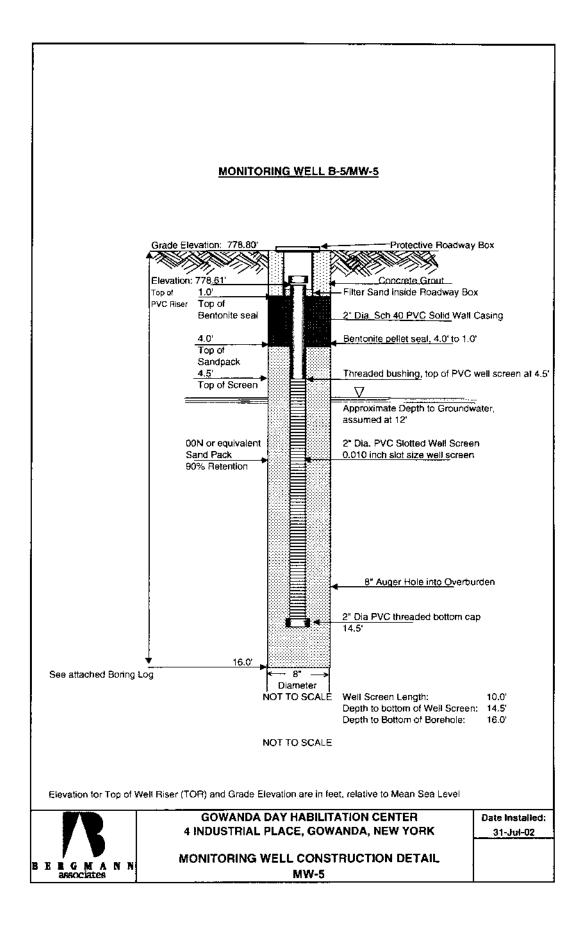


BORING/WELL NUMBER: Test Boring B-5/MW-5

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	s. Monitoring well installed via	auger pull back method.
Screened Interv	al: 14.5 ft. to 4.5 ft. Slot Size: 0.01	0 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 SAM						_	SAMPI	E		SOIL AND ROCK	Field Screening for VOCs, ppn
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	_	Recovery	INFORMATION	using PID
 	10	4	12 /10	10 72-7	11	1	0-2'	soil	17%	Asphalt Surface 0.5	
ł			7	10		 -	1 ~~	30,71	1,7,5		17.4 ppm
1	4	3			6	2	2'-4'	soil	71%	Damp Br. Mottled M. Stiff SILT,	1
Ţ			3	3		<u> </u>	1			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			1				36.0 ppm
	2	3			6	4	6'-8'	soil	100%	Same to 7'10"	
			3	11]	ľ		Start Brown Gravel 7'10'	56.0 ppm
	15	35			69	5	8'-10'	soil	54%	Damp Br. V. Dense F-M GRAVEL.	1
10.	_		34	18						some F-C Sand, tr. Silt	37.0 ppm
	1()	16			27	_ 6	10'-12'	soil	58%	Same F-M GRAVEL, Some F-C Sand	
			11	16			1		<u> </u>	Becomes M. Dense, Wet at 12.0' WT~12'	3.0 ppm
Ļ	11	6	_		15	7	12'-14'	soil	13%		
	• • •		9	15		<u> </u>	ا				2.0 ppm
15	39	21			42	- 8	14'-16'	soil	58%	Damp Gray hard CLAY and Sitt	
			21	36		<u> </u>	-			Trace Pebbles. Glacial Till 16.0'	1.6 ppm
1						<u> </u>	-		İ	Boring terminated at 16.0 feet	
}			-	-			-			2" diameter monitoring well	
20		_					1			installed in test boring	
					·			-	· - ·	All cuttings placed in drums.	
 		_			_	- - -	1			All cattings placed in division	
			·				1 .			Minirae 2000 PID with 10.6 ev lamp	
1							1			used to screen soil samples for VOCs	
25							1 .			,	
	-		_								
ŀ							1 .				
					_]				
							1				
30]				



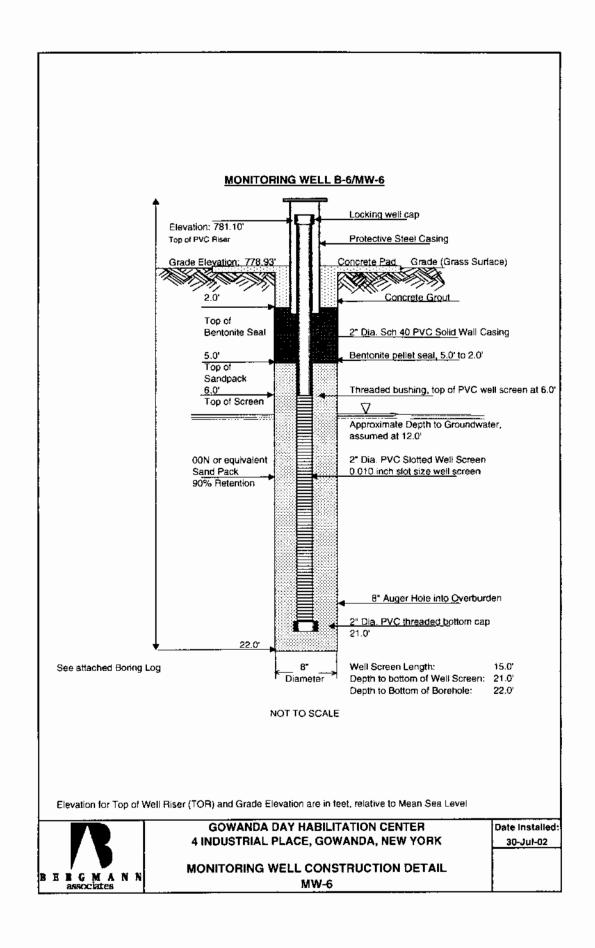


BORING/WELL NUMBER: Test Boring B-6/MW-6

	PROJECT:	(Gowanda Day	Habilitation Ce	nter	Project	No:	5596.03	Page No.	1	of	1	
•	Start Date:	0	7/30/02	Finish Date:	07/30/02	Top of	Well:	N/A	Boring No:	B-6/M	W-6		
	Driller:	S	teven Laramio	e, Geologic NY	/NorthStar	Boring	Location:	In grass strip	north of bui	lding ,	near p	roperty line	
	Inspector:	E	dward Jones,	Bergmann Asso	ociates	Water L	evel (Duris	ng Drilling):	Approximat	ely 12	feet		
	Drilling Method	d: <u>4</u>	-1/4 inch Holl	ow Stem Auger	s, CME-55 rig	Water L	evel (Post	Drilling):	Approx. 15	feet be	low g	rade	
	Remarks:	A	Advanced test	borings via Hol	low Stem Auger	s. Monit	oring well	installed via a	uger pull ba	ck metl	od.		
	Screened Inter	rval:	21.0 ft.	to 6.0 ft.	Slot Size: 0.01	0 inch	Well Type:	2" dia. PVC		Sandp	ack:	22.0 ft to 5.	0 ft
	Seal: 5.0 to	o 2.0) feet				Weather C	onditions:	Overcast, he	ımid, 7	5 degr	ees in morn	ing
	Prote	ectiv	e Steel Casing	installed over t	he monitoring v	vell.							

DEPTH	DI ()	WC ON	CAMDI	ED	SAMPLE					CON AND BOOK	Field Screening
DEPTH 0		WS ON 6"/12"		18"/24"	N	NO.		Туре	Recovery	SOIL AND ROCK INFORMATION	for VOCs, ppm
\vdash	3	2	12 /10	10 /24	9	1	0-2'	soil	54%	Grass surface	using PID
		 	7	4	. 7	<u> </u>	1 0-2	Son	3470		1.1 ppm
	2	2	- 		4	2	2'-4'	soil	71%	Damp Br Mottled Soft SILT,	1.1 ppin
1	<u> </u>	 	2	4			1 -	3011	1 ,,,,	some F. Sand. Partings evident	1.7 ppm
5	3	4	Ť		10	3	4'-6'	soil	63%	Same, Stiff, becomes Moist at 7'6"	11.7 ppin
		 	6	6							0.5 ppm
	3	3			6	4	6'-8'	soil	100%	Same, M. Stiff to 8.0', then Gravel	0.5 pp
			3	4			1				0.8 ppm
	8	15			25	5	8'-10'	soil	75%	Moist Br. M. Dense F-M GRAVEL,	1
10		1	10	8			1			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	İ
			15	23							14.7 ppm
]]	10	26			56	9	16'-18'	soil	100%	Same, becomes V. Dense	
			30	50							22.0 ppm
1 20	5	20		- 22	51	10	18'-20'	soil	100%	Same, V. Dense	
20			31	23	~ .		201.221	<u></u>	1.00.01		27.0 ppm
	10	10		- 40	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							1			Paris a transition of the 22 O feet	
25										Boring terminated at 22.0 feet	
!							-			2" diameter monitoring well	
							-			installed in test boring	
ļ										All cuttings placed in drums.	
30							-			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.





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

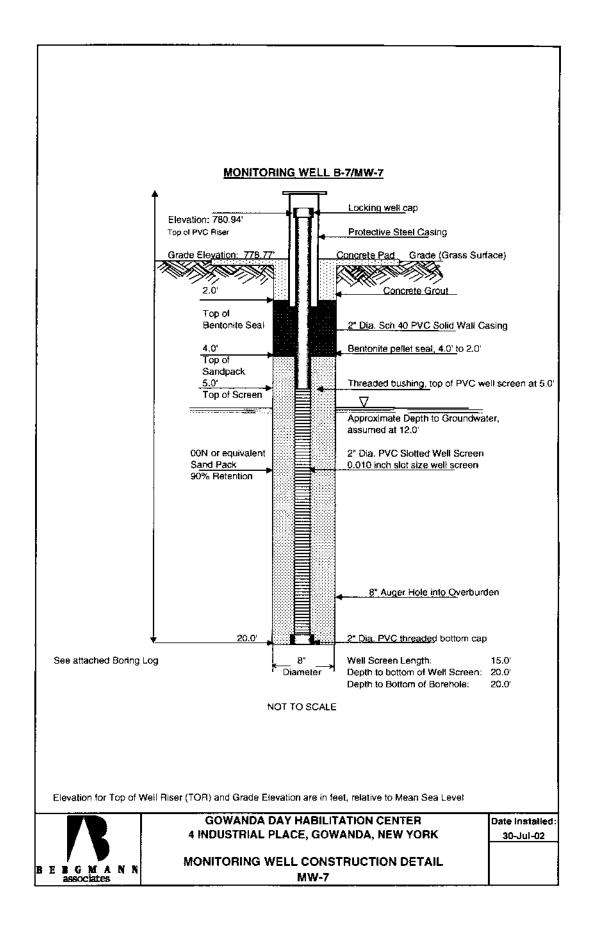
Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method.

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.

1							_				Field Screening
DEPTH		WS ON					SAMPI			SOIL AND ROCK	for VOCs, pp
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery	INFORMATION	using PID
	1	4			11	1	0-2'	soil	58%	Grass surface	
[7	11			<u> </u>			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,	1
[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					-	1	0.9 ppm
1	3	2			4	4	6'-8'	soil	100%	Same, Soft, mottled brown & gray, moist	1
Ī			2	3			1				0.7 ppm
- 1	2	2			8	5	8'-10'	soil	75%	Same SILT to 9.0', then Gravel 9.0'	
10			6	8			1	1		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]
			l	WR			1			Same, becomes V. Loose, Wet at 12'	2.9 ppm
ı	1	2			7	7	12'-14'.	soil	38%	Same, becomes Loose, saturated	· · ·
			5	6			1 i	İ			2.0 ppm
15	3	2			6	8	14'-16'	soil	63%	Same, saturated, becomes Gray	<i>''</i>
			4	29						_	2.1 ppm
	17	43			93	9	16'-18'	soil	94%	Same Gray GRAVEL, Some F-C Sand,	''
ľ			50/4"				1			becomes V. Dense	3.7 ppm
Ī	3	9			33	10	18'-20'	soil	100%	Same to 19'6" 19'6"	l ''
20			24	24			1			Damp Gray V. Stiff SILT and Clay	2.1 ppm
										Glacial Till 20'	
							1 .			, , , , , , , , , , , , , , , , , , , ,	
1	-		··-				1				
l							1			Boring terminated at 20.0 feet	
25					•		1			2" diameter monitoring well	
							1			installed in test boring	
-										All cuttings placed in drums.	
										The same of the sa	
										Minirae 2000 PID with 10.6 ev lamp	
30										used to screen soil samples for VOCs	
.70					20.0					" Fach Blow	





Sunny, 80 degrees in afternoon.

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

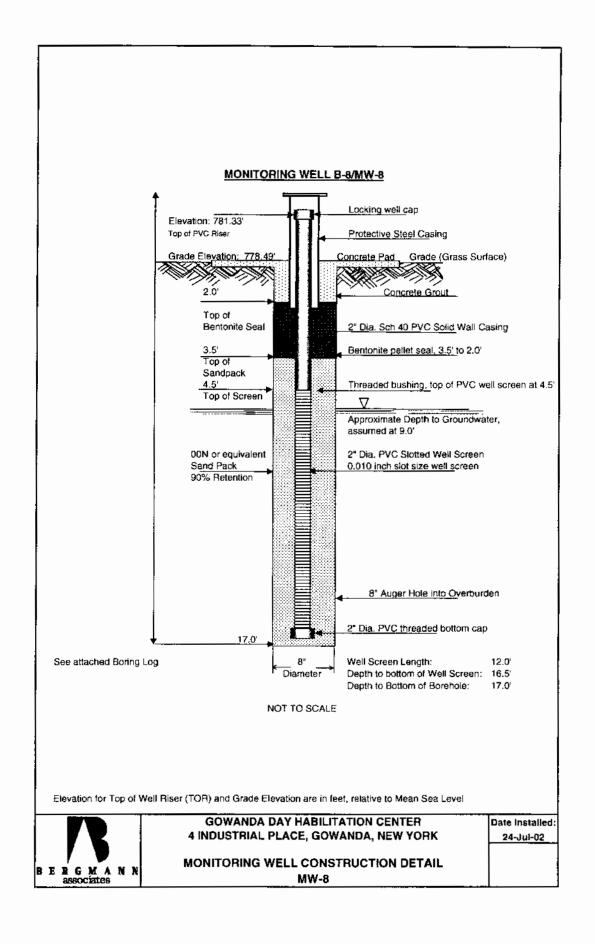
	PROJECT:	Gowanda Day Habilitation Center	Project No: 5596.0	3 Page No. 1 of 1
•	Start Date:	07/24/02 Finish Date: 07/24/02	Top of Well: N/A	Boring No: B-8/MW-8
	Driller:	Steven Laramie, Geologic NY/NorthStar	Boring Location: In grass at t	he southwest corner of the building.
	Inspector:	Edward Jones, 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 Auger	s. Monitoring well installed via	auger pull back method.
	Screened Interva	d: 4.5 ft, to 16.5 ft. Slot Size: 0.01	0 inch Well Type: 2" dia. PVC	Sandpack: 17.0 ft to 3.5 ft
•	Seal: 3.5 to 2	2.0 feet	Weather Conditions:	Sunny, 80 degrees in afternoon.

Weather Conditions:

Protective Steel Casing installed over the monitoring well.

					GAMPI E						Field Screenin
DEPTH		WS ON			ļ		SAMPI			SOIL AND ROCK	for VOCs, ppn
0	0"/6"	6"/12"	12"/18"	18"/24"	_	NO.	Depth	Туре	Recovery	INFORMATION	using PID
]	5		<u> </u>	10	1	0-2'	soil	75%	Grass surface, Sand & Gr. Fill to 1.0'	
		<u> </u>	5	4			ļ		•	Damp mottled Loose SILT, Some F. Sand	ND
,	3	4	<u> </u>		10	2	2'-4'	soil	63%	Same damp mottled SILT and F. Sand	
_			6	7		ļ	1			Loose	ND
5	2	4			9	3	4'-6'	soil	75%	Same, damp, Loose	1
			5	5			1				ND
	1	1			2	4	6'-8'	soil	13%	Same, Very Loose	
			1	WH			1	1			ND
	WH	4			11	5	8'-10'	soil	67%	Same to 8'6" 8'6"	1
10			7	20						Wet F-M GRAVEL, some F-C Sand	ND
1	5	11			22	6	10'-12'	soil	33%	Same, M. Dense, saturated, trace silt	!
ļ			11	10				1			ND
,	10	11			25	7	12'-14'	soil	58%	Same, saturated, M. Dense	Ĺ
			14	23							ND
15	5	12			24	8	14'-16'	soil	58%		<u></u>
ļ	4.	2011	12	12			ا ا			Same to 15'10" [5'10"	IND
	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	1
20							-		-	2" diameter monitoring well	
F							{			installed in test boring.	
H									İ	mistatied in test borning.	[
H										All cuttings placed in drums.	
25										An editings placed in drunis.	
2.5										Minimus 2000 PUN with 10.4 au laws	
-										Minirae 2000 PID with 10.6 ev lamp	
-										used to screen soil samples for VOCs	
}											
30											
.,0					2" 0	129	140	11		U.C. I. D.I.	

N=No. of Blows to Drive





Sandpack:

20.0 ft to 4.0 ft

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

PROJECT: Gowanda Day Habilitation Center Project No: 1 of 5596.03 Page No. 07/11/02 Finish Date: 07/11/02 Top of Well: N/A Boring No: B-9/MW-9 Start Date: Driller: Steven Laramie, Geologic NY/NorthStar Boring Location: By access road, west of the building. Edward Jones, Bergmann Associates Water Level (During Drilling): Approximately 8 feet Inspector: Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig Water Level (Post Drilling): Approx. 13'4" feet below grade

Slot Size: 0.010 inch Well Type: 2" dia. PVC

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

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

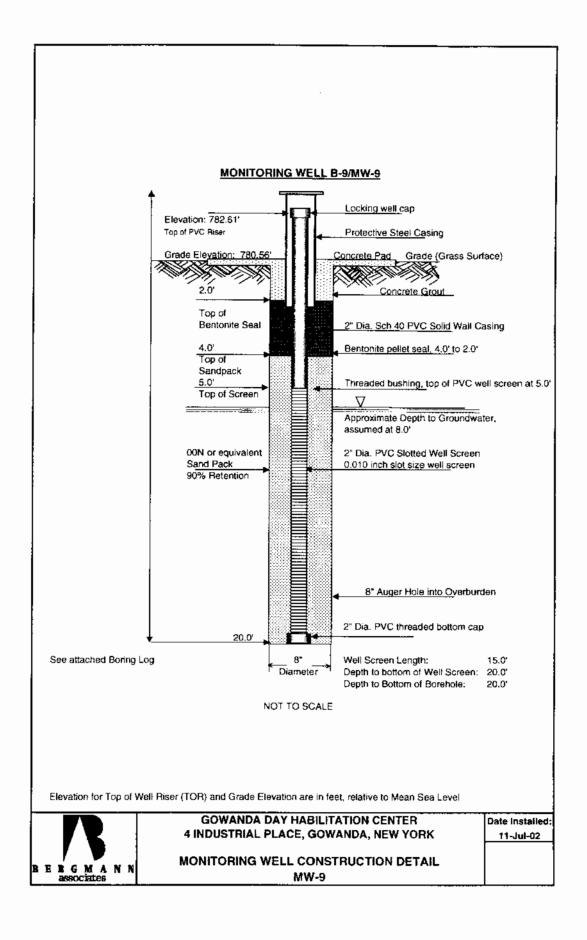
Protective Steel Casing installed over the monitoring well.

5.0 ft. to 20.0 ft.

Screened Interval:

	TTOICCE	.140 ()100	Custing	, materix	med over the monitoring wen.						D: 110
 					ļ			_			Field Screening
DEPTH			SAMPI				SAMPI			SOIL AND ROCK	for VOCs, ppm,
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.		Type	Recovery	INFORMATION	using PID
	11	12			19	1	0-2'	soil	67%	Grass surface; Gravel Fill to 1.0' 1.0'	
1 [i	7	7				!	ĺ	Damp Br. Stiff SILT, mottled, partings	ND
] [5	6			15	2	2'-4'	soil	63%	Same SILT, Stiff, little F. Sand	1
			9	10]	i	ł		ND
5	4	7		_	13	3	4'-6'	soil	83%	Same Damp Br. Silt, layers of F. Sand	
			6	6				-		1	ND
1 1	2	2			3	4	6'-8'	soil	83%	Same SILT, V. Soft, some F. Sand	
1 1			1	1			1			Wet, Saturated at 8.0'	ND
	WH	WH		<u> </u>	3	5	8'-10'	soil	83%	Brown F. SAND, some Silt, Saturated	
10			3	10		 	1			10.0	ND
	WH		-		6	6	10'-12'	soil	25%	Saturated Br to Gr Loose F-M GRAVEL	i i
	*****	<u> </u>	5	5		(/	10-12	30/11	2370	Some F-C Sand, Trace Silt	ND
	5	7	<u> </u>		16	7	12'-14'	soil	83%	Same, Saturated, M. Dense	110
1 }			9	8	10	 '	12-14 	3011	0.5 A	Same, Saturated, W. Dense	ND
15	- 8	3	9	0	12	8	14'-16'	soil	58%	Same, Wet, M. Dense	IND
1.7	0	.,	9	12	12	8	14-10	5011	36%	Same, wet, w. Dense	ND
}	22	16	9	. 12	31	9	16'-18'	anit	33%	Same West Down F. M. CD AVEL	ואט
[}		10	15	10	21	9	10-18	soil	33%c	Same, Wet, Dense F-M GRAVEL, Some F-C Sand, Trace Silt 19.5"	NID
	4	5	15	10	20	10	18'-20'	a a : 1	83%	Some F-C Sand, Trace Silt 19.5" Damp Grey V. Stiff SILT, Little Clay,	ואט
20	4		15	25	_ 20	10	18-20	soil	6.5%		
20			15	25						Trace Gravel, Laminated, TILL, 20'	
											İ
										Boring terminated at 20.0 feet	
]										2" diameter monitoring well	ļ
										installed in test boring.	
25			_								
										All cuttings placed in drums.	į
[i
							İ			Minirae 2000 PID with 10.6 ev lamp	
] [used to screen soil samples for VOCs	
30											

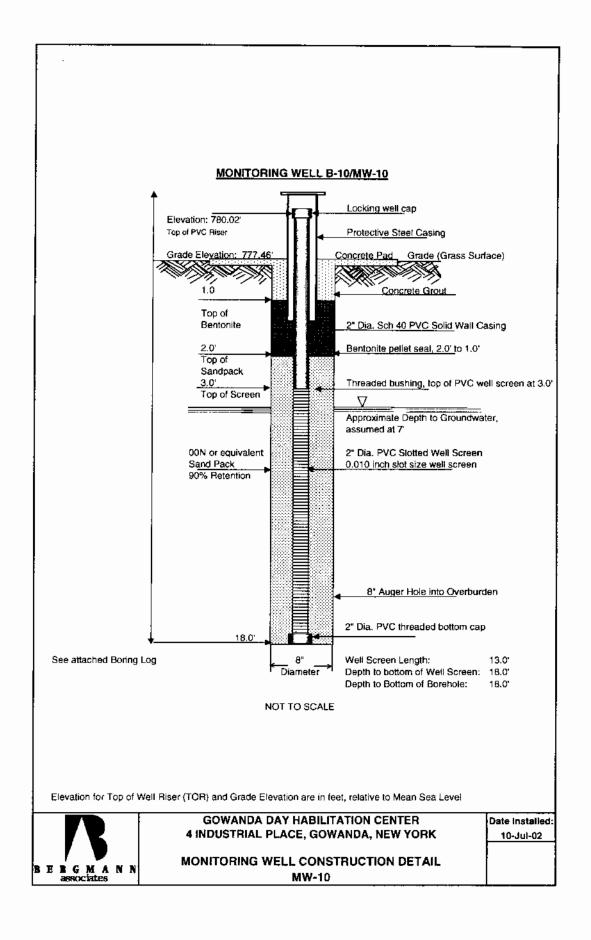
N=No. of Blows to Drive





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

PROJEC	T:	Gowar	ıda Day	Habilita	tion Ce	nter		Project	No:	5596.03 Page No. 1 of	t
Start Dat	e:	07/10/	02	Finish	Date:	07/10/	02	Top of	Well:	N/A Boring No: B-10/MW-	10
Driller:		Steven	Larami	e, Geolo	gic NY	/NorthS	tar	Boring	Location:	In grass south of the building, near pro	operty line
Inspector	;	Edwar	d Jones,	Bergma	nn Asso	ociates		_		ing Drilling): Approximately 7 feet	
Drilling M	lethod:	4-1/4 i	nch Holl	low Ster	n Auger	s, CME	-55 rig	Water	Level (Post	Drilling): Approx. 6' 6" feet below	w grade
Remarks	:	Advan	ced test	borings	via Holl	low Ster	n Auger	s. Mon	itoring well	installed via auger pull back method.	
Screened	Interva			o 18.0 f							18.0 ft to 2.0 f
Seal:	2.0 to	1.0 feet	•							Conditions: Sunny, 80 degrees in after	
	Protect	ive Stee	l Casing	installe	d over t	he mon	itoring w	ell.			
			_								Field Screeni
DEPTH			SAMPI				SAMPI			SOIL AND ROCK	for VOCs, pp
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.		Туре	Recovery	INFORMATION	using PID
	1	3			9	1	0-2'	soil	58%	Grass, then Fill: Damp F-C SAND	
			6	5			ļ <u>.</u>				ND
- 1	3	3			9	2	2'-4'	soil	42%	Damp mottled Stiff SILT, little	
5	5	5	6	6	9	3	4'-6'	soil	83%	fine Sand. V.Moist Loose F. SAND, Some Silt	ND
	,		4	2	9		4-0	SOIL	83%	V.Moist Loose F. SAND, Some Sin	ND
ŀ		3	-4	2	8	4	6'-8'	soil	33%	Wet Brown Soft SILT, Some F. Sand 7'	IND
ŀ	<u>, </u>		5	7	Ů	<u> </u>	1 ້ໍ້	3011	3570	Wet Brown M. Dense M-F GRAVEL,	ND
1	8	3			9	5	8'-10'	soil	42%	Some Fine to Coarse Sand	
10			6	10		<u> </u>	1			Same Gravel, Saturated, Loose	ND
	4	11			22	6	10'-12'	soil	50%	Same Gravel, Saturated, M. Dense	
			11	12]				ND
	6	3	<u> </u>		7	7	12'-14'	soil	83%	Same, becomes Gray, Loose	
			4	4	0.4				00%		ND
15	6	14	20.	20	34	8	14'-16'	soil	83%	Same Gray Gravel, some Sand, Dense	
ł	22	36	20	30	85	9	16'-18'	soil	75%	Same to 17.5' 17.5' Damp Grey Hard SILT, Little Clay,	IND
ŀ		30	49	40	6.5	9	10-18	SOII	1370		ND
ŀ			17	-40			1			Trace Graver, Landinated, TIEL 10	1
20		<u> </u>					1			Boring terminated at 18.0 feet	
										2" diameter monitoring well	
] .			installed in test boring.	
											1
										All cuttings placed in drums.	
25											
-										Minirae 2000 PID with 10.6 ev lamp	
-										used to screen soil samples for VOCs	
-											
30											
	N TL	o mussik	of lala	to a d		34 C-11	Cacco	100	- 140 IL 1	Hammer dropped 30" each blow.	L





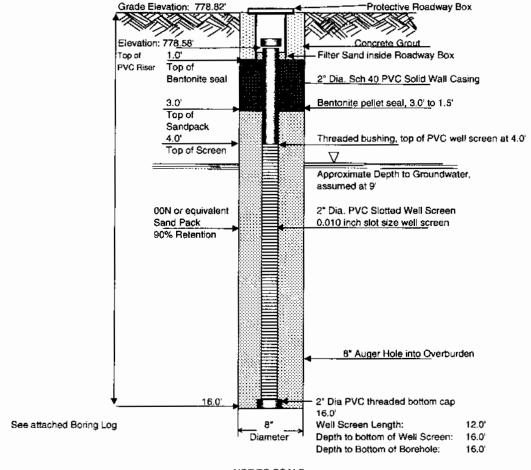
BORING/WELL NUMBER: Test Boring B-11/MW-11

PROJECT:	Gowanda Day Habilitat	ion Center	Project No:	5596.03	Page No.	1 of	1
Start Date:	07/17/02 Finish I	Date: <u>07/17/02</u>	Top of Well:	N/A	Boring No	B-11/MW-	11
Driller:	Steven Laramie, Geolog	gic NY/NorthStar	Boring Location:	Inside the Bu	ilding, by N	lurse Clinic,	Room 39
Inspector:	Edward Jones, Bergman	nn Associates	Water Level (Dur	ing Drilling):	Approxima	itely 9 feet	
Drilling Method:	4-1/4 inch Hollow Stem	Augers, skid rig	Water Level (Pos	t Drilling):	Approx. 10	feet below	grade
Remarks:	Advanced test borings v	ia Hollow Stem Auge	rs. Monitoring wel	l installed via	auger pull ba	ack method.	
Screened Interv	/al: 16 ft. to 4 ft.	Slot Size: 0.0	10 inch Well Type:	2" dia, PVC		Sandpack:	16.0 ft to 3.0 ft
Seal: 3.0 to	1.0 feet		Weather (Conditions:	Not applica	able: work w	as indoors.
Flush	to grade roadway box inst	alled over the monitor	ring well.				
DEPTH BLO	OWS ON SAMPLER	SAMP	LE	so	IL AND RO	CK	Field Screening for VOCs, ppm.

,												Field Screening
	DEPTH			SAMPI				SAMPI			SOIL AND ROCK	for VOCs, ppm,
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth		Recovery	INFORMATION	using PID
			14			48	1	0-2'	soil	67%	Concrete floor to 0.5 feet	
•				34	30]	ļ		Damp Dark Br. F-C SAND and	ND
i		not rec	orded			0	2	2'-4'	soit	58%	F-M Gravel, Some Silt. FILL 3.0'	74 ppm
									1		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'	ļ
-		5	5			10	4	6'-8'	soil	13%	Moist Br. Stiff SILT, some F-C Sand	75 ppm
·	i			5	6				l		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			Ì			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
İ	[
L	20										Boring terminated at 16.0 feet	
											2" diameter monitoring well	
1											installed in test boring.	
Į	[
ı	[All cuttings placed in drums.	
-	25											
1											Minirae 2000 PID with 10.6 ev lamp	
											used to screen soil samples for VOCs	
-	Ī			" I							,	
	30											

N=No. of Blows to Drive

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



GOWANDA DAY HABILITATION CENTER
4 INDUSTRIAL PLACE, GOWANDA, NEW YORK

Date Installed: 17-Jul-02

MONITORING WELL CONSTRUCTION DETAIL
MW-11



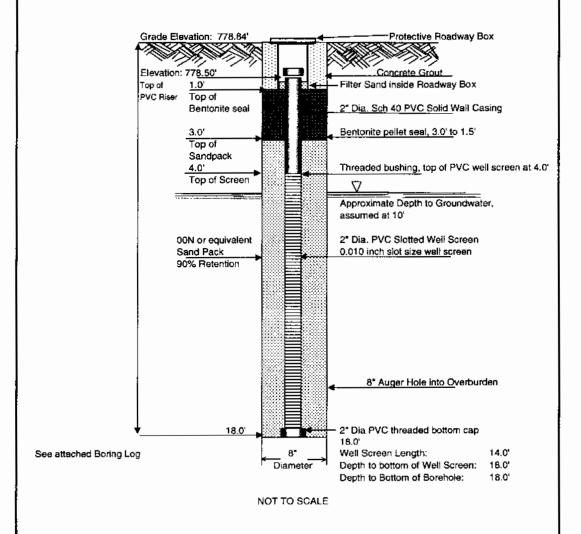
BORING/WELL NUMBER: Test Boring B-12/MW-12

PROJECT:	Gowanda Day	Habilitation Ce	nter	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 Larami	ie, Geologic NY	/NorthStar	Boring Location	Inside the B	uilding, by C	Cafeteria, Roc	om 50
Inspector:	Edward Jones,	Bergmann Ass	ociates	Water Level (Du	ring Drilling):	Approxima	ately 10.0 feet	<u>t</u>
Drilling Method:	4-1/4 inch Hol	low Stem Auge	rs, skid rig	Water Level (Pos	st Drilling):	Approx. 10) feet below ;	grade
Remarks:	Advanced test	borings via Hol	low Stem Auger	rs. Monitoring we	ll installed via	auger pull ba	ack method.	
Screened Interva	al: 18 ft. t	o 4 ft.	Slot Size: 0.01	10 inch Well Type	: 2" dia. PVC		Sandpack:	18.0 ft to 3.0 ft
Seal: 3.0 to 1	1.0 feet			Weather	Conditions:	Not applica	able: work w	as indoors.
Eluch t	a arada raaduus	v bov installed	war the monitor	ing wall				

Flush to grade roadway box installed over the monitoring well. Field Screening DEPTH **BLOWS ON SAMPLER** for VOCs, ppm, SAMPLE SOIL AND ROCK INFORMATION 0"/6" 6"/12" 12"/18" 18"/24" N NO. Depth Type Recovery using PID 18 46 0-2' 83% Concrete floor to 0.5 feet 1 soil 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 8 12 63% 20 3 4'-6' soil Same, V. Stiff SILT, some F. Sand 6.5 ppm 8 6 6 5 10 4 6'-8' 25% soil 10.0 ppm Same, Damp, Stiff SILT, some F. Sand 5 4 ō 5 8'-10' 83% not recorded soil same Silt & F. Sand to 9.0' 8.9 ppm 10 Wet Br. F-M GRAVEL and F-C Sand 9 32 17 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' 75% 30.0 ppm soil Same, M. Dense, saturated 12 8 15 22 39 75 8 14'-16' soil 63% Same, M. Dense, saturated F-M GRAVEL 14.0 ppm 34 36 some F-C Sand, Tr. Silt 21 14 64 9 16'-18' 75% soil Same to 17' 2" 17.17 9.0 ppm 50 50/4" Damp Gray Hard SILT and Clay, 18' 15 ppm Laminated TILL 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

MONITORING WELL B-12/MW-12



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



GOWANDA DAY HABILITATION CENTER
4 INDUSTRIAL PLACE, GOWANDA, NEW YORK

Date Installed: 16-Jul-02

MONITORING WELL CONSTRUCTION DETAIL

MW-12



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

PROJECT: Gowanda Day Habilitation Center Project No: 5596.03 Page No. 1 of 07/15/02 Finish Date: N/A Boring No: B-13/MW-13 07/16/02 Top of Well: Start Date: Steven Laramie, Geologic NY/NorthStar Boring Location: Inside the Building, in hallway by Room 58B Driller: Edward Jones, Bergmann Associates Water Level (During Drilling): Approximately 8 feet Inspector: 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

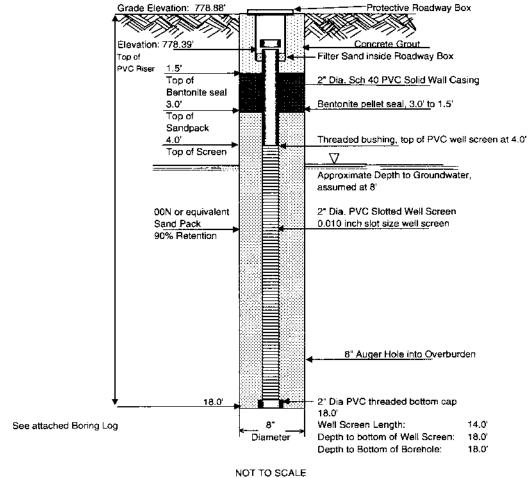
Seal: 3.0 to 1.5 feet Weather Conditions: Not applicable: work was indoors.

Flush to grade roadway box installed over the monitoring well.

		i tusu t	O grade.	oudway	DOX IIIS	tancu o	TOI UIC I	nomion	iig well	•		In. 110
												Field Screening
	DEPTH	BLO	WS ON	SAMPI	_ER			SAMPI		<u>,</u>	SOIL AND ROCK	for VOCs, ppm,
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery	INFORMATION	using PID
			7			18	1	0-2'	soil	44%	Concrete floor to 0.5 feet	
ŀ				11	12						Damp brown F-C SAND	ND
		23	11			18	2	2'-4'	soil	25%	and F-G Gravel, Tr. Silt	
				7	8			l		•	Re-Worked soil, Fill	ND
,	5	10	8	ľ		17	3	4'-6'	soil	63%	Fill to 4.5' 4.5'	
			Ī	9	8		Ĭ				Damp Brown V. Still SILT and F-Sand,	ND
	- 1	12	18			29	4	6'-8'	soil	54%	Faint partings/laminae to 6' 6.0'	j
				11	7	1		1			Damp dark Br. M Dense F-C SAND	ND
•	i	14	6			20	5	8'-10'	soil	83%	and F-M Gravel, Tr. Silt. Wet at 8'	
	10			14	9			1			Wet Gr. Br. M. Dense F-M GRAVEL	ND
	1	3	5			33	6	10'-12'	soil	25%	some F-C Sand, Tr. Silt	
•	1			28	12			1			Same, Wet, becomes Dense	9.0 ppm
	- 1	20	17			49	7	12'-14'	soil	63%	Same, saturated, Dense	''
	- 1		<u> </u>	32	20							5.0 ppm
,	15	48	33			53	8	14'-16'	soil	25%	Same, becomes V. Dense	
				20	12							ND
	ſ	10	6			16	9	16'-18'	soil	50%	Same, M. Dense to 17'5" 17'5	
,	Ī			10	30]			Damp Gray Hard CLAY and Silt	ND
	[ŀ	•		Trace gravel-pebbles. Till 18']
	20[Boring terminated at 18.0 feet	
									_		2" diameter monitoring well	
	[installed in test boring.	·
												<u> </u>
	ſ]			All cuttings placed in drums.	
•	25							}				
	· 1										Minirae 2000 PID with 10.6 ev lamp	ļ i
	1		F								used to screen soil samples for VOCs	
•			<u> </u>								·	
			<u> </u>					1				
	30											
										<u> </u>		

N=No. of Blows to Drive

MONITORING WELL B-13/MW-13



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



GOWANDA DAY HABILITATION CENTER 4 INDUSTRIAL PLACE, GOWANDA, NEW YORK Date installed: 16-Jul-02

MONITORING WELL CONSTRUCTION DETAIL MW-13



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

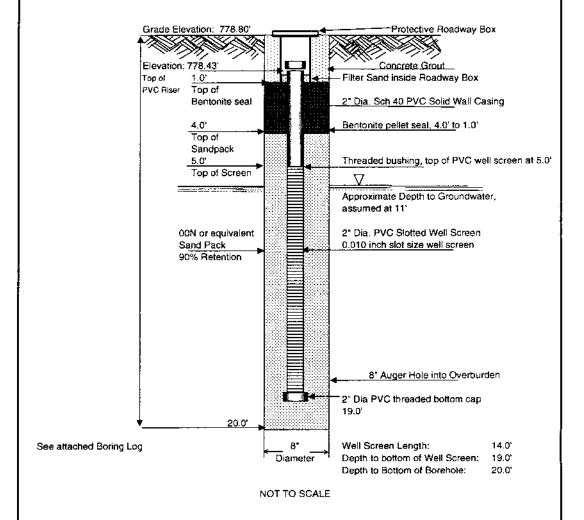
5596.03 Page No. PROJECT: Gowanda Day Habilitation Center Project No: 1 of Start Date: 07/18/02 Finish Date: 07/18/02 Top of Well: Boring No: B-14/MW-14 N/A Driller: Steven Laramie, Geologic NY/NorthStar Boring Location: Inside loading dock area, by east wall. Water Level (During Drilling): Approximately 11 feet Inspector: Edward Jones, Bergmann Associates Drilling Method: 4-1/4 inch Hollow Stem Augers, skid rig Water Level (Post Drilling): Approx. feet 13 below grade Advanced test borings via Hollow Stem Augers. Monitoring well installed via auger pull back method. Remarks: 19 ft. to 5 ft. Slot Size: 0.010 inch Well Type: 2" dia. PVC Screened Interval: 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	BLO	WS ON	SAMPI	ED			SAMPI	· C		SOIL AND ROCK	Field Screening for VOCs, ppm,
0			12"/18"	18"/24"	N	NO.		Туре	Recovery	INFORMATION	using PID
⊢		6	12 715	10 724	17	1	0-2'	soil	78%	Concrete floor to 0.5 feet	using TID
			11	20	17		\ \\ \	3011	10%	Damp Brown F-C Sand and F-C Gravel	16 ppm
	14	9			15	2	2'-4'	soil	42%	. ·	120 ppm
		-	6	20		<u> </u>	1 - '		1.2.0	Damp DarkBrown SILT, some F. Sand	120 pp
5	5	3			8	3	4'-6'	soil	75%	Damp mottled M. Stiff SILT,	51 ppm
			5	5						some F-Sand	
	6	5			11	4	6'-8'	soil	58%	Same Silt, inter-layered wth F-M Sand	78.5 ppm
1			- 6	3			1			, , , , , , , , , , , , , , , , , , , ,	
	WH	WH			1	5	8'-10'	soil	50%	Damp Br. V. Soft SILT, some F. Sand	42 ppm
10			1	1			1			Wet Brown F SAND, Some Silt	''
	1	2			8	6	10'-12'	soil	58%	same to 11' 11'	143 ppm
			- 6	7]	1		Wet F-M GRAVEL some F-C Sand	1
	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'	soi!	50%	Same saturated Gravel, M. Dense	53 ppm
			6	5			1				
	10	18			66	9	16'-18'	soil	91%	9	43 ppm
			48	50/4"		L				Wet Grey M. Dense F-M GRAVEL	
20	8	29	12.	50.00	69	10	18'-20'	soil	100%	Some F-C Sand 18'6"	
20			40	50/2"						Damp Gray Hard SILT and Clay,	53 ppm
						<u> </u>	Į i			Trace Pebbles TILL 20'	
						├─				Boring terminated at 20.0 feet	
						<u> </u>				2" diameter monitoring well	
2.5						<u> </u>				installed in test boring.	
25									<u> </u>		
										All cuttings placed in drums.	
							1			Maria 2000 PMD 131 10 5	
										Minirae 2000 PID with 10.6 cv lamp	
30						.				used to screen soil samples for VOCs	
							L				

N=No. of Blows to Drive

MONITORING WELL B-14/MW-14



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



GOWANDA DAY HABILITATION CENTER
4 INDUSTRIAL PLACE, GOWANDA, NEW YORK

Date Installed: 18-Jul-02

MONITORING WELL CONSTRUCTION DETAIL MW-14



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

PROJECT: Gowanda Day Habilitation Center Project No: 5596.03 Page No. 1 of 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 Water Level (During Drilling): Approximately 12 feet Inspector: Edward Jones, Bergmann Associates 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. Slot Size: 0.010 inch Well Type: 2" dia. PVC Screened Interval: 21 ft. to 6 ft. 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.

Г	ì				OUX IIIs					·	1	Field Screening
do	EPTH	BLO	WS ON	SAMPI	.ER	ļ		SAMPI	Æ		SOIL AND ROCK	for VOCs, ppm,
-	0	0"/6"	6"/12"	_	18"/24"	N	NO.			Recovery	INFORMATION	using PID
┢	t		7			21	1	0-2'	soil	72%	Concrete floor to 0.5 feet	
	Ī			14	30		F	1			Damp F-C SAND and F-C Gravel	102 ppm
	Ī	41	12			17	2	2'-4'	soil	58%		161 ppm
	ľ		İ	5	4			1			Mottled Soft SILT, Some F. Sand	1 ''
	5	1	1			4	3	4'-6'	soil	75%	Damp mottled Soft SILT, some F-Sand	99 ppm
			Ì	3	5						1	1
	Ī	6	8			14	4	6'-8'	soil	67%	Moist mottled stiff SILT, Some F. Sand	96.6 ppm
				6	7			1			partings/faint laminations evident	
	Ī	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	1
		7	10			17	6	10'-12'	soil	50%	F-C Sand, Tr. Silt	83 ppm
				7	10		l				same, becomes M. Dense, wet at 11'10"	
		7	7			9	7	12'-14'	soil	33%	Same, saturated	84 pm
			l	2	1							
	15	1	1		•	6	8	14'-16'	soil	58%	Same, saturated, becomes Loose	84 ppm
				5	9							
	L	25	34			68	9	16'-18'	soil	91%	Same, saturated, becomes V. Dense	70.2 ppm
	L			34	42		ļ					
1	L	5	15			40	10	18'-20'	soil	50%	Same, becomes Dense	75.4 ppm
	20			25	35						j	
İ	L	15	50/4"			50+	11	20-22	soil			not recorded
	Ĺ					<u> </u>					Gray hard CLAY and Silt, TILL 21'	
	ļ.											
	L							:			Boring terminated at 21.0 feet	-
L	25									<u></u>	2" diameter monitoring well	
	1										installed in test boring.	
1	1			:								
1	Ĺ						ļ				All cuttings placed in drums.	
							<u> </u>				Minirae 2000 PID with 10.6 ev lamp	
L	30		- C D1			00.6		-id- 140			used to screen soil samples for VOCs	<u> </u>

N=No. of Blows to Drive 2° Sp

MONITORING WELL B-15/MW-15 Protective Roadway Box Grade Elevation: 778.78 Elevation: 778.38' Concrete Grout Top of Filter Sand inside Roadway Box PVC Riser Top of 2" Dia. Sch 40 PVC Solid Wall Casing Bentonite seal 4.01 Bentonite pellet seal, 4.0' to 1.0' Top of Sandpack 6.01 Threaded bushing, top of PVC well screen at 6.0' Top of Screen Approximate Depth to Groundwater, assumed at 12' 2" Dia. PVC Slotted Well Screen 00N or equivalent Sand Pack 0.010 inch slot size well screen 90% Retention 8" Auger Hole into Overburden 21.0 2" Dia PVC threaded bottom cap 21.0 See attached Boring Log Diameter NOT TO SCALE Well Screen Lenth: 15.0" Depth to bottom of Well Screen: 21.0" Depth to Bottom of Borehole: 21.0" NOT TO SCALE Elevation for Top of Well Casing (TOC) and Grade Elevation are in feet, relative to Mean Sea Level **GOWANDA DAY HABILITATION CENTER** Date installed: 4 INDUSTRIAL PLACE, GOWANDA, NEW YORK 19-Jul-02 MONITORING WELL CONSTRUCTION DETAIL BERGMANN associates MW-15



BORING/WELL NUMBER: Test Boring B-16

	PROJECT:	Gowanda Day Habilitation Center	Project No: <u>5596.03</u> I	Page No. 1 of 1
,	Start Date:	07/08/02 Finish Date: 07/08/02	Top of Well: N/A 1	Boring No: B-16
	Driller:	Steven Laramie, Geologic NY/NorthStar	Boring Location: In former balls	field, 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 backfi	led with grout after completion. I	No well installed.
	Screened Interva	il: None: Test boring only. No monitoring	g well installed. All soil cuttings	placed in 55 gallon drums.
•	Seal: Backfil	led boring with bentonite grout	Weather Conditions: 5	Sunny and clear, 80 degrees F.

					,							Field Screening
١	DEPTH	BLO'	ws on	SAMPI	LER			SAMPI	_E		SOIL AND ROCK	for VOCs, ppm,
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Туре	Recovery	INFORMATION	using PID
		2	2			4	1	0-2	soil	50%	Grass surface, then Brown Soft	
1				2	2]			SILT and F. Sand. Roots to 4"	ND
		2	3			6	2	2'-4'	soil	75%	Same, becomes M. Stiff	
				3	4			1	İ		Same, becomes v. moist to Wet	ND
1	5	2	3			6	3	4'-6'	soil	92%		
				3	2						Same	ND
		2	1			2	4	6'-8'	soil	92%	Į	
				1	1						Saturated at 7' ~WT, becomes Soft	ND
		1	WR			2	5	8'-10'	soil	100%		
	10			1	WR		<u></u>				Same, saturated, V. Soft	ND
		WH	WH			1	6	10'-12'	soil	13%		
				WH	1		l				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
1	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]		İ	Grey Clay and Silt at 18' 18'	ND
	ļ											
	20										Boring terminated at 18.0 feet.	
									ŀ		Boring backfilled with Betonite	
	į										pellets, hydrated.	
	1			ļ .							All cuttings placed in drums.	
	1			<u> </u>			<u> </u>					
	25						İ				Minirae 2000 PID with 10.6 ev lamp	
											used to screen soil samples for VOCs	
	[
				!			•					
	30						!					

N=No. of Blows to Drive

B E R G M A N N 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 fo	rmer ballfield, southwest corner of property
Inspector:	Edward Jones, Bergmann Associates	_Water Level (During Dr	illing): Approximately 8.0 feet.
Drilling Method:	4-1/4 inch Hollow Stem Augers, CME-55 rig	Water Level (Post Drilli	ng): Approx. feet below grade
Remarks:	Advanced test borings via HSA. Boring backt	illed with grout after com	pletion. No well installed.
Screened Interva	al: None: Test boring only. No monitori	ng well installed. All soil	cuttings placed in 55 gallon drums.
Seal: Backfil	lled boring with bentonite grout	Weather Condit	ons: Hazy & overcast, then heavy rain

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

N=No. of Blows to Drive



BORING/WELL NUMBER: Test Boring B-18

PROJECT:	Gowanda Day Habilitation Center	Project No: <u>5596.03</u> Page No. <u>1</u> of <u>1</u>	
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 backf	illed with grout after completion. No well installed.	
Screened Interva	al: None: Test boring only. No monitori	ng well installed. All soil cuttings placed in 55 gallon drums.	
Seal: Backfil	lled boring with bentonite grout	Weather Conditions: Sunny, 70 degrees F in the morning.	

											i	Field Screening
	DEPTH	BLO	WS ON	SAMPI	LER			SAMPI	Æ		SOIL AND ROCK	for VOCs, ppm,
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Туре	Recovery	INFORMATION	using PID
		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			j			Interlayered with Fine SAND and Silt	ND
١ '	5,	2	2			3	3	4'-6'	soil	83%	V. Moist Brown V. Loose F SAND,]
				1	1		<u> </u>				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'	4 ,
,				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		ļ	1				ND
΄	15	3	15،			41	8	14'-16'	soil	8%	Same, but poor recovery	
]			26	49			1			Gray Silty CLAY at 16' 16'	ND
			<u> </u>	<u> </u>				4				
'								Į			Boring terminated at 16.0 feet	
											Boring backfilled with Bentonite	
-	20										pellets, hydrated.	
'											All cuttings placed in drums.	
ł								1		1		
ı								4			Minirae 2000 PID with 10.6 ev lamp	
.	,							1			used to screen soil samples for VOCs	
į	25											
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- [ļ]	!			
	30						<u> </u>					

N=No. of Blows to Drive



BORING/WELL NUMBER: Test Boring B-19

Backfilled boring with bentonite grout

PROJECT:	Gowanda Day Habilitation Center	_ Project No: 5596.03	3 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 p	arking 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 backf	illed with grout after completion	. No well installed.
Screened Interva	al: None: Test boring only. No monitori	ng well installed. All soil cutting	gs placed in 55 gallon drums.
Seal: Backfil	riller: Steven Laramie, Geologic NY/NorthStar Boring Location: In asphalt parking lot, southeast corner of property. Spector: Edward Jones, Bergmann Associates Water Level (During Drilling): Approximately 8 feet. Steven Laramie, Geologic NY/NorthStar Boring Location: In asphalt parking lot, southeast corner of property. Approximately 8 feet. Approx. 8.8 feet Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed. Treened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.		

ı				•	-							Field Screening
	DEPTH	BLO'	WS ON	SAMPI	LER	SAMPLE					SOIL AND ROCK	for VOCs, ppm,
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Туре	Recovery	INFORMATION	using PID
		24	16			30	1	0-2'	soil	50%	Asphalt Surface 0.5'	
			- "	14	7			1		i	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'	lios	67%	Same mottled Stiff SILT some F. Sand	
				4	3						V. Moist at 6.0'	ND
	i	4	3			5	4	6'-8'	soil	58%		
	[2	2						Same to 7'10", m. Stiff then WET 7'10"	ND
	i	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	
	ľ			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	
١				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.	!
	Ī											
'	1			· · · ·							Minirae 2000 PID with 10.6 ev lamp	
											used to screen soil samples for VOCs	
	30											

N=No. of Blows to Drive



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: As	phalt parking lot, northeast corner of property								
Inspector:	Edward Jones, Bergmann Associates	Water Level (During l	Drilling): Approximately 12 feet.								
Drilling Method:	4-1/4 inch Hollow Stem Augers, CME-55 rig	Water Level (Post Dri	lling): Not encountered: augers dry.								
Remarks:	Advanced test borings via HSA. Boring backfi	lled with grout after co	mpletion. No well installed.								
Screened Interval: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.											
Seal: Backfi	led boring with bentonite grout	Weather Cond	litions: Warm, humid in afternoon, 78 degrees F								

					Γ					Ĭ	Field Screening
DEPTH	BLO	WS ON	SAMPI	LER	SAMPLE					SOIL AND ROCK	for VOCs, ppm,
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery	INFORMATION	using PID
	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				1		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
1 {	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	<u>-</u>			i		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			1			becomes gray at 13'	14.7 ppm
15.	6	12			27	8	14'-16'	soil	83%	Same to 15', then Clay 15.0'	4
			15	31			l			Damp Gray Hard CLAY and Silt	9.3 ppm
										Trace Pebbles TILL 16.0'	
!!											
						<u> </u>				Boring terminated at 16.0 feet	
20						ļ			ļ	Boring backfilled with Bentonite	
						<u> </u>		!		pellets, hydrated	
						<u> </u>				All cuttings placed in drums.	
										Minirae 2000 PID with 10.6 ev lamp	
25										used to screen soil samples for VOCs	į
						ļ					1
							İ				
30		i									

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



BORING/WELL NUMBER: Test Boring B-21

PROJECT:	Gowanda Day Habilitation Center	Project No:	5596.03	Page No.	1of	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 f	ront of the	west loadin	g 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	t Drilling):	Approx. 9.9	feet (
Remarks:	Advanced test borings via HSA. Boring backt	filled with grout afte	er completion.	No well ins	talled.					
Screened Interva	al: None: Test boring only. No monitoring well installed. All soil cuttings placed in 55 gallon drums.									
Seal: Backfi	lled boring with bentonite grout	Weather C	Partly cloud	ly, 65 degre	es F in morning					
				warmer in t	he afternoo	n				

Г	- 1											Field Screening
D	ЕРТН	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK	for VOCs, ppm,
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Туре	Recovery	INFORMATION	using PID
\vdash		3	3			4	1	0-2'	soil	25%	Gravel surface	1.7 ppm
1				1	2	-		1	l		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			1	l		same fill	
1	5	1	2			6	3	4'-6'	soil	54%	same fill	2.0 ppm
\vdash				4	10						Same fill to 7'10" 7'10"	
1	- 1	6	5			10	4	6'-8'	soil	42%	Wet F-M GRAVEL, Some F-C Sand,	ND
1				5	7						Trace Silt	
	1	. 9	19	T		47	5	8'-10'	soil	63%	Same, Saturated Dense F-M GRAVEL,	ND
	10			28	18			1			some F-C Sand, Trace Silt	
_		27	14			42	- 6	10'-12'	soil	83%	Same, Saturated, Dense	ND
	1			28	29							
	1	9	8			17	7	12'-14'	soil	67%	Same, becomes M. Dense	ND
	1			9	10			1				
	15	28	25		-	53	8	14'-16'	soit	92%	Same, becomes V. Dense	ND
\vdash				28	17							
	1	11	14	i		38	9	16'-18'	soil	92%	Same to 16'6" 16'6"	ND
	[24	25		Ī]			Damp Gray Hard CLAY and Silt. Till	
	[]			18.0'	
	20						<u>. </u>				Boring terminated at 18.0 feet]
Г											Boring backfilled with Bentonite	
	- [1			pellets, hydrated.	
	1							1			All cuttings placed in drums.	
İ	1		i i					1				
	25						ľ	1			Minirae 2000 PID with 10.6 ev lamp	
\vdash							-				used to screen soil samples for VOCs	
							<u> </u>	1			•	
	1			"								
	ŀ											
	30			<u> </u>]				

N=No. of Blows to Drive 2" S



BORING/WELL NUMBER: Test Boring B-22

PROJECT: Gowanda Day Habilitation Center Project No: 5596.03 Page No. 1 of 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. Edward Jones, Bergmann Associates Water Level (During Drilling): Approximately 3.5 feet. Inspector: Drilling Method: 4-1/4 inch Hollow Stem Augers, CME-55 rig Water Level (Post Drilling): Approx feet 4.5 below grade Advanced test borings via HSA. Boring backfilled with grout after completion. No well installed. Remarks: 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.

											00 de <u>E</u> 1003 r .	
ı												Field Screening
	DEPTH			SAMP	LER			SAMPI			SOIL AND ROCK	for VOCs, ppm,
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.		Type	Recovery	INFORMATION	using PID
		1	2	Ī		5	1	0-2'	soil	75%	Grass surface, then Damp Brown	
	[3	4		L .]			M. Stiff SILT, mottled with roots	ND .
	[3	3			6	2	2'-4'	soil	67%	Same M. Stiff SILT, mottled	
	[3	2]	ŀ		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"	<u> </u>
				4	5]	ŀ		Wet Gray M. Dense F-M GRAVEL	ND
	[4	7		i	19	_5	8'-10'	soil	67%	Some F-C Sand, Tr. Silt	
	10			12	12				İ	1	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											
							l '				Boring terminated at 14.0 feet	ND
١	[]		ļ	Boring backfilled with Bentonite	
١											pellets, hydrated.	
ı	L										All cuttings placed in drums.	
l	20				:							
										į	Minirae 2000 PID with 10.6 ev lamp	
-											used to screen soil samples for VOCs	
Ì												
-	[
-	25											
ı		_										
1	Ī							1				
		,					Γ.	1				
1]				
1	30							1				

N=No. of Blows to Drive



BORING/WELL NUMBER: Test Boring B-23

PROJECT:	Gowanda Day Habilitation Center	Project No: 5596.0	3 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 par	king 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 backf	illed with grout after completion	. No well installed.
Screened Interv	al: None: Test boring only. No monitori	ng well installed. All soil cutting	gs placed in 55 gallon drums.
Seal: Backfi	lled boring with bentonite grout	Weather Conditions:	Partly cloudy, 80 degrees F in afternoon

_		· · · · · · · · · · · · · · · · · · ·										Field Screening
•	DEPTH	BLO'	WS ON	SAMPI	ÆR			SAMPI	Æ		SOIL AND ROCK	for VOCs, ppm,
	0		6"/12"		18"/24"	N	NO.	Depth		Recovery	INFORMATION	using PID
		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'	
	i			2	3			1			Becomes V. Moist at 4.0'	1
•	5	3	3	<u> </u>		6	3	4'-6'	soil	67%	Damp mottled M. Stiff SILT, Some	
				3	3						F-C Sand, Trace Silt	7.8 ppm
	i	WH	WH			1	4	6'-8'	soil	25%	Same, V. Soft, V. Moist	''
	- 1			WH	WH			1			Gravel at 8' 8.0'	4.4 ppm
	1	WH	1			3	5	8'-10'	soil	33%	V. Moist Br-Gr V.Loose F-M GRAVEL,	1
	10	11.		2	9	-		1			Some F-C Sand, Tr. Silt. Wet 9'10"	4.4 ppm
		5	9	:		21	6	10'-12'	soil	50%	Same, saturated, M. Dense	
	ſ			12	14			1				0.5 ppm
	Ī	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	
'	ļ			not sam	pled						Trace Pebbles, Laminated TILL 18'	0.5 ppm
							ļ					
	20										Boring terminated at 18.0 feet	
۱ ۱	ļ										Boring backfilled with Bentonite	
	Ļ										pellets, hydrated	
	Į.										All cuttings placed in drums.	
·												
	25										Minirae 2000 PID with 10.6 ev lamp	
	[used to screen soil samples for VOCs	
.	L											
- 1	30											

N=No. of Blows to Drive

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



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 n	orth 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 backf	illed with grout after completion.	No well installed.
Screened Interva	al: None: Test boring only. No monitoring	ng well installed. All soil cutting	s placed in 55 gallon drums.
Seal: Backfil	lled boring with bentonite grout	Weather Conditions:	Warm, humid in afternoon, 80 degrees F

												Field Screening
Ι	EPTH [BLO	WS ON	SAMPI	LER			SAMPI			SOIL AND ROCK	for VOCs, ppm,
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Туре	Recovery	INFORMATION	using PID
Γ		1	4			11	ł	0-2'	soil	58%	Grass surface	
	[Γ	7	5		I	1			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		Ĭ <u></u>]			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,	
Г				4	5						some F-C Sand Roots encountered	ND
1		4	6			11	4	6'-8'	soil	58%	Same Silt, becomes Stiff	
1	[5	6]				ND
1	[3	5			12	5	8'-10'	soil	100%	Same Stiff Silt, some F-C Sand	
-	10			7	8		Γ]			Same to 9'8", then Gravel 9'8"	6.6 ppm
Γ		5	7			12	6	10'-12'	soil	58%	Damp Br. F-M M. Dense GRAVEL,	1
1	[5	7]			some F-C Sand, Tr Silt	4.3 ppm
1	[5	5			12	7	12'-14'	soit	38%	Same, becomes saturated at 12' WT~12'	
1	Γ			7	9							6.5 ppm
	15	10	12			38	8	14'-16'	soil	75%	Becomes Dense, Same to 14'6",	
Г				26	40						Gray Gravel. Saturated	10.6 ppm
ł	[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%		
L	20		- "	50/4"							Same to 22.25', then gray clay	18.4 ppm
Г		26	31			68	11	20'-22'	soil	100%	22.25	
				37	49						Moist Gray Hard CLAY, some Silt. TILL	5.3 ppm
											22.50	
L	25										Boring terminated at 22.5 feet	
Г											pellets, hydrated	
1	Γ										All cuttings placed in drums.	
	Ī											
	Ī										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



BORING/WELL NUMBER: Test Boring B-25

	PROJECT:	Gowanda Day Habilitation Center	Project No:	5596.03 Page No. 1 of 1
ł	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 Dr	illing): Approximately 9 feet
•	Drilling Method:	Portable Tripod, Bosch Electric Hammer,	Water Level (Post Drilli	ng): Not determined using Marcro Core.
	Remarks:	4 foot Macro Core Sampling Barrel used to co	llect continuous soil samp	oles. Boring backfilled upon completion
ı	Screened Interva	al: None: Test boring only. No monitoring	ig well installed. All soil	cuttings placed in 55 gallon drums.
	Seal: Backfil	led boring with bentonite grout	Weather Conditi	ons: not determined using Marcro Core.
				Work was inside the building.

.												Field Screening
	DEPTH	BLO	WS ON	SAMPI	LER			SAMPI	LE _		SOIL AND ROCK	for VOCs, ppm,
	0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Туре	Recovery	INFORMATION	using PID
						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 BrGray SILT,	1 l
										100%	little F. Sand	ND
•	5			Ī .		ND	2	4'-8'	soil		Same Damp mottled SILT, little F. Sand	!
- [Same	ND
-	[ND]				
,											Same at 8.0'	ND at 9.0'
1	[·	ND	3	8'-12'	soil	100%	Same, becomes saturated at 9.0' 9.0'	ND at 9.0'
١	10]			Change to Wet Brown F-M GRAVEL,	1
. I						ND					some F-C Sand, Trace Silt	ND
' [ľ							1				
	Ī	• • • • • • • • • • • • • • • • • • • •				ND	4	12'-16'	soil	100%	Same, Saturated, becomes Gray	ND
	ſ										•	
۱ ۱	15										Same Gravel and sand, trace Silt 16'	ND
ſ											Refusal at 16. 0 feet	1 1
1	[Boring terminated at 16.0 feet	!
'											Boring backfilled with Bentonite	
-											pellets, hydrated.	
L	20	:									All cuttings placed in drums.	l
ı											Minirae 2000 PID with 10.6 ev lamp	
-	[-"			- "				used to screen soil samples for VOCs	-
	25											!
ſ												
	Γ											
1	Ī											
1												
	30											

No blow counts recorded



BORING/WELL NUMBER: Test Boring B-26

PROJECT:	Gowanda Day Habilitat	tion Center	Project No:	5596.03	Page No.	1	of	1
Start Date:	07/23/02 Finish I	Date: 07/23/02	Top of Well:	N/A	Boring No:	B-26		
Driller:	Steven Laramie, Geolog	gic NY/NorthStar	Boring Location:	In the buildi	ng, in hallwa	y south	of cafe	eteria Room 12
Inspector:	Edward Jones, Bergman	nn Associates	Water Level (Dur	ing Drilling):	Approxima	tely 11 f	eet	
Drilling Method:	Portable Tripod, Bosch	Electric Hammer,	Water Level (Pos	t Drilling):	Not determ	ined usir	ng Ma	rcro Core.
Remarks:	4 foot Macro Core Sam	pling Barrel used to	collect continuous so	il samples. Be	oring backfil	led upon	com	pletion
Screened Interv	al: None: Test bor	ing only. No monito	ring well installed. A	All soil cutting	s placed in 5	5 gallon	drum	s.
Seal: Backfi	lled boring with bentonit	e grout	Weather (Conditions:	not determi	ned usin	g Mai	rcro Core.
					Work was i	nside the	e build	ling.

1 1									"		Field Screening
DEPTH	BLO	WS ON	SAMPI	LER			SAMPI	LE .		SOIL AND ROCK	for VOCs, ppm,
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery	INFORMATION	using PID
					ND	1	0-4'	soil	100%	Concrete floor to 0.5 feet	
]			F-C SAND and F. Gravel Fill	15.5 ppm
				T	ND		1	[Fit1 to 3.0' 3.0'	18.9 ppm
]	ĺ	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		1			Same, moist at 7'	
							1			Same	5.3 ppm
					ND	3	8'-12'	soil	100%		5.3 ppm
10							1			Same to 10.0' 10.0'	
					ND					Dark Br. F - M GRAVEL, some Silt	3.9 ppm
1 [1			Becomes Wet at 11'	3.7 ppb
					ND	4	12'-16'	soil	100%		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										i	
										•	
	$\neg \neg$										
30											

No blow counts recorded



BORING/WELL NUMBER: Test Boring B-27

PROJECT:	Gowanda Day Habilitation Center	Project No: <u>5596.0</u>	3 Page No. 1 of 1
Start Date:	07/26/02 Finish Date: 07/26/02	Top of Well: N/A	Boring No: <u>B-27</u>
Driller:	Steven Laramie, Geologic NY/NorthStar	Boring Location: In the build	ing, 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 co	llect continuous soil samples. E	foring backfilled upon completion
Screened Interva	al: None: Test boring only. No monitoring	ng well installed. All soil cuttin	gs placed în 55 gallon drums.
Seal: Backfil	lled boring with bentonite grout	Weather Conditions:	Light rain, 68 degrees F in morning

											Field Screening
DEPTH	BLO	WS ON	SAMP	LER			SAMPI	E		SOIL AND ROCK	for VOCs, ppm
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery	INFORMATION	using PID
					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 BrGray SILT,	
						L	_		100%	_ ·	0.8 ppm
5					ND	2	4'-8'	soil		Same Damp Brown SILT, little F. Sand	
]			Same, mottled brown & gray	0.6 ppm
					ND	ļ]				
							_}			becomes v. moist at 8'	2.8 ppm
					ND	3	8'-10'	soil	100%	(short length sample)	
10		<u> </u>		İ						Same. V. Moist at 10'	1.0 ppm
					ND	4	10'-14'	soil	100%		
		<u> </u>	<u> </u>	<u> </u>			1			Same to 12.0', then wet Gravel 12'	3.4 ppm
		<u> </u>			ND	<u> </u>	1			Wet Br. F-M GRAVEL, some	
- 1		<u> </u>	<u> </u>	<u> </u>		5	14-18'	soil	100%	F-C Sand, Tr. Silt	3.4 ppm
15			<u> </u>							same, saturated gravel	
			<u> </u>			<u> </u>					1.5 ppm
		<u> </u>	ļ				1				3.0 ppm
		<u> </u>	ļ			<u> </u>	4			Macro Core refusal at 17'	
		ļ	<u> </u>							Boring terminated at 17.0 feet	
20		<u> </u>								Boring backfilled with Bentonite	
						ļ	1			pellets, hydrated.	
				ļ			1			All cuttings placed in drums.	
						 	4	l			
1		<u> </u>	ļ				4			Minirae 2000 PID with 10.6 ev lamp	
25										used to screen soil samples for VOCs	
		·	<u> </u>	Ļ			1				
- 1		ļ <u>.</u>		<u> </u>			4				
ļ			ļ				4				
ļ		 	ļ				4				
30		l .	1				J	L	1	1	i

No blow counts recorded



BORING/WELL NUMBER: Test Boring B-28

	PROJEC	T:	Gowan	da Day	Habilita	tion Ce	nter		Project	t No:	5596.03 Page No. 1 of	1
ŀ	Start Dat	te:	07/23/0	02	Finish	Date:	07/23/	02	Top of	Well:	N/A Boring No: B-28	
	Driller:		Steven	Larami	e, Geolo	gic NY	/NorthS	tar	Boring	Location:	Inside building, north hallway, northear	st corner.
	Inspecto	r:	Edward	d Jones,	Bergma	nn Asso	ociates	_	Water	Level (Duri	ing Drilling): Approximately 11 feet	
:	Drilling N	Aethod:	Portabl	le Tripo	d, Bosch	i Electri	c Hamn	ner,	Water	Level (Post	Drilling): Not determined using Ma	arcro Core.
	Remarks	:	4 foot l	Масто С	ore San	ıpling B	Barrel us	ed to col	lect cor	ntinuous soi	I samples. Boring backfilled upon comp	pletion
	Screened	l Interva	al:	None:	Test box	ring onl	y. No n	nonitorin	g well i	installed. A	Il soil cuttings placed in 55 gallon drum	ıs.
•	Seal:	Backfi	lled bori	ng with	bentoni	te grout	.			Weather C	Conditions: not determined using Man	гсго Соге.
						_					Work was inside the build	
	DERMI			C + 2 4 P					_			Field Screening
•	DEPTH 0:		WS ON 6"/12"	SAMPI 12"/18"	LER [18"/24"	N	NO.	SAMPI Depth		Recovery		for VOCs, ppm using PID
		0.70	6 /12	12 /18	18 724	ND	1	0-4'	soil	90%	Concrete floor to 0.5 feet	using PID
						NE	, ,	1 0-4	3011	30%		15 ppm
'	!					ND		1			I -	18.2 ppm
								1		100%		16.5 ppm
,	5			<u> </u>		ND	2	4'-8'	soil		-	15.4 ppm
			ļ	<u> </u>	ļ <u></u>	NID	.	Į į			Same mottled SILT with F. Sand	15.4 ppm
						ND		-				15.4 ppm
,				<u> </u>		ND	3	8'-12'	soil	100%	Same to 9.0' 9.0'	15.4 ррпі
	10		İ]		ļ.		15.3 ppm
						ND						
,											Becomes Wet at 11' 13.0'	
						ND	4	12'-14'	soil	100%		3.4 ppm
	15						 	1]	Gravel. TILL 13.5' Refusal at 13.5 feet	
'	15										Notable at 15.5 feet	
							1.				Boring terminated at 13.5 feet	
,											Boring backfilled with Bentonite	
	20		<u> </u>								pellets, hydrated.	
	20						<u> </u>				All cuttings placed in drums.	
											Minirae 2000 PID with 10.6 ev lamp	
	ļ i										used to screen soil samples for VOCs	
	25]	
İ	[
								'				

No blow counts recorded

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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: Wednesda	e: Wednesday	y, August 28, 2002	2002						
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MANA, 10
Casing Elevation*	778.23	778.08	778.38	778.43	778.61	781 10	780 94	784.93	707 61	200 002
(Depth to Groundwater (btoc)	6.24	5.96	6,42	7.95	10.79	13.33	13 93	20.00		
Groundwater Elevation	771.99	772.12	771.96	770.48	767.82	767 77	767 71	271 07		ľ
Well Diameter	2	2,	.2	6	10	.6	6	6	173.30	1,72,93
Product Thickness	ρυ	PL	þ	pu	1	, E	7	7 7	7	7
Well Depth (btoc)	16.02	17.15	16.30	15.78	12.05	00 00	2 2	יום לי	100	AIG.
Bottom of Moll Classics	1000		3	2	0.00	22.00	71.80	1,.65	20.96	19.42
DOMONI OF WASH 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	9 20	11 71	10.00
Minimum Purge Volume (gal)	1.59	1.82	1.61	1.28	0.52	1.56	1.40	96 -	1 01	12.33
3 Volumes	4.78	5.47	4.83	3.83	1.55	4.67	4 19	4.05	1.31	
Actual volume purged	5.50	5.50	5.25	4.00	2.00	5.50	4.50	4 50	00 8	
Comments	Flush = -0.29'	Flush = -0.30'	Flush = -0.23'	Flush = -0.34	-	Stickup=2.17		stickup=2.84	stickup=2.05	stickin=2.56°
										À

	Sampling Da	Sampling Date: Wednesday, August 28, 2002	y, 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	ри	pu	pu	ρu	pu
Well Depth (btoc)	15.48	17.38	17.40	18.15	19.80
Bottom of Well Elevation	763.10	781.12	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	Fiush = -0.39	Flush = -0.38

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

NOTES

All measurements are in feet, referenced to Mean Sea Level btoc = Below top of casing (inner riser)

All measurements are in feet, referenced to the 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	ate: 10/17/02								
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	6-MM	MW-10
Casing Elevation*	778.23	778.08	778.38	778.43	778.61	781.10	780.94	781.33	782.61	780 n2
Depth to Groundwater (btoc)	5.99	5.75	6.23	8.06	10.97	13.44			90.08	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	ν.".	2"	2		2	ţ,
Product Thickness	рu	pu	pu	pu	Pu				nd	1 5
(Well Depth (btoc)	16.02	17.15	16.30	15.78	13.95	22.88	21.	17.65	20.96	19 42
Bottom of Well Elevation	762.21	760.93	762.08	762.65	764.66	758.22	_	763 68	76165	780.80
Thickness of Water Column	10.03	11.40	10.07	7.72	2.98				11.88	19 79
Minimum Purge Volume (gal)	1.63	1.86	1.64	1.26	0.49				1 94	2 0.2
3 Volumes	4.90	5.57	4.92	3.78	1.46			,	5.81	6 22
Actual volume purged	5.50	5.50	5.25	4.00	2.00	5.50	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=2.847	stickup=2.05	stickup=2.56

	Monitoring Date:	ate: 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	pu	рп	pu	pu	pu
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	90'6	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

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

TOTAL VOLUME TO PURGE, 3X ALL WELLS:

Gallons 68.68

NOTES

All measurements are in feet, referenced to Mean Sea Level btoc = Below top of casing (inner riser)

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 Da	Monitoring Date: Tuesday,	December 10, 2002	, 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	70.7	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.	-5"	2"	2"	24	2
Product Thickness	рu	pu	pu	Р	pu	pu	pu	pu	pu	pu
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	เล	ns	пs	.Su	ns	รูบ	SU	SU
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 Da	ate: Tuesday,	Monitoring Date: Tuesday, December 10, 2002), 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	99'9	6.73	9.54	10.37
Groundwater Elevation	772.68	177.94	771.66	768.89	768.01
Well Diameter	.5	.2.	2.	2*	2"
Product Thickness	pu	pu	pu	ρυ	pu
Well Depth (btoc)	15.48	17.38	17.40	18.15	19.80
Bottom of Weil 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	SU	รน	Su	SU	ยน
Comments	Flush = -0.23	Flush = -0.35	Flush = -0.48	Flush = -0.39	Flush = -0.38
	Railor*				

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

NOTES

All measurements are in feet, referenced to Mean Sea Level btoc = Below top of casing (inner riser)

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.

	G	ROUND	WATER	SAMPL	ING WO	RKSHEE	<u>:T</u>			
PROJECT N Project Number Site Location Sample Date Weather: Personnel:	per:	55° Gow Par	96.03 anda, M	1y 0 2	unny r	tion cent	- - - B E R	r•6		N N
GROUNDWA	TER SA	MPLE P	OINT							
Well Number Location: Casing Diame	eter: er, below	top of ca		esamp Buill	7-4	=6.64		0.041	gal/foot	1 1
Depth to botte Length of wat			- <u> </u>	<u> </u>	15-33'	16.07			gal/foot gal/foot	1 8
20.19.1.01.17.2.		.,,	. <u>- , - </u>	Y ,	-		1		gal/foot	
Volume of war 3 Well volume Actual volume Sampling Mer Sampling Equ Well Recharg Required Ana	es (= ien e purged thodolog uipment: ed? dysis:	gth water prior to select y: Oed; Variation To Yes All:	r column sampling 'cated ble S Purge	X gal/fo g: Tef peach p well SVOCS	ion bai	10 ga ler 1+1< pc Low Fi	599a/1 110 N UW Ro	ed ve	terb q pest:	<i>ંઇલ</i>
	ı <u>.</u>		Accum	ulated V	olume E	Purged in	Gallon		· ,	,
Parameter			/	1.5	oldine i	ti ged ii	2/	5	-,	-,
Turbidity	7949	>999	>900	307	>9aa	>400	384	37	B 129	37
Temperature	19.1	18-3	17.6	17.4	17.1	12.4	18-0	18-6		18-6
рН	7.03	7.24	7.35	7-42	7.44	7.45	7-49	7.50		7.59
Conductivity	0684	0-652		0.557		0.607			0-604	0-59
DO	9.08	9-32	9.69	9.79	9.94	10-10	11-4/	1221	12.51	12.5
5 4	6,02		0-02	0-02	0.05	0.02	0.02		0.02	2 هـه
Time sample	was colle	ected:	11 0	^e Am						
COMMENTS	,	Collec	+00 /	Buse	Sample	, DUX	olicut	e 5	ample	
		M		sampl		MSD	Sam			
										1

	<u>G</u>	ROUND	WATER	SAMPLI	NG WO	RKSHEE	T	
PROJECT Name Project Numb Site Location Sample Date Weather: Personnel:	per:	559 Gowa 08 Humid	6.03 anda, n 12910 1,291), 75°		BER	G M A N
GROUNDWA	TER SA	MPLE P	<u>OINT</u>					
Well Number: Location: Casing Diame Depth to wate Depth to botto Length of wat Volume of wa 3 Well volume Actual volume Sampling Met Sampling Equ	eter: er, belower om of the er column ter in we es (= lenger chodolog	top of case well: In in well Il casing gth water prior to section.	asing: 16.0 16.0 9.76 gallons column sampling ca tel	: <i> \59</i> X gal/fo : Ba:/c	ot X 3):	1.78 5.50 Develop	1" == 2" == 4" == 6" == 8" ==	Volume/Foot 0.041 gal/foot 0.163 gal/foot 0.653 gal/foot 1.469 gal/foot 2.611 gal/foot
Well Recharg	ed?	Yes						•
Required Ana	lysis:	Full /	analys:	5, 0:	plica	ж, <u>А</u>	SP, 195	msD
FIELD PARA	METER	MEASUI	REMENT	<u>rs</u>	,			
			Accum	ulated V	olume P			
Parameter	0	.5	1.0	1-5	2.4	3.0	4-0	5.50
Turbidity	68	4/	765	580	363	142	59	3.7
Temperature	21-8	21.1	20. 7	20.6	203	3/00	20-6	20-8
pH	8-66	8-65	8-65	8-64	8-64	8.65	8-65	8-65
Conductivity	0.569	0.566	0.548	0.541		6.2.58	0.52/	0-517
Do	10.02		10.24		10.93	11.18	11-13	10.92
Time sample				20 pm	·	Sured	0-02 On 08	3/28/02

	G	ROUND	WATER	SAMPL	ING WO	RKSHE	ET	
PROJECT N Project Numb Site Location Sample Date Weather: Personnel:	AME: ber:	5590 VIII 491 08/2	wand 6 6.03 e Gow 8/02 1,75°f	anda, Thurs	MY MY	ili+a+20		R G M A N associates
GROUNDWA	TER SA	MPLE P	OINT					
Well Number Location: Casing Diame Depth to wate Depth to botto Length of wat	eter: er, below om of the	top of case well:	17, 500 ^ asing: 17.15			idong	1" = 2" =	Volume/Foot 0.041 gal/foot 0.163 gal/foot 0.653 gal/foot
Volume of wa 3 Well volume Actual volume Sampling Met Sampling Equ	es (= lenged thodolog	gth wate prior to s y: Dispi Varia	r column sampling ४०४१ / ७१९ ऽ१०	X gal/fo j:)edica ecd D	ot X 3): 5 • 5 <i>4</i> + ed Ba erista	ziler Itic P	8" =	: 1.469 gal/foot 2.611 gal/foot
Well Recharg Required Ana		Yes.			. '	rechar		• •
FIELD PARA	METER	MEASUI	REMENT	<u>rs</u>				
			Accumi	ulated V	olume P	urged in	n Gallon	S
Parameter	JUNAL	5	ાં	(5	7	7	415	5.5 FILM
Turbidity	208	999	412	603	131	85	100 4D	(6)
Temperature	16.20	15.2	15.7	15.1	15.3	15.8	16.1 16.2	
рH	8.55	8,52	હત્રક	8.32	8.29	8.43	846 851	
Conductivity	1,09	1,05	.672	-5৪৭	•55 <u>9</u>		533,528	
00	11:59	12.05	11.79	12.02	12.04		180/180	
SAL	0.04	0.04	0.02	0.02	002	0.07	0.02 0.02	0.02
Time sample	was colle		16:			•••	A	
COMMENTS		Samp	1e co/	1ected	1/nme	diates	atter	

			~					
	<u>G</u>	ROUND	WATER	SAMPL	NG WO	RKSHEE	<u>T</u>	
PROJECT N Project Numb Site Location Sample Date Weather: Personnel:	per:	HUMI	-03 nda, N 08/26 d 7	. Kī			BER	G M A N ssociates
GROUNDWA	TER SA	MPLE P	OINT					
Well Number Location: Casing Diame	A	MW Sphait, S		side of	E 8 0 11 d	1:109	Well Dia.	Volume/Foot
Depth to wate Depth to botto Length of wat	om of the	e well:	1630		· •		2" = 4" = 6" =	0.041 gal/foot 0.163 gal/foot 0.653 gal/foot 1.469 gal/foot
Volume of wa 3 Well volume Actual volume Sampling Met Sampling Equ	es (= lenged thodolog	gth water prior to s y: <i>Deà</i>	r column sampling 1cated	X gal/foo p: Ballo	ot X 3): 5- 6	11.33 9 all		2.611 gal/foot
Well Recharg		yes						•
Required Ana	lysis:	<u>voc.</u>	<u>s - T</u>	<u> </u>				•
FIELD PARA	METER	MEASU	REMENT	<u>rs</u>				
			Accum	ulated V	olume P	urged in	Gallon	s
Parameter	0	0.5	1.5	2-0	3.0	4.0	5-0	SAMPLE
Turbidity	7993	619	130	488	576	342	137	/23
Temperature	21.50	20.6	20.9	21.40	21.80	20-6	21,6	Z5.0
рH	8.71	8.56	8.5/6	8.56	8.60	8.44	8.57	8.43
Conductivity	0.715	0-564	0.554	0.584	0.509	0.552	0.515	0.627
DO	10.50	10.33	10.36	10-1	9.85	10-32	10.09	8.45
5W	0.03	0.02	0.02	0.02	0,02	0-02	2,02	0.02
Time sample	was colle	ected:		30				
COMMENTS	1	UMP	rate=	Same	p rec	harge	rate	
	/	3 ampik	2 CO11	ected	~1 h	or at	ter we	Development
		7						

GROUNDWATER SAMPLING WORKSHEET Gowanda Day Habilitation center PROJECT NAME: Project Number: Site Location: Gowanda, NY Sample Date: wells 08/28/02 Weather: Humik. BERGMAN Personnel: m Marschner associates **GROUNDWATER SAMPLE POINT** Well Number: MW-4 Parking LOT, East side of Building Location: Casing Diameter: Well Dia. Volume/Foot Depth to water, below top of casing: 1" = 0.041 gal/foot Depth to bottom of the well: 2" = 0.163 gal/foot Length of water column in well: 4" = 0.653 gal/foot 6" = 1.469 gal/foot 8" = 2.611 gal/foot Volume of water in well casing, gallons: 3 Well volumes (= length water column X gal/foot X 3): Actual volume purged prior to sampling: Sampling Methodology: Vedicated Sampling Equipment: Variable Speed Deristaltic Well Recharged? VOCS -TCL Required Analysis: FIELD PARAMETER MEASUREMENTS Accumulated Volume Purged in Gallons **Parameter** 20 3-0 ٥ 4.0 0.5 20 Turbidity 192 7999 266 61 Temperature 20.5 2,71217 20.8 20.9 21.0 8-58 8.68 Hq 88.8 8.79 8.66 9.01 0.612 Conductivity 0.620 0.624 0.626 0.616 0.614 9.2 9-31 9.67 10.20 10.22 9.28 Sal 0.02 U.03 0:02 0.02 0.02 Time sample was collected: COMMENTS Pump rate = rectarge Mate. SaMPR collect

mmediately after well Development

	<u>G</u>	ROUND	WATER :	SAMPLI	NG WOF	RKSHEE	I		
PROJECT NA Project Numb Site Location: Sample Date: Weather: Personnel:	er:	HUM	08/28 da, N. 08/28		·		BER	G M A N	
GROUNDWA	TER SA	MPLE P	<u>OINT</u>						
Well Number: Location: Casing Diame	eter:	2.0j/	2	COLVE	l of p	roperts	Well Dia.	Volume/Foot	
Depth to wate Depth to botto Length of wate	m of the	well:	13.9				2" = 4" = 6" =	0.041 gal/foot 0.163 gal/foot 0.653 gal/foot 1.469 gal/foot	
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: Veriable speed peristaltic Pump									
Well Recharge Required Ana		Yes	s - TC	4					
FIELD PARA								•	
			Accumi	ulated V	olume P	urged i	Gallon	s	
Parameter	0	0.5	0.75	1.0	1.25	1.5	1-75	FINAL -2.	
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 <i>-48</i>	8.46		8.48	8-47	8.47	
Conductivity	1.00	0.97	0.770				0.72/	0.740	
00	10.29	10.97	10.68	10,47		10.44	10-42	10-42	
<u> 561</u>	0.04	0.04	0.03	0.03	.03	0-03	0.03	0,03	

Cuell recharged - pump rule = recharge rate cuell Sampled Immediately after Development Low Turbidity

Time sample was collected:

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NA	AME:	C-04.4	مام ۸۵	14 Hab:1	· L., L. on				
Project Numb			6-03	9 170 . 1	, 77 <u>, 77, 107, 2</u>	-2717	_		
Site Location:		(Gowo		en					
Sample Date:			3/27/	02			-	7	
Weather:	•				·	·		, , ,	
Personnel:			7,680+ Jones	f : n 4.	/n		BE F	k G M associat	A N
reisonnei.		<u> </u>	7 0 1 2	_			- '	2550C1A1	i.cs
GROUNDWA	TER SA	MPLE P	OINT						
Well Number:		mw	-6	_					
Location:		+10N	h pro	perts L	:R				
Casing Diame	eter:	2,00	`	_					
							Well Dia	Volume	/Foot
Depth to water	r, below	top of ca	asing:	13.3	<u>3_</u>	_	1":	= 0.041 ga	al/foot
Depth to botto	om of the	e well:	22	39	_		2" =	= 0.163 ga	al/foot
Length of wat	er coium	nn in well	9.5	5	_		4" =	= 0.653 ga	al/foot
							6" =	= 1.469 ga	al/foot
							8" =	= 2.611 ga	al/foot
Volume of wa	ter in we	ell casing	, gallons	: 1.5	5٩				
3 Well volume	es (= len	gth water	r column	X gal/fo	ot X 3):	4.78	3	_	
Actual volume							5-50	gallon	2
Sampling Met									
Sampling Equ	ıipment:				criabk	<u>spe</u>	<u>ed po</u>	wo	
		Use		Pugge	الصرن	at L	ow fig	im Laxo	
Well Recharg		<u>ye</u>	_				- 10	_	
Required Ana	lysis:	Full.	<u>Analys</u>	<u>''s : Vo</u>	<u>0<5,51</u>	ICCs, 1	<u>ietals</u>	.	ł.
FIELD PARA	METER	MEASUI	REMENT	<u>rs</u>	28, ρ	=5+1c10	ies t h	erbica	વહ
	Γ		Accum	ulated V	olume F	uraed i	n Gallor	ns ,	$\overline{}$
Parameter	0	0.5	40	15	2	3	4	_	<u>5~5</u>
Turbidity	247	7999	272	7999	671	148	86		10
Temperature	18.2	17.7	18.1	17-5	17.2	17.6	17.4		7-6
рH	9.01	8-98	8.96	8-88	8-85	8-83	8.83	8.88 8	
Conductivity	0.607	-	0610	0.605	0.603	0-601	0.600	U.599 O-	
Do	9-99	10.15	9.92	10.05	10-13	944	9.94		1-07
501	0.93	0.02	0.02	0.02	0.02	0.02	0.02	0.02 8-	02
Time sample	,		93	PAM					
							4	- 4 11 5	
COMMENTS		Depth	70 C	vates	meas	ural c	N 08/	28Y02	

	<u>G</u>	ROUND	WATER	SAMPLI	NG WOI	RKSHEE	I		
PROJECT NA Project Numb Site Location Sample Date Weather: Personnel:	per:		96-0; Lnda, 18910 1287		bilita	tion ce	- - - B E R	G M	A N
GROUNDWA	TER SA	MPLE P	<u>OINT</u>						
Well Numbers Location: Casing Diame			n W- west Co	•	f propel	ito, by		Volume	/Foot
Depth to water	-	•	asing:	13.2	3′		Į.	0.041 ga	
Depth to botto Length of wat				<u> XI.80</u> 8,57	-			0.163 ga 0.653 ga	
Length of wat	er colum	(11 III WGII	•	0,7 4	•			: 0.653 ga : 1.469 ga	
							f	2.611 ga	- 1
Volume of water in well casing, gallons: 1,40 gallons: 1,40 gallons: 1,40 gallons: 4,2									
FIELD PARA	METER	MEASU	REMENT	<u>rs</u>					
			Accum	ulated V	olume P	urged in	Gallon	s	
Parameter	0	.5	1	1.5	2	3	2/	4	50
Turbidity	831	7999	7999	7991	794	216	151	HOT	Reco de
Temperature	18.5	18.4	18.6	18.4	18./	18.1	18-1	ļ <u>.</u>	
pH	8.72		8-70	8.67	8.70	8.63		<u> </u>	
Conductivity	0.97	0.97	0.726	0-699	0.643	0.683		<u> </u>	
00	10.36	10.40	1981	0.03	10.92	0.02	11.00		
Time sample	was colle	ತ. ೮ ५/ ected:	12	PM		0.0 -	0.0 2	L	J
COMMENTS		2 50	275 0	2f S	amples	C	ollect	(d)	
		Dept) to 0	vata	meas	ured o	8/28		
			<u> </u>				-,-,-,	·	

GROUNDWATER SAMPLING WORKSHEET										
PROJECT NAME: Project Number: Site Location: Sample Date: Weather: Personnel: Gowanda, NJ Cloudy 70°+ in Am Ed Jones & Jim Marschner associates										
GROUNDWATER SAMPLE POINT										
Location: Casing Diame Depth to wate Depth to botte Length of wate Volume of wate 3 Well volume Actual volume Sampling Me Sampling Equ Well Recharg Required Anal	Well Number: $m\omega - 8$									
FIELD PARA	METER	MEASU							·	
ļ			Accum		olume P		n Gallon	s		
Parameter	0	0.5	1.0	2-0	ತ.೦	3.5	4.0		5	
Turbidity	<i>355</i>	7719	7999	>999	7999		 	900	139	
Temperature	16-1	15,90	16-4	16.9	16.4	16.5	16-7	16.7	19.2	
pH	8.70	9.14	9.04	9.05	8-97	8.94	9-03	9.14	8.68	
Conductivity	2-63	1-11	1047	1.16	0.94	0.93	0.735			
DO		10-96	10-68	10.53	10_79	10-73	10-89		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		pum	p ro	Lte =	rec	hange	rate			
	_		CALL			אוני מני			Dawain	

N

GROUNDWATER SAMPLING WORKSHEET

PROJECT N	<u>AME:</u>	200	<u>uanaa</u>	Day F	+461117	<u>atiin</u> <u>c</u>	anter			
Project Numb	er:	559	6-03				_			
Site Location	;	Gow		NY			_	•		
Sample Date:	:	wedge	081	28/0	2		_	7		
Weather:		Cloud	5	2007] A A	m	BER	GN	MAN	
Personnel:		Ed J	ones a	Jim	marsch			ssoci		
GROUNDWA	TER SA	MPLE P	OINT							
Well Number:	;	mi	U-9	_						
Location:	4	TASS.	by roa	d. we	ST proj	oerb 1	1 10			
Casing Diame	eter: 0	a	11	_	, –,					
							Well Dia	. Volun	ne/Foot	
Depth to water		•	asing:	9-	25	_	1"=	0.041	gal/foot	
Depth to botto				0.96	_		2* =	0.163	gai/foot	
Length of water column in well: 11.71 4" = 0.653 gal/foot										
6" = 1.469 gal/foot										
				1 0	110.1		8" =	2.611	gal/foot	
Volume of wa		_			119al		. ^			
3 Well volume		•		-	ot X 3):	<u>5.7</u>	<u> </u>	_		
Actual volume	. —	•		-		<u>0-50</u>		- .		
Sampling Met		y: Pems	stalt.c	DUMP .	<u>38169 61</u>	: Ballo	r +0 50	שפוע		
Sampling Equ	iipment:				· · · · · · · · · · · · · · · · · · ·			-		
Well Recharg	ed?	Ves						-		
Required Ana		10	<u>cs</u> - :	rcL.				-		
	,	<u> </u>						-		
FIELD PARA	METER	<u>MEASUI</u>	REMENT	<u>rs</u>						
			Accum	ulated V	olume P	urged in	Gallon	ıs	6.5	
Parameter	Ogal	0-5	2.0	3-0	4.0	4.5	5.0	6.0	FINAL	
Turbidity		>999	154	7999	175	>999		1531	160	
Temperature	705	13-9	13.6	13-4	14.6	13.6	230			
рH	8:90	8-90	889	8.87	8-39	8-90	841		8.97	
Conductivity	1.51	1.52	1.53	1.54	1.53	1.55	1.56		1.50	
0	11.54	11.60	11.64	11.66	11.79	11.96	11.87		11.30	
Galain	3-06	50.0	0.07	0.06	0.07		0.07		0.07	

COMMENTS pump rate = recharge rate

Sample collected 1 how after Development

Time sample was collected: 10 3 0 Am

	GROUNDWATER SAMPLING WORKSHEET								
PROJECT NAME: Gowanda Day Habilitation Contest Project Number: 5596.03 Site Location: Gowanda > NY Sample Date: Cucht 08/28/02 Weather: Cloudy, 70°F BERGMAN Personnel: Ed Jones & Jim Maschnet associates									
GROUNDWATER SAMPLE POINT									
Well Number: Location: Casing Diameter: Mu-10									
Depth to water, below top of casing: 7.09 1" = 0.041 gal/foot									
Depth to bottom of the well: $\frac{19-42}{2}$ 2" = 0.163 gal/foot									
Length of water column in well: $\frac{1 \times 33F}{1.33F}$									
6" = 1.469 gal/foot 8" = 2.611 gal/foot									
Volume of water in well casing, gallons: 2.0/ 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 Speek Peristaltic pump									
Well Recharged?	-ye	\$							
Required Analysis:	VOC	5- T	CL				•		
FIELD PARAMETE	R MEASU	REMENT	<u>rs</u>						
		Accum	ulated V	olume P	urged in	Gallon	S		
Parameter 🔾	1921	2	4/:	5	6	6.5	SAMPLE		
Turbidity 152		7999	703	342	130	128	151		
Temperature 16-8		15-4	15-3	15-3	15.4	15.3	16.5		
pH 8-70		8-78		8-81	8.78	8.82	9.09		
Conductivity 6.50		11-09	10.539	11.11	11.02	11.45	0.479 9.95		
Sal 0-02		0.02	10.77	0.02	0.02	0.02	0.01		
Time sample was collected:									
comments pump rate = recharge rate sample collected I how ofter Development									
COMMEN 12	Pump	rat	e= r	echa	rge 1	ate			

	G	ROUND	WATER	SAMPLI	NG WOI	RKSHEE	<u>.T</u>				
Project Numb Site Location:	Personnel: Eduard Jones associates										
GROUNDWATER SAMPLE POINT											
Well Number: mcu-II Location: Inside Building, In Hall way Casing Diameter: Zain											
•				-			Well Dia.	Volum	e/Foot		
Depth to wate		•	-	6.61	<u>. </u>			0.041 g			
Depth to botto				<u> 48</u>	-			0.163 g			
Length of water	er colum	ın ın well	: <u> </u>	6 7				0.653 g			
								1.469 g 2.611 g	•		
Volume of war 3 Well volume Actual volume Sampling Met	es (= len purged hodolog	gth wate prior to s y: <i>Oed</i>	r column sampling lcated	X gal/fo	ot X 3):	7	-75 ga	JIOAS			
Sampling Equ	іршеш.	Sett:			sed to		e well)			
Well Recharge	ed?	<u> </u>	Võ?	7		/ 0		•			
Required Anal			VOCS					•			
FIELD PARA		MEASUI		·			-				
			Accum	ulated V	olume P	urged ir	ı Gallon	S	4-75		
Parameter	0	-5-	1.0	1.5	2	3	4	4.50	627 47		
Turbidity	180	/83	7991	>991	>991	7599	\$12	608	20		
Temperature	18.0	17.6	17-3	17.2	17.0	17.1	17-3	17.1	<u> </u>		
pH	8.63	8-58	8.57	8:58	8-56		8.67	_	8/-62		
Conductivity	1.29	1-33	1.3	0.908	<u>)-7/3</u>		0.653	11.13			
DO	11.28	0.06	0.05	0.03	0.04	11.40	1/.23	<u> </u>	11-00		
Time sample v	vas colle	ected:	/5	20	•		0.03		U - 0.5		
COMMENTS		Depti	1 <u>70</u>	wate	er me	asured	lon	08/20	3/02		

GROUNDWATER SAMPLING WORKSHEET

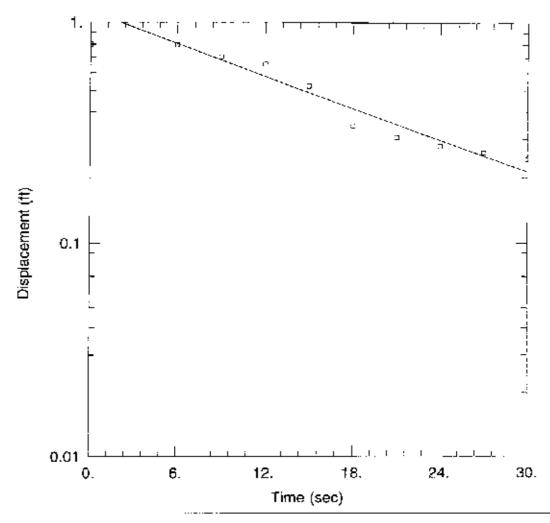
	<u></u>			<u> </u>					
PROJECT NA Project Numb Site Location: Sample Date: Weather: Personnel:	er:	5596 Gowa 08/ Humia	6.03 Na, N	y	owers	ioi cent	BER	G M A	N
GROUNDWA	TER SA	MPLE P	<u>OINT</u>						
Well Number: Location: Casing Diame	eter:	2-0	Build	17.09	<u>; n +/</u>	lail wa	Well Dia.	Volume/Fo	
Depth to water Depth to botto Length of water	om of the	well:	17.3	8 8 15		•	2" = 4" = 6" =	0.163 gal/fo 0.653 gal/fo 1.469 gal/fo	oot oot oot
3 Well volume Actual volume Sampling Met	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: Peristalt: pump op Low flow								
Well Recharg Required Ana		X	SeHin es O uu Ar		NO FO	cs sve pest.		! etals Herb:c	:des
FIELD PARA	METER	MEASU	REMENT	<u>rs</u>		•			
			Accumi	ulated V	olume P	urged ir	Gallon	S	\neg
Parameter	0_	•5	1	1.	2	3	4	5-125	==
Turbidity	89	49	a 3	17	21	7	21	17 3.	_
Temperature		18-3	18.0	17-9	17.9	18.2	17-8	10.	
рН	8-55	8-50	8-50	8-48	8.52	8.51	8-47	8-5	_
Conductivity	0.507		507	509	0.499	0-509	0.514	0-5	
00	10-47	10-22	20 OF	1250	10.41	10.26	1030	10-26	_
50)	0-02	0.02	1-472	D- 05	0-02	0_02	0.03	10-0	
Time sample		ected:		5 pm water		easur	ed OP	/28/02	
COMMENTS		Lispi.	, , , -	Wick.	///	C 43 0 / 6	<u> </u>	120/02	\dashv

GROUNDWATER SAMPLING WORKSHEET										
PROJECT NAME: Project Number: Site Location: Sample Date: Weather: Personnel: Gowanda Day Hebili Leton 5596-03 Homin, 75° f Ed Jones & Jim Marschner B E R G M A'N associates										
GROUNDWATER SAMPLE POINT										
Location:	Casing Diameter: 2-0in									
Depth to water, below top of casing: 7.28 Depth to bottom of the well: /7.40 Length of water column in well: /0./2 Will Dia. Volume/Fort 1" = 0.041 gal/foot 4" = 0.163 gal/foot 6" = 1469 gal/foot 8" = 2.61 gal/foot										
Volume of water in well casing, gallons: 3 Well volumes (= length water column X gal/foot X 3): 4.95 Actual volume purged prior to sampling: 5-0 9 a 1 0 a Sampling Methodology: Dedicated Bailer Sampling Equipment: Variable speak peri staltic pump										
Well Recharg Required Ana		yes voc	s - TC	6				• •		
FIELD PARA	METER	MEASU	REMENT	<u>s</u>						
			Accumi	ulated V	olum: P	urged in	Gallon	s		
Parameter	Ð	0-5	1	1.5	2	3	4	5		
Turbidity	12	43	16	6	3	3	1	11		
Temperature	19.6	18-8	18-4	18.9	18.1	18.1	18-1	18.0		
рН	8-54	8.45	8.37		8.35	8.35	8-3 ₹	8.39		
Conductivity	0.480	0.480	0-477		0.483	0.4/81	0.483	0.49	0	
0.0	10-87	11.05	11.03	10.75	11.05	10.78	10.51	13:47		
Sal	0-02	0.01	0.01	0.08	0.01	0.01	0.01	0 - 02		
Time sample	was colle	ected:	15:4			, 0.0,		, ,,,		
COMMENTS Well Recharged. Dump rate - recharge										
ren clear, Lun Turisting sampled immediates after development										
		Sami	_	mmed	Sakas	4 5 4 6 5	ب د د	1/4410		
L		7 ~ /// /	, CU.	שזייינע	19.	N71-61	aeve	אמשע עי	1/17	

	GROUNDWATER SAMPLING WORKSHEET								
PROJECT NAME: Gowanda Day Habi litation Center Project Number: 5596.03 Site Location: Gowanda, NY Sample Date: 08/29/02 Weather: Humid, 75°f, Light Raid BERGMAN Personnel: Ed ward Jones									
GROUNDWATER SAMPLE POINT									
Well Number: Location: \[\linside \text{ \									
FIELD PARA		INLAGO!			-I B		0.0		
Parameter			Accumi		olume P				
Turbidity	93	.5 332	84	1.5 54	2 40	3 47	24	18	
Temperature	19-4	18-3	18-2	18.3	17.90	18.5	12.Z	18-1	
pH	8.76	8.86	8.78		8.73	8.73	8.72	8.70	
Conductivity	0.64/1	0.649	0.636	0.605	0.600	0.609		0-590	
Do	9.81	10.39	- 10.5°		10.65	10.38	10.39	10.40	
SAL	0-02	0.02	0.02	0-02	0.02	0.02	0.37 0.02	0.02	
Time sample was collected: 12 10 COMMENTS Depth to custer measured 08/28/02									
			7						

-	<u>G</u>	ROUND	WATER	SAMPL	NG WO	RKSHE	T	:	-	
PROJECT N Project Numb Site Location Sample Date Weather: Personnel:	mber: 5596.03 cn: Gowarda, NY te: 08/29/02 Humid, 75°f, Light Rain-showes BERGMAN Edward Jones associates									
GROUNDWATER SAMPLE POINT										
Well Number: Location: Inside the build: M, In North Caseteria Casing Diameter: Depth to water, below top of casing: Depth to bottom of the well: Length of water column in well: Volume of water in well casing, gallons: 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 Volume of water in well casing, gallons: 3 Well volumes (= length water column X gal/foot X 3): 4 = 0.653 gal/foot 8" = 2.611 gal/foot Volume of water in well casing, gallons: 3 Well volumes (= length water column X gal/foot X 3): 4 = 0.653 gal/foot 8" = 2.611 gal/foot Volume of water in well casing, gallons: 3 Well volumes (= length water column X gal/foot X 3): 4 = 0.653 gal/foot 8" = 2.611 gal/foot Volume of water in well casing, gallons: 5 = 50 gallon s Sampling Methodology: Ded: cated Roseer Veal to purple well prior to sampling Well Recharged? Yes Required Analysis: Vocs only										
FIELD PARA	<u>METER</u>	MEASU		_ -		<u>-</u>				
			Accum	ulated V	olume F	urged in	Gallon	S		
Parameter	٥	-5	1	1.5	a_	3	4	5	5.5	
Turbidity	122	>191	7999	7999	7999	7999	7999	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		8.73	
Conductivity	1-1/	1.18	1.05	0.96	0.95	0.705	0-646		6-635	
DO	9-84	10.02	10-06	9-95	9.91	9.88		9-43	9.86	
Sal.	0.05	0.05	U-04	0.04 . UO	0.04	0.03	0-02	0.02	0.02	
Time sample	was colle	ected:	/	140						
COMMENTS	-	Dep	oth 7	to cu	ater	measu	red of	3/28	102	

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

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

WELL DATA (MW-1)

Casing Radius: 0.083 ft Initial Displacement: 0.8 ft Wellbore Radius: 0.333 ft Well Skin Radius: 0.333 ft

Total Well Penetration Depth: 10.03 ft Screen Length: 12, ft Gravel Pack Porosity: 0.42

SOLUTION

Solution Method: Bouwer-Rice Aquifer Model: Unconfined

 $K \approx 0.001265$ cm/sec

v0 = 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 Lenoth: 12. ft
Total Well Penetration Deoth: 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							

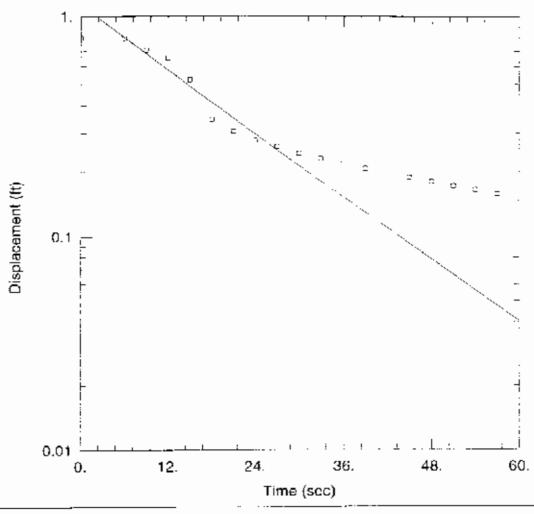
SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

cm/sec 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: <u>Bergmann</u> Client: <u>DASNY</u> 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)

Casing Radius: 0.083 ft Well Skin Radius: 0.333 ft

Total Well Penetration Depth: 10.03 ft

Initial Displacement: 0.8 ft Wellbore Radius: 0.333 ft

Screen Length: 12. ft Gravel Pack Porosity: 0.42

SOLUTION

Aguifer Model: Unconfined Solution Method: Bouwer-Rice

y0 = 1.122 ft

K = 0.001265 cm/sec

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 Perietration Deoth: 10.03 ft

Gravel Pack Porosity: 0.42

No. of observations: 20

			Observ	ation Data		
	Time (sec)	Displacement (ft)	Time (sec)	 Displacement (ft) 	<u>Time (sec)</u>	Displacement (ft)
	0.	O	—— _{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
	i5.	0.523	36.	0.218	57.	0.158
	18.	0.346	39.	0.207	60.	0.15
	21.	0.305	42.	0.197	00.	00
	۷.	0.303	·+ C.	0.107		

SOLUTION

Aguiter Model: Unconfined Solution Method: Bouwer-Rice

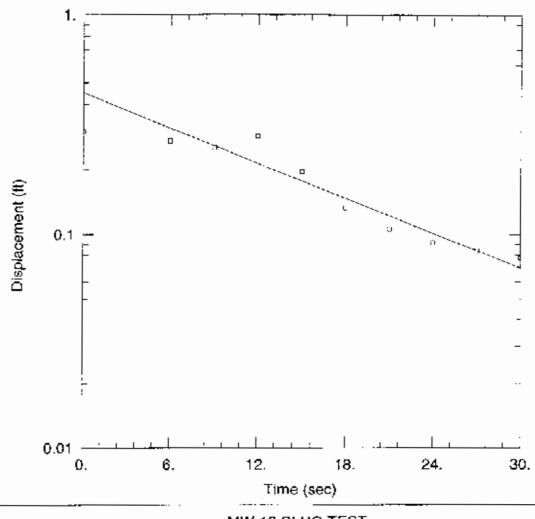
VISUAL ESTIMATION RESULTS

Estimated Parameters

_	Parameter K	Estimate 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	
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	60.09	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	811.0
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: <u>MW-13</u> Test Date: <u>10/17/02</u>

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
Well Skin 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

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.

SLUGITEST WELL DATA

Initial Displacement: 0.3 ft Casino 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.	_ · o. ·	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					

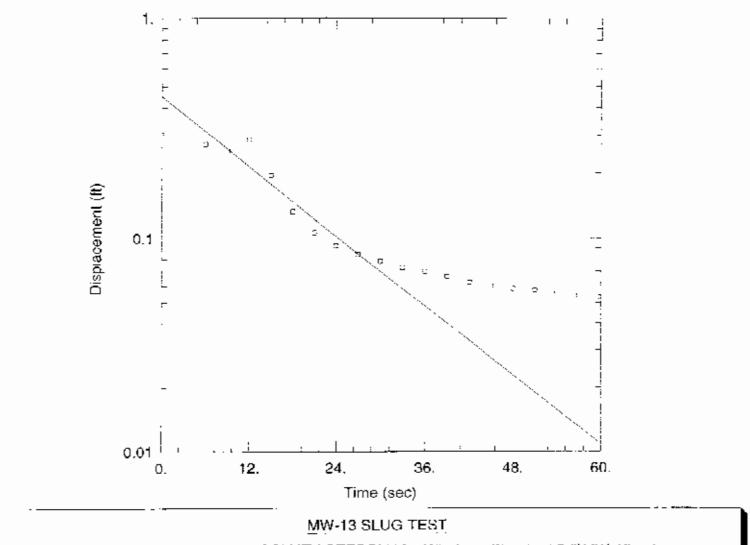
SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter K	Estimate 0.001238	cm/sec
ve)	0.4511	íł



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: <u>DASNY</u> Project: 5596.03

Fest Location: Gowanda

Test Well: <u>MW-13</u> Test Date: <u>10/17/02</u>

AQUIFER DATA

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

WELL DATA (MW-13)

Casing Radius: 0.083 ft Well Skin Radius: 0.333 ft

Total Well Penetration Depth: 10.33 ft

Initial Displacement: 0.3 ft Wellbore Radius: 0.333 ft

Screen Length: 14. ft

Gravel Pack Porosity: 0.42

SOLUTION

Solution Method: Bouwer Rice

y0 = 0.4511 ft

Aquifer Model: Unconfined

K = 0.001238 cm/sec

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-13.agt

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 Legath: 14 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					
21.	2., 22		.,					

SOLUTION

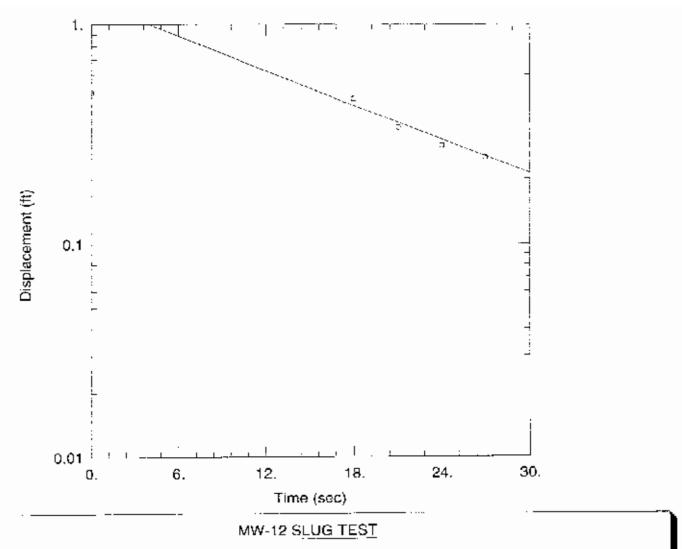
Aguifer Model: Unconfined Solution Method: Bouwer Rice

VISUAL ESTIMATION RESULTS

-	<u>Parameter</u> K	Estimate 0.001238	cm/sec
	v 0	0.4511	f t

MW-13 RISING HEAD

				Chan[1]	Chan[2]		
Date	Time	ET (sec)	EI (Min)	Fahrenheit	Feet H2O	Start Elev:	
4.0/4.7/0000	46.50.47		0.000	06.0		-	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 42	0.650	65.85 ec.ec	9.76 9.756		0.066
10/17/2002 10/17/2002	15:51:29 15:51:32	4 ≥ 45	0.700 0.750	65.85 65.85	9.754		0.062 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	9.752		0.058
10/17/2002	15:51:41	54	0.900	65.85	9.749		0.057
10/17/2002	15:51:44	57	0.950	65.85	9.748		0.055
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	65.96	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	65.8 <i>7</i>	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



Data Set: C:\...\MW-12-Limited-2nd.aqt

Date: 02/13/03 Time: 13:49:09

Company: Bergmann Associates
Client: DASNY

Project: 5596.03

Test Location: Gowanda, NY

Test Well: <u>MW-12</u> Test Date: <u>10/17/02</u>

AQUIFER DATA

PROJECT INFORMATION

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

WELL DATA (MW-12)

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

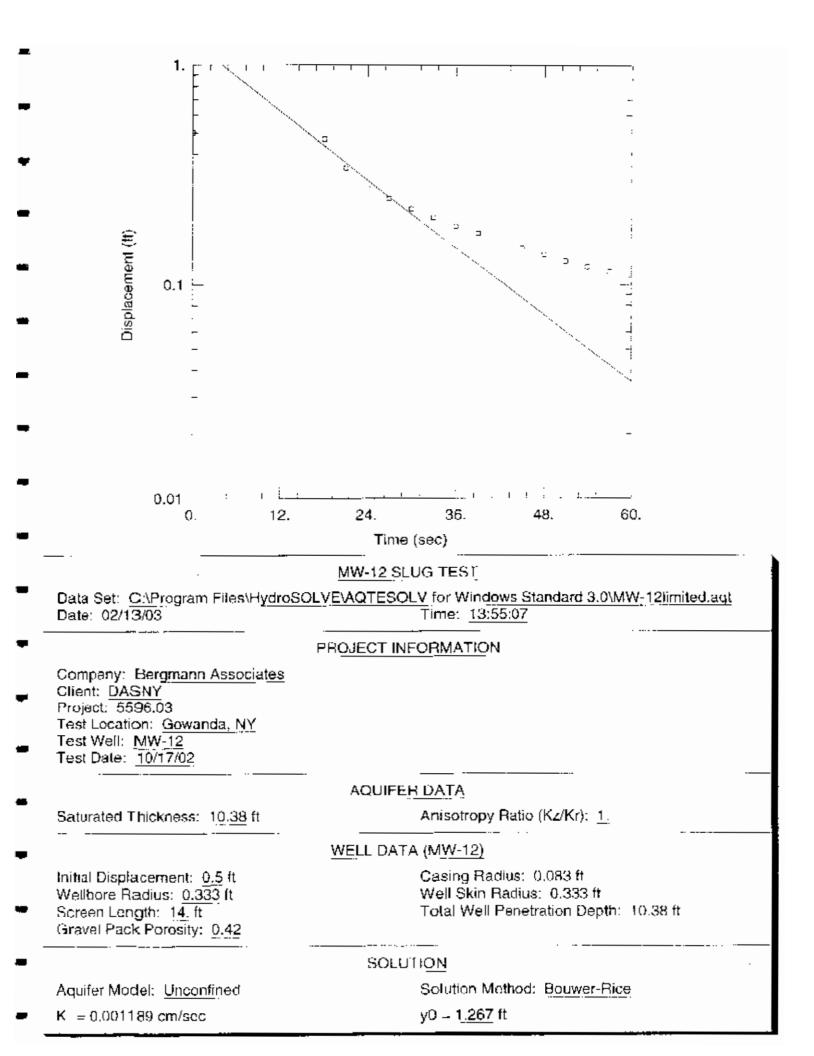
SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.001189 cm/sec y0 = 1.267 ft

Estimated Parameters

Parameter Estimate 0.001189 cm/sec "K" y0 1.267



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 Disolacement: 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 Perietration 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)			
—_n.	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			
	0.284	42.	0.16	60 .	0.11			
24. 27.	0.25	45.	0.148					
30.	0.224	48.	0.138					

SOLUTION

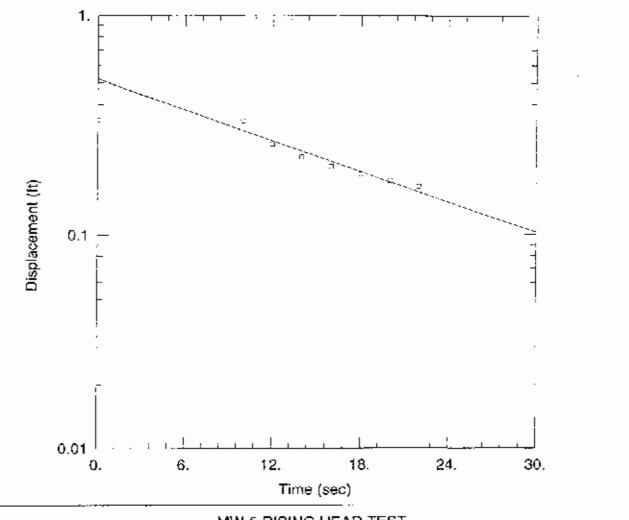
Aquifer Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Parameter	Estimate	
. —K——	0,001189	cm/séc
va	1.267	† †

MW-12 Slug Test

Initial WT:	10.25		Chan[2]	Change
Date	Time	ET (sec)	Feet H2O	in Elev.
10/17/00/00	17:03:47	0	10.311	0.061
10/17/2002 10/17/2002	17:03:47	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	91	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 0.097
10/17/2002	17:05:20	93 96	10.347 10.343	0.097
10/17/2002 10/17/2002	17:05:23	99	10.343	0.089
10/17/2002	17:05:26 17:05:29	102	10.337	0.087
10/17/2002	17:05:25	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

Time: 14:49:37 Date: 02/13/03

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

Anisotropy Ratio (Kz/Kr): 1. Saturated Thickness: 2.98 ft

WELL DATA (MW-5)

Casing Radius: 0.083 ft Initial Displacement: 0.34 ft Well Skin Radius: 0.333 ft Wellbore Radius: 0.333 ft

Total Well Penetration Depth: 2.98 ft Screen Length: 10. ft Gravel Pack Porosity: 0.42

SOLUTION

Solution Method: Bouwer-Rice Aquifer Model: Unconfined

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.act

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. Wellhore Ractius: 0.333 ft Well Skin Radius: 0,333 ft

Screen Lenoth: 10, ft Total Well Penetration Deoth: 2,98 ft Gravel Pack Porosity: 0,42

No. of observations: 8

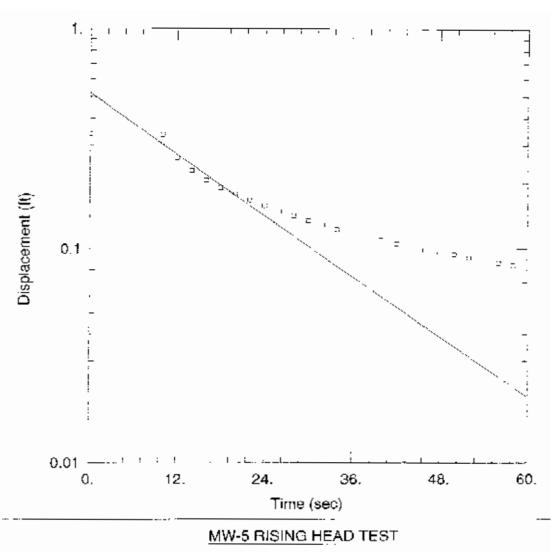
Observation Data								
Time (sec)	Displacement (ft)	Time (sec)	""Displacement (ft)	Time (sec)	Displacement (ft) 0.179			
0.	0.	14.	0.23	20.	0.179			
10.	0.336	16.	0.208	22.	0.168			
12.	0.263	18.	0.192					

SOLUTION

Aguifer Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

_	Parameter K	Estimate 0.001001	cm/sec
	VΩ	0.5212	f†



Data Set: C:\Program Files\HydroSQLVE\AQTESQLV 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: <u>MW-5</u> Test Date: 10/17/02

AQUIFER DATA

Saturated Thickness: 2.98 ft Anisotropy Ratio (Kz/Kr): 1,

WELL DATA (MW-5)

Casing Radius: 0,083 ft Well Skin Radius: 0,333 ft

Total Well Penetration Depth: 2.98 ft

SOLUTION

Solution Method: Bouwer-Rice

y0 = 0.5212 ft

Initial Displacement: 0.34 ft
Wellbore Radius: 0.333 ft
Screen Length: 10, ft

Gravel Pack Porosity: 0.42

Aquifer Model: Unconfined

K = 0.001001 cm/sec

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 Penctration 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.	nn	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
	2 4 .	0.158	42.	0.106	60.	0.082
					<u> </u>	

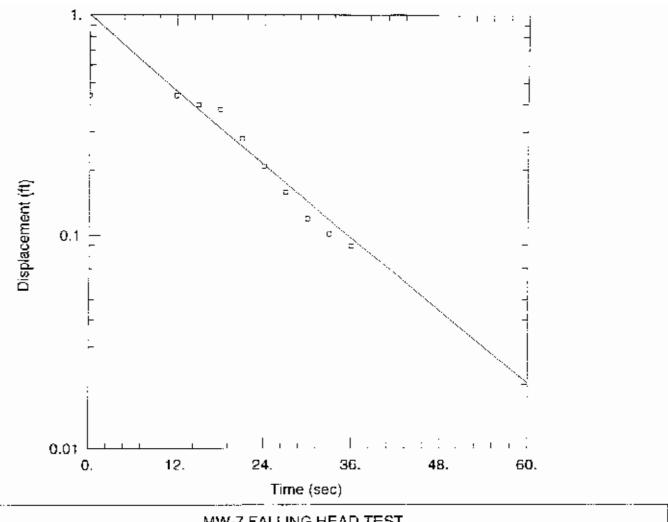
SOLUTION

Aguifer Model: Unconfined. Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS.

Parameter	Estimate	
K	0.001001	cm/sec
y0	0.5212	fl

IW-5 Rising Head nitial Water Column:	3.13			Chan[2]	
Date	Time	ET (sec)	ET (min)	Feet H2O	Change
10/17/2002	18:22:20		0.000	2 140	0.04
10/17/2002	18:22:20	0	0.000	3.148	0.01
10/17/2002		2	0.033	3.153	0.02
10/17/2002	18:22:24	4	0.067	3.314	0 18
10/17/2002	18:22:26	6	0.100	3.35	0.22
10/17/2002	18:22:28	8	0.133	3.413	0.28
10/17/2002	18:22:30	10	0.167	3.466	0.33
10/17/2002	18:22:32	12	0.200	3.393	0.26
10/17/2002	18:22:34	14	0.233	3.36	0.23
10/17/2002	18:22:36	16	0.267	3.338	0.20
10/17/2002	18:22:38	18	0.300	3.322	0.19
10/17/2002	18:22:40	20	0.333	3.309	0.17
10/17/2002	18:22:42	22	0.367	3.298	0.16
10/17/2002	18:22:44	24	0.400	3.288	0.15
10/17/2002	18:22:46	26	0.433	3.279	0.14
10/17/2002	18:22:48	28	0.467	3.272	0.14
10/17/2002	18:22:50	30	0.500	3.265	0.13
10/17/2002	18:22:52	32	0.533	3.259	0.12
10/17/2002	18:22:54	34	0.567	3.253	0.12
10/17/2002	18:22:56	36	0.600	3.249	0.11
10/17/2002	18:22:58	38	0.633	3.244	0.11
10/17/2002	18:23:00	40	0.667	3.24	0.11
10/17/2002	18:23:02	42	0.700	3.236	0.10
10/17/2002	18:23:04	44	0.733	3.233	0.10
10/17/2002	18:23:06	46	0.767	3.229	0.08
10/17/2002	18:23:08	48	0.800	3.227	0.09
10/17/2002	18:23:10	50	0.833	3.224	0.09
10/17/2002	18:23:12	52	0.867	3,221	0.09
10/17/2002	18:23:14	54	0.900	3.219	0.08
10/17/2002	18:23:16	56	0.933	3.216	0.08
10/17/2002	18:23:18	58	0.967	3.214	0.08
10/17/2002	18:23:20	60	1.000	3.212	0.08
10/17/2002	18:23:22	62	1.033	3.21	0.08
10/17/2002	18:23:24	64	1.067	3.209	0.07
10/17/2002	18:23:26	66	1.100	3.208	0.07
10/17/2002	18:23:28	68	1.133	3.206	0.07
10/17/2002	18:23:30	70	1.167	3.205	0.07
10/17/2002	18:23:32	72	1.200	3.204	0.07
10/17/2002	18:23:34	74	1.233	3,202	0.07
10/17/2002	18:23:36	76	1,267	3.201	0.07
10/17/2002	18:23:38	78	1.300	3.2	0.07
10/17/2002	18:23:40	80	1.333	3.198	0.06
10/17/2002	18:23:42	82	1 367	3.197	0.06
10/17/2002	18:23:44	84	1,400	3.197	0.06
10/17/2002	18:23:46	86	1.433	3.196	0.06
10/17/2002	18:23:48	88	1,467	3.196	0.06
10/17/2002	18:23:50	90	1.500	3.195	0.06
10/17/2002	18:23:52	92	1.533	3.194	0.06



MW-7 FALLING HEAD TEST

Data Set: C:\Program Files\HydroSOLVE\AQTESOLV for Windows Standard 3.0\MW-7-Limited3.aqt

Time: 14:55:13 Date: 02/13/03

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

Anisotropy Ratio (Kz/Kr): 1. Saturated Thickness: 8.47 ft

WELL DATA (MW-7)

Casing Radius: 0.083 ft Initial Displacement: 0.44 ft Wellbore Radius: 0.333 ft Well Skin Radius: 0.333 ft

Total Well Penetration Depth: 8.47 ft Screen Length: 13, ft Gravel Pack Porosity: 0.42

SOLUTION

Solution Method: Bouwer-Rice Aquifer Model: Uncontined

y0 = 1.003 ftK = 0.001319 cm/sec

Data Set: C:\Program Files\HvdroSOLVE\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 Peinetration Depth: 8.47 ft

Gravel Pack Porosity: 0.42

No. of observations: 10

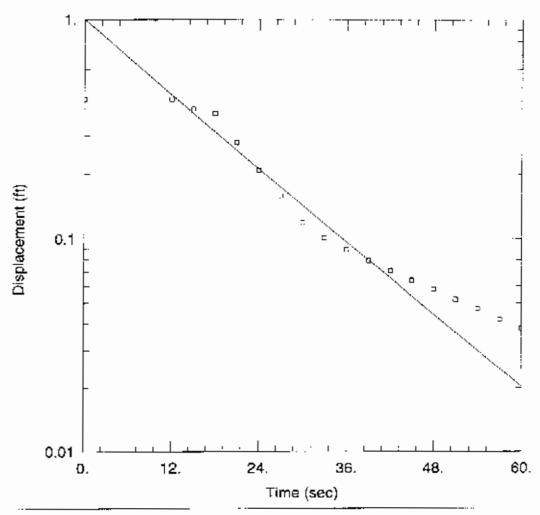
		Observ	ration Data		
Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
··· ·· · · · · · · · · · · · · · · · ·	<u> </u>	2t	0.278	33.	0.101
12.	0.438	24.	0.208	36.	0.089
15.	0.397	27.	0.158		
18.	0.378	30.	0.119		

SOLUTION

Aguifer Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

#	<u>Parameter</u> K	Estimate 0.001319	cm/sec
	VO	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: <u>MW-7</u> Test Date: <u>10/17/02</u>

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: <u>0.083</u> ft Well Skin Radius: 0.333 ft

Total Well Penetration Depth: 8.47 ft

SOLUTION

Aquifer Model: Unconfined

K = 0.001319 cm/sec

Solution Method: Bouwer-Rice

y0 = 1.003 ft

Data Set: C:\Program Files\HvdroSOLVE\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 Disolacement: 0.44 ft Casing Radius: 0.083 ft Wellbore Radius: 0.333 ft Well Skin Radius: 0.333 ft

Screen Lengtin: 13. ft

Total Well Penetration Depth: 8.47 ft

Gravel Pack Porosity: 0.42

No. of observations: 18

		Observ	ation Data		
Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	—— _{27.} ——	0.158*** ` ′	4 5. ´	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
<u>24.</u>	0.208	42.	0.071	60.	0.038
_ **					

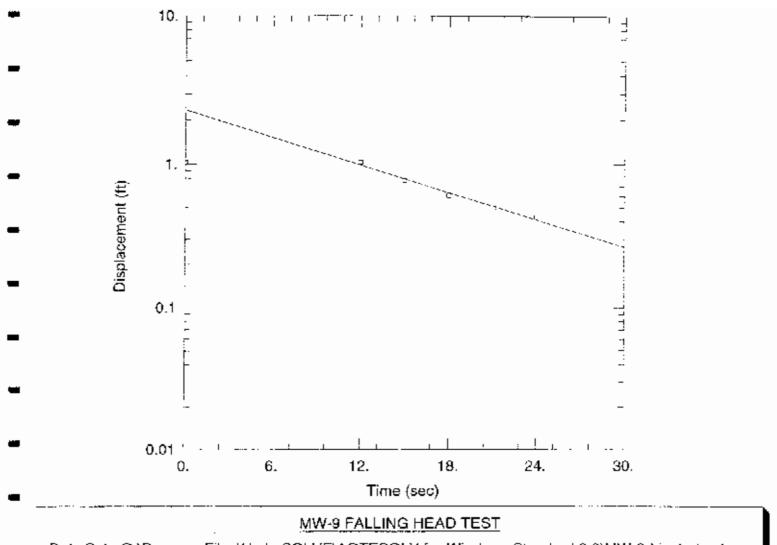
SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Parameter K	Estimate 0,001319	cm/sec
/U	1.003	ft

	Date	MW-7 Falling Head, Initial Water Level: Time	Slug Remo 8.13 ET (sec)	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	6.124	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
ł	10/17/2002	19:22:47	108	8.15	0



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: <u>DASNY</u> Project: 5596.03

Test Location: Gowanda, NY

Gravel Pack Porosity: 0.42

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 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

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.001403 cm/sec y0 = 2.35

y0 = 2.354 ft

Data Set: C:\Program Files\HvdroSOLVE\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

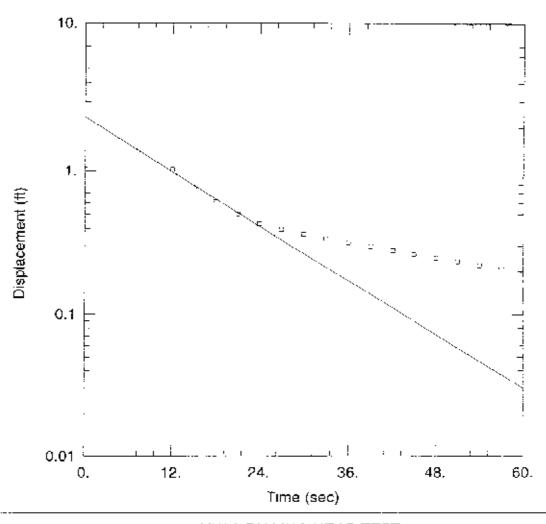
		Observ	ation Data		
Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	0.	15.	0.775	21.	0.501
12.	1.026	18.	0.611	24.	0.429

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Parameter	Estimate	
—к—	0.001403	cm/sec
γŌ	2.354	ft



MW-9 FALLING HEAD TEST

Data Set: O:\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 Casing Radius: 0.083 ft Wellbore Radius: 0.333 ft Well Skin Radius: 0.333 ft

Total Well Penetration Depth: 11.88 ft Screen Length: 15. ft Gravel Pack Porosity: 0.42

SOLUTION

Aguifer Model: Unconfined Solution Method: Bouwer-Rice

y0 = 2.354 ft

K = 0.001403 cm/sec

Data Set: C:\Program Files\HvdroSOLVE\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 Casino 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

		Observ	ation Data		
Time (sec)	Displacement (ft)	Time (sec)	**Displacement (ft)	Time (sec)	Displacement (ft)
 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

Aguiter Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

	Parameter	Estimate	
	. K -	0.001403	cm/sec
_	y0	2.354	ft

MW-9 Falling Head

Initial WT Elev:	11.27 Time	ET (sec)	Chan[2] Feet H2O	Change Elev.
		_ 1 (300)		
10/17/2002	14:49:03	ο	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
1 0 /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

VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

50 00

		Boring/Mor	nitoring Well	Boring/Monitoring Well Number, Sample Collection Interval and Sample Date	ample Colle	ection Interv	al and Sam	ple Date		
	NYSDEC	B-1/MW-1	B-1/MW-1	B-2/MW-2	B-3/MW-3	B-4/MW-4	B-5/MW-5	B-6/MW-6	B-7/MW-7	B-8/MW-8
	Recommended	2 - 4	8' - 10'	8 - 10	8- 10'	10' - 12'	8'-13'	18" - 20"	16' - 17.5'	9' - 10'
VOC Compound	Cleanup Objective	07/30/02	07/31/02	07/25/02	07/12/02	07/11/02	07/31/02	07/30/02	07/30/02	07/24/02
Trichloroethene	(0.7 ppm (700 ppb)	14000 D	3600 D	8	3.5	Q N	t)	44 J	330 D	QN
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	0 046	170	12	ON	QN	7	190	250 D	QN
Irans-1,2-Dichloroethene	0.3 ppm (300 ppb)	10	ND	ND	ND	QN	ND	ND	ND	ND
Vinyl chloride	0.2 ppm (200 ppb)	ΩN	6.5	QΝ	ND	GN	QN	QN	QN	ND
Acetone	0.2 ppm (200 ppb)	QN	QN .	ND	QN	QN	ND	QN	ND	QN
Benzene	0.06 ppm (6 ppb)	ON	ON:	ND	ND	dN	ND	an	۵N	ND
Bromodichloromethane	none	QΝ	QN	ND	QN	ΠN	QΝ	QN	Q.	ND
Bromoform	none	ΩN	ND	ND	ND	ND	ND	QN	ND	ND
Bromomethane	none	ON	ON	ON I	GN	an	QΝ	GN	NO	ND
2-Butanone	0.3 ppm (300 ppb)	۵N	DN	10 J	GN	QN	ΟN	GN	N N	ND
Carbon Tetrachloride	0.6 ppm (600 ppb)	an	ΩN	ďΝ	GN	an	ON	<u>a</u> N	ND	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	QN	QN	ND	GN	QN	ND	GN	P	ND
Chloromethane	none	QN	QN	ND	QN	ΠN	ON	QN	ND	ND
Chlorobenzene	1.7 ppm (1700 ppb)	ON	ND	ND	QN	ON	ND	[QN	ND	ND
Chloroethane	1.9 ppm (1900 ppb)	QN	QN	ND	GN	ON	QN	QN	ND	ND
Cyclohexane	none	QN.	ON	ΩN	ND	QN	QN	QN	ND ND	ND
Chleroform	0.3 ppm (300 ppb)	ON	ND	ND	ND	ON	ND	QN	ND	Ŋ
1,2-Dibromo-3-chloropropane	none	ΩN	QN.	ΩN	Q	QN	ND	QN	ND	ND
Dibromochloromethane	none	QN	ΩN	ND	ND	ND	Q	QN	S	ND
Dichlorodifluoromethane	none	an	Q	ND	ON	ND	ND	QN	S	ND
1,2-Dibromoethane	none	ON	ND	ON.	QN	٩D	QN	QN	ND ND	ND
1,2-Dichlorobenzene	(dgg 0087) mgg 8.7	'an	QN	ND	QN	QN	ND	QN	ND	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	Q	QN	QN	GN	ND	QΝ	QN	NO	ΩN
1,4-Dichlorobenzene	(8500 ppb) (8500 ppb)	QN	QN.	N D	9	ON	ND	QN	P	ND
1,1-Dichloroethane	0.2 ppm (200 ppb)	9	Ŋ	QN	뎦	ND	ND	QN	9	QN.
1,2.Dichloroethane	0.3 ppm (300 ppb)	Q	QN ON	ΔN	QN	QN	딮	QN	2	Q
1,1-Dichloroethene	0.4 pcm (400 ppb)	오	٩	QN	QN	ON	QN	ΔN	ΔN	QN 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
Page 1 of 10

GOWANDA DAY HABILITATION CENTER VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS

Bonno/Monitoring Wall Number Sa

		Boring/Mor	Boring/Monitoring Well Number, Sample Collection Interval and Sample Date	Number, S	ample Colle	action Interv	al and Sam	ple Date		
	NYSDEC	B-1/MW-1	8-1/MW-1	B-2/MW-2	B-3/MW-3		B-4/MW-4 B-5/MW-5	B-6/MW-6	B-7/MW-7	B-8/MW-8
	Recommended	2 - 4'	8 - 10	8' - 10	B'- 1C'	10' - 12'	8 - 13	18 - 20	16-17.5	9 · 10'
VOC Compound	Cleanup Objective	07/30/02	07/31/02	07/25/02	07/12/02	07/11/02	07/31/02	07/30/02	07/30/02	07/24/02
1,2-Dichloropropane	none	QN	QN	QN	QN	QN	QV.	Q	ON.	QN
cis-1,2-Dichloropropene	rione	ON.	ÓΝ	QN.	QN	QN	QN	QN	QN	ND
trans-1,2-Dichloropropene	none	QN	ND	ON	ON	ON	ND	Q	NO	QN
Ethylbenzene	5.5 ppm (5500 ppb)	QN	ND	O N	QN	QN	DN.	ON	QN	ND
2-Hexanone	nane	QV	ND	(N	QN	QN	ΩN	QN	Q	ND
Isopropylbenzene	5.0 ppm (500 ppb)	ON	ND	N D	QN	ON	QN	QN	ON	ND
Methyl acetate	euou	Û	ND_	QN	QN	ON	QN	ON	ΩN	ND
Methylene Chloride	0.1 ppm (100 ppb)	S	ND	ND	QN	QN	ON	ND	Ŋ	ND
Methyl lert butyl ether	0.12 ppm (120 ppb)	QN	ND	ND	GN	ND	QN	ND	ΔN	ND
4-Methyl-2-pentanone	(1.0 ppm (1000 pcb)	QN :	ND	QN	GN	ON	QN	ND	ON	ND
Methylcyclohexane	none	ND	ND	QN	QN	ND	QN	NO	ND	ND
Styrene	попе	QN	ND	ND	QN	ND	QN	ND	ND	DN
1.1,2 2-Tetrachloroethane	(add 008) mdd 9:0	QN	QN	QN	QΝ	۵N	QN	QN	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	9	ND	QN	QN	맏	S	QN.	QN	ND
Toluene	(1.5 ppm (1500 ppb)	QN.	ND	QN	ΠN	QN	QN	ND.	ND	NO
1.2,4-Trichlorobenzene	3.4 ppm (3400 ppb)	ÛN	ND	ON	ΩN	QV	ON.	QN	QN	QN
1.1,1-Trichloroethane	(add 008) mdd 8:0	QN	ND	QN	QN	ON.	NO	ND	Q	Q
1.1.2-Trichloroethane	попе	QN	ND	DN	QΝ	ON	QN	QN	QV	Q
1.1,2-Trichloro-1,2,2-trifluor	попе	Q	DN	ON	ON	g	QN	QN	ND	Q.
Trichtorofluoromethane	попе	9	QN	QN	Q	Q	2	ND	Q	Q
total Xylenes	1.2 ppm (1200 ppb)	QN	. ND	QN	2 J	g	QN	ND	QN	2
n-Propylbenzene	14 ppm (14000 ppb)	QN	ÖN	UD	ON	Q	<u>Q</u>	ND	ND	QN
P-Cymene	епоп	ON.	QV	QN	9	ΩN	Q.	QN	Q N	NO
1,2,4.Trimethylbenzene	[13 ppm (13000 ppb)	QN	QN	ON	ON.	ND	NO	Q	QN	OZ
1,3,5-Trimethylbenzene	(3300 ppb) (3300 ppb)	QN	ND	ON I	QV	ΩN	Q	QN.	ND	2
n-Butylbenzene	none	QN	ND	Q	ÓN	ON	□	Q	Q	9
sec-Butylbenzene	none	QN	ΟN	Ş	9	2	임	QN	9	Q

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. Page 2 of 10

VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, SOAL SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

Borboy Monitoring Well Number Sample Collection Interval and Sample Date

		Bonng/Mor	itoring Well h	Bonng/Monitoring Well Number, Sample Collection Interval and Sample Date	ole Collection	Interval and	Sample Date		
	NYSDEC	B-9/MW-9	B-10/MW-10	B-11/MW-11	B-12/WW-12	B-13/MW-13	B-10/MW-10 B-11/MW-11 B-12/MW-12 B-13/MW-13 B-14/MW-14 B-15/MW-15	B-15/WW-15	B-16
	Recommended	8' - 10'	· 8 - · 9	9'-11'	12' - 14'	10' - 12'	10' - 12'	12"-14"	8' - 10'
VOC Compound	Cleanup Objective	07/11/02	07/10/02	07/17/02	07/16/02	07/15/02	07/18/02	07/19/02	07/08/02
Trichloroethene	0.7 ppm (700 ppb)	QN	ďΝ	480	3300	9	62	51	QN
cis-1,2-Dichloroethene	0.3 ppm (300 ppb)	QN	ND	110	ND	ſε	12	ΓĹ	QN D
trans-1,2-Dichlorcethene	O.3 ppm (300 ppb)	QΝ	GN	ΩN	QN	ON	αN	ON	QN
Vinyl chloride	0.2 ppm (200 ppb)	QN	QN	ΩN	QN	QN	QN	QN	ND
Acetone	0.2 ppm (200 ppb)	QN	ON	Z	ND	ÜN	ND	QN	ND
Benzene	0.06 ppm (6 ppb)	QN	ØN₽	ON.	dΝ	QN	ND	ΩN	QN
Bromodichloromethane	none	ΩN	QN	QN	QN	ΩN	ND	QN	QN
Bromoform	попе	QN	ΩN	QN	ON	GN	ND	ΔN	Q
Bromomethane	none	Ŷ	QN	QN	۵N	GN	UN .	ÖN	ND
2-Butanone	(add 005) mdd 8.0	QN	GN	QN	dN	GN	ND	۵N	Q.
Carbon Tetrachloride	(0.6 ppm (600 ppb)	QN	GN	QN	QN	ON	QN	QN	QN
Carbon Disulfide	[2.7 ppm (2700 ppb)	ΩN	QN	QN	QN	QN	ND	QN	QN
Chloromethane	поле	QN	αN	QN i	ON	QN	ND	QN	ND
Chlorobenzene	[1.7 ppm (1700 ppb)	QN	QN	QN	ON	ΩN	ND	ND	NO.
Chloroethane	(1.9 ppm (1900 ppb)	QN	ON	QN	QN	QN	ND	ND	ND
Cyclohexane	none	QN	O N	QN	QN	QN	QN	QN	QN
Chloroform	0.3 ppm (300 ppb)	QN	QN	UND	ND	ND	ND	ND	S
1,2-Dibromo-3-chloropropane	none	QN	QN	QN	QΝ	QN	QN	QN	Q.
Dibremochtoromethane	попе	QN	Q N	ND	QN N	QN	ND	ND	S
Dichlorodifluoromethane	none	QN	ON	ND	오	Q	QN	QN	Q
1,2-Dibromoethane	none	.	QN	QN	ON.	QN	NO.	QN.	S
1.2-Dichlorobenzene	7.9 ppm (7900 pp)		ON.	QN	Ŷ	Q	Q	9	ND
1,3-Dichlorobenzene	1.6 ppm (1600 ppb)	QN	QN	QN	QN:	ON	ND	DN	QN
1,4-Dichlorobenzene	8.5 ppm (850C ppb)		QN	Q	Q	Q	2	9	QN
1,1-Dichloroethane	0.2 ppm (200 ppb)		QN	ON.	Q.	Q	QN	2	SP
1,2-DicFloroethane	0.3 ppm (300 ppb)	QN	_ ND	ON	9	9	Ŝ	ᄝ	S C C
1,1-Dichloroethene	0.4 ppm (400 ppb)	9	QN	ON.	2	2		QN	S

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 Page 3 of 10

VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

		DONNING MOU	moring ryell in	umber, sam	ole Collection	Merval and	sample Date		
	NYSDEC	8-9/WW-9	B-10/MW-10	B-9/MW-9 B-10/MW-10 B-11/MW-11 B-12/MW-12 B-13/MW-13 B-14/MW-14 B-15/MW-15	B-12/MW-12	B-13/WW-13	B-14/WW-14	B-15/MW-15	B-16
	Recommended	8' - 10	6'-8'	9'-11'	12' - 14'	10' - 12'	10' - 12'	12' - 14'	8' - 10'
VOC Compound	Cleanup Objective	07/11/02	07/10/02	07/17/02	07/16/02	07/15/02	07/18/02	07/19/02	07/08/02
1,2-Dichloropropane	none	ΟN	ND	ND	ND	QN	QN	QN	QN
cis-1,2-Dichloropropene	none	QV	ND	ND	ND	ND	ďΝ	QN	Ş
trans-1,2-Dichloropropene	none	QN	QN	QN	ND	ON	ΠN	QN	Q
Ethylbenzene	5.5 ppm (5500 ppb)	Q	S	QN	ND	ÖN	ÖN "	άN	2
2-Hexanone	попе	QN.	ND	ND	ND	NO	ND	QN	ND
Isopropylbenzene	5.0 ppm (500 ppb)	QN	ND	QN	QN	GN	ON :	GN	ND
Methyl acetate	none	QN	ND	ND	ND	QN	QN	ΩN	Q
Methylene Chloride	(0.1 ppm (100 ppb)	QN	ON	ND	ND	ND	QN	QN	QV
Methyl tert butyl ether	0.12 ppm (120 ppb)	QN	QN	_ ON	QN	ND	ON	QN	2
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ND	ND	ND	ND	ND	ON	QN	ND
Methylcyclohexane	none	QN	QN	QN	ON	Q	ON	QN	QΝ
Styrene	none	□N	NĎ	ND	ND	ND	QN	QN	QN
1,1,2,2-Tetrachioroethane	0.6 ppm (600 ppb)		ND	QN	ND	QN	QŃ	QN	QΝ
Tetrachloroethene	1.4 ppm (1400 ppb)		ND	ND	NO	ND	QN	ND	1 U
Toluene	1.5 ppm (1500 ppb)		ND	ND	UD	QN	an	QN	2
1,2.4-Trichlorobenzene	3.4 ppm (3400 ppb)		ND	Q.	ND	ND	QN	QN	QN
1,1,1-Trichloroethane	0.8 ppm (800 ppb)		ND	ND	ND	QN	GN	QN	ND
1,1,2-Trichloroethane	nane	QN	ND	ND	ND	ND	ON	ND	2
1,1,2-Trichlore-1,2,2-trifluor	попе	ND	NĎ	NO	GN	QN	an	ΩN	2
Trichlorofluoromethane	none	9	ND	Q.	ON.	QN	QN	QN	Q
total Xylenes	1.2 ppm (1200 ppb)	Ŝ	ND	ND	ND	ND	ND	QN	QN
n-Propylbenzene	14 ppm (14000 ppb)	NO	ND	NO	ND	ND	ND	ΠN	å
P-Cymene	попе	ND	ND	QN	ND	QN	ND	QN	ΩŅ
1,2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	ND	QV	ND	ND	ND	ON	QN
1,3,5-Trimethylbenzene	[3.3 ppm (3300 ppb)	QN.	ND	NO	ND	ND	QN	QN	QN
n-Butylbenzene	none	QN	ND	QN	QN	ND	ON	QN	QN
sec-Butylbenzene	none	ON N	ND	ON.	ND	QN	ND	QN	Q

Legend

D = Detected in difluted sample

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B = Detected in Method Blank

BDJ = Detected in Method Blank

Bold = Concentration above method detection limit

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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

		Boring/Mor	Boring/Monitoring Well Number, Sample Collection Interval and Sample Date	Number, S	ample Colfe	COLOR INTERV	al and Sam	ple Date		
	NYSDEC	8-17	B-18	B-19	B-20	B-21	8-22	8-23	B-23D	B-24
	Recommended	B' - 12'	5'-6'	8' - 10'	12' - 14'	8' - 10	4'-6'	10-11	10" - 11"	18' - 20'
VOC Сотроил d	Cleanup Objective	07/09/02	07/10/02	07/24/02	07/26/02	07/24/02	07/09/02	07/25/02	07/25/02	07/31/02
Trichloroethene	(0.7 ppm (700 ppb)	ND	QN	ND	ΩN	ΩN	QN	QN	QN	910 D
cis-1,2-Dichlomethene	0.3 ppm (300 ppb)	QN	QN	ΟN	ND	ND	QN	QN	QN	700 D
trans-1.2 Dichloroethene	[0.3 ppm (300 ppb)	QN .	ÖN	ON	NO	ND	ND	QN	ND	3.1
Vinyt chloride	0.2 ppm (200 ppb)	QN	ND	ND	NO	ND	ND	ON	Q	Š
Acetone	0.2 ppm (200 ppb)	QN	ΠN	ND	ND	ND	ON	QN	QN	ND
Benzene	0.06 ppm (6 ppb)	QN	QN	QN	ND	ND	QN	ND	ON	QN
Bromodichloromethane	none	ND	ND	ND	ND	N	ND	ND	ON .	ND
Bromoform	none	QN	QN ON	9	Š	Q	QN	ND	ON	ND
Bromomethane	none	ND	NO.	ND	ND	NO	ND	ND	ON	QN
2-Butanone	0.3 ppm (300 pob)	QN	Ω	ND	ND	ON	QN	ON.	QN	ND.
Carbon Tetrachloride	0.6 ppm (600 ppb)	QΝ	ON	ND	QN	QN	ND ,	ND	ON	ND
Carbon Disulfide	2.7 ppm (2700 ppb)	ON	Q	Š	N.	QN	QN	ND	ON	3.1
Chloromethane	rone	QN	NO	NO	ND	ND	QN	ND	QN	ND
Chlorobenzane	1.7 ppm (1700 ppb)	QN	QQ Q	ON	Q	ND	QN	ND	ON	ND
Chloroethane	1.9 ppm (1900 ppb)	ND	QN NO	ND.	ND	ON	ND.	ND	NO	ND
Cyclohexane	none	ND	QN :	QN	2.3	QN	ND	QN	ON	ND
Спютогогт	0.3 ppm (300 ppb)	NĎ	ON	ND	S	QN.	ND	ND	NO	QN.
1,2-Dibromo-3-chloropropane	none	QN	QN	2	QN N	ON	ND	ND	QN	ND
Dipromochloromethane	none	ND	NO	9	S	QN	Q	QZ	QN	ND
Dichlorodifluoromethane	none	ON.	ON	Q	₽:	ON	QŅ	ON	ND	QŽ
	none		ND	ON	N D	QN	ND	ND	ND N	Q.
1,2-Dichlorobenzene	7.9 ppm (7900 ppb)		ND	_ Q _ N	Q.	ND	ON	OZ	ON	QN
1,3-Dichlorobenzene	1.6 ppm (1600 pab)	ON NO	QN	Q	Q	QN	N	Ð	Q	ΩN
1,4-Drchlorobenzene	8.5 ppm (8500 ppb)]	2	Q	Q	Q	2	9	오	Q.
1,1.Dichloroethane	0.2 ppm (200 ppb)		Q.	2	2	QN	2	Q	Q	S
1,2-Dichloroethane	0 3 ppm (300 ppb)	ON	ND	ON	Q	Q	2	9	Q	Q
1,1-Dichloroethene	[0.4 ppm (400 ppb)	QN (ND	ND	ND	Q	ZD.	QN	ON	QN

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 imit Page 5 of 10

LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 GOWANDA DAY HABILITATION CENTER

07/31/02 18' - 20 모 2 2 2 2 일일 2|2 2 92 S 9 무 밁 呈 2 2 2 2 윤 2 2 07/25/02 10' - 11' B-23D 운 S 욷 9 물 9 2 엙 2 9 9 2 양 9 물 9 |9|9 무 戹 07/25/02 10-11 Soring/Monitoring Well Number, Sample Collection Interval and Sample Date B:33 욷 皇 g 오 일일 皇 욷 皇 身 2 욷 쉳 9 읖 2 물 07/09/02 4'-6' B-55 |9 皇 무 닏 9 일일일 잂 일일 999 9 문 일일 身 문 물 9 07/24/02 8-10 <u>8</u>-2 밁 물 물 2 2 웆 9 99 9 皇 9 9 닐 묻 皇 S 일일 皇 오 2 12 무 07/26/02 12: 14 B-20 皇 2 9 욷 99 2 9 2 9 9 욷 2 2 9 9 2 S 07/24/02 9 - 10 B-19 욷 2 2 9 ᄝ 9 2 밁 2 욷 닏 2 읖 물 9 물 욷 2 2 07/10/02 B-18 9.0 皇 2 물 일일 2 무 9999 2 욧 원 Ź 문 문 물 욷 07/09/02 8 - 12 8-17 ᅌ 9 皇 2 일일 皇 일일 읖 9 욷 일일일일 물 皇 皇 9 l⊋ Cleanup Objective 3 ppm (13000 ppb) 14 ppm (14000 ppb 0.12 ppm (120 ppb) (dgg 0001) mag 0,1 .5 ppm (1500 ppb) 3.4 pom (3400 ppb) 3.3 ppm (3300 ppb) .5 ppm (5500 ppb) 4 ppm (1400 ppb) .2 ppm (1200 ppb) 5.0 ppm (500 ppb) 0.1 ppm (100 ppb) 0.6 ppm (600 ppb) 3.8 ppm (800 ppb) Recommended VYSDEC Done one BUOL anor one nane Pone 900 none all of Š one 1,2-Trichlaro-1,2,2-trifluor rans-1,2-Dichloropropene 2,2-Tetrachloroethane cis-1,2-Dichloropropene ,2,4-Trimethylbenzene .3.5-Trimelhylbenzene 2,4-Trichlorobenzene "richlorofluoromethane 4-Methyl-2-pentanone Methyl ted butyl elher 1.1.1.Trichloroethane 2-Trichloreethane 2-Dichloropropane Methylene Chloride Methylcyclohexane etrachloroethene sec-Butylbenzene sopropylbanzane /OC Compound n-Propylbenzene n-Butylbenzene Methyl acetate Ethylbenzene total Xylenes 2-Hexanone P-Cymene Toluene Styrene

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 Imit

Page 5 of 10

VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

		DOM:/BUILDG	HOLLING WELL	NUMBER, S	ample colle	scilon interv	politig/worlding well womber, sample collection interval and sample Date	Jare
	NYSDEC	B-25	B-25D	B-26	B-27	B-28	Garden Soil-N	Garden Soil-S
	Recommended	9' - 11	9 11.	11-12	12' - 13'	11'-12	0,-0.5	0.0.5
VOC Compound	Cleanup Objective	07/23/02	07/23/02	07/23/02	07/26/02	07/23/02	07/19/02	07/19/02
Trich:oroethene	0.7 ppm (700 pcb)	4 J	11	160	130	9	1.3	1.1
ds-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	9	28	65	dN	QN	QN
trans-1,2-Dichloroethene	0.3 ppm (300 ppb)	ND	QN	ON	ND	ND	ND	QN
Vinyl chloride	0.2 ppm (200 ppb)	ND	Q.	ON	ND	ÙN	ND	QN
Acetone	0.2 ppm (200 ppb)	QN	aN	QN	MD	QN	ΟN	QN
Benzene	0.06 ppm (6 ppb)	ND	ON	GN	ND	ND	NO	ND
Bromodichloromethane	none	ND	QN	QN	QN	ND	ND	ND
Bromolorm	euou	ΩN	QN	GN	ND	ND	QN	QN
Bromomethane	none	ND	QN	ND	ND	ND	ND	QN
2-Butanor.e	(300 ppm (300 ppb)	QN	QN	ON.	ND	QN	ND	ON
Carbon Tetrachioride	(qdd 009) mdd 9:0	QN	QN	ND	ND	ON	ND	QN
Carbon Disulfide	2.7 ppm (2700 ppb)	ON.	DN	ND	QN	ND	ND	ND
Chloromethane	none	ND	ND	ND	NO.	ND	NĎ	(JN
Chlorobenzene	1.7 ppm (1700 ppb)	QN	QN	ND	QN	NO	ND	QN.
Chloroethane	1.9 ppm (1900 ppb)	ND	ND	Q	S	Q	ND	2
Cyclohexane	none	ND	ND	_ QN	ON	ND	ND	ND
Chloroform	0.3 ppm (300 ppb)	QN	QN	ND	ND	ON	ND	ON
1,2-Dibromo-3-chloropropane	none	. dn	QN	QN	ND	QV	٩D	QN
Dibromochloromethane	none	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	попе	QN	ND	NO NO	ND	ND.	ND	ND
1,2-Dibromoethane	none	ND	Q	ON.	ND	ND	ND	Q.
1.2-Dichlorobenzene	7.9 ppm (7900 ppb)	QN	QN	ND	ON.	ND.	ND	QN
1,3-Dichlorobenzene	1.6 ppm (160C ppb)	ND	QN	QV	ND	QN	ND	Q
1,4-Dichlorobenzene	8.5 ppm (8500 ppb)	ND	ON	Q	ND	ON.	ND	Q.
.,1-Dichloroethane	0.2 ppm (200 ppb)	ND	QN	Q	ND	QN	ND	2
1,2-Dichloroethane	0.3 ppm (300 ppb)	ND	QN	ND	ND	QN	ND	ON
1,1-Dichloroethene	0.4 ppm (400 ppb)	ND	ON	ΩN	ND	QN	ÜN	QN

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 Page 7 of 10

VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABOHATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

BorboyMonitoring Wall Number, Sample Collection Interval and Sample Date

		Baring/Mon	iloring Well	Number, S	ample Colle	ction Interv	Boring/Monitoring Well Number, Sample Collection Interval and Sample Date	Jete
	NYSDEC	B-25	B-25D	B:26	B-27	B-28	Garden Soil-N	Garden Soil-S
	Recommended	9'-11	9. 11.	11-12	12'-13'	11' - 12'	0.0.5	0'-0.5'
VOC Compound	Cleanup Objective	07/23/02	07/23/02	07/23/02	07/26/02	07/23/02	07/19/02	07/19/02
1,2-Dichlarapropane	попе	ND	QN	ND	ON.	QN	ND	QN
ds-1,2-Dichloropropene	none	QN	ND	QN	QN	QN	QN	QN
Irans-1,2-Dichloropropene	none	ND	4D	ΩN	ND	ND	ND	ON
Ethylbenzene	5.5 ppm (5500 ppb)	ND	ND	ND	ND	ND	ND	QN .
2-Hexanone	none	ND	QN	ON	QN.	QN	QN	QN
Sopropylbenzena	5.0 ppm (500 ppb)	ND	ON	QN	ND	ND	QN	QN
Methyl acetate	none	ND.	- QN	ON.	ΩN	GN	ON	QN
Methylene Chloride	0.1 ppm (100 ppb)	ND	QN	N	ND	ND	ND	ND
Methyl tert buty: ether	0.12 ppm (120 ppb)	ON	ON	ND	. ND	ND	ND	QN
4-Methyl-2-pentanone	1.0 ppm (1000 ppb)	ON	QN	QN	QN	QN	QN	ND
Methylcyclohexane	uone	ND	QN	ON.	QN	ND	ND	ND
Styrene	none	QN	GN	ND	ND	ND	ND	DN
1,1,2,2.Tetrachloroethane	0.6 ppm (600 ppb)	ND	QN	ND	QN	QN	ND	ND
Tetrachloroethene	1.4 ppm (1400 ppb)	QΝ	NO	ND	ND	ND	ND	ND
Toluene	1.5 ppm (1500 ppb)	QN	QN	QN	QN	ND	ND N	ND
1,2,4-Trichlorobenzene		ON	QN	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	[[qdd bog) mdd g o]	an	QN	ND	ND	ND	ND	ON
1,1,2-Trichtoroethane	none	ND	QN	QN	QN	ND	ND	QN
1,1,2-Trichloro-1,2,2-trifluor	none	GΝ	QN	ND_	ND	ND	ND	ND
Trichlorofluoromethane	none	ND	QN	QN	QN	ND	ND	ND
total Xylenes	1.2 ppm (1200 ppb)	QN	GN	ND	ND	ND	ND	ND
n-Propylbenzene	14 ppm (14000 ppb)	QN	QN	QN	ďΝ	ND	QN	ND
P-Cymene	none	ΩN	ΩN	ND	ND	ND	ND	ND
1.2,4-Trimethylbenzene	13 ppm (13000 ppb)	ND	QN	ND	ON	ND	ON	ON.
1,3,5-Trimethylbenzene	3.3 ppm (3300 ppb)	ΩN	QN	ND	ND	MD	Q.	Q
n-Butylbenzene	none	ND	QN	ND	ND	ND	QN	Q
sec-Butylbenzene	none	ΩN	QN	Q	QN	QN	□N	Q.

Legend

D = Detected in dilluted sample

ND = Not Detected

J = Estimated concentration

BDJ = Detected in Method Blank B = Detected in Method Blank

Bold = Concentration above method detection limit Page 8 of 10

VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

		Boringryon	Boring/Monitoring Well Number,	Number, 5	Sample Collection Interval and Sample Date	ection Interv	al and sam	ple Date	
	NYSDEC	Field Blank Trip Blank Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank Field Blank Trip Blank	Field Blank	Trip Blank
	Recommended	B-4 FB	18	B-15 FB	18	8-20 FB	TB	8-1 FB	æ
VOC Compound	Cleanup Objective	07/11/02	07/11/02	07/19/02	07/19/02	07/26/02	07/26/02	07/31/02	07/31/02
Trichloroethene	(dog 007) mgq 7.0	i ON	ND	UN	QN.	QN	QN	QN	ON ON
cis-1,2-Dichloroethene	6.3 ppm (300 ppb)	GN] ON	QN	QN	ON.	ON	QN	QN
Irans-1,2-Dichloroethene	0.3 ppm (300 ppb)	ΠN	ND	ND	ΟN	ND	QN	QN	QN
Vinyl chloride	0.2 ppm (200 pcb)	QN	ON:	ND	ND	ND	QN	Q	ND.
Acetone	0.2 ppm (200 ppb)	31	6 BJ	16.J	QN	ND	7.7 83	7.8 J	. F9.6
Benzene	0.06 ppm (6 ppb)	QN	ND	ON	ND	ND	QN	QN	ND
Bromodichloromethane	nane	QN	QN	QΝ	QN	ND	ND	ND.	ND
Bromaform	euous	QN	GN	ON	QN	QN	QN	QΝ	ND
Bramamethane	none	ON	QN	QN	ND	ND	ON	QN	ND
2-Butanone	0.3 ppm (300 ppb)	Ŷ	QN	QN	ΠN	ND	QN	Q.	ND
Carbon Tetrachloride	(gdd: 009) mdd 9:C	QN	αN	ON.	QNi	QN	QN	QN	ND
Carbon Disultide	2.7 ppm (2700 ppb)	QN	Q N	QN	dN	ND	ND	ND	ND
Chloromethane	none	QN	ΟN	ON	ΠN	QN	QN	ND	ND
Chlorobenzene	(1.7 ppm (1700 ppb)	QN	- QN	QN	QN	ND	9	QV	QD.
Chloroethane	(dgg 0061) mgg 8.1	QN	ND	QN	QΝ	ND	2	2	ND
Cyclohexane	none.	9	GN	ND	ND	ND	ON .	ND	DN
Chloroform	(300 ppp) (300 ppb)	Q	QN	QN	ON	ND	UN	ND	QN N
1,2-Dibromo-3-chloropropane	ацюш	ND	QN	QN	ND	ND	Q	ND	2
Dibromochloromethane	none	ON	ND	ND	ND	QN	Q	ND	ON ON
D:chlorodifluoromethane	euou	QN	QΝ	ND	ND	2	Ñ	QN	Ð
1,2-Dibromoethane	попе	ON	ND	Q	ND	QV	Q.	S	S
1,2-Dichlorobenzene	[7.9 ppm (7900 ppd)	QN	ION	ND	ND	ΔN	ŊĎ	QN	ND
1,3-Dichlorobenzene	(1.6 ppm (1600 ppb)	[QN]	an	QN	ON	QN	QN	QN	ND
1,4-Dichlorobenzene	(30d 00 5 8) wdd 5.8	QN	QΝ	ND	ND.	ND	S	2	QN
1,1-Dichloroethane	0.2 ppm (200 ppb)	QN	ND	QN	ON	QN	2	Q	Q.V
1,2-Dichloroestrane	0.3 ррт (300 ррb)	QN .	ND	9	ON.	Ş	9	잎	Q.
1,1-Dichloroethene	0.4 ppm (400 ppb)	QN	Q.D	g	Ō	9	Q	ND	QN

Legend

D = Detected in difluted sample

ND = Not Detected

J = Estimated concentration

B = Detected in Method Blank

BDJ = Detected in Method Blank

Bold = Concentration above method detection I mit Page 9 of 10

LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, VOLATILE ORGANIC COMPOUNDS VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 GOWANDA DAY HABILITATION CENTER

Field Blank Trip Blank Field Blank Trip Blank Field Blank Trip Blank Field Bkank Trip Blank 07/31/02 2.480 9 8. 맆 문 2 2 2 2 물 2 욷 욷 욷 2 2 07/31/02 B-1 FB 2.0 BJ Boring/Monitoring Well Number, Sample Collection Interval and Sample Date 2.3 J 皇 9 9 윺 9 웆 皇 일은 쉳 9 2 |2 9 일일 07/26/02 2.3 B. 일일일 물 물 9 2 2 욷 9 2 9 ä 1919 9 身 2 웆 B-20 FB 07/26/02 3.5 BJ 4.80 2 g 9 2 욷 2 욷 문 욷 웊 2 9 2 2 2 물 9 9 물 07/19/02 2 呈 문 g 2 무 9 욷 2 일일 물 2 9 皇 2 07/19/02 B-15 FB 383 99 9 2 2 2 皇 皇 욷 9 윤 문 밁 물 물 2 皇 9 07/11/02 4 S 윺 2 身 물 윷 07/11/02 9-4 FB 38 윈 ջ 2 문 2 Ş 2 9 9 9999 윷 윷 9|9 Cleanup Objective 4 ppm (14000 ppb) 3 ppm (13000 ppb) 0.12 ppm (120 ppb) .5 ppm (1500 ppb) 3.3 ppm (3300 ppb) 1.4 ppm (1400 ppb) .2 ppm (1200 ppb) 1.0 ppm (1000 ppb) 3.4 ppm (3400 ppb) .5 ppm (5500 ppb) 1.1 ppm (100 ppb) 5.0 ppm (500 ppb) 0.6 ррг (600 ррb) 0.8 ppm (800 ppb) Recommended NYSDEC Pole Plone Jone 9101 andi jone Pone POLIS POL none Jane encu one 2-Trichloro-1,2,2-trifluor rans-1,2-Dichloropropene 1,2,2-Tetrachloroethane 2,4-Trimethylbenzene 3,5-Trimethy/benzene cis-1,2-Díchlompropene 2,4-Trichlorobenzene richlorofluoromethane I-Methyl-2-pentanone Methyl tert butyl ether ,1-Trichloroethane ,2-Trichloroethane 2-Dichloropropane Methylene Chloride lethylcyclchexane etrachloroethene sec-Butylbenzene sopropylbenzene **УОС Сотроина** n-Propylbenzer.e n-Butylbenzene Methyl acetate Ethylbenzene otal Xylenes 2-Hexanone 2 Cymene oluene Styrene

Legend

D = Detected in difluted sample

ND = Not Detected

J = Estimated concentration

B = Detected in Method Blank

BDJ = Detected in Method Blank

Bold = Concentration above method detection I mit

Page 10 of 10

VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

Boring/Monitoring Well Number. Sample Collection Interval and Sample Date

		DOMESTIC	licorning even	NUCIDEL, 3	all ple colle	A LANCE IN LIGHT	comprisingly well further, sample collection merval and sample bale	age
	NYSDEC	B-1/MW-1	B-17	B-21	8-25	B-25D	Garden Soil-N	Field Blank
	Recommended	8' - 10'	B' - 12'	B - 10'	9' - 11'	9.11.	00.5	8-1FB
SVOC Compound	Cleanup Objective	07/31/02	07/09/02	07/24/02	07/23/02	07/23/02	C7/19/02	07/31/02
Acenaphthene	20 ppm (50000 ppb	UD	ON	ND	QN	Ν̈́D	ND	ND
9	41 ppm (41000 ppb)	ON	an	ND	ND	ND	ND	ND
	дdd 0000с) шк	GN	ON	QN	ND	ND	ND	ND
Benao(a)anthracene		MD	QN	ON	GN	ON.	ON	ND
Benzo(b)fluoranthrene	1.1 ppm (1100 ppb)	ΔN	GN	an	ND	ND	QN	ND
Benzo(k)fluoranthrene	1.1 ppm (1100 ppb)	QN	QΝ	QN	ND	ND	QN	QN.
Benzo(ghi)perylene	_	ON	QN		ND	ND	QN	ND
Benzo(a)pyrene		GN	ND	ON	ND	ND	ND	ND
Benzoic acid		QN	an	QN	ND	ON	QN	ND
Benzy' alcohol	N/A	QN	QN	Q١	ND	ND	ON	ON.
Bis(2-chloroethoxyl) methane	N/A	ON	ND	QN	ND	ND	ND	ΔĎ
Bis(2-chloroethyl) ether	N/A	QN	ND	ND	NO	ND	ND	QQ.
2.2Oxbis(1-Chloropropane)	N/A	QN	QN	QN	ND	ND	ND	ND
Bis(2-ethylhexyl) phtahalate	N/A	QN	2400	f 88	ND	QN	ND	ND
4-Bromophenyl phenyl ether	N/A	QN	ND	QN	ND	QN	QN QN	ND.
Butyl benzyl phthalate	NA	ON	QN	QN	1700	7300 D	QN QN	Q
4-Chloroaniline	N/A	ON	QN	J. ON	QN	QN	ND	ΩN
4-Chloro-3-methylphenol	N/A	ND	ON	UD	QN QN	QN.	QN	QN
2-Chloronaphthaiene	N/A	ON	UN	ΩN	QN	ND	QN	2
2-Chlorophenal	N/A	QN	ND	QN	ON	ND	ND	QN
4-Chlorophenyl phenyl ether	N/A	ON	QN	dN	ND	딮	QN	QN
Chrysene	0.4 ppm (400 ppb)	270 J	ND	QN	QN	ND	QN	Q.
Dibenzo(a,h)anthracene	0.014 ppm (14 ppb)	ON	ND	QN	ND	ND	QN	QN
Dibenzofuran	N/A	ΩN	QN	QN	GN	IND	2	QQ.
Di-n-butyl phthalate	8.1 ppm (8100 ppb) NO	QN.	ON	QN	ND.	ND	QN	ND

ND = Not Detected

All results micrograms per kitogram, ug/kg (ppb)

J = Estimated, detected below method detection limit

NA = Not Applicable, no NYSDEC cleanup objective for these compounds. Page 1 of 3

VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

	NYSDEC	B-1/MW-1	B-1/MW-1 B-17 B-21		B-25	B· 25D	B-25 B-25D Garden Soil-N Fiek	Field Blank
	Recommended	8' - 10'	8' - 12'	8' - 10'	9'-11'	9' - 11'	0' - 0.5	B-1 FB
SVOC Compound	Cleanup Objective	07/31/02	07/09/02	07/24/02	07/23/02	07/23/02	07/19/02	07/31/02
1,2-Dichlorobenzene	N/A	QN		ON	ND.	ON	QN	QN
1,3-Dichlorobenzene	N/A	QN	ND	ND	ND	ND.	ND	Š
1,4-Dichlorobenzene	N/A	ND	ND	NO	ND	S	ON	ND
3.3'-Dichlorobenzidine	N/A	QN	ND	QN	·	ND	_ ON	ND QN
2.4-Dichlorophenol	N/A	QN	.ND	GN		. QN	GN	ND
Dielnyl phthalate	N/A	QN	QΝ	O١٨	ÓΝ	ND		ND
2.4-Dimethylphenol	N/A	QN	ON.	QN		ND		ND
Dimethyl phthalate	N/A	QN	ND	ND		ND		ND
4.6-Dinitro-2-methylphenol	N/A	۵N	QN	ND		ND	ND	ND
2,4-Dinitrophenal	N/A	ON	QN	QN		ON		QN
2.4-Dinitrotoluene	N/A	ON	ND	ND		ND		ND
2,6-Dinitrotoluene	N/A	QN	QN.	GN		ON.		ND
Di-n-octyl phthalate	N/A	QN	3100	QN	F 86	640	, ON	ND
Fluoranthrene	30 ppm (50300 ppb	C 007	ND	QN		QN	2103	ND .
Fluorene	20 ppm (50000 ppb	<u> </u>	ΩN	QN		QN	an	ĠN
Hexachlorobenzene	0.41 ppm (410 ppb)	ON	ND	ND	ON	ND	ND	ON
Hexachlorobutadine		an	άN	ND		ND	ND	ND
Hexachlorocyclopentadine	NYA	ON	ON	QN	QN	ND	_ ON	ND
Hexachloroethane	N/A	ON	QN	ND	ND	ND	2	Q
Indeno(1,2,3-cd)pyrene	[3.2 ppm (3200 pob)	QN	i QN	ND		ND	NO	ON
Isophorone	4.40 ppm (4400 ppb)	ND	ON	QN] ON	ND	ON.	ND
2-Methylnaphthalene	36.4 ppm (36400 pp	ON	ND	ND		Q	ND	ND
2-Methylphenol	0.100 ppm (100 ppb)	QN	ON.	GN:		. QN	ND	ND QN
[4-Methylphenol	0.9 pppm (900 ppb)	ND	NĎ	ON		N	QN	ND
Naphthalene	(13 ppm (13000 ppb)	QN	[ND	ND	ND	ND	UD QN	ND
		ACCOUNT OF THE PERSON						

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
Page 2 of 3

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

				,				Cana
	NYSDEC	B-1/MW-1	B-17	B-21	B-25	B- 25D	Garden Soil-N Field Blank	Field Blank
	Recommended	8' - 10'	8' - 12'	8'- 10'	9'-11'	9' - 11'	0 0.5	B-1 FB
SVOC Compound	Cleanup Objective	07/31/02	07/09/02	07/24/02	07/23/02	07/23/02	07/19/02	07/31/02
2-Nitroaniline	0.43 ppm	GN	QN	ND	ON	QN	ND	ND
3-Nitroaniline	GN (ddd 008) mdd 008:0	QN	an	ND	ON	_ QN	ND ON	ND
4-Nitroaniline	N/A	ON	QN	ND	ND	QN	ND	ND
Nitrobenzene	0.2 ppm (200 ppb)	QN	ND	ND	QN	ON	ND	ND
2-Nitrophenol	0.330 ppm (330 ppb)	ON	΄	ND	ND	an	ND	ND
4-Nitrophenol	O.100 ppm (100 ppg) ND	QN	dΝ	ND	GN	<u> </u>	ND	ND GN
H-nitrosodiphenylamine	A/A	ON.	QN	ND	QN	QN	QN	ND GN
N-Nitroso-Di-n-propylamine	N/A	QN	QN	ND	ON	QN	ON	QN
Pentachlorophenol	1.0 ppm (1000 ppb)	QN	GN	ND	ND	ND	QN	, GN
Phenanthrene	add 00003) m	£ 065	QN	ND	ND	an	ND	ND
Phenol	(qdd g) шdd g0;0	ON	ND	ND	ND	ND	ND	QN
Pyrene	ठ	480 J	QN	ND	ND	QN	ND	ND.
1,2,4-Trichlorobenzene	N/A	ON.	ND	ND	ND	ND	9	Q
2,4,5-Trichlorophenol	0.1 ppm (100 ppb)	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	QN	QN	ÜŅ	ND	UD.	ND	ON

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
Page 3 of 3

VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, SOIL SAMPLES, PESTICIDES AND HERBICIDES GOWANDA DAY HABILITATION CENTER

Boring/Monitoring Well Number, Sample Collection Interval and Sample Date

		DOMESTICATION OF THE PARTICLE.	y rvell IND IIDET	Jan ple conec	Carrigle Constant (RIC) variation Carrigle Date	January Date	
	Recommended	B-1/MW-1	B-17	B-21	B-25	B-25D	Garden Soil-N
	NYSDEC Cleanup	8' - 10'	8' - 12'	B ' - 10'	9'-11'	9-11	0' - 0.5'
Compound	Objective	07/31/02	07/09/02	07/24/02	07/23/02	07/23/02	07/19/02
Pesticides, ug/kg (ppb)							
Aldrin	0.041 ppm (41 ppb)	GN	ND H	NO	QN	QN	QN
alpha-BHC	0.11 ppm (110 ppb)] ON	NO R	ND	ND	QN	ND
beta-BHC	0.2 ppm (200 ppb)	QN:	ND A	ND	ND	QN	QN
gamma-BHC (Lindane)	0.06 ppm (6 ppp)	QN	NDR	ND	QN	ON	QN
delta-BHC	0.3 ppm (300 ppb)	QN	ND R	ND	ND	QN	QN
Chlordane	0.54 ppm (540 ppp)	۵N	ND B	QN	QN	QN	QN
4,4'-DDD	[2:9 ppm (2900 ppb)	QN	ND R	ND	ND .	ND	PN
4,4-DDE	2.1 ppm (2100 ppb)	QN	NDH	ND	ND	ND	28 ug/kg
4,4 -DDT	2.1 ppm (2100 ppb)	QN	ND H	ND	ND	QN	520 ug/kg
Dieldrin	0.044 ppm (44 pppb)	ON	ND B	ON	MD	QN	37 ug/kg
Endosulfan I	0.9 ppm (900 ppb)	QN	ND R	ND	ND	ND	QN
Endosulfan li	0.9 ppm (900 ppb)	QN	NDR	ND	ND	ND	9
Endosutfan sulfate	1.0 ppm (1000 ppb)	QN	NDR	ON	18 ug/kg J	13 ug/kg J	ND.
Endrin	0.10 ppm (100 ppb)	GN	ND R	ND	ND	ND	ON
Endrin aldehyde*	10 ppm (10,000 ppg)	QN	NDR	ON.	ND	ND	ON
Heptachlor	0.10 ppm (100 ppb)	ON T	NDFI	QN	QN	QN	QN
Heptachlor epoxide	0.02 ppm (20 ppb)	Q.	ND A	QN .	ND	QN	ΩN
Methoxychicn	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)	9	NOR	Q	QN	ON	ON
Herbicides							
2,4.D	0.5 ppm (500 ppb)	QN	QN	QN	ON ON	ON	QN
2,4,5-TP (Silvex)	0.7 ppm (700 ppb)	ON	NĎ	ND	ND	ND	ON
2,3,5-T	1.9 ppm (1900 ppb)	ON	NĎ	QN	NĎ	ND	ND
		Addition of the A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	the state of the state of			100.0

Values expressed as ug/kg = ppb unless otherwise noted

ND = Not Detected

R = Data rejected during validation

J or $\mathbf{E} = \mathbf{E} \mathbf{s} \mathbf{t} \mathbf{i} \mathbf{m} \mathbf{a} \mathbf{t} \mathbf{e} \mathbf{d}$, detected below method detection limit

B = Detected in Method Blank

* Endrin atdehyde, 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 Page 1 of 1

GOWANDA DAY HABILITATION CENTER VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY ON SOIL SAMPLES, PCBS

		Boring/Monitorin	g Well Number,	Sample Collecti	Boring/Monitoring Well Number, Sample Collection Interval and Sample Date	Sample Date	
PCB,	Recommended	B-1/MW-1	B-17	B-21	B-25	B-25D	Garden Soil-N
ug/kg (PPB)	NYSDEC Cleanup	8' - 10'	6' - 12'	9' - 10'	9 - 11'	9-11	0'-0.5'
Compound	Objective*	07/31/02	02/09/05	07/24/02	07/23/02	07/23/02	07/19/02
PCB Aroclor 1016	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	ND, <18
PCB Araclor 1221	10 ppm (10,000 ppb)	ND, <90	ND, <20	41> 'QN	8t>'QN	ND, <20	ND, <18
PCB Aroclor 1232	10 ppm (10,000 ppb)	ND, <90	NĎ, <20	ND, <19	81> 'QN	ND, <20	ND, <18
PCB Araclor 1242	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	ND, <18
PCB Aractor 1248	(10 ppm (10,000 ppb)	06> 'QN	ND, <20	ND, <19	ND, <18	ND, <20	ND, <18
PCB Araclar 1254	10 ppm (10,000 ppb)	ND, <90	ND, <20	ND, <19	ND, <18	ND, <20	40 ppp
PCB Araclor 1260	10 ppm (10,000 ppb)	06> 'QN	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

Page 1 of 1

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

	•		Jonng/Monitorin	Boring/Monitoring Well Number, Sample Collection Interval and Sample Date	Sample Collecti	on Interval and t	Sample Date	
Metals,	Recommended	Eastern USA	B-1/MW-1	B-17	B-21	B-25	B- 25D	Garden Soil-N
Total,	NYSDEC Cleanup	Background	9 - 10'	8' - 12'	8-10	9'-11'	9'-11	0'-0.5'
Mg/Kg (ppm)	Objective, ppm	Range, ppm	07/31/02	07/09/02	07/24/02	07/23/02	07/23/02	07/19/02
Aluminum	SB	33,000	069,9	6,760	069'2	6,380	7,140	8,020
Antimony	SB	WA	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 cr SB	15-600	45.2		59.2 J	128 J	L 171	105
Beryllum	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	95.0> , QN	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	99	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	9.6	9.6	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	956	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		N/A	0.06 B	ND, <1.1	ND, <1.1	ND, <1.2	ND, <1.2	ND <1.1
Sod:um	SB	6,000-8,000	66.2	ND, <114	ND, <108	ND. <116	ND, <118	ND, <108
Thallium	88	N/A	ND; <0.44	6,9> ,dN	ND, <6.5	NO, <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	76.9 J	82.9 J	77.8 J	91.8 J	82.2
nide. Iotal, 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
	Lot Candleson - 100		Manhana and add	Water or boson	c social moc	beton estimants social mose		

SB = Site Background

Values are expressed as mg/Kg = pcm 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 Page 1 of 1

VOLUNTARY CLEANUP INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

		Groundwal	Groundwater Monitoring Well and Sample Date	g Well and	Sample Dat	e.				
	NYSDEC	MW-1	MW-1D	MW-2	MW-3	MW-4	S-WW.	MW-6	MW-7	MW-7D
	Class GA Standard								-	
VOC Compound	TOGS 1.1.1	09/04/02	09/04/02	08/28/02	08/28/92	08/28/02	08/28/02	08/29/02	08/29/02	08/29/02
Trichloroethene	5.0 ug/L	380	320	4.7.3	2.3.1	1.80	12	2.4.1	56	23
	5.0 ug/L	380	300	18	9.6	2.0 J	1.7.1	400	420	380
trans-1,2-Dichloroethene	5.0 ugl	4.)	F 01#	QN	ND	QN	ΔN	3.4 J	QN.	2.1 J
Vinyl chloride	2.0 ug/L	4.)	3.2 J	ND ND	3.13	QN	QN	QN	L 4	3,3 J
Acetone	25.0 ug/t.	QN	QN	QN	ND	ON	ND	αN	QN	QN
Benzene	1.0 ug/L	ND] ON	ND	ON	ON	QN	QN	QV	Q
Bromodichloromethane	50.0 ug/L	QN	an	SO] ON	٩	Q	QN	ON N	Q
Bromofarm	50.0 ug/l.	QN	QN	ND	ND	Q	ND	an	Q	QN N
	5.0 ug/L	ND	ND	ND	ND	Q	ON	QN	ND	ND
2-Butanone (MEK)	50.0 ug/L	GN	QΝ	QN	QN	QN	N	QN	QN	QN
	60.0 ug/L	QN	QN	ND	ND	ND	ND	ON	NO	Q
Carbon Tetrachloride	5.0 ug/L	an	ON.	QN	ΩN	QN	QN	an	QN	QN
Coloromethane (methyl chloride)	5.0 ug/L	QN	ď۷	ND	QN .	QN	QN	ON	ND	QN
Chlorobenzene	5.0 ug/L	ND	ND	ND	ND	_ QN	ND	ΩN	ON	ND
Chloroethane	5.0 ug/L	QN	92	QN	Q.	QN	ND	ND	QN	QN
Cyclohexane (hexamethylene)	none	ND	ΩN	ND	ON.	ND	ND	۵N	QN	QN
Chloroform	7.0 ug/L	QN	ON	QN	QN	QN	QN	QΝ	ND	QN
1,2-Dibromo-3-chloropropane	0.04 ug/L	ND	ND	ND	QN	ON	ND	QN	QN	QN
Dibromochloromethane	5.0 ug/L	an	ďΝ	ON	i an	CN	ND	QN	QN	ON
Dichlorodifluorometrane	5.0 ug/L	ON	QV.	ND	Q N	Q	ON	ND	QN	QN
ethylene dibro	6 x 10-4 ug/L	ND	ND	ON.	۵N	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3.0 ug/L	αN	QΝ	ND	QΝ	QN	ND	QN	ND	Q
1,3-Dichlorobenzene	3:0 ug/L	ND	QN	ND	ON	ND	ND	QN	QN.	QN
1,4-Dichlorobenzene	3.0 ug/L	ΩN	GN .	ND	QN	ΩN	ND	GN	Q	QN
1,1-Dichloroethane	5.0 ug/L	OΝ	ND	ND	Q N	ON.	ND	QN	S	Q
1,2-Dichloroethane	0.6 ug/L	QN	ΩN	S	(N	Q	ND	ND	ND	QN N
1,1-Dichloroethene	5.0 ug/L	QΝ	Q	£	Q	2	QN	QN	Ŷ	QN
1,2-Dichloropropane	1.0 ug/L	Q.	ND	N	Q	Q	QN	ND	2	ND ND

Pagend

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 Page 1 of 6

VOLUNTARY CLEANUP INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

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		Groundwat	Groundwater Monitoring Well and Sample Date	g Well and	Sample Da	te			:	
	WYSDEC	MW-1	MW-1D	MW-2	MW-3	MW-4	5-WW	9-WW	2-MM	MW-7D
	Class GA Standard									•
VOC Compound	70GS 1.1.1	09/04/02	09/04/02	08/28/02	08/28/92	08/28/02	08/28/02	08/29/02	08/29/02	08/29/02
cis-1,3-Dichloropropene	0.4 ug/L	QN	ΠN	QN	ND	QN	ON	QN	ON	QN
trans-1,3-Dichloropropene	0.4 ug/L	QN	QN	QN	QΝ	GN	ON	ON	QN	ND
	5.0 ug/L	QN	ND	QN	ND	ΩN	QN	QN	QN	Q.
2-Hexanone	50.0 ug/L	ΩN	QN	QN	ON	QN	OIN	QΝ	ON	QN
enezueglobal	5.0 ug/L	S	Q	QΝ	2	QN	ĠN	ΠN	Q	ND
Methyl acetale	попе	Q	Q	ND	QV QV	QN	ND	QN	QN	ND
Methylene chloride	5.0 ug/L	ON	QN	ND	ND	ND	ND	an	QN.	Q
Methyl lert butyl ether	10.0 ug/L	QN	ΩN	QN	αN	ON I	QN	QΝ	QN	QN
4-Methyl-2-pentanone	none	QN	ND	ND	QN	ND	QN	QN	ND	ND
Methylcyclohexane	NA: Not Listed	Q.	QN	ďΝ	QN	QN	_ ON	ON	QN	QN
Styrene	5.0 ug/L	QN	QN	QΝ	ΟN	ΩN	. ON	QΝ	QN	QN
1,1,2,2-Tetrachioroethane	5.0 ug/L	QN	dN	ON	QN	ON	. dn	QN	QN	QN .
Tetrachloroethene	5.0 vg/L	QV	ND	GN	QN	ďN	ON	΄	QN	ON
Toluene	5.0 ug/L	dN	ND	ND	QN	ND	ND	ND	ND	QN
1,2,4-Trichlorobenzene	5.0 ug/L	Q	QΝ	QN	ON	QN	_ ON	QN	QN	ON
1,1,1-Trichloroethane	5.0 ug/L	QN	ND	ON	ΩN	QN	QN	ď٩	ND	QN
	1.0 ug/L	QNŧ	ND	QN	QN	ND	QN	ND	QN	ΩN
1,1,2-Trichloro-1,2,2-triff.Jorethane	5.0 ug/L	ND	ND	ND	QN	QN	QN	ND	ND	QN
Trichlorofluoromethane	5.0 ug/L	ΩN	ND	ND	QN	ÓΝ	QN	ON	ÓΝ	QN
Total Xylenes	5.0 ug/L	ON	ND	QN	ON	ND	QN	QN	ND	QN
N-Propylbenzene	5.0 ug/L	₫Ņ	ND	ND	ON	NO	QN	QN	ΩN	QN
p-Cymene (4-Isopropyltoluene)	5.0 ug/L	ΠN	ND	QN	ON	QN	ON	QΝ	QN	QN
1,2,4-Trimethylbenzene	5.0 ug/L	QN	ND	QV	QN	<u>N</u> D	QN	QN	ND	ďΝ
1,3,5-Trimethylbenzene	5.0 ug/L	ΔN	2	Q.	Q	Ŷ	2	2	ND	QN T
	5.0 ug/L	QN	ND	QN	2	Q	QN	ON	QN	QN
sec-Butylbenzene	5.0 ug/L	QN	NO.	ON	UN ND	ON.	ND	ND	ND	QN

<u>Legend</u> All results ug/L ND ≂ Not Detected

J = Estimated B = Detected Below Method Detection Limits BDJ = Detected in Method blank

Botd = Exceed NYSDEC Class GA Standard Page 2 of 6

VOLUNTARY CLEANUP INVESTIGATION V-00463-9 GOWANDA DAY HABILITATION CENTER

LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS

	2	_
le	MW-12	
Groundwater Monitoring Well and Sample Date	10 MW-11 N	
ig Well and	MW-10	
ar Monitorin	6-MM	
Groundwate	B-MM	
	ပ	•

	NYSDEC	B-MM	MW-9	MW-10	MW-11	MW-12	WW-13	MW-14	MW-15
	Class GA Standard								
VOC Compound	TOGS 1.1.1	08/28/02	08/28/02	08/28/02	08/29/02	08/29/02	08/28/02	08/29/02	08/29/02
	5.0 ug/L	[P#1	4.2 ∫	2.6.J	2300	0096	250	8	320
ois-1,2-Dichloroethene	5.0 ug/L	<u>Q</u> N	ND	ND	2300	3000	69	130	380
ne	5.0 ugL	an	QN	ON	16	28	ተ.3 J	1.6.J	QN
Vinyl chloride	2.0 ug/L	ÓΝ	9	ND	31	15	QN	3.6 J	Ŝ
	25.0 ug/L	QN	QN	ON	ON	ND	NO	ND	ND
Вепzепе	1.0 ug/L	ΩN	Q	ND	QΝ	ON	GN .	ÖN	ND
Bromodichloromethane	7,/0n 0:00s	QΝ	ND	ND	ND ND	ND	ND	QN	ND
	50.0 ug/t	QN	ND	ND	QN	ÓΝ	ON :	an	ND ND
nane	5.0 ug/L	Ŷ	QN	ND	ND	QN	QN	ΠN	ON.
2-Butanone (MEK)	50:0 ug/L	QN.	QN	ΩN	QN	ND	ND	ND	ON ON
Carbon Disulfide	90:0 ng/L	QN	ND	QN	ND	ON	QN	αN	ΔN
ride	5.0 ug/L	QN	QN	ON.	NO	ON	QN	QΝ	ND
yl chloride)	5.0 ug/L	QN	QN	QN	an	QN	GN	ON	ON
	3.0 ug/L	ND	ND	Q	NO	QN	Q	QN	QN N
	5.0 ug/L	ND	ND	2	ON	QN N	QN	Q	ΩN
Cyclohexane (hexamethylene)	none	ND	NĎ	QN	ND	ON.	Q	QΝ	QN.
Chloroform	7,6 n a 7,6 n	. QN	ND	Q	ND	Q	QN	QN	ND
o-3-chloropropane	0.04 ug/L	QN	ND	QN	9	Q	QN	ON	NO
Dibromochloromethane	5.0 ug/L	_ QN	ND	QN	9	2	QN	Q	Ŷ
Dichlorodifluoromethane	5.0 ug/L	ON	ND	QN	ON.	Q	Q	Q	ND
1,2-Dibromoethane (ethylene dibro	6 x 10~4 ug/L	QN	QQ	9	Q	QN	Ġ	2	ΩN
	3.0 ug/L	i an	ND	QN	QN	QN	αN	QN	QN
1,3-Dichlorobenzene	3.0 ug/t.	an	ΠN	QN	QN	ND	QN	ÓΝ	_ ON
1,4-Dichlorobenzene	3 0 ng/L	ON	QN	QN	QN	QN	ND	ND	QN
1,1-Dichloroethane	5.0 ug/L	an l	ND	ON.	ND	QN	2	옷	QN
.1,2-Dichloroethane	0 6 ug/L	ON	QN	9	QN	QN	R	9	QN
	5.0 ug/L	QN	9	2	3.1 J	8.3	윤	Q	Q
1.2-Dichleropropane	1/5n 0/1	ON.	2	9	QN	Q	9	άN	ΔN

Legend

All results ug/L ND = Not Detected

J = Estimaled

B = Detected Below Method Detection LimitsBDJ = Detected in Method blank

Bold ≥ Exceed NYSDEC Class GA Standard Page 3 of 6

VOLUNTARY CLEANUP INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

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MYSDEC Class GA Standard TOGS 1.1.1 0.4 ug/L 5.0 ug/L 5.0 ug/L 5.0 ug/L 10.0 ug/L 5.0 ug/L	08/28/02 06/28/02 ND ND ND ND ND ND ND ND ND ND ND ND ND	-9 MW-10	MW-11	MW-12	MW-13	MW-14	MW-15
Class GA Standard 70GS 1.1.1 0.4 ug/L 5.0 ug/L 5.0 ug/L 10.0 ug/L 10.0 ug/L 5.0 ug/L 10.0 ug/L 5.0 ug/L	┈╟┼┼┼	-	08/29/02				
POGS 1.1.1 D.4 ug/L D.4 ug/L 5.0 ug/L 5.0 ug/L TO.0 ug/L TO.0 ug/L 5.0 ug/L	╫┿┿╇	⊣⊢	OR/20/02				
propropene 0.4 ug/L e 0.4 ug/L e 0.0 ug/L sene 5.0 ug/L zene 5.0 ug/L rice 5.0 ug/L none 10.0 ug/L entanone NA: Not Listed none 10.0 ug/L exane 5.0 ug/L robenzene 5.0 ug/L roethane 5.0 ug/L roethane 5.0 ug/L roethane 5.0 ug/L roethane 5.0 ug/L roethane 5.0 ug/L roethane 5.0 ug/L roethane 5.0 ug/L roethane 5.0 ug/L so ug/L 5.0 ug/L so ug/L 5.0 ug/L so ug/L 5.0 ug/L so ug/L 5.0 ug/L so ug/L 5.0 ug/L				08/29/02	08/28/02	08/29/02	08/28/02
orderbane 0.4 ug/L e 5.0 ug/L scene 5.0 ug/L interest 5.0 ug/L interest 5.0 ug/L interest 5.0 ug/L interest 5.0 ug/L interest 5.0 ug/L interest 5.0 ug/L interest 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 5.0 ug/L incertaine 6.0 ug/L incertai			dΝ	QN	QN	9	QN
e 5.0 ug/L izerie 5.0 ug/L tate 5.0 ug/L nlorde 5.0 ug/L entanone 5.0 ug/L exane 10.0 ug/L exane 10.0 ug/L exane 15.0 ug/L schloroethane 5.0 ug/L roethane 5.0 ug/L roethane 5.0 ug/L ro-1,2,2-trilluorethane 5.0 ug/L romethane 5.0 ug/L s 5.0 ug/L songthane 5.0 ug/L songthane 5.0 ug/L songthane 5.0 ug/L songthane 5.0 ug/L songthane 5.0 ug/L songthane 5.0 ug/L	$+\!+\!+$	dN (ND	QN	QN	QN	Q
sure 50.0 ug/L a none oride 5.0 ug/L tyl ether 10.0 ug/L manne NA: Not Listed sxane NA: Not Listed sxane NA: Not Listed sxane NA: Not Listed sxane NA: Not Listed 5.0 ug/L 5.0 ug/L bethane 5.0 ug/L co-1,2,2-trifluorethane 5.0 ug/L smethane 5.0 ug/L 5.0 ug/L 5.0 ug/L ene 5.0 ug/L	\mathbb{H}	QN . C	QN	ND	QN	QN	QN
treene 5.0 ug/L the alone alonds alonds alonds alonds alonds bexane bexa	+	ON C	QN	QN	GN	QN	Q.
noretate none none none none no chloride 5.0 ug/L ert butyf ether 10.0 ug/L i	L		ON	ND	Q N	ON	QN
ne chloride ert butyl ether 10.0 ug/L 1-2-pentanone 1-2-pentanone 1-2-pentanone 1-2-pentanone 1-2-pentanone 1-2-pentanone 1-2-pentanone 1-3-pe	_		ND	QN	GN	QN	ND
10.0 ug/L	ON ON	ON C	NĎ	ON	QN	QN	QN
-2-pentanone none -2-pentanone NA: Not Listed	_		ΩŽ	QN	ďΝ	ND	ND
yclohexane NA: Not Listed Tetrachloroethane 5:0 ug/L inchoroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L ichloroethane 5:0 ug/L	ON ON	ON C	QN	ON	QN	QN	QN
Tetrachloroethane 5.0 ug/L Icroethene 5.0 ug/L Icroethene 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L Ichloroethane 5.0 ug/L			QN	ΠN	ON	ND	ND
hioroethane 5.0 ug/L tene 5.0 ug/L 5.0 ug/L benzene 5.0 ug/L bethane 5.0 ug/L bethane 1.0 ug/L wethane 5.0 ug/L smethane 5.0 ug/L 5.0 ug/L 5.0 ug/L	an an	_	QND.	QN	QN	ÓΝ	ON
sene 5.0 ug/L benzene 5.0 ug/L bethane 5.0 ug/L bethane 1.0 ug/L b-1,2,2-trifluorethane 5.0 ug/L b-0 ug/L 5.0 ug/L			ND	ND	ďΝ	ND	ΩN
5.0 ug/L behzene 5.0 ug/L bethane 1.0 ug/L b-1,2,2-trifluorethane 5.0 ug/L b-0 ug/L 5.0 ug/L b-0 ug/L 5.0 ug/L		ON C	ND	1.0.1	ON	ND	ND
Solugil Sethane 5.0 ug/L Sethane 1.0 ug/L Sethane 5.0 ug/L Solugil 5.0 ug/L Sethane 5.0 ug/L Sethane 5.0 ug/L	QN ON		ND	QN	S	QN	ND
5.0 ug/L 5.0 ug/L bethane 1.0 ug/L b-1,2,2-trilluorethane 5.0 ug/L smethane 5.0 ug/L 6.0 ug/L 6.0 ug/L	_ [ND	ďΝ	QN	ND	QN
1.0 ug/L >-1,2,2-trilluorethane 5.0 ug/L >methane 5.0 ug/L 5.0 ug/L 5.0 ug/L	QN QN		ND	ND	ΔN	ON	QN
v-1,2,2-trifluorethane 5.0 ug/L smethane 5.0 ug/L 5.0 ug/L ene 5.0 ug/L			QN	ND	ND	ON	QN
5.0 ug/L 5.0 ug/L ene 5.0 ug/L			QN	ND.	ND	ΩN	ND
5.0 ug/L ene 5.0 ug/L	ON ON		ND	ND	QN	QN	NO
5.0 ug/L			ND	ON !	QN	QN	ND
		QN	ND	ND	ON	ND	NO
propyltoluene) 5.0 ug/L		-	UN	QN	2	QN	ND
1,2,4-Trimethylbenzene 5.0 ug/L ND			QN ND	ND	Q	QN	ND
			QN	DN	QN	QN	ND
5.0 ug/L	_		QV	ND	2	Q	ND ND
sec-Butylbenzere 5.0 ug/L ND	ON ON	QV C	QN	άN	QN	QN	2

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 Page 4 of 6

LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS VOLUNTARY CLEANUP INVESTIGATION V-00463-9 GOWANDA DAY HABILITATION CENTER

Groundwater Monitoring Well and Sample Date

				GIOGRAMATE INCLINIONING WEREATH SERVICE L	חחוו
	NYSDEC	Field Blank	Trip Blank	Trip Blank	
	Class GA Standard	MW-1 FB			
VOC Compound	70GS 1.1.1	08/29/02	08/29/02	C9/04/02	
Trichloroethene	5.0 ug/L	QN	Q	2	
cis-1,2-Dichloroethene	5.0 ug/L	QN	ġ	Q	
rans-1,2-Dichloroethene	5.0 ugL	QN	QN	S	
Vinyl chloride	2.0 ug/L	QN	2	Q	
Abetone	25.0 ug/L	QN	2	5.5 BJ	
Benzene	1.0 ug/L	ND	QN	9	
Bromodichloromethane	50.0 ug/L	QN	QN	2	
Bromoform	50.0 ug/L	ДN	QN	Q	
Bromomethane	5.0 ug/L	QN	QN	Q	
2-Butanone (MEK)	50.0 ug/L	QN	٩N	ND	
Carbon Disulfide	60.0 ug/L	QN	QN	QN	
Carbon Tetrachloride	5.0 ug/L	QN	QN	QN CN	
Chloromethane (methyl chloride)	5.0 ug/L	QN	ND	QN	
Chlorobenzene	5.0 ug/L	QN	ND	ND	
Chloroethane	5.0 ug/t.	ND	ND	ON.	
Cyclohexane (hexamethylene)	none	QN .	ND	ND	
Chloroform	7.0 ug/L	ND	QN	QN	
1,2-Dibromo-3-chloropropane	0.04 ug/L	ON	QN	QN	
Dibromochloromethane	5.0 ug/L	ON.	ND	ND	
Dichlorodifluoromethane	5.0 ug/L	QN	UN	QN	
1,2-Dibromoethane (ethylene dibro	6 x 10-4 ug/L	QN	QV.	ND	
1,2-Dichlorobenzene	3.0 ug/L	Q	ND	ND	
1,3-Dichlorobenzene	3.0 ug/L	ON.	QN	ND	
1,4-Dichlorobenzene	3.0 ug/L	ON	ND	ND	
1,1-Dichloroethane	5.0 ug/L	ΩN	QN	ND	
1,2-Dichloroethane	0.6 ug/L	QN	ŅĎ	ND	
1,1-Dichloroethene	5.0 ug/L	QN	ND	ND	
1,2-Dichloropropane	1.0 ug/L	QN	QN	g	

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 Page 5 of 6

VOLUNTARY CLEANUP INVESTIGATION V-00463-9 LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, VOLATILE ORGANIC COMPOUNDS GOWANDA DAY HABILITATION CENTER

Groundwater Monitoring Well and Sample Date

	WYSDEC	Field Blank	Trip Blank	Trip Blank	
	Class GA Standard	MW-1 FB		•••	
VOC Compound	TOGS 1.1.1	08/29/02	08/29/02	09/04/02	
cis-1,3-Dichloropropene	0.4 ug/l.	ĠN	QN	QN	
Irans-1,3-Dichloropropene	0.4 ug/t,	ΩN	ND	QN	
Ethylbenzene	5.0 ug/L	QN	ND	QN	
2-Hexanone	50.0 ug/L	QΝ	ND	QN	
Isopropylbenzene	5.0 ug/L	QN	ND	QΝ	
Methyl acetate	none	ON	QN	QN	
Methylene chloride	5.0 ug/L	2.4 BJ	ND	2.7 BJ	
Methyl tert butyl ether	10.0 ug/L	QN	QN	QN	
4-Methyl-2-pentanone	елоп	QN	QN	QN	
Methylcyclohexane	NA: Not Listed	GN	ΩN	ON	
euaing	5.0 ug/L	QN	QN	۵N	
1.1.2.2-Tetrachloroethane	5.0 ug/L	QN	QN	QN	
Tetrachloroethene	2.0 ug/L	QN	QN	ON .	
Toluene	5.0 ug/L	QN	ND	2.1 BJ	
1,2,4-Trichlorobenzene	5.0 ug/L	QN	QN	QN	
1,1,1-Trichloroethane	5.0 ug/L	QN	QN	QN	
1,1,2-Trichloroethane	1.0 ng/L	ON	QN	QN	
1,1,2-Trichloro-1,2,2-trifluorethane	2.0 ng/L	ON .	QN	QN	
Trichiorofluoromethane	5.0 ug/L	ON	QN	ND	
Total Xylenes	5.0 ug/L	ΩN	QN	QN	
N-Propylbenzene_	5.0 ug/L	QN	QN	QN	
p-Cymene (4-Isopropyltoluene)	5.0 ug/L	ÓΝ	٩D	QN	
1,2,4-Trimethylbenzene	5.0 ug/L	ΩN	ND	ND	
1,3,5-Trimethylbenzene	5.0 ug/L	QN	ND	ŅĎ	
	5.0 ug/L	άN	ND	QN	
sec-Butylbenzene	5.0 ug/L	QN	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 Page 6 of 6

GOWANDA DAY HABILITATION CENTER VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-000463-9 LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS

	NYSDEC	Method	MW-1	MW-1D	MW-6	MW-12	Field Blank
	Class GA Standard	Detection				!	MW-1 FB
SVOC Compound	TOGS 1.1.1	Limit	09/04/02	09/04/02	08/29/02	08/29/02	08/29/02
Acenaphthene	20 ug/L	10 ug/L	ΩN	ΩN	ON	QN	QV
Acenaphthylene	попе	10 ug/L	QN	ND	UD	QN	QN
Anthracene	İ	10 ug/L	QN	QN	QN	QN	QN
Benao(a)anthracene	/L (guidance)	10 ug/L	g	QN	ND	QΝ	GN
Benzo(b)fluoranthrene	/L (guidance)	10 ug/L	QN	QN	QV	QN	ND
Benzo(k)fluoranthrene	0.302 ug/L (guidance)	10 ug/L	QN	ΩN	ND	QN	ON
Benzo(ghi)perylene	none	10 ug/L	QΝ	QΝ	QN	QN	QN
Benzo(a)pyrene	Non Detectable	10 ug/L	ND	QN	9	ΔN	9
Benzoic acid	none	48 ng/L	ΩN	QΝ	ON	. ON	ND
Benzyl alcohol		19 ug/L	QN	QN	QN	ΟN	QN
Bis(2-chloroethoxy) methane		10 ug/L	Ð	Q.	QN	GN	QN
Bis(2-chloroethyl) ether	1.0 ug/L	10 ug/L	ND	QN	QN	QN	QN
2,2'-Oxbis(1-Chloropropane)		10 ug/L	QN	QN	QN	ND	ND
Bis(2-ethylhexyl) phahalate	5.0 ug/L	10 ug/L	ON	2 J	ГЭ	12	ND
4-Bromophenyl phenyl ether		10 ug/L	ND	QN	QN	ND	CN
Butyl benzyl phthalate	-	10 ug/L	QN	QN _	ON	QN	ON
		10 ug/L	ON	ND	ON	an	ND
inol		10 ug/L	ÖN	QN	QN	ND	ND
alene	(guidance)	10 ug/L	QN	ON	 ON	QN	ND
	1.0 ug/L	10 ug/L	Q	Q	QN	QN	ÖN
4-Chlorophenyi phenyi ether		10 ug/L	ON	Q.	₽	ON	ND
Chrysene	0.002 ug/L (guidance)	10 ug/L	QN	QN	QN	ND	ND
(Dibenzo(a,h)anthracene		10 ug/L	QN	ON .	QN	ND	ND
Dibenzofuran	попе	10 ug/L	Q	ON.	QN	QN	ND
Di-n-butyl phthalate	50.0 ug/L	10 ug/L	QN	QN	Q	. ON	0.7 J
1,2-Dichlorobenzene	3.0 ug/L	10 ug/L	QN	ND	Q	QN.	ND
1,3-Dichlorobenzene	3.0 ug/L	10 ug/L	QN	ON	QN	QN	ND
1,4-Dichlorobenzene	3.0 ug/L	1/6n a1	ΩN	QN	QN	ΔN	QN
3,3'-Dichlorobenzidine		10 ug/L	ON	GN	QN	QN	UD
joj		10 ug/L	QN	QN	QN	ND	ND
		10 ug/L	Q	2	2	QN	ND
_	. (guidance)	10 ug/L	Q	오	딮	QN	ND
Dimethyl phthalate	(guidance)	10 ug/L	윤	9	Q	QN	QN

ND = Not Detected J = Estimated All results ug/L (ppb) Page 1 of 2

GOWANDA DAY HABILITATION CENTER VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-000463-9 LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS

	INYSDEC	Method	MW-1	MW-1D	MW-6	MW-12	Field Blank
	Class GA Standard	no no					MW-1 FB
SVOC Compound	TOGS 1.1.1		09/04/02	09/04/02	08/29/02	08/29/02	08/29/02
4,6-Dinitro-2-methylphenoi	1.0 ug/L	48 ug/L;24 ug/L for ASP	QN	QN .	ND	ND	QN
2,4-Dinitrophenol	10.0 ug/L (guidance)	48 ug/L;24 ug/L for ASP	GN	GN	QN	ND	QN
2,4-Dinitrotoluene		10 ug/L	GN :	GN	QN.	QN	QN
2,6-Dinitrotoluene	5.0 ug/L	10 ug/L	QN	QN	Q	QN	QN
Oi-n-octyl phthalate	50.0 ug/L (guidance)	10 ug/L	ND	QΝ	ND	ND	ND
Fluoranthrene	50.0 ug/L (guidance)	10 ug/L	ON	GN	QN	ND	QN
Fluorene		10 ug/L	QN	QN	ON.	QN	Q.
Hexachlorobenzene		10 ug/L	ON	QN	QN	ON	Ð
Hexachlorobutadine	0.5 ug/L	10 ug/L	ON	QN	QN	QN	QN Q
Hexachlorocyclopentadine	50 ug/L	10 ug/L	QN	QN	QN	QN	ND
Hexachloroethane	5.0 ug/L	10 ug/L	QN	QN	QN	QN	ND
Indeno(1.2,3-cd)pyrene	0.002 ug/L (guidance)	10 ug/L	QN	QN	QN	QN :	QN
Isophorone	50.0 ug/L (guidance)	10 ug/L	QN	QN .	QΝ	Q	Q
2-Methylnaphihalene	4.7 ug/L	10 ug/L	QN	ON	QN	Q	Ö
2-Methylphenol	1.0 ug/L	10 ug/L	ON.	ND	QN	QN	ND
4-Methylphenol	1.0 ug/L	10 ug/L	QN	QN	ÖN	QN	ON
Naphthalene	10.0 ug/L (guidance)		QN.	Q	Q	QN	2
2-Nitroaniline		,24 ug/L for	QN	QN	QN	ND ND	Q
3-Nitroaniline	5.0 ug/L	48 ug/L;24 ug/L for ASP	QN	ND	QN.	ON	ND
4-Nitroaniline	5.0 ug/L	,24 ug/L for	QN	QN	QN	QN	ND
Nitrobenzene	0.4 ug/L	П	QN	Q	9	QN	ND.
2-Nitrophenol	1.0 ug/L	10 ug/L	ÖN	QN	QN	QV	QV
4-Nitrophenol	1.0 ug/L	46 ug/L;24 ug/L for ASP	8	Q	QN	QN	QV.
N-nitrosodiphenylamine	50.0 ug/L (guidance)	10 ug/L	Q	9	물	2	ΩN
N-Nitroso-Di-n-propylamine	none	10 ug/L	QN	S	Q	Q	QN
Pentachlorophenol	1.0 ug/L	48 ug/L;24 ug/L for ASP	QN	QN	ND	QN	ND
Phenanthrene	50.0 ug/L (guidance)	10 ug/L	QN	QN	QN	QN	QN
Phenol	1.0 ug/L	10 ug/L	Q	S	2	2	2
Pyrene	50.0 ug/L (guidance)	10 ug/L	QN	QN	ND	Q	QN
1,2,4-Trichlorobenzene		10 ng/L	운	9	Q	Q	QN
2,4,5-Trichlorophenol	1.0 ug/L	10 ug/L	문	ş	ģ	Q	Q
2,4,6-Trichlorophenol	1.0 ug/L	10 ug/L	Q	Q	Q.	QN	ND

ND = Not Detected J = Estimated All results ug/L (ppb) Page 2 of 2

LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, METALS VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-000463-9 GOWANDA DAY HABILITATION CENTER

ond Comple Date

			Groundwarer Monthorning Well and Sample Date	ren and dall	Date Date		
Metals, ug/L (ppb)	NYSDEC	Махітит	MW-1	MW-1D	MW-6	MW-12	Field Blank
	Class GA Standard	Reporing Limit					MW-1 FB
	TOGS 1.1.1		09/04/02	09/04/02	08/29/02	08/29/02	08/29/02
Alurinum	none established	0.20 тg/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	QN	QN	ON	ND
Arsenic	25 ug/L	0.0070 mg/L	2.8 ug/L B	QN	ON	QN	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 ng/L	0.0050 mg/L	ND, <0.30 mg/L	an	QN	QN	ND
Cadmium	5 ug/L	0.0010 mg/L	ND, <0.30 mg/L	ΟN	QN	QN	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/Ł	0:0020 mg/L	ND, <0.60 ug/L	ΟN	0.0057 mg/L	dΝ	ND
Cobalt	none established	0.0050 mg/L	ND, <1.5 ug/L	ND	ND	NO	ND
Copper	200 ug/L	0.0050 mg/L	0.91 ug/LB	ND	0.0093	QN	ON
ron	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	QN
Lead	25 ug/L	0.010 mg/L	2.3 ug/L J	ON	ON I	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 (0.718 mg/L)	0.71 mg/L	0.67 mg/L	0.86 mg/L	QN
Mercury	0.7 ug/L	0.00020 mg/L	ND, < 0.092 ug/L J	ND	ND	QN	ND
Nickel	100 ug/L	0.010 mg/L] ND, <0.47 ug/L	ND	ΠN	QN:	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
Setenium		0.010 mg/L	ND, <4.9 ug/L	QN	ND	QN	QN
Silver	50 ug/L	0.0030 mg/L	ND, <0.90 ug/L	9	ND	ON	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	32.3 mg/L	ÑĎ
Thallium		0.020 mg/L	5.6 ug/L J	QN	QN	QN	QN
Vanadium		0.0050 mg/L	1.1 ug/L B	ND	0.0061 mg/L	QN	gN
Zinc	2,000 ug/L (guidance)	0.020 mg/L	3.0 ug/L B	Q	0.31 mg/L	QN	ND
Cyanide, total, ug/g	200 ng/L	0.010 mg/L	ND, <10 ug/L	S	ND	Q	ND

ND = Not Detected

All Results ug/L, micrograms per liter (ppb) or mg/L, mitigrams 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

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LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, PESTICIDES AND HERBICIDES VOLUNTARY CLEANUP AGREEMENT SITE INVESTIGATION V-000463-9 GOWANDA DAY HABILITATION CENTER

Groundwater Monitoring Well and Sample Date

			Groundwater Monitoring Well and Sample Date	ignitoring v	vell and Sa	тріе пате	
	WYSDEC	Maximum	NW-1	MW-1D	9-MW	MW-12	Field Blank
	4 Standard	Reporting Limit	_				MW-1 FB
Pesticides	T0GS 1.1.1		09/04/02	09/04/02	08/29/02	08/29/02	08/29/02
Akdrin	QN	0.050 ug/L	QN	H-GN	ND-R	H-GN	QN.
Alpha-BHC	0.01 ugit.	7/6n 050/0	QN	H-GN	H-GN	H-QN	QN
beta-BHC	0.04 ug/L	2.050 ug/L	N/A	H-GN	H-ON	H-ON	QN
gamma-BHC (Lindane)	0.05 ug/L	7,6n ggorg	QN	ND-R	NO-R	H-GN	QN
delta-BHC	0.04 ug/L	0.050 ug/L	QN	ND-B	ND-R	H-QN	ND
Chlordane	0.05 ug/L	7/6n og:o	N/A	ND-R	ND-R	H-QN	QN
Alpha-Chlordane	. (Chlordane)	0.050 ug/L	QN	NA	NA	NA	NA
gamma-Chlordane	0.05 ug/L (Chlordane)	0.050 ug/L	QN	ΝA	NA	NA	NA
4,4. DDD		0.050 ug/L	ND-J	ND-R	ND-B	H-GN	ND
4,4'-DDE	0.2 ug/L	0:050 ug/L	QN I	ND-R	ND-R	H-GN	ND
4,4'-DDT	0.2 ug/L	0.050 ug/L	f-dN	H-ON	H-ON [H-QN	ND
Dieldrin	0.004 ug/L	0.050 ug/L	GN .	ND-R	ND-R	H-QN	ND
Endosulfan I	N/A	0.050 ug/L	ON	ND-R	ND-R	H-QN	۵N
Endosulfan II	N/A	0.050 ug/L	ON	ND-B	ND-R	H-GN	ND
Endosulfan Sulfate	N/A	0.050 ug/L	GN	H-GN	H-QN	ND-R	QN
Endrin	ON	0.050 ug/L	QN	H-ON	ND-R	H-QN	ND
Endrin afdehyde	5.0 ug/L	0.050 ug/L	QN	ND-R	ND-R	ND.FI	ND
Endrin ketone	5.0 ug/L	0.10 ug/L	QN	NA	NA	NA	NA
Heptachlor	٦ .	0.050 ug/L	QN	ND-R	ND-R	H-QN	QN
Heptachlor epoxide	0.03 ug/L	0.050 ug/L	GN]	H-GN	H-GN	H-UN	UD
Methoxychlor		0.050 ug/L	QN	ΝA	NA	NA	NA
Toxaphene	0.06 ug/L	0.99 ug/L	QN	ND-B	ND-R	ND-R	ND
Herbicides							
2,4-D	50 ug/L	0.48 ug/L	DN	QN	QN	ON	ND
2,4,5.TP (Silvex)	10 ug/L	0.48 ug/L	ND	QN	ON	Ŋ	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

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GOWANDA DAY HABILITATION CENTER VOLUNTARY CLEANUP AGHEEMENT SITE INVESTIGATION V-000463-9 LABORATORY ANALYSIS SUMMARY, GROUNDWATER SAMPLES, PCBs

	NYSDEC		MW-1	MW-10	9-WM	MW-12	Field Blank
	Class GA Standard	Maximum Reporting					MW-1 FB
PCB	TOGS 1.1.1	Limil	09/04/02	09/04/02	08/59/02	08/29/02	08/29/02
PCB Aroclor 1016	5.0 ug/L	0.53 ug/L	QN .	ON	f-QN	P-ON	QN
PCB Aroclor 1221	5.0 ug/L	0.53 ug/L	<u>a</u> N	ON	ſ-dN	∩-QN	QN
PCB Aroclor 1232	5.0 ug/L	0.53 ug/L	QN	QN	r-qn	C-QN	ON
PCB Aroclor 1242	5.0 ug/L	0.53 ug/L	QN	ON	r-an	r-an	QN
PCB Araclor 1248	5.0 ug/L	0.53 ug/L	QN	ON	r-an	r-qn	ND
PCB Arador 1254	5.0 ug/L	0.53 ug/L	QΝ	QN [P-QN	r-dn	ND
PCB Aredor 1260	5.0 ug/L	0.53 ug/L	QN	QN	PON	ND-1	ND

egend

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 Chain-of-Custody Forms And Laboratory Analytical Reporting Package

SEVERN TRENT

Severn Trent Laboratories, Inc.

0490191 Special Instructions/ Conditions of Receipt Chan of Custody, Number (A fee may be assessed if samples are retained forger than 3 months; 5 J. Lind Page Ž 35 Š Ž Cale 50/11/LO 26. - Hot-127 26. - Hot-227 26. - 12 Analysis (Attach list if Lab Number MODIFIE (585) 22-5135 (585) 232 4652 She Contact Lab Contact \$2015 M Disposal By Lab ☐ Archive For OC Requirements (Specify) Brian Fischer HOPN RHV2 Containers & Preservetives 3. Received By HÇI Educard Tones SONH ≠O\$₹J 255pm □ Unknown □ Raturn To Client WETHBUDOW. WHITE CO'YS WITH THE CAMBRY CAMBRY TO THE THE THINK THE TON Sample Disposal ŝ Ē CamismWaybili Number Matrix Edward pe 07/11/02 Project Manager 07/28/02 5"Pm 7/09/02 33am \$ 18 100 N W# 11 20/01/L 7/10102 8 70 7/11/02 7/5 1 mg 2521 20/11/1 Carte ☐ 21 Cays 29/60/20 11/103 41941 Porson B DAY HOLVITATION State Zip Code Sieg + ASSOCIATES Sample I.D. No. and Description (Containers for each sample may be combined on one line). 45.5 Skin Imtan! ₹ 5071102 EJ 04/10-12 5071002 6510 6-8 SO 71102 EJ 098-10 5079902 ET 18 5-6 SO70802 ET 16 8-10 Tall Bear Contract Drawn Day SO70902F5 22 4-6 7 Days 50709025178-12 W 8071102 EJ 04FB 200 First Federal Figuranable Rochester Project Warre and Localing (State) 18 Hours Mich Hazard Premi Possibie Hezerd Idenlification Berg mann f. Reunquished By 3 Reintquished By 2. Relanguished By SFL-4124 [1200] 24 Hours Comments

SEVERN TRENT SERVICES Severn Trent Laboratories, Inc.

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Substituting the assessed if samples are recipied to the control of the control Special Instructions/ Conditions of Receipt Chan of Custody Number 100433 , 1 1 APP.O Page Anelysis (Attach list if mora space is needed) Lab Number Date Archye For 96 0988 5201 OC Requirements (Specify) Mrea Coda), Fax Muniber 5/35 HOPN AWZ HOPN Disposal By Lab Confeiners & Preservatives 3. Received By ЮН SOMH Jon es POSZH saudur) ☐ Unknown ☐ Return To Cliant 1545 7,110 Matrix Camer/Waybill / Number peg Telephone Number (102 Joz Project Manager Sva Contect 🗆 2) Days 🔲 Oliher. aγa O 100 Time State Zip Code 14614 07/17/02 Poison B Rochester State 70 1461
Projectivane and Location (State) Habilitation Date Bergmann Associates
Address of First Federal phaza C 7 Days C 14 Days (Containers for each sarticle may be combined on one line) Skyn krafant Sample I.D. No and Description W-860 MEZOVITOS ☐ Mon-Hausid ☐ Flammable Contract/Purchase Order/Queile No. 49 Hours Possible Mazard Mentification Turn Around Time Required 1. Belinguished By 2. Reliefquished By 3 Relinquished By 24 Hours STL-4124 (1200) Comments

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

SEVERN TRENT

Severn Trent Laboratories, Inc.

TASH BEF 0001930002017 Special Instructions/ Conditions of Receipt 00432 (A fee may be assessed if samples are retained forger than 3 months) 6 ş Chein of Custody Numi Page Ě 7/19/0 Analysis (Attach list if more space is needed) Months Archive For 520/1 ОС Яединамен[3-45респу) Brian fischer H(H N Oispassi By Lab The being 34 Contemers & Preservatives жоем 1. Received By 1. Received B4 232 5135 /DH JOAES Tokenhore Number (Area Code)/Fax Number (585) SOM POSCH sa aduji I ASEC . I WALL BY UN JOIDS . I AND ... SHOWE ... THE SALE BY WAS ... I THEN ... I THEN ... I THEN ... G Ratum To Client 15:2 Sample Disposal M 21 Days Clare Stall LTD Matrix Сатівг/Маубії! Милфек 07/14/62 Sile Contact ☐ Dakadewn 7/19/02 1025pt 1035 15 02 EJ 1310-12 7/15/02 3 29m 7/16/02 250 7/17/02/10 10% 7/19/02 8 30 mm Date Time 1/19/67/F 28 E. MAINSY 20/1/12 71/19/02 Habilitating CTC 41971 D Poison B Date Bergmann Associates State Zip Code 14 Days (Containers for each sample may be combined on one line) 21-01 5507/902EJGANGI-N SO7 1702 ES 11 9-11 Skin frofant <u>₹</u> SO71902 EJ 15 12-4 SOT 1602 ETA12-14 200 First federal plaza Sample I D. No and Description W07/902EJ 15 FB SS 07/902ET G-S ☐ 7.0ays 07 1802 ES 14 5596.03 T8071907 Flammable Gowanda Day ROCh ester T 48 Hours Papable Harand Ideathcation um Around Time Reguind 2 Pernamened By 3 Religgished By M. Non-Hazard 1 Sefriquished 1 Ö STL-4124 (1200) 24 Hours Comments

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

2 JARS 00194 7 545 Special Instructions/ Conditions of Receipt Chain of Custody Number 13316 (A foe thay be assessed if samples are retained languither. I month) Asp į ō STUBLET CHICLES 22 eje O P808 29/98/10 And theis (Attach list if moded) Cab Munibo **Meson has** 212+9M-Anchive Far Osposal By Lab L. A Brian Fische Containers & Preservatives HOM ones Received/By 3. Received By Pecelved By (DH S-13S Biaphone (Number (Ansa Code)/Fan (Aumber ECONH. MOSZN D Unknown | | Return to Quant O TREAT 14 50 DISTRIBUTION: WHITE Recurred to Client with Report; CANARY - Stays with the Sample, PINK - Field Copy Edward Name Table Malnix Carrier/Waytorf Number Serios districts ees. Ste Confet (585) ж Olfrer 07/24/02 8ºº A 107/23/02 4 Ero 0723/02 420 107/18/12 850 Date 107/R4/102 3-Pm 930 Time S). 07/46/03/8 33 07/25/07 1 40 07/25/03/148 Plaza, 28 East Mail ST. 22 Days 67/83/63 07/23/62 TO THE PARTY 🖰 Pasan B Gowanda Day Hubilitation CTT. Contactionanda Day Hubilitation CTT. Job# 5596.03 Oate T t Days (Contaviers for each sample may be combined on one line) 🔲 Elammatik 🔝 Sturtindant 5072302 KJ 28 11-12 SOF 2302 FJ 26 11-12 507 2602 EJ 27 12-13 S 07 2502 ET 028-10 5072402EJ08 9-10 507 2502 ET 23 10-11 0-1 So72504EJ 23D 10-11 Possible Hitzer (centicetion 507 AH OR EJA18-10 5072402EJ 19 8-16 ž 0723 02 EJ 250 9-11 Sample I.O. No. and Description Berg mann ASSOCIALES ☐ 7 Days So72302EJ 25 Project Name and Location (State) Zoo first federal 1 46 HOU'S Men Hazara Elam Tura Angust Tune Pequired Rochester 1. Retinguished By 2. Ratinguished By 3 Relunquished By SWITH RE 51L-4-24 (3901) Comments

SEVERN TRENT

Savides ... Severn Trent Laboratories, Inc.

opere3 00195 ** 1 104 4012 Special Instructions/ Conditions of Receipt NOW ASP (A fee may be assessed it samples are retained forger than 1 mount) ign. ซี Grain of Custody Cale Page 07/26/02 Analysis (Attach list if more space is needed) STRUCTURE MONTHS age C Disposal By Lab Archive For DC Requirements (Specify) 0 :08.8 24 121 5>0/ ××× Brian Fischer አውስሪ የተርነዛነ Containers & Preservatives жен 1. Asceived By 5/35 Codel/Far Number (OH E(TANH) HOSZN Ado 13 D Unknown | B Return To Chem Project Manager Semple Dispose **(17**) E III Matrix Camer/Waybill Mumber - MWK Telephone Num (5-85) She Contect 07/20th D 21 Days D College re Sa 07/26/02 11 25 ŝ Time Shirt 200 First Folcal ph24, 28 Ext mx 11 ST. T. B. 07/17/01 07/19/11 57/26/62 Gowanda Day Habilitation Ct.
Connect Purchase Organizate No.
Joba 5516-03 State Zip Cone W 14614 B noson B Date 🗖 14 Days Š Begmann Associates Sample I.D. No and Description (Containers for each sample may be combined on one line) Skin Imdant S0726036J2012-14 TW IV. WOJR6 02 ET 20 FB 7 Days Denne. M Non-Hazard 🔲 Flaramatka ROCH estes T 49 Hours WO78603 EJ Possible Hazard Identification Turn Around Time Required W741 Pellaguisusa By 2 Reinquistad Sy 3. Reinquistad By Srt.412s (0801) Client 24 Hours лвин. Comments

SEVERN TRENT SERVICES & Severn Trent Laboratories, Inc.

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SEVERN TRENT

Severn Trent Laboratories, Inc.

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STL Buffalo

10 Hazelwood Drive Suite 106 Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7992 www.sti-nc.com

ANALYTICAL REPORT

Job#: A02-7056, A02-7130, A02-7365, A02-7638, A02-7821

STL Project#: NY2A8896

SDG#: 7056

Site Name: Bergmann Assoc. - Gowanda Day Pabilitation Center

Task: SW8463 DELIVERABLES

SW846 SOIL SAMPLES

Mr. Edward Jones Rergmann Associates 28 East Main Street Rochester, NY 14614

> Brian J. Fischer Project Manager

STL Baffalo

08/28/2002

This report contains 23 pages which are individually numbered.



SAMPLE SUMMARY

000001

		SAMPLE	כ	RECEIV	3 0
<u>LAB SAMPLE 11</u>		DATE	TIME	DATE	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	S070902E722 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	
A2736501	S071502EJI3 10-12			07/19/2002	
A2736502	S071602EII2 12-14			07/19/2002	
A2736503	S071702EILL 9-11			07/19/2002	
A2736504	S071802EJ14 10-12			07/19/2002	15:21
A2763803	S072302EJ25 9-11	07/23/2002			14:50
A2763804	S072302EJ25D 9-11			07/26/2002	14:50
A2763802	S072302EJ26 11-12	07/23/2002			14:50
A2763801	S072302EJ28 11-12	07/23/2002		,	14:50
A2763806	S072402EJ08 9-10	07/24/2002			14:50
A2763807	\$072402EJ19 8-10	07/24/2002			14:50
A2763805	S072402EJ21 8-10	07/24/2002			14:50
A2763808	S072502EJ02 8-10	07/25/2002			14:50
A2763809	8072502EJ23 10-11			07/26/2002	
A2763811	S072502EJZ3D 10-11	07/25/2002			14:50
A2763812	S072602EJ20 12-14	07/26/2002			14:50
A2763810	S072602EJ27 12-13	07/26/2002			14:50
A2782101	S073002EJ07 16-17.5	07/30/2002		, ,	
A2782104	S073102EJ01 2-4			08/01/2002	
A2782102	S073102EJ05 8-13	07/30/2002			
A2782103	S073102EJ24 18-20	• . • .	11:20	08/01/2002	
A2736508	SS071902EJ G-S	07/19/2002		• •	
A2736507	SS071902EJ GARDEN-N		10:25	07/19/2002	
A2736506	TB071902	07/19/2002		07/19/2002	
A2782106	TRIP BLANK	07/23/2002		08/01/2002	
A2736505	W071902EJ15 FB	·		07/19/2002	
A2763813	W072602E720 FB		11:45	07/26/2002	
A2763814	W072602EJT.B.	07/26/2002	16 45	07/26/2002	
A2782105	W073102EJ01FB	07/30/2002	15:30	08/01/2002	09:20



METHODS SUMMARY

000902

Job#: A02-7056, A02-7130, A02-7365, A02-7638, A02-7821

SIL Project#: NY2A8896

SDG#: 7056

Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

PARAMETER		METHOD
BERG - SOLL METHOD 8260 - TCL VOAS + STARS	SW8463	8260
BERG -W- MEIH 8260 - TCL VOLATILE ORGANICS + STARS	SW8463	8260/5ML
BERG - W- METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	SW8463	8270
RERG -S- METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	SW8463	8270
BERG - S - METHOD 8082 - POLYCHLORINATED BIPHENYLS	SW8463	8082
BERG - S - SW8463 8081 - TCL PESTICHDES	SW8463	
BERG · S - SW8463 8151 HERBICIDES (3 CMPDS)	SW8463	•
BERG - W - METHOD 8082 - FOLYCHIORINATED BIPHENYIS	SW8463	8082
BERG - W - \$W\$463 8081 - TCL PASTICIDES	SW8463	8081
BERC - W - SW8463 8151 - HERBICIDES (3 CMFDS)	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
Chronium - Total	SW8463	6010
Cobalt - Total	SW8463	6010
Copper - Total	SW8463	6010
Iron - Total	\$W8463	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	
Selenium - Total	SW8463	6010
Silver - Total	SW8463	6010
Sodium - Total	SW8463	6010
Thallium Total	SW8463	
Vanadium - Total	SW8463	
Zinc - Total	SW8463	6010
Cyanide - Total	SW8463	9012
Cyanide - Total	SW8463	9012A



References:

000003

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: <u>Bergmann Assoc. - Gowanda Day Habilitation Center</u>

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.



000005

GC/MS Volatile Data

The analyte Methylene Chloride was detected in VBLKG3 and VBLKG4 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 VBLKG2 and VBLKG3 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 Mothylene 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 VHIK 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

- SIL 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 \$072302EJ25 9-11, \$072302EJ25D 9-11, and \$072402EJ21 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 \$070902EJI7 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.



-060007

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 \$072302EJ25 9-11, and \$072302EJ25D 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 S072402FJ21 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 SSO71902EJ GARDEN-N was analyzed past the EPA-recommended holding time for Cyanide analysis. The sample results should be considered estimated.



000008

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.

Date: 08/28/2002 Time: 10:17:04 pilution Log w/Code Information
For Project NY2A8896, SDG 7056

Page:

Rept: ANT266

Client Sample ID	<u>lab Sample ID</u>	Parameter (Inormanic)/Method (Organic)	Dilution	Code	^^^	
SSD719DZEJ GARDEN-N	A2736507	8081	10.00	_	600000	
SSD71902EJ GARDEN·N	A2736507	8151	4.00	010		
SSO71902EJ GARDEN-N	A2736507	8270	10.00	012		•
\$072302EJ25 9-11	A2763803RE	8270	5.00	012		
\$072302EJ250 9-11RED	A2763804DR	8270	2.00	800		
						•

Dilution Code Definition:

- 002 sample matrix effects
- 003 excessive foaming
- 804 non-target compounds (TICS) exceeded 5% the total response of one of the Internal Standards
- 805 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 till 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 idea 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/M\$.
- 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.
- 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/Aroctor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the data page and flagged with a "P"
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- ¹ Indicates coelution.
 - Indicates, analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U. Indicates element was analyzed for, but not detected. Report with the detection limit value.

- J or B Indicates a value greater than or equal to the instrument detection firmit, 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
 - 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

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Bergmann Assoc. - Gowanda Day Habilitation Center SWB&63 DELIVERABLES BERG - SOIL WETHOD 8260 - TCL VOAS + STARS

Date: 08/26/2002

Bergmann Assoc. - Gowands Day Rabilitation Center Sw8463 DELIVERABLES BERG - SOIL WETHOD 8260 - TCL VOAS + STARS

Date: 08/26/2002 Time: 12:04:10

Rept: AN0326

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Client ID Job Wo Sample Date	Analyte	Acetone	Bengadi dal atatahana	Bromoform	Bronofethane	2-Butanona	Carbon Disulfide	Carton letracaloride Chiproparthers		Chloroethane	Cycloheanne	chloroform	1,2-Dibromo-3-chloropropane	Dibromochloromethane	Dicklorodiftuoromethane	1,2-0)brombethane 1,2-5ichlombethanene	1,5-bich orcheorene	1,3-Dichlorobenzene 1,4-Dichlorobenzene	1.1-Dichloroethane	1,2-Dichloroethane	1,1.Dichtoroethene	cis-1,2-Dichloroethene	trans-1, 2-Dichlaraethene	1, Z-Dichloropropane	trans-1.3-b) chiloropopene	Ethylbenzene	2-Hexanone	l sapropy lbenzene	Nethyl acetate	Nethyl test butyl ether	4-Wethyl-2-pentanone	Hethylcyclohexane	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethere	Tolvene 1 3 / referi	1,2,4-1F1CALOFODBAZENE 1 1 1-1:1:-h >:>++++++	1, 1, 1, 1, 1, contorostados 1, 1, 2, Trichlorostados	31.00.00 10.00.00 10. 31. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.

Rept: AN0326

Bergmenn Assoc. - Sowende Day Habilitation Center SAMS-63 DELIVERABLES
BERG - SOLL METHOD 8260 - TCL VDAS + STARS

Date: 08/26/2002 Time: 12:04:10

S071602EJ12 12-14 A02-7365 A2736502 07/16/2002	Sample Reporting	MD 680 3300 680						12	61 50-200	201	
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10 A2713001	Reporting Limit	10101	, t	35 R	in i	3 10 1	2 2	\$0.200	20.50	78-118	***
S071202TM038-10 A02-7130 07/12/2002	Sample Value	- Pr	2 9	, 2 J		2		06	3 12	8	2
-10 A2705605	Reporting Limit	-0-0	o 12	18 18	• • •	. •	۰۰	50.200	20-500	78·11B	440
\$0711025.09 8-10 A02-7056 07/11/2002	Sample Value	229	2 9	99	2 5	2 !	29	38	\$ 3	R&	9
	Unita	06/KG UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG UG/KO	×	« ре	*	>
Ctlent ID Job No Sample Date	Analyte	1,1,2-Trichloro-1,2,2-trifluor uG/KG Trichloroethene uG/KG	vinyl chloride	Total Xylenes n-Propylbenzene	900,000	1,3,5-Trimethylbenzene	n-Buryt benzene sec-Butyt benzene I skalogomateken	Chlorobenzene-D5	1,4-Dichlorobenzene-D4	Toluene-D8	D. Broand Instrumentant

Rept: ANO326

Bergmann Assoc. - Gowanda Day Habilitation Center SWE463 DELIVERABLES BERG - SDIL METHOD 8260 - TCL VDAS + STARS

Date: 08/26/2002 Time: 12:04:10

	Γ	Ţ															_							_	_		_	_			7)(π	Ņ	у	- 5
9-11 R1 A2763503R1	Reporting Limit	15	9 40	*	# ;	ž	ο ν	€,	4 ۽	2 40	1 40	•	*	40	·a·	0 10	• •0	•	•	•	•	0 <		*	φ;	2 *	_	184	~;	, v	· v o	•	-0 +	۰ ٦	۰.0	9
S072302E.J25 9- A02-7638 07/23/2002	Sample Value	NA 54 E	2	2	오 :	2 9	2	2 1	2 9	9	2	ş	2	2	2 9	2	9	2	9	요 :	9 9	2 9	3	2	9 9	2	_	200	25	2 9	2	오 :	2 5		9	NO
4276380p	Reporting Limit	7. 27	• •	9	2:	- v	, e	7	0 2	. 9	40	9	•	9,	•	0 40	40	y 0	40	v	0 <		•	10 1	o į	1.40	•	4.6	0 5	, ·o	•	1 0 1	۰ ۷	0 40	140	•
\$072302E.JZ5 9-11 402-7638 07/23/2002	Sample Value	St. 3	9	2	2 :	2 2	2	9 9	2 9	9	윺	ş	£	9 :	2 5	2	2	9	숲	9!	2 5	2 9	2	- ·	2 9	9	₹	NO NO	2.6	2.2	QH/	9 4	2 5	2 2	3	2
-12 A2736504	Reporting Limit	28	ı un	ır.	P ?	6 rv	ıv	은 "	, C	ır	.	r	in ((r 1	e 11		r		un i	.	.		u.	v. 1	v		3 00	ķ.	n *	, n	2	ur u	n v	· 10	· • •	5
S071802EJ14 10-12 A02-7345 A718/2002	Sample Value	100 to 001	2	2	2 9	2 2	<u> </u>	99	2 9	9	9	ą	Ŷ	9 9	2 9	2	9	2	9	ē,	š	9	£	2 !	2 5	£	•	14 GN	2 5	2 €	읖	₽ :	2 5		· •	O¥
11 A2736503	Reporting Limit	140	: ₹3	22 (7.5	282	28	25	27.5	83	58	88	58	8. 8	9.8	2 %	82	28	82	88	9.5	88	8	8 8	3.6	8		200	9 5	28	28	% }	9 %	82	8	28
\$071702E411 9-11 A02-7365 07/17/2002	Sample Value	ND 54-83"	9	2	2 9	2 2	9	2 9	2 9	2	2	2	ş	9 9	2 5	9	€	2	9	2	= 5	2	윤	2 9	2 5	2	-	20 S	2 9	£ £	무	Q (₽ ⊊	2 2	웃	Q.
	Units	UG/KG	UG/KG	UG/KG	5%/5n	97/90	UG/KG	97/8	08/KG	UG/KG	UE/KG	U6/K6	₽6/KG	UG/KG	0.67 KG	06/KG	UG/KG	UG/KG	UG/KG	UG/KG	06/RG	06/100 DG/100	UG/KG	DG/KG	UG/KG	DG/KG	DG/KG	UG/KG	20,00	DC/KG	UG/KG	06/KG			e/Xe/S	UG/KG
Client 1D Job No Lab ID Sample Date	Knalyte	Acetone Benzene	Bromodichioromethane	Bromoform	Bromomethane 2.6tennome	Carbon Disulfide	Carbon Tetrachloride	Chloromethane	Chloroethane	Cyclohexane	Chloroform	1,2-Dibromo-3-chloropropane	Dibromoch! promethane	Dichloredifluoremethane	1,c-dibromoethere	1.3-Dichlorobenzene	1,4-0ichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dickloroethene	cis-l,z-Dichlocoethere	1,2-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Denzene 2-400 mmm	1sopropylbeniene	Methyl acetate	Methylene chloride	Methyl tert bulyl ether	Wethylovojohexane	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethene	1 2 4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane

Bergmann Arsec. - Gowanda Day Habilitation Center Su8463 DELIVERABLES
BERG - \$01L METHOD \$250 - TCL VOAS + STARS

STL Buffeto

C(ient IO Job Mo Sample Date		\$071702EJ11 9-11 A02-7365 07/17/2002	A2736503	\$0718025J14 10-12 402-7365 07/18/2002	0-12 A2736504	\$072302EJZ5 9-11 402-7638 07/23/2002	-11 A2763803	S0723025.25 9-11 RI A02-7638 A27 07/23/2002	-11 RI A2763B03RI
Analyte	Units	Sample Value	Reporting Limit	Sample	Reporting Limit	Sample	Reporting	Sample Velue	Reporting
1,1,2-Trichloro-1,2,2-triftuor US/KG	or UG/KG	9	82	2	5	2	9	9	9
frichloroethere	UG/KG	780	₽2	æ	~	7 7	**	7	•
Trichlorofluoromethane	UG/KG	문	82	2	ς.	9	***	2	• •
Vinyl chloride	UG/KG	9	25	2	2	2	12	2	Ē
Total Xylenes	UG/KG	돠	58	4	22	/ DN	2	9	\$
n-Propylbenzene	105/KG	ę	25	2	'n	3	·43	2	•••
p. Cymene	16,756	물	20	2	٠	ş	\$	2	•
1.2.4-Trimethylbenzene	UG/KG	£	82	윺	'n	GE /	•	2	-
1.3.5-Trimethylbenzena	06/KG	2	6 27	2	45	9	9	2	-
n-Butylbenzene	08/90	£	28	2	ς.	2	•	2	•
sec-Butylbenzene	UG/KB	œ	28	Q.	2	UN /	9	ON	•
Chlorobenzene-05	×	66	\$0.200	46	20-200	*	50-200	75	20-200
1,4.Difluorobenzene	×	25	59-200	\$	20-200	\$	20-200	53	20-200
1,4-Dichlorobenzene-D4	×	26	20-200	101	20-200	27.	20-200	* 67	20-500
Toluene-DB	×	3	79.115	ž	78-118	26	78-118	88	78-118
p-Bronof Luorobenzene	×	\$	67-118	. B.	67-118	92	67-118	92	67-118
1.2-Dichtoroethane-D4	×	£82	63-133	62	63-133	102	63-133	89	63-133

Rept: AMD326

Bergmann Assoc. - Sowerde Day Habilitation Center SW8463 DELIVERABLES BERG - SOIL METHOD 8260 - ICL VGAS + STARS

Date: 08/26/2002 Time: 12:04:10

Detected
+ Not
웆
Applicable
= Not
ž

Client ID Job No Lab ID Sample Date		\$072302EJ250 9-11 A02-7638 A 07/23/2002	11 AZ763804	8072302EJ26 11-12 A02-7638 A 07/23/2002	1-12 A2763802	\$072302EJ28 11-12 A02-7638 A7723/2002	-12 A27 63 801	\$072402EJ08 9 402-7638 07/24/2002	9-10 A2763806
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/KG	BOF OW	9. C.	My that	22	THE CON	92	VB SE	52
Benzene	US/KG		•	a	5	문	9	₽	<u></u>
Bromodich Loromethane	06/KG	Ŷ	•	R	ın	유	9	2	'n
Broncform	UG/KG	€	•	テ	5	모	•	₽	5
8romomethene	UG/KG	-	12	오	=	오	Ξ	윤	2
2-Butanone	UG/KG	물	ŝ	윺	27	읖	87	SK.	22
Carbon Disulfide	UG/KG	읖	•	문	2	오	•	무	<u>~</u>
Carbon Tetrachloride	DC/KG	운	•	2	<u>.</u>	모	•	호	<u>د</u>
Chloromethane	UG/KG	DN DN	5	읖	=	운	=	2	2
Chlorobenzene	UG/KG	Se Se	49	ON THE	ς.	ON .	•	읖	
Chloroethans	10/KB		<u>;</u>	2	=	요	Ξ	윺	ō,
Cyclohexane	US/KE	全	*	£	'n	윺	9	全	\$
Chlarafarm	06/86	2	9	2	ıΛ	욮	•	2	<u></u>
1,2-Dibromo-3-chloropropene	UG/KG	2	•	ş	יט	2	\$	2	1 00
Dibromochloromethene	UG/KG	2	•	2	٠,	3	•	2	· •
Dichlorodifluoromethane	UG/KG	ş	9	2	~	2	40	2	
1,2-Dibromoethane	UG/KG	2	9	£	~	2	10	£	.
1,2-Dichlorobenzene	UG/KG	9	•0	⊋	2	2	40	2	in.
1,3-Dichlorobenzene	UG/KG	9	•0	운 -	<u>د</u>	ş	**	9	w
1,4-Dichlorobenzene	UG/KG	£	•	£	<u>.</u>	2	9	2	E/A
1,1-Dichloroethame	DG/KG	Ç	•	읒	L O	<u>₽</u>	•	9	•••
1,2-Dichloraethane	UG/KG	모	•	2	<u>.</u>	읖	•0	9	1
1,1-Dichloroethene	UG/KG	웊	-0	운 [']	ın :	ş	•	£	<u>.</u>
cis-1,2-Dichlaroethene	90/00	٠,	•	8	^ 1	모 :	۰ م	문 :	
trans-1,2-Dichloroethene	06/86	2 :	•		^ 4	2 9	۰ .	2 9	L n
, z-orchiorapropane	16/X6	₹ :	٥,	2 5	Λ.	2 5	۰.	2 :	•
C1S'-1, b-01cq(oropropene		2 5		2 9	N LE	2 5	0 4	2 9	
Crans-1,5-uncardoropene			0 4		^ L	2 9	٥,	2 9	^'
Cray Coenzene 3-uenosco	94/90	2 5	יי פ	2 5	`:	25	- ۵	2 5	'n ;
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 5	2 4	2 5	. u	2 5	- *	2 9	≘ '
table by toenene	10,770	2 5	> 4	2 5		2 5	•	2 9	^ '
thyt beeters	10,770			7.7	16.	1	٠ <u>٠</u>	2	
Merity ene Chibi lue	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2	5	-		S =		4	
MESTRY TEST DOON BUILDING	00/100	2 9	9 5	2 5	, ,	2 5	9 2	2 9	^;
+ - Methyl - 2 - pentanone	100/80	2 9	₹ ~	2 9	ù •	2 5	8	⊋ :	53
Methylcyclonexane	106/KG	2 9	0 4	2 9	~ L	2 9	•	⊋ :	<u>.</u>
Styrene	LKJ/KG	₽:	a •	2 9	חו	2 :	•		יט
1, 1, 2, 2. Tetrachioroethane	De/xc	₽:	Δ,	⊋ :	^ -	2 1	•	⊋ :	r
letrach orgethere	UG/KG	9 9	۰ ۵	2 9	Λ u		•	9 9	ın ı
Totuene	06/86	2 9	۰ ۵	2 5		2 9	•	2 9	iń i
1.Z.4.Irichlorobenzene	00/KG	2 9	۰ ۵	2 5		2 5	۰ ٦	2:	.
1, 1, 1-Irichioroethane	2000	2 5	D 4	2 5	יט ר	2 5	0 4	2:	•
							•		

Rept; ANG326

Bergmern Assoc. - Gowanda Day Habilitation Center SW8463 DELIVERABLES BERG - SOIL METHOD 8269 - TCL VOAS + STARS

Date: 08/26/2002 Time: 12:04:10 Bergmann Assoc. - Gowanda Day Habilitation Center SW8463 DELIVERABLES BERG - SOIL METHOD 8260 - TCL VQAS + STARS

Date: 08/26/2002 Time: 12:04:10

Rept: AN0326

Cifent ID Job No Sample Date		5072302E.J25D 9-11 A02-7638 07/23/2002	>-11 R2763804	S072302EJ26 11-12 A02-7638 A 07/23/2002	1-12 A2763802	\$072302E.128 11-12 402-7638 A 07/23/2002	1-12 A2763801	\$072402EJ08 9-10 A02-7638 07/24/2002	10 A2763806
Anglyte	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 16,00	DG/ICC	9	\$	9	in i	읖	9	OK.	5
richtorofluoromethame Trichtorofluoromethame	92/90	= =	a •o	<u> </u>		9 🖫	40 4	2 5	. .
Vinyl chloride	DG/KG	윺	. 5	.	· =	2	7	2 5	~ -
fotal Mylenes	UG/KG	줖	#	a	9	2	. 2	2 9	5 £
n-Propylbenzene	UG/KG	2	•	문	ur.	9	•	=	
D-Cymens	UG/KG	2	•	읖	<u>بر</u>	9	•	· ⊊	. 25
l, 2, 4–Trimethyl benzene	U6/KG	3	9	?	-	9	· •	=	
1,3,5-Trimethylbenzene	UG/KG	=	•	£	ın	9	·••	· =	
n-Butylbenzene	UG/KG	2	\$	2		2	• •	9	
sec-Butylbenzene	UG/KG	9	•	2	'n	2	140	2	·
Chlorobenzene-05	×	85	50-200	7	20-200	76	50-200	87	50.200
1,4-Difluorobenzene	×	ž	50-200	69	50-200	6	50-200	3 %	20-20
1,4-Dichlorobenzene-D4	×	5.3	20-200	99	50-200	50	50-200	. Z	20-20
Toluene-05	×	£	78-119	8	78-118	25	78-118	8	78-118
p-Bromafluorobenzene	×	35	Br1-29	81	67-118	45	67-118	***	67-118
1,2-Dichloroethane-04	₩	*	63-133	₹.	63-133	38	63-133	۲	63-133
	_								

STL Buffalo

ND - Mot Detected NA = Not Applicable

000020

Reporting Limit * A2763809 S072502EJ23 10-11 A02-7638 07/25/2002 Sample Value 22222 22222222**2**2 Reporting Limit aa552aa5a5aaaaaaaaaaa A2763BDB ખ્ \$072502EJ02 8-10 A02-763B 07/25/2002 2 Sample Value 오오 오오오오 유무무무무무모모 ₹ ş Reporting Lang A2763805 শূ S072402EJZ1 B-10 A02-763B 07/24/2002 Sample Value 9999999999 ξ ٥ Reporting Limit A2763507 ⇉ S072402EJ19 A02-7639 07/24/2002 Samp(e Value ફ્ Š UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG **JG/KG** JC/KG UG/KG JG/KG UG/KG UG/KG UG/KG **J**6/KG US/KG UG/KG 06/KG U6/KG UG/KG UG/KG UG/KG 06/100 1,2-0ibromo-3-chtoropropane trans-1,3-01chtoropropene Leb trans-1,2-0ichloroethene cia-1,3-Dichloropropere Dichtorodiftuoromethane Wethyl tert butyl ether cis-1,2-Dichloroethene 6-Nethyl-2-pentanone Bronodichloronethane Carbon Tetrachloride 0 ibronochtoromethane 1,2-0ichloropropane ,2-Dichlorobenzene 4-Dichlorobenzene , 1-Dichloraethana 2-Dichlaraethane , 1-Dichlaroethene Methylene chloride Anal yte ,2-Dibromoethane Wethyl cyclohexane sopropylbenzene Carbon Disulfide Methyi acetate Chloromethane Chlorobenzene Sample Date Bromomethane Chloroethane Ethylbenzene Cycl oherane 2-Butanone Chloroform 2-Hexanone Client 10 Bromoform icetone Benzehe

Rept: AN0326

. Gowanda Day Habilitation Center SWG463 DELIVERABLES

Bergmann Assoc.

Date: 08/26/2002

Time; 12:04:10

BERG - SOIL METHOD 8260 - TCL VOMS + STARS

UG/KG UG/KG DB/KG UG/KG UG/KG

,1,2,2.Tetrachloraethane

Stynene

let rachionoethene

Gluene

, 2, 4-Trichlarobenzene 1,1-Trichloroethene 1,2-Trichloroethene

Time: 12:04:10			Bergmenn A		ESOC GOMANMA Day Nabilitetion Cor SW4443 DELIVERABLES SOIL METHOD B26D - TCL VDAS + STARS	Center ARS			Rept: AND326
Client 10 Job No Lab ID Sample Date		\$072402EJ19 8-10 A02-7638 07/24/2002	-10 A2763807	S072402EJ21 8 A02-7638 D7/24/2002	8-10 A2763805	SD72502EJ02 8-10 A02-7638 D7/25/2002	-10 A2763808	SD72502EJ23 10-11 AD2-7638 A7725/2002	0-11 A2763409
Analyte	Uhits	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichtoro-1,2,2-triffuor UG/KG Trichtoroethene	UG/KG UG/KG	99:	20.00	22	in in	5	00	웃모	10.10
Vinyl chloride	06/KG	2 Q !	9 (2)	22	^ =:	2 2	• 2.	99	• =
notel Aylenes n-Propylbenzene	DG/KG DG/KG	22	<u>`</u>	무모		문 문	E 4	22	5 a
P-Cymene 1 2 6 Trimethy beneath	DG/KG	2 5	va v	2 9	6	요 !	· •o ·	· 😩 :	ימני
1, 3, 5-Trimethylbenzene	UG/KG	2 9	D 40	2 2	n un	2 9	۰-۰	2 2	u r
n-Butylbenzene	UG/KG	<u>급</u>	46 V	윤 :	'n	물	-0	2	
Secretty Conzene	UB/KIS	0.	٠	O X	^	G	•	물	- 2
Chlorobenzene-05	×	æ	002-05	103	002-05	89	002-05	72	50-200
1,4-Difluorobenzene	м	8	20-590	2	20-200	59	50-200	22	50.200
1,4-Dich(orobenzene-D4	×ŧ	ౙ	002-05	6	50-200	29	002-05	. 3 8	50-200
Totuene-DB	×ŧ	£	78-118	75	78-119	%	78-118	8	78-118
p-Bromaflyarobenzene	×ŧ	ð	67-118	25	67-118	5	67-118	E	87-118
1,2-Dich(oroethene-04	*	€	63-133	26	63-133	5	63-133	98	63-133

NO = Not Detected

Mot Applicable

000022Reporting Limit A2782101 16-17.5 \$073002E107 A02-7821 07/30/2002 Sample 99 222222222 ş 55 Reporting Limit A2763B10 ŋ 4 S072602EJ27 12-13 A02-7638 07/26/2002 Sample Value 22222222222222222 9999999 9 22222222**2** Ş Reporting Li ii i A2763812 ţ 34 \$072602EJ20 12-14 A02-7638 07/26/2002 Sample Value £\$\$\$£££££\$\$\$\$\$\$\$\$\$ 오 2222222222 ą Reporting Limit A2763811 S072502EJ23D 10-11 A02-7638 07/25/2002 Sample Value 2222222222 Ş UG/KG UG/KG V6/KG V6/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG DG/XG UG/KG UG/KG UG/KG UGZKG UG/KG UG/KG UG/KG VG/KG JG/KG 06/KG UG/KG V6/K6 V6/K6 V6/K6 UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG DZ/XC UG/KG DG/KG UG/KG UG/KG UG/KG 1,2-Dibreme-3-chloropropane trens-1,3-Dichloropropene i,i,2,2-Tetrachloroethane letrachloroethene trans-1,2-Dichloroethene cis-1,3-Dichloropropens Dichlorodifluoromethane kethyl tert butyl ether cis-1,2-Dichloroethene ,2,4 · Ir ichlorobenzene 1,1,1.1richloroethane 4-Methyl-2-pentanone Carbon Disulfide Carbon Tetrachloride Dibromochloromethene Benzene Bromodichloromethane ,2-Dichloropropane , 2-0ichlorobenzene .3-Dichlorobenzene , 4 -Oich Lor obenzene ,1-Dichloroethane ,2-Dichloroethane ,1-Dichloroethene kethylene chloride Analyte i, 2-Dibromoethane **Hethylcyclohexane** |sopropy|benzene Wethy acetate Chloromethane Chlorobenzene Job No Sample Date Bronomethane Chloroethane Ethylbenzene Cyclohexane 2-Butanane Chloroform 2-Hexanone Client 1D Bromofarm Acetone

Rept: ANU326

- Gowanda Day Wabilitation Center

BERG - SOIL METHOD BZ60 - TCL VOAS + STARS

SW8463 DELIVERABLES

Bergmann Assoc.

Date: 08/25/2002 Time: 12:04:10

Rept: AND326	
Bergmann Assoc Gowanda Day Mabilitation Center Sv8463 DeliveRABLES BERG - SDIL METHOD 8260 - TCL VOAS + STARS	
Date: 09/26/2002 Time: 12:04:10	

Ctient ID Job No Sample Date Analyte 1,2-Trichloro-1,2,2-trifluor UG/KG richloroethene	\$0725025.0290 10-11 A02-7638 A2 07/25/2002 Sample R	10-11 A2763811	\$072602E.J20 12-14 A02-7638	2-14 A2763812	SG72602EJ27 12-13 A02-7638	12-13 A2763810	\$075002E,U07 16-17.5 A02-7821 A27	6-17,5 A2782101
2,2-trifluor	7.		07/26/2002		07/26/2002		07/30/2005	
1,2-Trichloro-1,2,2-trifluor UG/KG fchloroethene		Reporting Limit	enje/. ejdus/	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting
	£	9	9	9	욮	5	5	5
	9	9	뮬	9	130		736 40	~
Trickloroftworomethane UG/KG	_	••	2	•	2	4.	h, ≘	ب
Vinyl chloride UG/KG		15	오	=	9	=	2	=
Total Mylenes UG/KG	£	82	2	22	2	35	9	36
n-Propylbenzene UG/KG	_	49	운	•		·	2	2
p-Cymene (UG/KG		•0	무	•	9	~	9	\$
_		•••	皇	•	2	~	9	\$
	£	4 0	テ	•	Q.	יים	2	'n
n-Butylbenzene DG/KG	<u> </u>	•••	읖	•	모	2	2	'n
sec-Butylbenzene bG/KG	를 	••• •••	₽	•	다	ب	> 2	5
Chlorobanzene-05	%	50-200	103	50-200	0,	902-05	30 *	50-200
2.4-0iftworobenzene	80	\$0-500	50	002-05	19	20-200	* DS	20-200
-04	8	20-200	76	50-200	23	20-200	* %2	20-200
Folluena-D8	45	78-118	75	78-118	ž	78-118	25	78-118
p-Bromofluorobenzene	23	67-118	8	67-118	20	67-11B	2	67-118
1,2-Dichlaraethane-D4	602	63-333	£	63-133	26	63-133	10%	63-133

STL Buffalo

-13 A2782102	Reporting Limit	/> พืชพระบบสิทธิการการการการการการการการการการการการการก
\$073102E.J05 8-13 A02-7821 07/30/2002	Sample Value	2 8999999999999999999999999999999999999
4 A2782104D(Reporting Linit	0000 0000 0000 0000 0000 0000 0000 0000 0000
\$073192EJ01 2-4 A02-7821 G7/30/2002	Sample Yatue	089 999 999 999 999 999 999 999 999 999
A2782104	Reporting Limit	明~~~日路~~日~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
\$073102EJO1 2-4 A02-7821 07/30/2002	Sample Value	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
17.5 AZ78Z1Q1DL	Reporting Limit	មិលអង់ខ្លួនមានមានមានមានមានមានមានមានមិនមានមានមានមានមានមានមានមានមានមានមានមានមាន
\$073002E107 16-17.5 A02-7821 A27 07/30/2002	Sample Value	22222222222222222222222222222222222222
	unīts	00/KG 00/KG
Client 10 Job No Sample Date	Analyte	Acetore Benzene Benzene Bromodichloromethane Bromodichloromethane Carbon Disulfide Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chlorobenzene Chlorobenzene Chlorobenzene Chloromethane 1,2-Dibromo-3-chloropropane Dichlorodifluoromethane 1,2-Dibromoethane 1,2-Dibromoethane 1,2-Dibromoethane 1,2-Dibromoethane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Tetrachloroethane 1,2,4-Trichloroethane 1,2,4-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane

BERG - SOLL METHOD BSO - TCL VQAS + STARS

Date: 08/26/2002 Time: 12:04:10			Bergmann / BERG -	1 arr	ssoc Gowende Day Nabilitation Cer SW8463 DELIVERABLES SOIL METHOD 8260 - TCL YOAS + STARS	Center	•		Rept: ANG326
	i		,						
Client ID Job Mo Lab ID Sample Date		\$073002E.07 16-17.5 A02-7821 A27 07/30/2002	A2/821010L	\$9731025.01 2-4 AD2-7821 07/30/2002	1-4 A2782104	\$073102E.J01 2-4 402-7821 07/30/2002	105012822V	S073102E,U5 8-13 A02-7821 07/30/2002	9-13 A2782102
Analyte	Units	Sample Value	Reporting	anna. Apine	Reporting Limit	Sample Volue	Reporting Limit	Sample Value	Reporting
1,1,2-Trichloro-1,2,2-trifluor UG/KG Trichloroethene	r UG/KG UG/KG	ND 330 D	88	**************************************		14000 D	810	3	MA NA
Trichlorofluoromethane Vinyl-chloride	UG/KG UG/KG	99	2 2	를 유	r t	2 2	, 810 1610	25	ψŞ
Total Mylenes	UG/KG	99	K 10	25	202	모	24.00	9 9	52.
p-Cymene	UG/KG	9	1 (3)	2 !	. 1-1	2 2 3	018	2 9	n 10
1,2,5-Trimethylbenzene	DE/KG		0 KQ	99		Q Q	019	29	W 100
n-Butylbenzene sec-Butylbenzene	ne/ke	ድ፪	53 F3	9 9	~ ~	무무	88	55	.in in
:Chlorobenzene-05	×	82	\$0-200	ęź.	50-200	*	50-200	83	50-200
1,4-Difluorobenzene	ж.	- S8	50-200	80	20-200	7 05	20-200	· 5	5D-2dd
],4-01chlorobenzene-D4 Toluene-DA	××	- E	50-200 78-418	69 6	20-200	66.6	20-200	22.6	50-200
p-Bromofluorobenzene	t at a	85	67-118	282	67-118	7	67.118	£ 55	67-118
1, c-ciciloroechane-64	ıt.	5	63-133	25	43-133	26	£5:133	\$	55-59

KA = Not Applicable

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IDEN-N A2736507	Reporting Limit	25	5	'n	'n	92	\$2	'n	S	2,	'nŞ			· in	'n	'n	v	io i	S.	NO 1	•	יט ו	O M	n 10		æ.	so i	v č	2 4	1 1/1	4	,	26	in.	5 0 1	ın ı	n v		i vi	140
55071902EJ GARDEN-N A02-7365 A27 07/19/2002	Sample Vatue	4	2	2	2	2	£	£	2 :	₽ 9	2 5	2	2		œ	2	Q !	₽ :	2 !	2 5	2 5	2 5	Ž	2 2	2	2	2 :	25	2	2	84 VB	2	全	9 9	₽ :	2 9	2 5	2 5	문	웃
A2736508	Reporting Limit	27	v	2	<u>,</u>	Ξ	22	.	. .	= "		5	'n	5	2	ın ·	6 0 1	· ·	۰.		^ •	Λ L	N LO		īV	5.	. .	7		S	ın	ın	27	· ·	^ '	n u		, LO		ľ
\$\$071902EJ G-S A02-7365 07/19/2002	Same Value	£	읖	2	2	9	9	2	운 :	2 9	2 5	2	皇	9	모	문	오 :	2 9	2 9	2 5	2 1	2 5	2 5	2 92	2	₽ :	2 9	2 5	: ♀	2	\$ 4 A	2	2	2 :	2 9	2 5	2 5	2	2	2
A27821036L	Repo∤ting Limit	/ 130	13	23	×	ر ا	051	121	ю:	₹ ¥	3 S	: 10	83	ĸ	53	1 0	K.	01	0 %	G #	G	C K	C #7	: K3	ಬ	53 1	S 7	0.5	123	ĸ	ĸ	53	5 5	20.7	0 #	ΩK	3 %	3 12	i Ki	ю
S073102EJ24 1B-20 A02-7821 67/30/2002	Semple Value	2	ş	9	2	£	£	₽ ;	운 (2 9	2 9	읖	2	S	2		== = !			2 5	2 5	2 5	1000	9	2	2	2 9	2 9	. 9	2	09 03	₽	2	Q i	<u> </u>	₽4	2.5	2	2	₩
20 A2782103	Reporting Limit	27	1 6		ب	=	27	en i	^:	= "	` =	'n	'n	ľ	v	urs I	1 0 1	,Λ L	^ •	n 11		n v			5	.		-=	- 40	. 151	4		27	un i		27 10		, m	110	
80/3102EJ24 18-20 A02-7821 07/30/2002	Sample Value	N.D. 27	9	9	2	2	2	~ M	2 9	2 9	2 9	2	유	윤	유	2	오 :	2 9	2 9	2 9		2 5	7000		ş	9	2 4	2 5	9	-	\$ # C	9	2	₽ !	2 !	2 9	2 5	2	2	2
	Units	-UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	US/KG	08/KG	15.7KG	UG/KG	DC/KG	DG/KG	UG/KG	08/¥C	DG/KG	DE/KG	DG/KG	06/KG	16/KG	9 1	16/KG	UG/KB	UG/KG	UG/KG	UG/KG	U6/KG	16/86	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	92/20	IIG/KG	DG/IG	00/00	DC/KG
Client 10 Job No Lab 10 Sample Date	Anslyte	Acetone	Вепделе	Bronodichloromethane	Bramaform	Bronomethane	2-Butanone	Carbon Disulfide	Carbon Tetrachloride		chloroethane	Cyclohexane	Chloroform	1,2-Dibromo-3-chloropropane	Dibromoch oromethane	Dichlorodifluoromethane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,5-Dichiorocenzene	1,4-Dichlorobenzene	I, I DI CALOFOREMENTO	Z-Dichloroethane	, -0 CA(O OPC POP -10 7-0 OPC POP	trens-1.2-Dichloroethene	1,2-Dichloropropane	cin-1,3-bichloropropene	trans-1,3-0 ich loropropene	ethytbenzene 2-usvegane	Isopropylbenzene	Methyl acetate	Methylene chloride	Methyl tert butyl ether	4-Methyl-2-pentanone	Methyloyclohexane	Styrene	1,1,2,2-Tetrachloroethane	letrachioroethene Tolisans	iousie 1 2 4-Trichlorobenzene	1.1.1-Trichloroethane	1,1,2-Trichloroethane

Rept: ANOSZ6

Bergmann Assoc. - Gowands Day Habilitation Center SW8463 DELIVERABLES
BERG - SOIL METHOD 8260 - ICL VOAS + STARS

Date: 08/26/2002 Time: 12:04:10

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RDEN-H A2736507	Reporting Limit	សសសភិទិសសសសស	50-200 50-200 50-200 78-118 67-118
SS071902EJ GARDEN-M A02-7365 A27 07/19/2002	Sample Value	5 555555 5 55555 6 5 5 5 5 5 5 5 5 5 5 5	88 88 73 160 160
A2736508	Reporting Limit	សសសក្សិសសសសស	\$0-200 \$0-200 \$0-200 78-118 67-118
\$\$071902EJ G-\$ A02-7365 07/19/2002	Sample Value		**************************************
3-20 AZ7B2103D1	Reporting Limit	333333333333333333333333333333333333333	50-200 50-200 50-200 78-118 67-118
8073102EJ24 18-20 A02-7821 A 07/30/2002	Sample Value	80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25 25 25 25 25 25 25 25 25 25 25 25 25 2
3-20 A2782103	Reporting Paint	พพพ=5	50-200 50-200 50-200 78-118 67-118
\$0731025J24 18-20 A02-7821 07/30/2002	Sample Value	9(2 the the the the the the the the the the	85 77 72 83 93
	Units	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG	****
Client 10 Job No Sample Oste	Anslyte	1,1,2-Trichtoro-1,2,2-trifiuor UG/KG Trichtorothene Trichtorotluoromethane UG/KG Vinyt thtoride Total Mytenes UG/KG P-Cymene Propylbenzene UG/KG P-Cymene 1,2,4-Trimethylbenzene UG/KG I,3,5-Trimethylbenzene UG/KG P-Surylbenzene UG/KG P-Surylbenzene UG/KG P-Surylbenzene UG/KG P-Surylbenzene UG/KG P-Surylbenzene UG/KG	

Rept: AMG326

Bergmann Assoc. - Gowanda Day Mabilitation Center SU6463 DELIVERABLES BERG - SOIL NETHOO 8260 - TCL VGAS + STARS

Omte: 08/26/2002 Time: 12:04:10

000028 Reporting Sample Value Reporting Limit A2782105 4073102EJ01FB 3 A02-7821 07/30/2002 Sample Yalue Reporting Limit A2763813 #. 2 2 2 2 2 2 2 2. 4072602EJ20 AD2-7638 07/26/2002 Semple Value Reporting Limit A2736505 107 1902EJ 15 A02-7365 07/19/2002 Sample 72 750 1750 1750 1750 1750 ACT TO THE PROPERTY OF THE PRO 3 율 1,2-Dibromo-3-chloropropane 1,1,2,2-Tetrachloroethane cia-1,3-bichloropropene trans-1,3-bichloropropene trans-1,2-Dichloroethene Dichlorodifluoromethane Wethyl tert butyl ether cis-1,2-Dichloroethene 2,4-Trichlorobenzene , 1-Trichloraethane , 2-Trichloraethane 4-Methyl-2-pentanone Dibromochloromethane Bromodichloromethane Carbon Tetrachloride 1, 2-Dichtoropropane , 3-Dichlarabenzene 4-0ichlarabenzene ,2-Dichlorobenzene 1,2-Dichloroethane 1-Dichloroethine 1,1-Dichloroethene Methylene chloride Analyte 2.Dibrompethane letrach loroethme Methyl cyclohexana Isopropy/benzene Carbon Disutfide Methyl acetate **Chloromethane** Chiloro**benzene** Ethyl benzene Sample Date Bromomethane Chloroethane Cyclohexene 2-Butenone Chloroform 2-кехвлоле Client ID Bromoform 용명 Benzehe lo tueme Acetone

Rept: AN0326

-W- METH 8260 - TCL VOLATTLE ORGANICS + STARS

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SW8463 DELIVERABLES

· Gowenda Day Habilitation Center

Bergmann Assoc.

Date; 08/26/2002 Time; 12:04;10

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Liferit ju Job No Sample Date		M071902EJ15 FB A02-7365 07/19/2002	8 A2736505	W0726025J20 FB A02-7638 07/26/2002	B A2763813	M073102EJ01FB A02-7821 07/30/2002	A2782105		
Analyte	units	Sample	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2.trifluor UG/L	UG/L	ş	5.0	2	5.0	·	5.0	\$	
Trichtoroethene	J/S/I	9	5.0	2	2.0	呈	2.0	¥	
Trichlorofluoromethane	1/bn	9	5.0	물	2.0	2	5.0	≨	
Vinyl chloride	NG/L	2	2.0	9	2.0	2	5.0	≨	
Foral Xylenes	UG/1,	£	₹	숲	22	2	5	≨	
n-Propylbenzene	100/1	9	5.0	흨	2.0	2	5.0	₹	
p-Cymene	1/90	2	9.5	2	2.0	2	2.0	£	
,2,4-Irimethylbenzene	7/5n	₽	5.0	2	2.0	오	5.0	Ť	
1,3,5-trimethylbenzene	7/9 n	£	5.0	읖	5.0	2	5.0	¥	
n-Butylbenzene	7/50	a	0.2	윺	0.0	2	2.0	≨	
sec-Butylbenzene	UG/L	Oh .	5.0	QN	5.0	Q#	5.0	МА	
Chlorobenzene-05	<u>*</u>	59	002-05	26	50.200	Ę.	50-200	KH	
1.4-Difluarobenzene	24	88	20-200	45	20-200	85	20-500	¥	
1.4-Dichlarabenzene-D4	×	*	20-500	3 5	20-200	22	20-200	£	
foluena-DB	×	86	77-122	25	77-122	8	77-122	Œ	
p-Bromofluarabenzene	×	- 66 	73-120	88	23-120	1.1	021-57	£	
1 2. Dick Languaghana, Di	•	10	76 474	20	72.174	7	757 72	;	_

Rept: AM0326

Bergmann Assoc. - Gowanda Day Habilitation Center SWG&G3 DELIVERABLES BERG -W- METH &2&O - ICL VOLATILE DRGANICS + STARS

Date: 08/26/2002 Time: 12:04:10 STL Buffalo

NA * Not Applicable ND * Not Detected

000030 Reporting Limit Semple Volue Reporting Limit Sample Reporting Sample Value Reporting Limit A2782105 JO73102EJ01FB A02-7821 07/30/2002 Sampie Value Units 7/9n ne/1 7/36 7/36 7/36 788 788 1674 11671 70/ 488 78 7/98 7/98 7/98 7/98 7/9n 1/9n Z 790 걸 Š 7,50 790 78 됞 16/2 걸 녛 Bis(2-chloroethowy) methane Bis(2-chloroethyl) ether 2,2'-Owybis(1-Chloropropone) 1,3-Dichlorobenzene 1,4-Dichlorobenzene 5,3-Dichlorobenzene 2,4-Dichlorophenol Diethyl (Ahhalate 2,4-Dimethylphenol Dimethyl phthalate 4,6-Dimitrophenol 2,4-Dimitrophenol 2,4-Dimitrophenol 2,6-Dimitrophenol Bis(2-ethythexyl) phthalate 4-Bromophenyl phenyl ether 9 4-Chlorophenyl phenyl ether Hexach (procyclopentadiene 귤 4-Chloro-3-methytphenol 2-Chloronaphthalene 2-Chlorophenol Butyl benzyl phthalate Dibenzo(a,h)anthracene Di-m-butyl phthalate Bento(b)fluoranthene Di-n-octyl phthalate Benzo(k)fluoranthene Nexach Lorobutadiene Analyte Benzo(a)anthracene Benza(ghi)perylene **Hexach Lorobenzene** 4-Chloroaniline Acenaphthylene Benza(a)pyrena Benzyl alcohol Benzaic acid Dibenzofuran Fluoranthene Sample Date Acenaph thene Anthracene Client 10 Chryseane Fluorene 왕영

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Rept: AN0326

· W. NETHOD 8270 · TCL SEMI-VOLATILE GRGANICS

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. - Cowanda Day Mabilitation Center SW8463 DELIVERABLES

Bergmahn Assoc.

Unite: 08/25/2002

Sample Control Contr	Client ID Job No Semple Date		M073102EJ01FB A02-7B21 07/30/2002	A2782105						
Contraction Contraction	Analyte	Unite	anjen ajduss	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
All the contract of the contra			-		1					
atene UG/L NO 10 NA NA NA NA NA NA NA NA NA NA NA NA NA	Rexach loroethane	1/50	2		≨		4		¥	_
ularit NO 10 NA NA ularit NO 10 NA NA ularit NO 10 NA NA ularit NO 10 NA NA ularit NO 69 NA NA ularit NO 69 NA NA ularit NO 69 NA NA ularit NO 69 NA NA ularit NO 69 NA NA ularit NO 69 NA NA ularit NO 69 NA NA ularit NO 69 NA NA ularit NO 69 NA NA ularit NO 69 NA NA ularit NO NA NA NA ularit NO NA NA NA ularit NO NA	Indeno(1,2,3-cd)pyrene	1/50	9	7	≨		£		¥	
UST NO 10 NA NA NA NA NA NA NA N	Isopharone	1/9n	2	₽	≇		£		¥	
USAL NO 10 NA NA NA NA NA NA NA N	2-Nethylnaphthalene	U67L	윤	-	≨		≨		3	
UG/L	2-Methylphenal	UG/L	2	2	≨		\$		¥	
UG71 NB 10 NA NA NA NA NA NA NA NA NA NA NA NA NA	4-Hethylphenol	1/50	2	-	. ≇		\$		¥.	
UG/1	Nachthalene	06/1	2	₽	≨		\$		*	
UG/L ND 69 NA NA UG/L ND 69 NA NA UG/L ND 10 NA NA Percept with end of the copy with th	2-Nitroaniline	1/90	2	5	≨		\$		¥.	
UG/1	3-Nitroantine	1/90	2	69	≨		2		*	
UG/1 ND NA NA UG/1 ND 69 NA NA UG/1 ND 69 NA NA UG/1 ND 69 NA NA UG/1 ND 69 NA NA UG/1 ND 10 NA NA UG/1 ND 10 NA NA UG/1 ND 10 NA NA Ophenol UG/1 ND 10 NA NA Ophenol UG/1 ND 10 NA NA Ophenol UG/1 ND 10 NA NA OCATE(S) ND 10 NA NA NA OCATE(S) NA NA NA NA NA OCATE(S) NA NA NA NA NA OCATE(S) NA NA NA NA NA NA SS SO-200	4-Nitroaniline	1/90	2	69	≨		\$		≨	
UG/1	Nitrobenzene	1/90	9	2	≨		≨		1	
UG/1	2-Ni trophenol	1/90	9	2	\$		£		3	
tempt banine UG/L ND 10 NA NA re-propy lamine UG/L ND 49 NA NA re-propy lamine UG/L ND 10 NA NA re-propy lamine UG/L ND 10 NA NA re-propy lamine UG/L ND 10 NA NA re-propy lamine UG/L ND 10 NA NA re-propy lamine UG/L ND NA NA NA uG/L ND 10 NA NA NA NA re-propy lamine UG/L ND 10 NA	4-Nitrophenol	1/90	2	69	\$	•	£		≨	
Marco Marc	N-nitranadichenylamine	1/30	9	9	2		=		*	
three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of the three-bit of three-bit o	Mark transport of a proposal philos	1,20	1 5	2 \$	§ ‡		4		1	
Trichlorobenzene UG/L ND 10 NA NA Trichlorobenzene UG/L ND 10 NA NA Trichlorobenzene UG/L ND 10 NA NA Trichlorobenzene UG/L ND 10 NA NA Trichlorophenol UG/L ND 10 NA NA Trichlorophenol UG/L ND 10 NA NA Trichlorophenol UG/L ND 10 NA NA Inchangelene UG/L ND 10 NA NA Inchangelene NA NA NA NA NA Inchangelene NA NA NA NA NA Inchangelene NA NA NA NA NA Inchangelene NA NA NA NA NA Inchangelene NA NA NA NA NA Inchangelene NA			2 5	2 9	5 5				£ 3	
Trichlorobenzene UG/L ND 10 NA NA NA NA NA NA NA NA NA NA NA NA NA	Pentacut or opniend	1,00	2 :	* •	5 ;		•		£ :	
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UG/L ND 10 NA NA NA NA NA NA NA NA NA NA NA NA NA	Pyrana	1/90	3	2	≨		4		4	
UG/L ND 10 NA NA UG/L ND 10 NA NA V X 95 50-200 NA NA X 95 50-200 NA NA X 95 50-200 NA NA X 93 50-200 NA NA X 93 50-200 NA NA X 91 25-125 NA NA X 96 19-152 NA NA X 50 10-110 NA NA X 50 10-120 NA NA X 50 10-150 NA NA	1, 2, 4-Trichlorobenzene	1/90	9	2	≨		4		¥	
S)	2,4,5-Trichlorophenol	1/90	2	=	≨		≨		¥	
D4 X 101 50-200 HA NA X 95 50-200 HA HA X 89 50-200 HA HA X 93 50-200 HA HA X 93 50-200 HA HA X 82 50-200 HA NA X 91 25-125 HA NA X 98 19-152 HA HA X 30 10-110 HA HA X 30 10-152 HA HA X 103 28-152 HA HA	2,4,5-Trichlorophenol	1/9n	2	2	≨		Ş	_	¥	
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X	Phenenthrene-D10	ж.	\$ 1	20-200	≨ :		€ :		¥ :	
X	Chrysene-012	×	26	20-500	≨		ž		¥	
X 68 24-125 NA NA NA NA NA X 99 19-152 NA NA NA NA NA X 30 10-110 NA NA NA NA X 58 20-120 NA NA NA NA NA NA NA NA NA NA NA NA NA	Perylene-012	×	32	20-500	£		≨		¥	
X 91 25-125 NA NA NA X 98 19-152 NA NA NA X 30 10-10 NA NA NA X 38 20-120 NA NA NA X 103 28-152 AAA NA NA	Nitrobenzene-D5	×	2 0	24-125	≨	_	≨		ž	
X 98 19-152 NA NA NA NA NA X 30 10-110 NA NA NA NA NA NA NA NA NA NA NA NA NA	2-Fluorobiphenyt	×	16	25-125	≨		4		ž	
X 30 10-110 NA NA X X 38 20-120 NA NA NA X X 103 28-152 NA NA NA	p-Terphenyl-d14	×	8	19-152	≨		₹		¥	
X 38 20-120 NA NA NA NA NA	Phenol-05	×	ន	0-1:0 0:1-0	≨ :		€		ž	
28-152 NA NA NA	2-Fluorophenol	×	37	20-120	≨ '		\$		¥	_
	2,4,6-Tribromophenot	×	103	28-152	≨		≨		¥	

Rept: AN0326

Bergmann Assoc, - Gowanda Day Habilitation Center SV8463 DELIVERABLES BERG - W- NETHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Date: 08/26/2002 Time: 12:04:52 STL Buffalo

STL Bu

NA = Not Applicable NO = Not Detected

000032

UG/KG UG/KG	Reporting Limit Limit 1390 390 390 390 390 390 390 390 390 390	Sample Value ND ND ND ND ND ND ND ND ND ND ND ND ND	Report Line	A02-7638 A02-7638 A02-7638 A02-7638 A02-7638 A03-7639 A03-7639 A03-7639 A04-7639 A05-7638 A05-76	A27638D4RE Reporting Limit 380 380 380 380 380 380 380 380 380 380	80723025.0250 9-13RED A02-7638 A276 07/23/2002 Sample Repg Walue ND ND ND ND ND ND ND ND ND ND ND ND ND N	m	## ### ### ###########################
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UG/KG UG/KG	05 05 05 05 05 05 05 05 05 05 05 05 05 0	2	1800 1800 1800 1800 1800 1800 1800 1800	i		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	, m	32222222222222
UG/KG UG/KG	25 25 25 25 25 25 25 25 25 25 25 25 25 2	2	1800 000 000 000 000 000 000 000 000 000			<u></u>	, m	822222222222
ug/Kg ug/Kg ug/Kg ug/Kg ng/Kg ng/Kg ng/Kg ng/Kg her ug/Kg her ug/Kg her ug/Kg no! ug/Kg no! ug/Kg no! ug/Kg no! ug/Kg ng	88 88 88 88 88 88 88 88 88 88 88 88 88	2	1800 1800 1800 1800 1800 1800 1800 1800		25.55.55.55.55.55.55.55.55.55.55.55.55.5	99999999999	, m	322222222222
ug/KG ug/KG ug/KG ug/KG ug/KG ug/KG ug/KG ug/KG ther ug/KG thelate ug/KG to ug/KG	8% 8% 8% 9% 8% 8% 8% 8% 8% 8% 8% 8% 8% 8% 8% 8% 8%	₽	1800 1800 1800 1800 1800 1800 1800 1800	را	56 55 55 55 55 55 55 55 55 55 55 55 55 5	999999999		22222222222
nzo(k)fluoranthene uG/kG nzo(ghi)perylene uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzo(a ezid uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténe uG/kG nzoniténezene uG/kG nzoniténezene uG/kG nzoniténezene uG/kG nzolotobenzene uG/kG	36 8 8 9 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2	1800 1800 1800 1800 1800 1800 1800	را	55 55 55 55 55 55 55 55 55 55 55 55 55	99999999	, , , , , , , , , , , , , , , , , , ,	3333333333333333
nzo(ghi)perylana 106/KG 116/KG	56 56 56 56 56 56 56 56 56 56 56 56 56 5	₽	1800 1800 1800 1800 1800 1800 1800 1800	۲,	58 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2222222	, , , , , , , , , , , , , , , , , , ,	88888888888
nzo(a)pyrene nzo(a acid nzy(a acid nzy(a acid nzy(a acid nzy(a acid nzy(a acid nzy(a acid nzy(a acid nzy(a acid nzy(a acid nzy(b) ether ng/kg 2-ch(croethy) ether ng/kg 2-chyblexy() phthalate ng/kg 2-chyblexy() phthalate ng/kg Chlorophiv(pheny(ether ng/kg Chlorophiv(pheny) ether ng/kg Chlorophiv(pheny) ether ng/kg Chloropheny(pheny) ether ng/kg Chloropheny(pheny) ether ng/kg Chloropheny(pheny) ether ng/kg Chloropheny(pheny) ether ng/kg Chloropheny(pheny) ether ng/kg Chloropheny(pheny) ether ng/kg Chloropheny(pheny) ether ng/kg -n-buty(phthalate ng/kg -n-buty(phthalate ng/kg -n-buty(phthalate ng/kg -n-buty(phthalate ng/kg -n-bichlorobenzene	8	₽	1800 1800 1800 1800 1900 1800 1800		350 350 350 350 350 350 350 350 350 350	2999999		88888888888
neofc acid ney! alcohol s(2-chloroethoxy) methane s(2-chloroethy) ether s(2-chloroethyl) ether ug/kg s(2-chloroethyl) phthalare ug/kg s(2-chloroethyl) phthalare ug/kg s(3-cthylbexyl) phthalare ug/kg chloroeniline ug/kg chloroeniline ug/kg chloroeniline ug/kg chloroehenyl phenyl ether ug/kg chloroehenyl phenyl ether ug/kg chloroehenyl phenyl ether ug/kg chloroeniline ug/kg s-Dichloroenzene ug/kg s-Dichlorobenzene	5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2	8900 1800 1800 1800 1800 1800		985 985 985 985 985 985 985 985 985 985	999999	in	3888888888
atchel atchel atchel atcher		2	1800 1800 1800 1800 1800		26666	99999		383333333
s(2-chloroethoxy) methene 105/KG s(2-chloroethoxy) methene 105/KG s(2-chloroethyl) ether 105/KG s(2-cthylbexyl) phthelate 105/KG s(2-cthylbexyl) phthelate 105/KG s(2-cthylbexyl) phthelate 105/KG tyl benyl ether 105/KG chloroenitine 105/KG chloroenitine 105/KG chloroenitine 105/KG chlorophenol 105/KG chlorophenol 105/KG chlorophenol 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorophenol 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorobenzene 105/KG chlorophenol 105/KG		2	1800 1800 1800 1800	'7	28.88.88	9999		88888888
s(2-chloroethyl) ether UG/KG 20xybiz(1-chloropropene) UG/KG s(2-cthylbexyl) phthelate UG/KG s(2-cthylbexyl) phthelate UG/KG tyl benzyl phthelate UG/KG tyl benzyl phthelate UG/KG thlorophenol UG/KG thlorophenol UG/KG thlorophenol UG/KG thlorophenol UG/KG thlorophenol UG/KG tysene UG/KG benzofuran UG/KG	20 00 00 00 00 00 00 00 00 00 00 00 00 0	₽	1800 1800 0081		288	999		3333333
2oxybiz(1-Chloropropane) UG/KG s(2-ethylhexyl) phthalate UB/KB Bromophenyl phenyl ether UG/KG tyl benzyl phthalate UG/KG Chloro-3-methylphenol UG/KG Chlorophenol UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenol UG/KG -1-butyl phthalate UG/KG -3-Dichlorobenzene UG/KG -3-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorobenzene UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol UG/KG -4-Dichlorophenol	00 00 00 00 00 00 00 00 00 00 00 00 00	8	1800 1800 1800	'7	98.88	99		333333
s(2-ethylheayl) phthalate UG/KG Bromophenyl phenyl ether UG/KG tyl benzyl phthalate UG/KG Chloroanitine UG/KG Chloroaphenyl benyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phthalate UG/KG 2-pichlorobenzene UG/KG 3-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 6-Dichlorobenzene UG/KG	00 00 00 00 00 00 00 00 00 00 00 00 00	2	1800 1800	٦'	380	2	-	33333
Bromophenyl phenyl ether UG/KG Chloroenilshe UG/KG Chloroenilshe UG/KG Chlorophanyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG Chlorophenyl phenyl ether UG/KG S-Dichlorobenzene UG/KG Chlorobenzene UG/KG Chlorobenzene UG/KG Chlorophenol UG/KG	00 00 00 00 00 00 00 00 00 00 00 00 00	2	1800	٦,	1111	! :	-	3888
tyl benzyl phthelate UG/KG Chloroanitine UG/KG Chloroaphthaiene UG/KG Chiorophenol UG/KG Chiorophenol UG/KG Chiorophenol phenyl ether UG/KG Chysene UG/KG Chysene UG/KG Chysene UG/KG Chysene UG/KG Chysene UG/KG Chysene UG/KG Chotlorobenzene UG/KG Chiorophenol UG/KG	390 390 390 390	1,007 1,007 1,007		Έ.	380	2	_	388
Chloroenitine Chloroenitine Chlorophenoi Chi	390	2	1800		380	7300 0		85
Chloro-3-methylphenoi UG/KG Chlorophenoi UG/KG Chlorophenoi UG/KG Chlorophenyl ether UG/KG Chlorophenyl ether UG/KG Chlorophenyl ether UG/KG	340		1800	2	380	4		9
Chloropaphthalene UG/KG Chlorophenol UG/KG Chlorophenyl ether UG/KG rysene UG/KG	340	Q	1800	2	380	2	,	8
Chlorophenol Chlorophenol Chlorophenyl ether UG/KG rysene UG/KG benzola, h) anthracene UG/KG -n-butyl phthalate UG/KG 5-Dichlorobenzene UG/KG 5-Oichlorobenzene UG/KG 6-Oichlorophenol UG/KG 4-Dichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol UG/KG 6-Oichlorophenol		· ·	1800	2	380	2		98
Chlorophenyl phenyl ether UG/KG rysene UG/KG benzo(a,h)anthracene UG/KG -n-butyl phthalate UG/KG -orchlorobenzene UG/KG -orchlorobenzene UG/KG -orchlorobenzene UG/KG -orchlorophenol UG/KG	390		1800	2	380	2		99,
bento(a,h)anthracene UG/KG bento(a,h)anthracene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene UG/KG chordenzene	200	₩.	1800	2	380	<u></u>		8
benzo(a,h)anthracene UG/KG benzofuran UG/KG -n-butyl phthalate UG/KG 2-Dichlorobenzene UG/KG 5-Dichlorobenzene UG/KG 5-Oichlorobenzene UG/KG 5-Oichlorobenzene UG/KG 5-Oichlorobenzene UG/KG 6-Dichlorobenzene UG/KG	390	읖	1800	2	26	9		3
benzofuran UG/KG -n-butyl phthalate UG/KG 2-Dichlorobenzene UG/KG 5-Dichlorobenzene UG/KG 5-Dichlorobenzene UG/KG 6-Dichlorobenzene UG/KG 6-Dichlorobenzele UG/KG	350	웊	1800	9	380	2	, ,	3
4-butyl phthalate UG/KG 2-Dichlorobenzene UG/KG 3-Dichlorobenzene UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzidine UG/KG 4-Dichlorophenol UG/KG 4-Dimethylphenol UG/KG methyl phthalate UG/KG methyl phthalate	265	皇	180	£	380	2		3
2-Dichlorobenzene ug/KG 3-Dichlorobenzene ug/KG 4-Dichlorobenzene ug/KG 4-Dichlorobenzidine ug/KG 4-Dichlorophenol uG/KG ethyl phthalate uG/KG methyl phthalate uG/KG	390	모	1800	NO SEE	380	2		8
3-Dichlorobenzane UG/KG 4-Dichlorobenzene UG/KG 4-Dichlorobenzidine UG/KG 4-Dichlorophenol UG/KG 4-Dimethylphenol UG/KG methyl phthalate UG/KG	360	오 :	1800	2	88	9		280
5Dichlorobenzene UG/KG 5Dichlorobenzidine UG/KG 4-Dichlorophenol UG/KG 4-Dimethylphenol UG/KG methyl phthalate UG/KG	350	9 9	1800	€ :	280	2	_	8
4-Dichlorophenol UG/KG 4-Dichlorophenol UG/KG ethyl phthalate UG/KG 4-Dimethylphenol UG/KG methyl phthalate	200	2 9	ממפר	2 !		=	_	290
ethyl phthalate UG/KG UG	000	2 5	00.5	2 9	3 5	9	-	200
4-0 methylphenol UG/KG UG/KG UG/KG	200	2 5		2 9	200	G !	~	8
methyl phthalate	202	2 5	1000	2 5	8 6	2:	_	290
	102	2 5	200	⊋ ≨	8 8		-,	50;
4.6-Diditro-Z-methylphenol U6/KG ND	0061	2	0058	2 9	99	2 2	- [9 5
UE/KG	1900	2	8900	9 €	1800	2-9		3 5
טפיאנפ חפיאנפ	390	F2	1800	2	380	- =	ñ '-	3 5
2,6-Dinitrataluene UB/KS ND	390	2	1800	윷	380		-	3 5
Di-n-octyl phthalate UG/KG 3100	390	38	1500	640	360	270 bu	. [*	2
Fluorenthene 105/KG 100	390	2	1800	9	380	ON /	. ^	252
:UG/KG	390	요	1600	9	280	- NO	. ^	26
- 02/KG	390	2	1800	ŝ	380		. ~	760
U6/KG	390	2	1600	2	380	S	^	760
Remach Lorocyclopentadiene UG/KG ND	360	2	1800	2	380	9	^	260

Bergmann Assoc. - Gowanda Day Habilitation Center SN8463 DELIVERABLES
BERG -S- METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Date: 08/26/2002 Time: 12:04:52

Limit	Sample Value ND ND ND ND ND ND ND ND	yporting Limit 390 390 390 390 390 390	Sample Value ND ND				01/23/2002	Reborting
UG/KG ND 390 ND		200000000000000000000000000000000000000	222	Reparting Limit	Sample	Reporting Limit	Sample Salue	LIMIT
US/KG ND 390 ND 1900 N			· 😑	1800	99	380	2 2	092
University Uni		2888	•	1900	2	88	99	95
UG/KG ND 390 AD UG/KG ND 1900 ND UG/KG ND 1900 ND UG/KG ND 1900 ND UG/KG ND 1900 ND UG/KG ND 1900 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 300 ND UG/KG ND 300 <		88	2 2	1800	2 2	3 3 3	2 2	88
10 10 10 10 10 10 10 10		25	문	1690	오 5	8 8	99	92.2
1900 1900		1900	2 9	8900	2 2	1800	2 9	3700
U6/KG		1900	2 !	0000	2 :	1800	9 9	3700
US/KG		380	2 2	1800	2 2	280	2 2	9,00
eny leadine US/KG ND 1900 ND n-propy leadine US/KG ND 390 ND enol US/KG ND 390 ND enol US/KG ND 390 ND US/KG ND 390 ND US/KG ND 390 ND rogherot US/KG ND 390 ND rogherot US/KG ND 390 ND ROGATE(S) ND 390 ND ROGATE(S) ND 390 ND ROGATE(S) ND 390 ND ROGATE(S) ND 390 ND ROGATE(S) ND 390 ND ROGATE(S) ND 390 ND ROGATE(S) ND 390 ND ROGATE(S) ND 390 ND ROGATE(S) ND 390 ND ROGATE(S) ND 300 ND	_	260	2	1800	율	380	£	2
UG/KG	_	1900	9 !	2800	<u> </u>	1800	₽ :	3700
UG/KG ND 1900		200	2 9		2 9	280	2 9	22
UG/KG ND 390 NB UG/KG ND 390 NB UG/KG ND 390 ND UG/KG ND 390 ND UG/KG ND 940 ND UG/KG ND 940 ND N 52 50-200 ND N 66 50-200 95 N 66 50-200 95 N 63 50-200 90 N 77 21-120 90 N 77 21-120 90 N 77 21-120 90 N 77 21-120 90 N 77 21-120 90 N 77 111 139 65		1900	- 2	8900	2 2	1800	2	3700
UG/KG ND 9900 HD UG/KG ND 950 ND UG/KG ND 940 ND UG/KG ND 940 ND UG/KG ND 940 ND ND 940 ND ND ND 940 ND ND ND 940 ND ND ND 960-200 95 ND ND 772 20-200 95 ND 773 27-120 90 ND 773 27-120 90 ND 773 27-120 90 ND 773 27-120 90 ND 773 27-120 90 ND 773 27-120 90 ND 773 27-120 90 ND 773 77-120 90 ND 77-120 90 90 ND 77-120 90		380	2	1800	웊	280	9	760
MO		8 .	운 :		≘ :	8,	2 9	92
UG/KG ND 920 ND 102 ND 920 ND 102 ND 920 ND 102 ND 920 ND 102 ND 102 ND 920 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 102 ND 103 ND			2 9	1800	1 5	3 5	2 9	3 5
May 250	_	270	2 5	2077	2 5	80	2 9	88
ATE(S) AT		330	9	1300	2	0B\$	9	292
50.200 50.200	25	50-200	102	50-200	8	002-05	92	50-200
7 66 50.200 93 7 66 50.200 95 7 53 50.200 95 8 50.200 95 7 77 27-120 62 8 41.139 102 7 111 18-139 67 10 113 16-139 67	63	\$0.200	8	20-200	8	50-200	87	20-200
56 50-200 95 50-200 85 50-	99	20.200	æ	20-200	82	50-200	98	20-200
20-200 85 27 21-120 62 27 27-128 90 27 113 18-139 102 27 113 18-139 102	295	50.200	8.8	20-200	103	20-20	 8 8	20-500
77 27-128 62 73 27-128 90 74 139 102 75 111 18-139 102	200	007.00	2 8	200	2 6	20-500	- 6	202-200
73 27-128 90 74 139 102 75 111 18-139 67	75 22	21-120	8 3	21-120	2 2	21-120	3 12	21-120
X 89 41-139 102 X 111 18-139 67	: "	27-128	8	27-128	85	27-128	102	27-128
111 19-139 (67	69	41-139	102	41-139	109	41-139	118	41-139
30 - 12-12-12-12-12-12-12-12-12-12-12-12-12-1	Ξ	18-139	<u> </u>	18-139	R . 1	18-139	64	18-139
56 131.62 901	801	25-121	χ.;	25-121	`	25-121	2.7	25-121
34-147	58	24-147	8	34-147	100	24-147	B 0L	34-147

Rept: ANO326

Bergmann Assoc, - Gowanda Day Habilitation Center SWB\$63 DELIVERABLES BERG -5- METHOD 8270 - TCL SEMI-VOLATILE DRGANICS

Date: 08/26/2002 Time: 12:04:52

= Not Applicable

*		2002/52/20	!	05/19/2002					
Analyte	Units	Sample	Reporting Limit	Sample Value	Reporting	Sample Value	Reporting Limit	Sample	Reporting Limit
Acenaphthene	UG/KG	ON	360	9	00%	ILA		2	
Acenaphthylene	UG/KG	문	350	2	3400	: 3		£ 3	
Anthracene	UG/KG	오	350	2	3400	=			
Benzo(a)anthracene	UG/KG	문	360	2	3400	=		2	
Benzo(b) fluorenthene	UG/KG	오	360	2	3400	*			
Benzo(k) fluoranthene	UG/KG	모	360	2	3400	*		£ 3	
Benzo(ghi)perytene	UG/KG	2	360	2	3400	±		£ 3	
Benzo(a)pyrene	UG/KG	2	360	2	3400	=		£ ±	
Benzoic acid	UG/KG	2	1800	2	16000	=		ž =	
Benzyl alcohol	UG/KG	2	366	2	3400	Ĭ		.	
8is(2-chloroethoxy) methane	UG/KG	운	360	2	2400	*		=	
Bis(2-chloroethyl) ether	UG/KG	말	360	2	3400	3		1	
2,21-0xybis(1-chloropropane)	UG/KG	2	360	3	3400	¥		=	
Bis(2-ethylhexyl) phthalate	NG/KG	38 J	360	9	3400	Ŧ		*	
4-Bromophenyl phenyl ether	UG/KG	모	360	9	3400	ĭ		¥	
Butyl benzyl phthalate	UG/KG	오	360	9	3400	ž		¥.	
4.Chloroaniline	UG/KG	오	360		3400	¥		¥	
4 - Chloro - 3 - methylphenol	UG/KG	물	360	오	3400	¥.		*	
2-Chloronaphthalene	UG/KG	물	360	2	3400	5		\$	
2-Chlorophenol	UG/KG	テ	360	즟	3400	NA		ž	
4-Chlorophenyl phenyl ether	UG/KG	모	35	읖	3400	N.		2	
Chrysene	UG/KG	皇	360	흎	3400	¥.		7	
Diberzo(a, h)anthracene	09/80	오 :	360	9	3400	¥		7	
Dibenzofuran	UG/KG	2	99	2	3400	Ĩ		£	
Di-n-butyl phthalate	ng/kg	₽ :	360	2:	3400	¥		≨	
1,2-Dichlorobenzene	06/86	₽ !	360	2	200	₹		¥	
1, 5-Dichlorobenzene	10/KG	9 1	360	<u>-</u>	3400	¥.		₹	
1,4-01cmlg/goenzeme	20,00	2 9	2 6	2 1	2000	= :	_	≨	
		2 9	2 5	2 9	37.22	E :	•	≨ :	
	20,000	2 9	100	2 5	3400			≨ :	
Official about	24.00	2 5	000	2 5	7400	5 5		ď.	
Dimerky retrained	07/00	2 5	155	2 5		5 4		4 :	
4.6.0 initro-2-methylchenol	UG/KG	: 모	1800	9	16000	*			
2.4-Digit rochenal	UG/KG	9	1800	2	16000	3			
2.4-Dinitrotaluene	UG/KG	9	360	9	3400				
2, 6-Dinitrotoluene	UG/KG	오	360	유	3400	≨		¥	_
Di-n-octyl phthalate	UG/KG	유	360	문	3400	≨		¥	
Fluoranthene	UG/KG	욷	360	210.1	3400	¥		¥	
Fluorene	ng/kg	2	360	유	3400	44		NA	_
Hexachlorobenzene	UG/KG	拿	360	무	3400	¥		\$	
Hexachlorobutadiene	UG/KG	묶	360	-	3400	¥		£	
Hexach lorocycl opentadiene	UG/KG	읖	360	₽	3400	≨	•	≨	

Rept: AN0326

Bergmann Assoc. - Gowanda Day Habilitation Center su8463 DELIVERABLES
BERG -S- METHOD B270 - TCL SEMI-VOLATILE ORGANICS

June: 06/20/2002

Job No Sample Date		50724025121 8-10 A02-7638 07/24/2002	-10 A2763805RE	SS071902EJ GARDEN-N A02-7365 07/19/2002	ROEN - N A2736507				
Anslyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Somple Value	Reporting Limit
Hexach Consthans	116.766	5	175	á	0072	4		1	_
Indeport 2.3-ed/byrane	00/00	₽ 🗜	360	2 9	2600	=		£ 7	
Isophorone	19/kg	· 문	360	2	3,00	4		£ £	
2-Methylnaphthalene	OG/KG	2	360	9	3400	\$		*	
2-Methylphenol	UG/KG	읖	340	2	3400	\$		≨	
4-Methylphenol	DG/KG	물	360	£	3400	≨		Ā	
Naphthalene	08/80	모	360	9	3400	≨		¥	
2.Witroandline	UG/KG	2	1800	€	14000	≨		3	
3-Nitroanfline	UG/KG	9	1800	2	16000	¥	_	≨	
4-Nitroaniline	UG/KG	2	1800	£	14000	¥		≨	
Ni trobenzene	UG/KG	Ş	360	9	3,00	\$		¥	
2-Nitrophenol	UG/KG	2	360	2	00%	\$		\$	
4-Mitrophenol	UG/KG	2	1800	9	16000	£		Ā	
N-nitrosodiphenylamine	UG/KG		360	9	3,00	≨		¥	
N-Witroso-Di-n-propylemine	UG/KG	9	360	2	3,58	≨		¥	
Pentachlorophenol	UG/KG	2	1800	2	16000	¥		¥	
Phenanthrene	UG/KG	7	360	9	200	¥		≨	
Phenot	US/KG	2	360	2	2502	4		¥	
Pyrene	UG/KG	2	360	2	3400	¥	_	NA	
1,2,4-Trichlorobenzene	US/KG	2	360	£	2625	4		4	
2,4,5-Trichlorophenol	UG/KG	2	980	ŧ	6530	¥		¥	
2,4,6-Trichlorophenol	UG/KG	묲	360	£	2700	¥¥		¥	
1 K-mint protection DA	,	801	50-200	8	20-200	1		NA I	
2.4 O - C C C C C C C C C C	1.31	701	50-200	2.5	20-200	4		Y.	
	2	70,	20-200	. E	50-200	× ×		4	
	t ×	=	20-200	2 2	50-200	\$		4	
Chrysnon-012	* >4	105	20-500	6	20-200	£		N.	
Perviene-012	×	ž	50-200	29	20-200	4	_	\$	_
Nitrobeazane-05	×	\$	21-120	1,	21-120	\$	_	¥	
2-Fluorobiotenyl	×ŧ	28	27-128	\$\$	27-128	₹		ž	
p-Terphenyt-d14	>÷	8	41-139	\$	41-139	≨		ž	_
Phenol-05	*	æ	18-139	25	18-139	ź		¥	_
2-Fluoraphenol	*	3	25-121	36	25-121	≨		£	
A C THE PERSON NAMED IN COLUMN 1	•		:	•			_		

Rept: AN0326

Bergmann Assoc, - Gowanda Day Habilitation Center SW3463 DELIVERABLES BERB -s- METHDD 8270 - TCL SEMI-VOLATILE ORGANICS

Date: 08/26/2002 Time: 12:04:52

STL Buffalo

NA = Mot Applicable ND = Mot Detected

	Reporting Sample Reporting Sample Limit Value		NA NA				· 		•	• -									•			
	Sample Value	NA NA	¥	NA NA	¥	ž	¥	ž	¥	≨	≨	\$		¥	\$		¥	-	¥	¥.		
A2762105	Reporting Limit	0.048	0.048	0.048	0.048	0.048	97.0	970.0	0.048	0.048	0.048	0.048	0.048	B40-0	0.048	0.048	0.048	870.0	0.048	9.0		26.135
u0731025.101f8 A02-7821 07/30/2002	Sample Value	ΩN	윤	2	2	2	2	2	a	<u>-</u>	오	9	2	2	2	2	2	2	2	9	;	
	Units	ng/r	1/9n	1/5n	UG/L	U6/L	7/90	1/9n	7/90	1/9n;	1/90	1/90	1/90	1/90	1/90	1/5 /	1/90	1/90	1/90	UG/L	 -	-
Client ID Job Wo Lab ID Sample Date	Analyte	Aldrin	alpha-6HC	beta-BHC	gagma-BHC (Lindane)	del ta-BHC	Chlordene	000-17-7	4,4DDE	7,4'-001	Dieldrin	Endosulfan !	Endosulfan 11	Endosulfan Sulfate	Endrin	Endrin aldehyde	Heptachlor	Heptachlor epoxide	Methoaychlor	Toxaphene	SURROGATE(S)	Tetrachioro-dexemple

Bergmann Assoc. - Bowanda Day Habilitation Center SW8463 DELIVERABLES
BERG - W - SW8463 BO81 - ICL PESTICIDES

Date: 05726/2002 Time: 12:05:11

Date: 08/26/2002 Time: 12:05:11			Bergmenn As	Assoc Gowarda Day Habilitation Center Sw2463 DELVERABLES - S - SW2463 8081 - TCL PESTICIDES	Oay Habilitation C ERABLES - TCL PESTICIDES	Center			Rept: AMOS26
Client ID Job No Lab ID Sample Date		\$070902EJ17 8-12 A02-7056 07/09/2002	-12 A2705602	\$072302E.J25 9-11 402-76.88 07/23/2002	-11 A2763803	\$07230251250 9-11 A02-7638 O7/23/2002	9-11 A2763804	\$072402EJ21 8-10 A02-7638 07/24/2002	-10 A2763805
Analyte	Units	Sample	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting thait	Sample Value	Reporting Limit
Aldrin Blobe-BHC beta-BHC delta-BHC Chlordane 4,4-DDE 9,4-DDE 9,4-DDE 9,4-DDE 9,4-DDE Friorin Endosulfan 11 Endosulfan 21 Endosulfan 21 Endosulfan 22 Endosulfan 22 Endosulfan 23 Endosu	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG	후 축 축 쿡 중 음(원)음(금 주 주 쿡 즉 국 주 위 원(원) 조	P. C. C. C. C. C. C. C. C. C. C. C. C. C.	######################################	မရ မရ ရ ရ ရ ရ ရ ရ ရ ရ ရ ရ ရ ရ ရ ရ ရ ရ ရ	6;2688888888888888888888888888888888888		9 R S S S R R S S S S R R R R S S S S S	
Tetrachlorom-xylene Decachlorobiphenyl	<u> </u>	2.0*	32-130 36-153	91 246 *	32-130 36-153	88 178 *	52-130 56-153	82	32-130 36-153

STL Buffalo

NA = Not Applicable

ND - Not Detected

Cilent ID Job No Sample Date		\$5071902EJ GARDEN-N A02-7365 A27 07/19/2002	DEN-N A2736507						
Analyte	Units	Sample Value	Reporting Limit	anja, ajdus	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aldrin	UG/KG	QN.	18	A.W.		£		NA	
a(pha-9MC	UG/KG	2	55	A.A.		£		≨	
beta-BMC	UG/KG	æ	₽	*		#		2	
.gamma-BMC (Lindane)	UG/KG	9	18	Ĭ		¥		ž	
delta-BMC	UG/KG	2	92	ž		Ŧ		ž	
Chlordone	UG/KG	•	180	¥		**		\$	
4,4'-000	UG/KG	9	18	-		£		ž	
300>,	UG/KG	22	6 2	÷		≨		2	
100-17.5	UG/KG	250	£ 2	¥		4		≨	
Dieldrin	UG/KG	×	₽	¥		=		\$	
Endosuifan I	DC/KG	윺	_ 	¥		¥		2	
Endosulten II	DC/KG	£	- B	¥		¥		2	
Endosultan Sultate	UG/KG	₽	13	¥		¥		2	
Endrin	UG/KG	ş	£.	£		¥		=	
Endrin aldehyde	UG/KG	유	B2	NA NA		¥¥		ž	
Heptachlor	UG/KG	운	E.	5		N.		\$	
Heptachlor epoxide	UG/KG	£	₽	¥¥		\$		4	
Methoxychlor	UG/KG	윤	13	=		Ş		\$	
Toxaphene	UG/KG	ę	350	NA		¥		¥	
SURROGATE (S)									
Tetrachioro-m-xylene	×	65	32-130	Ĭ		¥		\$	
Decachlorobiphenyl	ĸ	00	36-153	¥		N.		₹	

Rept; AN0326

Bergmann Assoc. - Gowanda Day Habilitation Center Sv8463 DELIVERABLES
BERG - S - SA8463 8081 - TCL PESTICIDES

Client ID Job No Semple Date		M073102EJ01FB AD2-7821 07/30/2002	A2782105						
Analyte	Units	Sample Value	Reporting Limit	enjek ejdues	Reporting Limit	endus algue	Reporting Limit	Sample Value	Reporting Limit
Arocler 1016 Arocler 1232 Arocler 1242 Arocler 1248	7/90 7/90 7/90 7/90 1/90 1/90	무요요요유	200000 200000	<u> </u>		4444		4 4 4 4 4 2 2 2 2 2 3	
Aroctor 1634 Aroctor 1260 Tetrachloro-m-xylene Decachlorobiphenyl	1/90 x	47 47 59	3.6-132	¥		14 X X		4	

Rept: AND326

Bergmann Assoc. - Gowanda Day Habilitation Center \$48463 DELLVERABLES BERG - W - METHOD 8082 - POLYCHLORHATED BIPHENYLS

Date: 08/26/2002 Time: 12:05:11

* Not Detected 몵 NA = Not Applicable

STL Buffato

STL Buffalo

Client ID Job No Lab ID Sample Date		8070902E417 B-12 A02-7056 07/09/2002	-12 A2705602RE	\$072502E.J25 9-11 A02-7638 07/23/2002	-11 A2763803	\$072302E.J250 9-11 A02-7636 # 07/23/2002	P-11 A2763804	\$972402EJ21 8-10 A02-7638 07/24/2002	-10 A2763805RE
Anstyte	Units	Sample Value	Reporting Limit	Sample Salue	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1254	UG/KG UG/KG UG/KG UG/KG UG/KG	<u> </u>	288888	999999	ស្តា និង ស្ត្រ ស្ត្ ស្តុក ស្ត្រ ស្តុក ស្ត្	3	20 20 20 20 20 20 20 20 20 20 20 20 20 2	무무모중요요요	5 5 5 5 5 5
Tetrachloro-m.xylene Decachlorobiphenyl	**	፠፠	32-148	52	32-148	48	32-14B 36-153	58 58	32-148 36-153

| _____ | Rept: AW0326

Bergmann Assoc, - Gowanda Day Habilitation Center Sw8463 OELIVERABLES
BERG - S - NETHOD 8082 - POLYCHLORIWATED BIPHENYLS

Juste: 06/25/2002 Time: 12:05:11

Client ID Job No Lab ID Sample Date		SSO71902EJ GARDEN-N A02-7365 A273 07/19/2002	NEN·N A273 6 507						
Analyte	Units	Sampte Value	Reporting Limit	Sample Value	Reporting Limit	andes eluc	Reporting Limit	Sample Value	Reporting
Proclar 1016	UG/KG	2	18	¥		5		44	
Araclar :221	U6/KG	9	₽	*		#	_	¥	
Araclar :232	UG/KG	2	P 2	₹		£		ž	
tractor 1242	09766	2	18	ş		ź		*	
Aroctor 1248	UG/KG	9	13	≨		¥		¥.	
Araclar 1254	UG/KG	Ş	2	¥		£		¥.	
Araclar 1260	UG/KG	2	18	¥		Ī		₹2	
SURROGATE(S)———SURROGATE(S)——— Tetrachloro-m·xylene Decachlorobiphenyl	**	83	32-148 36-153	¥N ¥N		2 2		A K	

Client ID Job No Leb ID Sample Date		4073102EJ01FB A02-7821 07/30/2002	A2782105						
Analyte	Unfts	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
2,4.5 2,4,5.TP (Silvex) 2,4,5.T supporteres	1/50 106/L 106/L	888	0.47	* X X		NA AN		***	
Dichlorophenyl Acetic Acid	*	101	17-133	NA		NA		N.A.	

Rept: AN0326

Bergmann Assoc. - Gowande Day Mabilitation Center Sy8463 DELIVERABLES BERG - V - SW8463 8151 - MERBICIDES (3 DMPDS)

Date: 08/26/2002 Time: 12:05:11 STL Buffelo

NA = Not Applicable ND = Not Detected

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Client ID Job No Lab ID Sample Date	·	S070902E.117 B-12 A02-7056 07/09/2002	-12 A2705602	5072302EJ25 9-11 A02-7638 07/23/2002	11 A2763803	S07230251250 9-11 A02-7638 07/23/2062	>-11 A2763804	\$0724025.121 B·10 A02-7638 07/24/2002	· 10 A2763805
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample	Reporting Limit	Sample Value	Reporting Limit
2,4-0 2,4,5-TP (Silvex) 2,6,5-T	UG/KG UG/KG UG/KG	웃모모	\$ 50 \$ 50 \$ 50 \$ 50	윤문문	\$ \$ \$	999	\$ 64 64	999	82 82 82 84 84 84 84 84 84 84 84 84 84 84 84 84
Dichlorophenyl Acetic Acid	×	7.6	17-133	9%	17-133	20	17-133	85	17-133
Client 10 Job No Lab 10 Sample Dete		\$5071902EJ GARDEN-W A02-7365 A27 07/19/2002	RDEN-8 A2736507						
Analyte	Units	Sample	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample	Reporting Limit
2,4.5 TP (Silvex) 2,4,5 TP (Silvex) 2,4,5 T embooriess	UG/KG UG/KG UG/KG	ON ON ON	22 22	N N N N N N N N N N N N N N N N N N N		NA NA NA		2 4 4	
Dichloraphenyl Acetic Acid		53	17-133	¥¥		NA		¥	

Bergmann Assoc. - Gowanda Day Habilitation Center Sy8463 DELIVERABLES BERG - S - SV8463 8151 HERBICIDES (3 CMPDS)

Client ID Job No Sample Date		M073102EJD1F8 A02 - 7821 07/30/2002	A2782105						
Analyte	Units	Sample	Reporting Limit	Sample Value	Reporting Limit	andes	Reporting Limit	Sample Value	Reporting Limit
Aluminum · Total	MG/L	OM.	0.20	NA.		¥₹		¥	
Antimony - Total	MG/L	문 :	070'0	M.		Ą		¥	
Arsenic - Total Ranium - Total	7 PR	2007	0.0070	¥ :		¥ :		X :	
Beryllium - Total	HG/L	9	0,0050	* *		í		£ =	
Cachnium - Total	HG/L	£	0.0010	¥				*	
Catcium - Total	MG/L	2	0.50	Ş		¥		ž	
Chromium - Total	M6/L	2	0.0020	*		₹		£	
Cobeit - Total	H6/L	2	0.0050	₹ ₹		¥		£	_
Copper - Jotel	MG/L	3	0.0050	¥		ž		Æ.	_
Iron - Total	MG/L	0.20	0.050	e E		¥		ž	
Lead - Total	1/94	물	0.010	4	_	\$		ž	
Magnesium - Total	1/94	2	87.0	ž		•		¥	
Mangazese - Total	1/94	2	0.0030	≨		£		#	
Mercury - Total	MG/L	€	0.00020	4×		\$		≨	
Nickel - Total	MG/L	皇	0.010	NA	_	¥		\$	
Potassium - Total	MG/L	오	0.50	¥		¥		W	
Selenium - Total	MG/L	유	0,010	¥		N.		¥	
Silver - Total	1/5 H	₽	0.0030	¥ 2		4		¥	
Sodium · Total	NG/L	£	?	ī		M		₹	
The Liter · Total	MG/L	£	0.020	ž		Ą		ž	
Venadium - Total	NG/L	£	0.0050	2		Ĩ		¥¥.	_
Zinc - Total	MG/L	2	0.020	\$		Ϋ́		£	

Rept: ANG326

Bergmann Assoc. - Gowands Day Habilitation Center \$48463 DELIVERABLES BERGMANN - W- SM8463 TAL METALS

Dete: 08/26/2002 Time: 12:05:27 NA = Not Applicable ND = Not Detected

STL But

Unite Sample Reporting Sample Reporting Sample Limit Value Limit L	Client ID Job No Lab 10 Sample Date		\$070902EJ17 8-12 A02-7056 07/09/2002	12 A2705602	\$072302EJ25 9-17 A02-7638 07/23/2002	A2763803	S0723026.1250 9-11 A02-7638 07/23/2002	-11 A2763804	\$072402EJ21 8-10 402-7638 07/24/2002	10 A2763805	
HENCE 6760 22.9 6380 23.2 7140 23.7 7600	Analyte	units	Sample Value	Reporting Limit	Sample Vetue	Reporting Limit	angues andues	Reporting Limit	Sample Value	Reporting Limit	
Net Net		MG/KG	0929	22.9		23.2	7140	23.7	7690	21.7	_
Marke	intimony - Total	MG/KG		11.4		11.6		11.8	b g	10.8	_
MCKG MO	Irgenic - Total	MG/KG	7.6	:		1.2		1.2	8.3	=	_
Marked M	Barium - Totel	MG/KG	t) 0.52	<u>-</u>		7,2	4	1.2	₩	-	_
MCKG	Beryllium - Total	MC/KG	£	1.57	문	0.58	È	0.59	운	0.54	_
MG/KG 1200 114 14700 116 62290 118 6240	Cochnium - Total	MG/KG	읖	0.57	문	0.58	2	0.59	읖	0,54	_
NG/KG 10.1 2.3 9.5 2.3 10.7 2.4 11.0 NG/KG 7.3 2.3 8.8 2.3 10.1 2.4 6.8 NG/KG 2.4 2.3 18.2 2.3 10.1 2.4 2.1 NG/KG 12.4 2.3 18.2 2.3 19.2 2.4 2.1 NG/KG 12.4 22.9 3300 25.2 850 23.7 4560 NG/KG 10.8 1.1 10.9 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 10.9 NG/KG 10.8 1.1 1.2 1.2 1.2 NG/KG 10.8 1.1 1.2 1.2 1.2 NG/KG 10.8 1.1 1.2 1.2 1.2 NG/KG 10.8 1.1 1.2 1.2 NG/KG 10.8 1.1 1.2 1.2 NG/KG 10.8 1.1 1.2 1.2 NG/KG 10.8 1.1 1.2 1.2 NG/KG 10.8 1.1 1.2 1.2 NG/KG 10.8 1.1 1.2 1.2 NG/KG 10.8 1.1 1.1	Celcium - Total	MG/KG	1200	114	14700	911	9559	BLL.	6240	103	_
MG/KG 7.3 2.3 8.8 2.3 10.1 2.4 6.8 6	Chromium - Total	NG/KG	10.1	2.3	5.6	F. 2	7.01	2.4	11.0	2.2	_
MG/KG 24.6 2.3 18.2 2.3 19.2 2.4 21.7 MG/KG 18600 17.2 40700 17.4 41000 17.8 22000 MG/KG 12.4 22.9 3300 23.2 4850 23.7 4560 MG/KG 758 1.1 664 1.2 826 1.2 19.1 MG/KG 18.0 2.3 15.8 2.3 19.1 2.4 17.0 MG/KG 18.0 2.5 991 3.5 ND 1.2 ND MG/KG 10.8 1.1 ND 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 1.2 91.8 7.1 MG/KG 10.8 1.1 9.8 7.1 MG/KG 10.8 1.1	Cobalt - Total	#G/KG	7.3	2,3		5:3	10.1	5.4	6.8	2.2	_
NG/NG 18600 17.2 40700 17.4 41000 17.8 22000 17.8 22000 17.8 22000 17.8 22000 17.8 22000 17.8 22000 17.8 22.9 25.2 4850 22.7 4560 17.2 18.0 22.9 23.7 4560 17.2 18.0 22.9 23.7 19.1 2.4 17.0 11.2 18.0 22.9 991 23.2 1030 2.5 1030 2.5 1110 110	Copper - Total	MG/KG	34.6	2,3	18.2	2.3	19.2	5,5	21.7	2.2	_
Color Colo	Iran - Total	MG/KG	18600	17.2	40700	17.4	41000	17.8	22000	16.2	_
Color Colo	Lead - Total	MG/KG	12.4	5.7	o, o	5.8	٥.٥	۵, د	 	5.4	_
Color Colo	Magnesium - Total	MG/KG	2440	22.9	3300	23.2	0587	23.7	4560	21.7	_
	Manganese - Total	MG/KG	P52	Ξ	789	1.2	929	1.2	194	:	_
NG/KG 18.0 2.3 19.1 2.4 17.0 110.3 19.1 2.4 17.0 110.3 19.1 2.4 17.0 110.3 110	Mercury - Total	MG/KG	2	0.12	2	0,023	£	0.055	2	0.022	_
HE/KG ND 3.4 ND 3.5 ND 3.6 ND 1.2 ND	Nickel - Total	MG/KG	18.0	2.3	5.8	5.3		2.4	17.0	2.2	_
NG NG NG NG NG NG NG NG	Potessium · Total	MG/KG		525	7	232		237	+ ₽=	217	_
MG/KG ND 1.1 ND 1.2 ND 1.2 ND 1.2 ND 1.2 ND 1.2 ND 1.2 ND 1.8 ND 1.6 ND 1.8 ND 1.8 ND 1.8 ND 1.9 ND 7.1 ND 1.2 NG/KG 10.8 1.1 9.8 1.2 10.9 1.2 82.9 T	Selenium · Total	MG/KG	æ	 	2	3.5	윤	3.6	2	3.2	
MG/KG MO	Silver - Total	MG/KG	2	-	9	1.2	₽	1,2	2	:	-
1 160/KG NO 6.9 NO 6.9 NO 7.1 NO 17.8 1 1 9.8 1.2 10.9 1.2 12.2 12.2 12.2 12.9 1.8 1.1 1.2 12.9 1.8 1.1 1.2 12.9 1.8 1.1 1.2 12.9 1.8 1.1 1.2 1.8 1.9 1.8 1.1 1.2 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8	Spdium - Total	MG/KG	£	71.	£	116	₽	118	2	108	_
1.1 9.8 1.2 10.9 1.2 12.2 12.2 12.2 12.2 12.2 12.2 12.	Thattium - Total	HG/KG	9	6.9	2	6.9	ę		2	6.5	_
1.2 2.6.4 1.1 72.8.4 1.2 82.9.4 1.2 82.9.4 1.2	Vanadius - Total	MC/KG	10.8	-	9.8	1.2	6'01	1.2	12.2	-:	_
	Zine - Total	HG/KG	76.67	-:	72.8 4	1.2	2.8 C	-2.	62.9		_

Bergmann Assoc. - Gowanda Day Habilitation Center SM8463 DELIVERABLES
BERGMANN - S - SM8463 TAL METALS

000045

Client ID Job No Sample Date		SS071902EJ GARDEM-N A02-7365 A27 07/19/2002	DEM-N A2736507							
Analyte	Unita	Semple	Reporting Limit	Sample Value	Reporting	Sample Value	Reporting Limit	Sample Value	Reporting Limit	т—
Aluminum - Total	MG/KG	8020	21.7	MA		MA		¥		, -
Antimony - Total	MG/KG	€.	10.8	MA		NA		F.A.		
Arsenic · Total Barium · Total	MG/KG	8.7 201	5.5	¥ \$		¥ ¥		¥ 4 2 2		
	HC/KG	물	0.54	ž		¥		¥		
Cachium - Total	MG/KG	2	0.54	NA.		¥		HA		
Ca(c)um - Total Chromium - Total	MG/KG	5210 30 6	308	÷i		¥ \$				
Ĕ	MG/KG	6.7	2.2	ź		£		4	_	
	MG/KG	38.4	2.2	\$		≨		¥		
Iron - Total	MG/KG	22100	16.3	\$		≨		¥.		
Lead - Total	MG/KG	22.0	2.6	Ę		≨		¥	_	
Magnesium - Total	MG/KG	3230	7:12	¥¥		¥		Ą		
Manganese - Total	MG/KG	\$€		A.		NA	•	M.		_
Mercury - Total	MG/KG	육	0.10	4		43	•	¥		_
Nickel · total	MG/KG	25.8	5.5	ž		T		¥		_
Potessium - Total	MG/KG	352	212	¥		¥		¥		
Setenium · Total	MG/KG	₽	1.2	\$		¥.		Ŧ		_
	MG/KG	9	:	*		¥.		≨		
Sodium · Total	MG/KG	2	2 01	\$		≨		≨		
Thallium - Total	MG/ACG	2	6.5	4		₹	_	¥		_
Vanadium - Total	MG/KG	- E.E	-	\$		≨		*		
Zinc - Totai	MG/KG	62.2	Ξ.	¥		¥		ΑN		

Rept: AND326

Bergmann Assoc. - Gowanda Day Habilitation Center Sy8463 DELIVERAGLES BERGMANN - S - SWB463 TAL METALS

Date: 08/26/2002 Time: 12:05:27 STL Buffeto

MA = Not Applicable NB = Not Detected

Client ID Job No Sample Date		\$070902EJ17 8-12 A02-7056 A7709/2002	12 A2705602	5072302E125 9-11 A02-7638 07/23/2002	11 A2763803	SQ72302E.125D 9-11 AQ2-763B A2: 07/23/2002	-11 A2763804	\$072402EJZ1 8-10 A02-7438 07/24/2002	10 A2763805
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Semple	Reporting Limit	Sample Value	Reporting Limit
Cyanida - Total	9/90	\$ ₹	0.50	¥•-€	02.0	# <u>₩</u> K	05.0	4	0.50
Client 10 Job Ma Lob 10 Sample Date		55071902EJ GARDEN-N A02-7365 07/19/2002	DEN-W A2736507	WD73102EJD1FB AD2-7821 D7/30/2002	A27B2105				
Analyte	Units	anjaA ajdwas	Reporting Limit	Sample Value	Reporting Limit	Sample Salue	Reporting Limit	Sample Yelue	Reporting Limit
Cyanide - Total Cyanide - Total	NG/G NG/F	¥ #12	05-0	S ON	0.010	YA Yn		MA NA	

Rept: ANG326

Bergmarm Assoc. - Gowanda Day Habilitation Center Swa463 DellyeRABLES
WET CHENISTRY ANALYSIS



STL Buffarc

10 Hazerwo I, Orive

Suite 106

Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7991 www.stHnc.com

ANALYTICAL REPORT Revised

Job#: <u>A02-7059, A02-7362, A02-7816</u>

STL Project#: NY2A8896

SDG#: 7059

Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

Task: ASPOO LEVEL IV DELIVERABLES

ASP SOIL SAMPLES

Mr. Edward Jones Bergmann Associates 28 East Main Street Rochester, NY 14614

SIL BILLERO

Brian J) Fischer Project Manager

Susan L. Mazur Laboratory Director

10/31/2002

This report contains 1607 pages which are individually numbered.



STL Buffalo

10 Hazelwood Drive Suite 106

Suite 106 Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7991 www.sbinc.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 inscrtion into the original report. The pertinent information regarding these analyses is listed below:

Project: Gowanda Day Habilitation Center

SDG#: 7059

Task: ASPO0 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



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:

STL Buffalo

10 Hazelwood Onve Suite 106 Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7991 www.stlanc.com

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 J.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 1.D. #A02-7059.rev3 #NY2A8896



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 LD, 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 SAMPLE DATA SUMMARY PACKAGE

SAMPLE SUMMARY

			SAMPLE	D	RECEIVE	3 D
LAB SAMPLE ID	CLIENT SA	MPTR ID	DATE	TIME	DATE	TIME
A2705901	S071002EJ18	5-6			07/11/2002	
A2705902	S071102EJ04	10-12			07/11/2002	
A2736201	S071902EJ15	12-14			07/19/2002	
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			08/01/2002	
A2782104	S073102 EJ01	2-4			08/01/2002	
A2782104MD	S073102 EJ0 1	2-4			08/01/2002	
A2782104MS	S073102EJ01	2-4			08/01/2002	
A2782104SD	S073102EJ01	2-4			08/01/2002	
A2781602	S073102EJ01	8-10			08/01/2002	
A2781602MS	S073102EJ01	8-10			08/01/2002	
A2781602SD	S073102EJ01	8-10			08/01/2002	
A2705904	TRIP BLANK				07/11/2002	
A2705903	W071102EJ04	FB	07/11/2002	13:00	07/11/2002	14:50



METHODS SUTTARY

000003

Job#: <u>A02-7</u>059,<u>A02-7362</u>,<u>A02-7816</u>

SIL Project#: NY2A8896 SDG#: 7059

Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

FARAMETER	Ά	NALYTICAL METHOD
BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS	ASPO0	
BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS		
BERG - S · ASP 2000- METHOD 8270 SEMIVOLATILES	ASP00	8270
BERG - S - ASPOO - 8151 - HERBICIDES (3 CMPDS)	ASP00	_
BERG - S - ASPOO 8081 PESTICIDES	ASP00	
BERG - S - ASPOO 8082 - POLYCHLORINATED BIPHENYLS	ASP00	8082
Aluminum - Total	ASP00	
Antimony - Total	ASP00	
Arsenic - Total	ASP00	
Barium - Total	ASP00	
Beryllium - Total	ASP00	
Cadmium - Total	ASP00	
Calcium - Total	ASP00	
Chromium - Total	ASP00	
Cobalt - Total	ASP00	6010
Copper - Total	ASP00	
lron - Total	ASP00	
Lead - Total	ASP00	6010
Magnesium - Total	ASP00	6010
Manganese - Total	ASP00	
Mercury - Total	ASP00	
Nickel - Total	ASP00	
Potassium - Total	ASP00	
Selenium - Total	ASP00	
Silver - Total	ASP00	
Sodium - Total	ASP00	
Thallium - Total	ASP00	
Vanadium - Total	ASP00	
Zinc - Total	ASP00	6010
Cyanide - Total	ASP00	
Leachable pH	ASP00	9045

References:

ASPOO "Analytical Services Protocol". New York State Department of Conservation, June 2000.



NON-CONFORMANCE SUMMARY

000001

Job#: <u>A02-70</u>59, A02-7362, A02-7816

SIL Project#: NY2A8896

SDG#: <u>7059</u>

Site Name: <u>Bergmann Assoc. - Gowanda Day Habilitation Center</u>

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.



000883

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 VHLK45 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 A210000735-1 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 %RMD 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.



000005

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-dimitrotoluene 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 S073102E701 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 80mg of internal standard added instead of the required 40mg. 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.

SEL Buffalo internal validation reports have been printed and are included in this report as Appendix A.



Metals Data

000007

The following elements are not contained in the CLP spiking solution for samples \$073102EJ01 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.



<u>ಿ</u>ಂಟ್ರಿ

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 tag

Susan L. Mazur 131 Laboratory Director

8/28/2012

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHRET

			_	Cilent No.
Lab Name: STL B <u>uffalo</u>	Contract:		S071002F	<u> </u>
Lab Code: <u>RECNY</u> Cas	⊭e No.: SAS No.:	SDG No.: <u>7059</u>	-	•
Matrix: (soil/water) <u>s</u>	SOIL	Lab Sample ID:	A2705901	_
Sample wt/vol: _	5.19 (g/mL) <u>G</u>	Lab File ID:	F4589.RR	·
Level: (low/med) <u>I</u>	<u>.CW</u>	Date Samp/Recv:	07/10/200	07/11/2002
Moisture: not dec	40.8 Heated Purge: Y	Date Analyzed:	07/20/200	<u>)2</u>
GC Column: <u>DB-624</u>	ID: <u>0.25</u> (mm)	Dilution Factor:	1.00	•
Soil Extract Volume: _	(uL)	Soil Aliquot Vol	lume:	(ய_)
		CONCENTRATION UNITS:		•
CAS NO.	COMPOUND	(ug/L or ug/Kg)		Q
67-64-1			21	84 °
71-43-2			,	ŭ
75-27-4	-Brancdichloramethane			U
175-25-2	-Brancform	•	16	" ט
74-83-9	Bronomethane		16	ប [
78-93-3	2-Butanone		16	υ [
75-15-0	Carbon Disulfide		16	U .
56-23-5	-Carbon Tetrachloride		16	u
74-87-3	Chloromethane		16	ប
108-90-7	-Chlorobenzene		16	U
75-00-3	-Chloroethane	·		υ "
110-82-7	-Cyclohexane			υ
67-66-3	Chloroform			Ū
	-1,2-Dibromo-3-chloropropane			ਹ •
	Dibromochloromethane			ΰ
	-Dichlorodifluoromethane			ប
106-93-4	-1,2-Dibromoethane			ַ ט
	-1,2-Dichlorobenzene	 : " ::	16	ט "
541-73-1	-1,3-Dichlorobenzene		16	υ
	-1,4-Dichlorobenzene		16	υ
	-1,1-Dichloroethane	-	16	U -
107-06-2	-1,2-Dichloroethane		16	ן ט
	-1.1-Dichloroethene		16	ט ו
	cis-1,2-Dichloroethene		16	υ -
	-trans-1,2-Dichloroethene			ប
	-1,2-Dichloropropane		16	ប៊
	-cis-1,3-Dichloropropene		16	Ŭ
	-trans-1,3-Dichloropropene			lŭ l
	Ethylbenzene		16	ΰ
591-78-6			16	ŭ l
	-Isopropylbenzene	- —— 		υ -
	Methyl acetate			Ü
	-Methylene chloride		28	Br UL
			4.4.	

16

1634-04-4----Methyl tert butyl ether

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

000010

-		S071002EJ1	L8 5-6
Tab Name: STL Buffalo Contract:		1	
Lab Code: RECNY Case No.: SAS No.:	SDG No.: 7059		
atrix: (soil/water) SOIL	Lab Sample ID:	A2705901	
 Sample wt/vol: <u>5.19</u> (g/mL) <u>G</u>	Lab File ID:	F4589.RR	
evel: (low/med) <u>LOW</u>	Date Samp/Recv:	07/10/2002	07/11/2002
° Moisture: not dec. <u>40.8</u> Heated Purge: <u>Y</u>	Date Analyzed:	07/20/2002	
Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.00	
oil Extract Volume: (uL)	Soil Aliquot Vol	.me:	_ (uL)
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		Q
108-10-14-Methyl-2-pentanone		16 U	
108-87-2Methylcyclohexane		16 U	
100-42-5Styrene		16 U	- 1
79-34-51,1,2,2-Tetrachloroethane		16 U	- 1
127-18-4Tetrachloroethene		16 U	- 1
108-88-3Toluene		16 U	
120-82-1l,2,4-Trichlorobenzene		16 U	
71-55-61,1,1-Trichloroethane		16 U	
79-00-51,1,2-Trichloroethane	 ;	16 U	1
76-13-11.1.2-Trichloro-1.2.2-triflu	oroethane	16 U	1
		16 U	
75-69-4Trichlorofluoromethane		16 U	
75-01-4Vinyl chloride		16 U	i
1330-20-7Total Xylenes	· -	16 U	ŀ
103-65-1n-Propylbenzene		16 U	-
99-87-6p-Cymene		16 U	
95-63-61,2,4-Trimethylbenzene		16 U	
108-67-81,3,5-Trimethylbenzene		16 U	
104-51-8n-Butylbenzene	 -	16 U	ĺ
135-98-8sec-Buty1benzene		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

Lab	Name:	<u>STL Buffa</u>	alo	Contract:		S071002EJ18 5-6	_
Lab	Code:	RECNY	Case No.;	SAS No.:	SDG No.: <u>7059</u>		•

Matrix: (soil/water) SOIL Lab Sample ID: A2705901

Sample wt/vol: $\underline{5.19}$ (g/mL) \underline{G} Leb File ID: $\underline{F4589.RR}$

Level: (low/med) Low Date Samp/Recv: 07/10/2002 $07/11/20 \rightleftharpoons$

% Moisture: not dec. 40.8 Date Analyzed: 07/20/2002

GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm) Dilution Factor: ____1.00

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS:

Number TICs found: _1 (ug/L or ug/Kg) <u>UG/KG</u>

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 110-54-3	HEXALE:	3.21	24	BJN

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000012

Client No.

The state of the s		S071102EJ04 10-12
ab Name: STL Buffalo Contract:		
Lab Code: <u>RECNY</u> Case No.: SAS No.:	SDG No.: 7059	
atrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A2705902
Sample wt/vol: 5.01 (g/mL)	Lab File ID:	F4590.RR
mevel: (low/med) <u>LOW</u>	Date Samp/Recv:	07/11/2002 07/11/2002
Moisture: not dec. <u>12.2</u> Heated Purge: <u>Y</u>	Date Analyzed:	07/20/2002
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.00
oil Extract Volume: (uL)	Soil Aliquot Vol	ume:(uL)
•	CNCFNTRATION UNITS: (ug/L or ug/Kg)	
67-64-1Acetone		er = 11
71-43-2Benzene	<u> </u>	5 5 U
75-27-4Bromodichloromethane	 -	11 0
75-25-2 Promoform	·	1 1
75-25-2Bromoform		1 1
74-83-9Bromomethane	 -	11 U
78-93-32-Butanone		11 0
78-93-32-Butanone 75-15-0Carbon Disulfide	. [11 U
56-23-5Carbon Tetracritoride		11 U
74-87-3Chloromethane		11 0
108-90-7Chlorobenzene		11 U
75-00-3Chlomethane	!	1.1 U
110-82-7Cyclohexane		יטן טו
6/-66-3~Chloroform		11 0
96-12-81,2-Dibromo-3-chloropropane		110 U
124-48-1Dibromochloromethane		11 U
75-71-8Dichlorodifluoromethane		וו [ט]
106-93-41,2-Dibromoethane		11 0
95-50-11,2-Dichlorobenzene		11 ប្រ
541-73-11,3-Dichlorobenzene		11 0
106-46-71,4-Dichlorobenzene		11 U
75-34-31,1-Dichlorcethane		11 U
107-06-21,2-Dichloroethane		11 U
75-35-41,1-Dichlorcethene	_	11 ប្រ
156-59-2cis-1,2-Dichloroethene		11 ប្រ [
156-60-5trans-1,2-Dichloroethene		11 0
78-87-51,2-Dichloropropane		11 U
10061-01-5cis-1,3-Dichloropropene		11 U
10061-02-6trans-1,3-Dichloropropene		וו ע
100-41-4Ethylbenzene		11 Ü
591-78-62-Hexanone	· —	11 0
98-82-8Isopropylbenzene		11 0
79-20-9Methyl acetate		11 U
75-09-2Methylene chloride	· -	12 20
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-	1

11

1634-04-4----Methyl tert butyl ether

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000013

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U U Client No.

The same and Profesion (Contract)		S071102E	104 10-12
Lab Name: STL Buffalo Contract:			
Lab Code: REXINY Case No.: SAS No.:	SDG No.: 7059		-
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	<u>A27059</u> 02	
Sample wt/vol: $\underline{5.01}$ (g/mL) \underline{G}	Lab File ID:	F4590.RR	
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	07/11/2002	07/11/2002
% Moisture: not dec. <u>12.2</u> Heated Purge: Y	Date Analyzed:	07/20/2002	<u>.</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.00	-
Soil Extract Volume: (uL)	Soil Aliquot Vol	.une:	(uL)
	CONCENTRATION UNITS:	,	
	(ug/L or ug/Kg)		Q
108-10-14-Methyl-2-pentanone		11 U	
108-87-2Methylcyclohexane		11 JU	
100-42-5Styrene		11 [1	
79-34-51,1,2,2-Tetrachloroethane		11 [1	
127-18-4Tetrachloroethene		11 [0	
108-88-3Toluene		11 [U	
1120-82-11.2.4-Trichlorobenzene			
71-55-61,1,1-Trichloroethane		11 [0	
[79-00-51,1,2-Trichloroethane		11 U	
76-13-11,1,2-Trichloro-1,2,2-triflu	oroethane	ii t	
79-01-6Trichlorcethene		11 U	, -
75-69-4Trichlorofluoromethane		11 [t t
75-01-4Vinyl chloride		11 t	
1330-20-7Total Xylenes	i	11 [
103-65-1n-Propylbenzene		11 [
99-87-6p-Cymene		11 [1	I
99-87-6p-Cymene 95-63-61,2,4-Trimethylbenzene		11 [7	
108-67-81,3,5-Trimethylbenzene		11 [7	,

104-51-8----n-Butylbenzene

135-98-8----sec-Butylbenzene

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

000014

-						S071102E	TOA	10-12
`ab Name:	STL Buffalo	Con	tract:				JU4	10-12
Lab Code:	RECNY Case No	·:	SAS No.:	SDG No.:	7059			
btrix: (soil/water) <u>SOIL</u>			Lab Sampi	le ID:	A2705902	2	
- Sample wt,	/vol: <u>5.0</u>	<u>i</u> (g/m i) <u>G</u>		Lab File	ID:	F4590.RI	3	
evel:	(low/med) <u>LOW</u>			Date Sam	/Recv:	07/11/20	002	07/11/2002
". Moisture	e: not dec. <u>12.2</u>			Date Anal	lyzed:	07/20/20	002	
GC Column:	: <u>DB-624</u> ID	0.25 (mm)		Dilution	Factor:	1.00	<u>)</u>	
oil Extra	act Volume:	(uL)		Soil Alia	juot Vol	Lume:		_ (uL)
- umber TIO ■	Os found: _2			CONCENTRATI (ug/L or u				_
	CAS NO.	Co	mpound Name	RT	Est.	Conc.	Q	

CAS NO.	Compound Name	RT	Est. Conc.	Q	
1. 2. 110-54-3	UNKNOWN HEXANE	1.43 3.22	6 .8	j bjn	

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BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS
ANALYSIS DATA SHEET

000015

ah Name- st	<u>L Buffalo</u> Contract:	S071902	EJ15 1	2-14
	<u> </u>			
Lab Code: <u>RE</u>	CNY Case No.: SAS No.: SDG No.: 7059	_		
Matrix: (soi	1/water) SOTL Lab Sample ID:	A2736201	<u></u>	
Sample wt/vo	l: <u>5.08</u> (g/mL) <u>G</u>	<u>05394.RF</u>		
Level: (lo	w/med) <u>LOW</u> Date Samp/Recv:	07/19/20	02 07/	<u>19/2002</u> 1
Moisture:	not dec. <u>10.0</u> Heated Purge: Y Date Analyzed:	07/23/20	02	
OC Column: D	B-624 ID: 0.25 (mm) Dilution Factor	1.00	!	•
oil Extract	Volume: (uL) Soil Aliquot Vo	olume:	(1	ıL)
	CONCENTRATION UNITS	٠.		
CAS	NO. COMPOUND (ug/L or ug/Kg)		Q	
			 -	
67-	64-1Acetone	11	U	
71-	43-2Benzene	11	U	
75-	27-4Bromodichloromethane	11	ļu	_
175-	25-2 Bromoform	11	U ,	•
74-1	83-9Bronomethane	11	ט	
178-	93-32-Butanone	11	U	
75-3	15-0Carbon Disulfide	11	υ	
56-2	23-5Carbon Tetrachloride	11	ŭ	
74-	37-3Chloromethane	11	Ü	
108	90-7Chlorobenzene	11	บั	
75-0	00-3Chloroethane	11	บั	-
110	-82-7Cyclohexane	11		
62	66-3Chloroform		บ	
96.	13 9 1 2 Pibrary 3 of laws	11	ט	_
104	12-81,2-Dibromo-3-chloropropane -48-1Dibromochloromethane	110	U	•
75	-48-1Dibromochloromethane	11	U	
100	71-8Dichlorodifluorcmethane	11	<u>u</u>	
100.	-93-41,2-Dibromoethane	11	U	•
		1 1	ש	
	-73-11,3-Dichlorobenzene	11	บ	
	-46-71,4-Dichlorobenzene	11	ָלן ע	
	34-31,1-Dichloroethane	11	U	
	-06-21,2-Dichloroethane	11	ប	
	35-41,1-Dichloroethene	11	U	
	-59-2cis-1,2-Dichloroethene	7	[J	•
	60-5trans-1,2-Dichlorcethene	11	ប	
	37-51,2-Dichloropropane	11	U	
	51-01-5cis-1,3-Dichloropropene	11	ע	
	1-02-6trans-1,3-Dichloropropene	11	U	
	41-4Ethylbenzene	Ξ.	Ū	
	78-62-Hexanone	11	ΰ	
	2-8Isopropylbenzene	11	Ü	•
	0-9Methyl acetate_	11	ϋ	
	9-2Methylene chloride		Per a	
	-04-4Methyl tert butyl ether	11	U	-
1455			14	

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000015

		S071902EJ	15 12-14
ab Name: STL Buffalo Contract:		1	
Lab Code: <u>RECNY</u> Case No.: SAS No.:	SDG No.: 7059		
atrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A2736201	
Sample wt/vol: <u>5.08</u> (g/mL) <u>G</u>	Lab File ID:	<u>05394 . RR</u>	
mevel: (low/med) <u>LOW</u>	Date Samp/Recv:	07/19/2002	07/19/2002
Moisture: not dec. <u>10.0</u> Heated Purge: Y	Date Analyzed:	07/23/2002	
3C Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.00	
oil Extract Volume: (uL)	Soil Aliquot Vol	.ume:	(uL)
	CONCEMIRATION UNITS: (ug/L or ug/Kg)		Q
108-10-14-Methyl-2-pentanone 108-87-2Methylcyclohexane 100-42-5Styrene		11 U U U U U U U U U U U U U U U U U U	
79-34-51,1,2,2-Tetrachloroethane 127-18-4Tetrachloroethene 108-88-3Toluene		11 U 11 U	
120-82-11,2,4-Trichlorobenzene 71-55-61,1,1-Trichloroethane		11 U	
79-00-51,1,2-Trichloroethane 76-13-11,1,2-Trichloro-1,2,2-triflu 79-01-6Trichloroethene		11 U 11 U	1
75-69-4Vinyl chloride		11 U	ł ·
		11 U	·
99-87-6p-Cymene 95-63-61,2,4-Trimethylbenzene		11 U 11 U 11 U	·
108-67-81,3,5-Trimethylbenzene 104-51-8n-Butylbenzene 135-98-8sec-Butylbenzene		11 U	'

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS 000017

			S071902EJ15 12-14
Lab Name: <u>STL Buffalo</u>	Contract:	_	
Lab Code: <u>RECNY</u> Case 1	No.: SAS No.:	SDG No.: 7059	
Matrix: (soil/water) <u>SOI</u>	L	Lab Sample ID:	A2736201
Sample wt/vol:5	<u>.08</u> (g/mL) <u>G</u>	Lab File ID:	05394.RR
Level: (low/med) <u>LOW</u>		Date Samp/Recv:	07/19/2002 07/19/200
Moisture: not dec. <u>10</u>	.0	Date Analyzed:	07/23/2002
GC Column: <u>DB-624</u> 1	ID: <u>0.25</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(uL)	Soil Aliquot Vol	lume:(uL)
Number TICs found: <u>1</u>		CONCENTRATION UNIT (ug/L or ug/Kg)	

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 110-54-3	H-RAIL -	2.85	 	JN -

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000 MEIHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

		S073002EJ	me 18-20
ab Name: <u>STL Buffalo</u> Contract:		307300280	
ab Code: RRONY Case No.: SAS No.:	SDG No.: <u>7059</u>	_	
atrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A2781601	
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{G}	Lab File ID:	F4947.RR	_
evel: (low/med) <u>LOW</u>	Date Samp/Recv:	07/30/2002	08/01/2002
Moisture: not dec. <u>9.3</u> Heated Purge: Y	Date Analyzed:	08/02/2002	
C Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor	:1.00	
oil Extract Volume: (uL)	Soil Aliquot Vo	lume:	(uL)
	CONCENTRATION UNITS (ug/L or ug/Kg)		Q
67-64-1Acetone			3 U
71-43-2Benzene			<u> </u>
75-27-4Bromodichloromethane		11 U	•
75-25-2Bromoform	_	11 U	1
74-83-9Brommethane		11 U	
78-93-32-Butanone		11 U	
75-15-0Carbon Disulfide		11 U	
56-23-5Carbon Tetrachloride		11 ប្រ	
74-87-3Chloromethane		ט ט	
108-90-7Chlorobenzene		11 U	J-1
75-00-3Chloroethane		11 U	
110-82-7Cyclohexane		ט 11	
67-56-3Chloroform		11 U	
96-12-81,2-Dibromo-3-chloropropane		110 U	
124-48-1Dibromochloromethane	·	11 U	
75-71-8Dichlorodifluoromethane		11 U	
106-93-41,2-Dibromoethane		11 0	
95-50-11,2-Dichlorobenzene		11 0	
541-73-11,3-Dichlorobenzene		11 U	f
106-46-71,4-Dichlorobenzene	-	11 ប	i
75-34-31,1-Dichloroethane		11 U	
107-06-21,2-Dichloroethanc		11 U	1
75-35-41,1-Dichloroethene		11 U	-
156-59-2cis-1,2-Dichloroethene		190	
156-60-5trans-1,2-Dichloroethene		11 U	
78-87-51,2-Dichloropropane		11 U	I
10061-01-5cis-1,3-Dichloropropene		11 U	
10061-02-6trans-1,3-Dichloropropene		11 U	1
100-41-4Ethylbenzene		11 Ŭ	
591-78-62-Hexanone		11 U	
98-82-8Isopropylbenzene	· · · · · · · · · · · · · · · · · · ·	11 U	
79-20-9Methyl acetate		11 0	
75-09-2Methylene chloride		e B	
1634-04-4Methyl tert butyl ether	— ·—— ''	11 1	1

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Client No

Lab Name	: STL Buffal:		Contract:				£0 7300	2EJ06 18	3-20
Lab Code	: <u>RECNY</u> Ca	use No.:	SAS No.:	'	SDG No.:	<u>7059</u>			
Matrix:	(soil/water)	SOIL		Lá	ab Sampl	e ID:	A278160	1	_
Sample w	t/vol;	<u>5.00</u> (g/mL)	<u>G</u> _	L	ab File	ID:	<u>F4947.R</u>	<u>R</u>	
Level:	(low/med)	TOM		Da	ate Samp	/Recv:	07/30/2	002 08/0	1/2002
% Moistu	re: not dec.	9.3 Heate	ed Purge: Y	Da	ate Anal	yzed:	08/02/2	002	
3C Colum	n: <u>DB-624</u>	ID: <u>0.25</u> ((nm)	D	ilution	Factor:	1.0	<u>0</u>	-
Soil Ext	ract Volume:	(uL)		Sc	oil Aliq	Lev ton	ume:	(1	ıL)
				CONCE	ያቸው አጥተፖቈተ	INTERNA			•
	CAS NO	COMPOUND					UG/KG	0	
						· 			-
	108-10-1	4-Methyl-2-	pentanone				11	ប	
	108-87-2	Methylcyclo	hexane				11	Ü	
	100-42-5	Styrene				1	11	U	
	79-34-5	1,1,2,2-Tet	rachloroethane				11	Ū	_
	127-18-4	Tetrachloro	ethene				11	ប	
	1108-88-3	Toluene				i	11	עבים	
	120-82-1	1,2,4-Trich	ılorobenzen e				11	ប	-
	71-55-6	1,1,1-Trich	lloroethane				11	U	
	79-00-5	1,1,2-Trich	loroethane				11	U	
	76-13-1	1,1,2-Trich	loro-1,2,2-trif	uoroeth	ane		11	ប	-
	79-01-6	Trichlorcet	hene				44	15	
	75-69-4	Trichlorofl	uoromethane				11	ប	
	75-01-4	Vinyl chlor	ride]	11	ប	_
	1330-20-7	Total Xyler	<u> </u>			i	11	U	-
	103-65-1	n-Propylber	zene				11	ប	
	199-87-6	p-Cymene					11	Ū,	
	95-63-6	1,2,4-Trime	thylbenzene				11	U	-
	108-67-8	1,3,5-Trime	thylbenzene				11	ប	

104-51-8----n-Butylbenzene

135-98-8----sec-Butylbenzene

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

0000330

			S073002EJ06 18-20
Tab Name: <u>STL Buffalo</u> Co	ntract:		30730021006 18-20
Tab Code: RECNY Case No.:	SAS No.:	SDG No.: 7059	
atrix: (soil/water) SOIL		Lab Sample ID:	<u>A2781601</u>
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{G}	_	Lab File ID:	F4947.RR
evel: (low/med) <u>LOW</u>		Date Samp/Recv:	07/30/2002 08/01/200
" Moisture: not dec. <u>9.3</u>		Date Analyzed:	08/02/2002
C Column: <u>DB-624</u> ID: <u>0.25</u> (mm))	Dilution Factor:	1.00
oil Extract Volume: (uL)		Scil Aliquot Vol	ume: (uL)
umber TICs found: 3		CONCENTRATION UNIT	

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	LINIKNOWN	1.43	10	J
2.	LINIKNOWN	1.67	7	J
3. 110-54-3	HEXANE	3.22	- 16 -	DJN

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BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

Lab Name: SIL Buffalo Contract:	<u> </u>	S073102EJ01 8-10
Lab Code: RECNY Case No.: SAS No.:	SDG No.: 7059	. -
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A2781602
Sample wt/vol: $5.01 \text{ (g/mL) } \underline{G}$	Lab File ID:	F4948.RR
Level: (low/med) <u>LON</u>	Date Samp/Recv:	07/31/2002 08/01/20
Moisture: not dec. <u>13.3</u> Heated Purge: Y	Date Analyzed:	08/02/2002
3C Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume: (uL)	Soil Aliquot Vol	ume:(uL)
	ONCENTRATION UNITS: (ug/L or ug/Kg)	
67-64-1		12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U 12 U U U 12 U U U 12 U U U 12 U U U 12 U U U 12 U U U 12 U U U U

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Client No.

lab Name: STL Buffalo Contract:		S073102EJ01	8-10
TAD Maile: SIT PORTATO CONTRACC:		<u> </u>	<u> </u>
Lab Code: RECNY Case No.: SAS No.:	SDG No.: 7059		
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A2781602	
■ Sample wt/vol:	Lab File ID:	F4948.RR	
Level: (low/med) LOW	Date Samp/Recv:	<u>07/31/2002</u> 0	8/01/2002
% Moisture: not dec. <u>13.3</u> Heated Purge: <u>Y</u>	Date Analyzed:	08/02/2002	
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.00	
Soil Extract Volume: (uL)	Soil Aliquot Vol	ume:	(uL)
CAS NO. COMPOUND		<u>ug/kg</u> o	•
108-10-14-Methyl-2-pentanone		12 U	\neg
" (100-07-2Rectly1Cyclonexale		12 U	
100-42-5Styrene		12 U	
79-34-51,1,2,2-Tetrachloroethane		12 U	į
127-38-4Tetrachloroethene	,	12 U	1
120-82-11,2,4-Trichlorobenzene	i	12 U	1
71-55-61,1,1-Trichloroethane		12 U	
79-00-51,1,2-Trichloroethane		12 0	- !
76-13-11,1,2-Trichloro-1,2,2-triflu	omethane	12 U	l l
79-01-6Trichloroethene	3600		ſ
75-69-4Trichlorofluoromethane		12 U	
75-01-4Vinyl chloride	·	5 J	
1330-20-7Total Xylenes	,	12 U	-
103-65-1n-Propylbenzene		12 Ŭ	
99-87-6p-Cymene		12 U	
95-63-61,2,4-Trimethylbenzene		12 U	ł
108-67-8 1,3,5 Trimethylbenzene	<u> </u>	12 U	
104-51-6n-Butylbenzene		12 ע	
135-98-8sec-Butylbenzene		12 U	1

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

000023

[CAS NO.	Cor	apound Name	RT	Est.	Conc.	Q	-
Number TI	(Cs found:0			CONCENTRATION (ug/L or)				-
Soil Extr	ract Volume:	(uL)		Soil Alic	quot Vol	ume:		(uL)
GC Colum	n: <u>DB-624</u>	: <u>0.25</u> (mm)		Dilution	Factor:	1.00	<u>0</u>	_
% Moistu	re: not dec. <u>13.3</u>			Date Ana	lyzed:	08/02/2	002	-
Level:	(low/med) <u>LOW</u>			Date Sam	p/Recv:	07/31/2	002 0	08/01/ <u>00</u>
Sample wi	t/vol: <u>5.0</u>	1 (g/mL) <u>G</u>		Lab File	ID:	F4948.R	R	
Matrix:	(soil/water) <u>SOI</u> L		•	Lab Samp	le ID:	A278160	2	
Lab Code	: RECNY Case No	-:	SAS No.:	SDG No.:	<u>7059</u>			_
Lab Name	: <u>STL Buffalo</u>	Con	tract:	_	i	S073102E	J01 8	3-10

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

S073102EJ01	8-10	Dr.

•	Lab Name: STL Buffalo Contract:		S073102EJ01 8-10 DL
	Lab Code: RECNY Case No.: SAS No.:	SDG No.: 7059	
_	Matrix: (soil/water) SOIL	Lab Sample ID:	A2781602DL
_	Sample wt/vol: $\underline{4.05}$ (g/mL) \underline{G}	Lab File ID:	F4973 .RR
	Level: (low/med) MED	Date Samp/Recv:	07/31/2002 08/01/2002
-	% Moisture: not dec. <u>13.3</u> Heated Purge: N	Date Analyzed:	08/06/2002
	GC Column: $\underline{DB-624}$ \underline{TD} : $\underline{0.25}$ (mm)	Dilution Factor:	1.00
•	Soil Extract Volume: 10000 (uL)	Soil Aliquet Vol	ume: <u>100.00</u> (uL)

CONCENTRATI	ON UNITS	;
		_

CAS NO.	COMPOUND	(ug/L or ug/Kg)	<u>ug/kg</u>	Q
	Acetone		260	BDJ
	Benzene		1400	ប
	Bromodichloromethane		1400	U
	Bromoform		1400	U
	Bronomethane		1400	ប
	2-Butanone		1400	U
	Carbon Disulfide		1400	ប
	Carbon Tetrachloride		1400	ט
74-87-3	Chloromethane		1400	U
	Chlorobenzene		1400	U
	Chloroethane		1400	טן
	Cyclohexane		1400	Ū
67-66-3	Chloroform		1400	្រប
96-12-8	1,2-Dibromo-3-chloropropar	ie i	14000	Մ
124-48-1	Dibromochloromethane		1400	υ
75-71-8	Dichloredifluoremethane		1400	ļυ
106-93-4	1,2-Dibromoethane		1400	U
95-50-1	1,2-Dichlorobenzene		1400	ប
541-73-1	1,3-Dichlorobenzene		1400	U
	1,4-Dichlorobenzenc		1400	Ųΰ
75-34-3	1,1-Dichloroethane		1400	JU
107-06-2	1,2-Dichlorcethane	· <u> </u>	1400	ש
75-35-4	1,1-Dichloroethene	-	1 4 00	U
156 - 59-2	cis-1,2-Dichlorcethene		180	[DJ
	trans-1,2-Dichloroethene		1400	IJ
78-87-5	1,2-Dichloropropane		1400	U
	cis-1,3-Dichloropropene		1400	U
	trans-1,3-Dichloropropene		1400	U
	Ethylbenzene		1400	Ū
	2-Hexanone		1400	ĺυ
	Isopropylbenzene	·	1400	Ū
	Methyl acetate		1400	Ü
	Methylene chloride		720	EDJ
	Methyl tert butyl ether		1400	บั

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Client No

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		G022100	
Lab Name: STL Buffalo Contract:	 _	5073102	EJ01 8-10 D.
Lab Code: RECNY Case No.: SAS No.:	SDG No.: 7059		-
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	A2781602	<u>DL</u>
Sample wt/vol:4.05 (g/mL) <u>G</u>	Lab File ID:	F4973.RR	
Level: (low/med) MED	Date Samp/Recv:	<u>07/31/20</u>	02 08/01/20
% Moisture: not dec. <u>13.3</u> Heated Purge: N	Date Analyzed:	08/06/20	02
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor	:1. <u>00</u>	-
Soil Extract Volume: 10000 (uL)	Soil Aliquot V o	lume: <u>10</u>	0. <u>00</u> (uL)
	NCENTRATION UNITS UG/L or Ug/Kg)		Q
108-10-14-Methyl-2-pentanone 108-87-2Methylcyclohexane 100-42-5Styrene 79-34-51,1,2,2-Tetrachloroethane 127-18-4Tetrachloroethene 108-88-31,2,4-Trichloroethane 120-82-11,2,4-Trichloroethane 79-00-51,1,2-Trichloroethane 76-13-11,1,2-Trichloroethane 76-13-1Trichloroethene 75-69-4Trichloroethene 75-69-4	ethane	1400 1400 1400 1400 1400 180 1400 1400 1	ממממממממ המממממ הממממ הממממ המממ הממממ הממממ הממממ הממממ הממממ הממממ הממממ הממממ הממממ הממממ הממממ הממממ הממממ הממממ המממ הממממ המממ המממ המממ המממ המממ הממ הממ הממ ה
95-63-61,2,4-Trimethylbenzene		1400	ŭ

108-67-8-----1,3,5-Trimethylbenzene

104-51-8----n-Butylbenzene_

135-98-8----sec-Butylbenzene

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BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOMANDA DAY HABILITATION CENTER BERG - S - ASP 2000 METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

Client No

Lab Name: STL Buffalo	Contract:	S073102EJ01 8-10 DL

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. <u>13.3</u> Date Analyzed: <u>08/06/2002</u>

GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm) Dilution Factor: <u>1.00</u>

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CONCENTRATION UNITS:

Number TICs found: 3 (ug/L or ug/Kg) <u>UG/KG</u>

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

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

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Lab Name: STL Buffalo Contract:			
Lab Code: RECONY Case No.: SAS No.:	SDG No.: 7059	-	•
Matrix: (soil/water) <u>WATER</u>	lab Sample ID:	<u>A2705904</u>	
Sample wt/vol: 5.00 (g/mL) \underline{ML}	Lab File ID:	F4573.RR	
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	07/11/200	02 07/11/2002 •
% Moisture: not dec Heated Purge: Y	Date Analyzed:	07/20/200	02
OC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.00	•
Soil Extract Volume: (uL)	Soil Aliquot Vol	ume:	(uL)
	Oncentration units: (ug/L or ug/Kg)		Q
67-64-1Acetone		6	BU
/ -4.1	Į.	5	Ū
75-27-4Bromodichloromethane	[5	l ū l
75-25-2Bromoform			· υ •
74-83-9Bromomethane			·υ
78-93-32-Butanone			u
75-15-0Carbon Disulfide		5	Ŭ •
56-23-5Carbon Tetrachloride			Ū
74-87-3Chloromethane		5	l u
108-90-7Chlorobenzene			υ _
75-00-3Chloroethane			Ŭ •
110-82-7Cyclohexane		_	Ū l
67-66-3Chloroform			์ บี
67-66-3Chloroform 96-12-81,2-Dibromo-3-chloropropane	·		ŭ ! •
			ן ען
75-71-8Dichlorodifluoromethane			ן ט
106-93-41,2-Dibromoethane			י ו י
95-50-11,2-Dichlorobenzene	-		U
541-73-11,3-Dichlorobenzene		5	ប
106-46-71,4-Dichlombenzene		5	ַן וּען
75-34-31,1-Dichloroethane		5	טן יטן
107-06-21,2-Dichlorcethane	t	5	ן ט
75-35-41,1-Dichloroethene		5	ប
156-59-2cis-1,2-Dichloroethene	•	5	U •
156-60-5trans-1,2-Dichloroethene		5	[ប
78-87-51,2-Dichloropropane		5	[ប
10061-01-5cis-1,3-Dichloropropene	i	5	ט •
10061-02-6trans-1,3-Dichloropropene		5	ט
100-41-4Ethylbenzene		5	ļu
591-78-62-Hexanone		25	ַ יַּי
98-82-8IsopropyIbenzene		5	ប
79-20-9Methyl acetate		10	U]
75-09-2Methylene chloride		4	BJ
1634-04-4Methyl tert butyl ether		10	U - •

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

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Tab Name: STL Buffalo Contract:	_ 	IRLE	BLANK	
Lab Code: RECNY Case No.: SAS No.:	SDG No.: <u>7059</u>			
ktrix: (soil/water) <u>WATER</u>	Lab Sample ID:	A2705	904	
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID:	<u>F4573</u>	.RR	
evel: (low/med) <u>LOW</u>	Date Samp/Recv	: <u>07/11/</u>	<u>/2002_07/;</u>	11/2002
% Moisture: not dec Heated Purge: Y	Date Analyzed:	07/20/	/2002	
C Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Facto	r: <u> </u>	00	
oil Extract Volume: (uL)	Soil Aliquot V	olume: _	(1	ıL)
CASINO. COMPOUND	CONCENTRATION UNIT (ug/L or ug/Kg)		0	
108-10-14-Methyl-2-pentanone	·· 1			
108-87-2Methylcyclohexane	-	10	ט	
1100-42-5Styrene	1	5	ប	
79-34-51,1,2,2-Tetrachloroethane		5	ប	
127-18-4Tetrachloroethene		5	ប	
108-88-3Toluene		5	שו	
■ 120-82-11,2,4-Trichlorobenzene		5	υ	
71-55-61,1,1-Trichloroethane		5	บ	
79-00-51,1,2-Trichloroethane		5	U	
76-13-11,1,2-Trichloro-1,2,2-trifle	uoroethane	10	ប	
79-01-6Trichloroethene		5	U	
75-69-4Trichlorofluoromethane		5	Ü	
75-01-4Vinyl chloride		5	ט	
		5	บ	
103-65-1n-Propylbenzene		5	ט	
199-87-6p-Cymene	!	5	lū	
95-63-61,2,4-Trimethylbenzene		5	Ū	1
108-67-81,3,5-Trimethylbenzene		5	Ū	
104-51-8n-Butylbenzene		5	U	
135-98-8sec-Butylbenzene	·	5	U	1

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EFA ASPOO-METHOD 8260 VOLATTIES + STARS 000023 TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: <u>STL Buffalo</u>	Contract:		TRIP BLANK
Lab Code: RECNY Case No.:	_ SAS No.:	SDG No.: 7059	•
Matrix: (soil/water) <u>WATER</u>		Lab Sample ID:	A2705904
Sample wt/vol: 5.00 (g/mL) <u>ML</u>	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: <u>DB-624</u> ID: <u>0.25</u>	(mm)	Dilution Factor:	1.00
Soil Extract Volume: (uL)		Soil Aliquot Vol	ume: (uL)
Number TICs found: <u>1</u>		CONCENTRATION UNIT (ug/L or ug/Kg)	- ·

CAS NO.	Compound Name	RT	Est. Conc.	ō
1. 110-54-3	HEXANE	3.21		BJN

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EFA ASPOO-METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

000030

			W071102EJ04	FB
ab Name: <u>STL Buffal</u>	o Contract:			
Lab Code: <u>RECNY</u> C	ase No.: SAS No.:	SDG No.: 7059	-	
atrix: (soil/water)	WATER	Lab Sample ID:	A2705903	
Sample wt/vol:	<u>5.00</u> (g/πL) <u>M</u> L	Lab File ID:	F4572.RR	_
evel: (low/med)	<u>ICW</u>	Date Samp/Recv:	07/11/2002 0	7/11 /2 002
^ Moisture: not dec.	Heated Purge: Y	Date Analyzed:	07/20/2002	
3C Column: <u>DB-624</u>	ID: <u>0.25</u> (mm)	Dilution Factor	:1.00	
oil Extract Volume:	(uL)	Soil Aliquot Vo	lume:	(uL)
		CONCENTRATION UNITS	:	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L Q	
67.64.1	Rentere	- 	з "т	\neg
87-64-1	Acetone Benzene		5 U	1
71-43-2	Bromodichloromethane		5 0	
- 75-27-4	Branoform		ร์ บั	1
74 - 93 - 9	Bromoform Bromomethane		ร์ ซี	
79-03-3	2 Putanono		25 Ŭ	1
125 15 0	Carbon Dieulfido		້ 5 ບັ	1
75-15-0	Carron Materials		5 0	
56-23-5	Carbon Tetrachloride		5 U	
74-87-3	Chloromethane	·	รีซี	
108-90-7	Chlorobenzene	i	5 0	1
75-00-3	Chloroethane	· -	10 0	Į.
110-82-7	Cyclohexane		I	
	Chloroform		5 U 5 U	
96-12-8	1,2-Dibromo-3-chloropropane	 :		
124-48-1	Dibromochloromethane		I	
	Dichlorodifluoromethane		5 ប 5 ប	
	1,2-Dibromethane		- 1-	
95-50-1	1,2-Dichlorobenzene		5 บ 5 บ	ŀ
	1,3-Dichlorobenzene		รี ไซ	1
	1,4-Dichlorobenzene	 -	รี่บั	
	1,1-Dichloroethane		รี่บั	
	1,1-Dichloroethene		รี ไซ	1
			5 0	1
	cis-1,2-Dichloroethene		מ פ	
	trans-1,2-Dichloroethene		รี บ็	
	1,2-Dichloropropane	··	5 U	1
	cis-1,3-Dichloropropene		5 U	
10061-02-6-	trans-1,3-Dichloropropene	[5 U	
	Ethylbenzene		25 U	
	2-Hexanone		I	
98-82-8	Isopropylbenzene		5 U	-
79-20-9	Methyl acetate		10 U	
	Methylene chloride		3 EJ	
■ 11634-04-4	Methyl tert butyl ether		10 IU	

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BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

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Client No.

Lab Name: STE Bufinalo Contract:		W07110	2EJ04 FE	3
Lab Code: RECNY Case No.: SAS No.:				
		_		
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID:	<u>A270590</u>	<u>3</u>	_
Sample wt/vol:	Lab File ID:	<u>F4572.R</u>	R	_
Level: (low/mad) LOW	Date Samp/Recv	07/11/2	002 07/1	1/2002 _
% Moisture: not dec Heated Purge: Y	Date Analyzed:	07/20/2	002	
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor	r: <u> 1.0</u>	Q	•
Soil Extract Volume: (uL)	Soil Aliquet Ve	olume:	(t	њ)
	CONCENIRATION UNITS	· .		-
CAS NO. COMPOUND	(ug/L or ug/Kg)		0	
		321.	- 	_
108-10-14-Methyl-2-pentanone		25	ן ט	_
108-87-2Methylcyclohexane		10	1 -	
100-42-5Styrene		5	ប	
79-34-51,1,2,2-Tetrachloroethane		5	ַ ט	-
127-18-4Tetrachloroethene		5	U j	
108-88-3Toluene		5	ן ט	
120-82-11,2,4-Trichlorobenzene		5	U	_
71-55-61,1,1-Trichloroethane		5	ן ט	
79-00-51,1,2-Trichlorcethane		5	- υ(
76-13-11,1,2-Trichloro-1,2,2-trifly	uoroethane	10	ן טן	
79-01-6Trichlorcethene		5	U	
75-69-4Trichlorofluoromethane		5	U	
75-01-4Vinyl chloride		5	ן ט	
1330-20-7Total Xylenes		5	ט	
103-65-1n-Propylbenzene		5	ט	
99-87-6p-Cymene		5 5 5	ប	
95-63-61,2,4-Trimethylbenzene			ן ט	_
108-67-81.3.5-Trimethylbenzene	1	5	U	

108-67-8----1,3,5-Trimethylbenzene

104-51-8----n-Butylbenzene

135-98-8----sec-Butylbenzene

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANIA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS TENIATIVELY IDENTIFIED COMPOUNDS

000032

Client No.

- ∣ah Name:	STL Buffalo	Con	tract:			W0711021	EJ04	FB
	RECNY Case No			 SDG No ·	7059			
	soil/water) WATER			 Lab Samp		A270590	าว	
-	/vol: <u>5.0</u>		,	Lab File		-		
_	(low/med) <u>LOW</u>							
° Moistun	e: not dec	.		Date Anal	lyzed:	07/20/2	2002	
Column	: <u>DB-624</u> ID	: <u>0.25</u> (mm)		Dilution	Factor:	:1.0	<u>)0</u>	
oil Extra	act Volume:	(uL)		Soil Alia	quot Vol	lume:		_ (uL)
`umber TIC	Os found:1			OKENTRAT (ug/L or 1			-	
_	CAS NO.	Co	mpound Name	RT	Est.	Conc.	Q	
- [1. 110-54-3	HEXANE	- "-	3.21	" .	6	BJN	

HERGMANN ASSOCIATES, INC.

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000- METHOD 8270 SEMITVOLATILES ANALYSIS DATA SHEET

Client Mo.

Date Samp/Recv: 07/31/2002 08/01/200

Lab Name: <u>STL Buffalo</u>	Contract:	S073102EJ01 8-10
Lab Name: <u>STL Buffalo</u>	Contract:	S073102EJ01 8-10

Lab Code: RECNY Case No.: ____ SDG No.: 7059 Matrix: (soil/water) SOIL

Lab Sample ID: <u>A2781602</u>

Lab File ID: Z52632.RR Sample wt/vol: 30.47 (g/mL) GLevel: (low/med) LOW

% Moisture: 12.4 decanted: (Y/N) N Date Extracted: <u>08/05/2002</u>

Concentrated Extract Volume: 1000 (uL) Date Analyzed: <u>08/06/2002</u>

Injection Volume: 2.00(uL) Dilution Factor: ___25.00

GFC Cleanup: (Y/N) N pH: 8.1

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
	Benzaldehyde		9300	U
108-95-2			9300	U
111-44-4	Bis(2-chloroethyl) ether		9300	ប
	2-Chlorophenol		9300	υ
	2-Methylphenol		9300	Įυ
108-60-1	2,2'-Oxybis(1-Chloropropane)		9300	י טן
	Acetophenone		9300	ប
10 6 -44-5	4-Methylphenol		9300	U
621-64-7	N-Nitroso-Di-n-propylamine		9300	U
67-72-1	Hexachloroethane		9300	U
	Nitrobenzene		9300	U
78-59 -1	Isophorone		9300	U
88-75-5	2-Nitrophenol		9300	U
105-67-9	2,4-Dimethylphenol		9300	υ
1 11-91-1-	Bis(2-chloroethoxy) methane		9300	U
	2,4-Dichlorophenol		9300	U
	Naphthalene		9300	U
	4-Chloroaniline		9300	U
	Hexachlorobutadiene		9300	ט
	Caprolactam		9300	U
59-50-7	4-Chloro-3-methylphenol		9300	U
91-57-6	2-Methylnaphthalene		9300	ប
77- 47 -4	Hexachlorocyclopentadiene		9300	ប
	2,4,6-Trichlorophenol		9300	U
95-95-4	2,4,5-Trichlorophenol		9300	ប
92 -52-4	Biphenvl		9300	lσ
91-58-7	2-Chloronaphthalene		9300	ប
88-74-4	2-Nitroaniline		22000	ប
131-11-3	Dimethyl phthalate	-	9300	Ū
208-96-8	Acenaphthylene		9300	Ū
506-20-2	2,6-Dinitrotoluene		9300	บ
99-09-2-	·3-Nitroaniline		22000	Ü

006034

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000- METHOD 8270 SEMIVOLATILES ANALYSIS DATA SHEET

Client No.

		<u> </u>
		S073102EJ01 B-10
ab Name: <u>STL Buffalo</u>	Contract:	

Matrix: (soil/water) SOIL Lab Sample ID: A2781602

■ Sample wt/vol: <u>30.47</u> (g/mL) <u>G</u> Leb File ID: <u>Z52632.RR</u>

Level: (Iow/med) <u>10W</u> Bate Samp/Recv: <u>07/31/2002</u> <u>08/01/2002</u>

% 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 Cleamip: (Y/N) N pH: _8_1

CONCENTRATION UNITS: CAS NO. COMPOUND (vg/L or vg/Kg) <u>ug/kg</u> 0 83-32-9-----Acenaphthene 9300 U U J 51-28-5----2,4-Dinitrophenol 22000 100-02-7----4-Nitrophenol____ 22000 U 132-64-9-----Dibenzofuran 9300 U ひょ 121-14-2----2,4-Dinitrotoluene 9300 84-66-2----Diethyl phthalate 9300 U 7005-72-3----4-Chlorophenyl phenyl ether 9300 U 86-73-7-----Fluorene U 9300 100-01-6-----4-Nitroaniline U 22000 534-52-1----4,6-Dinitro-2-methylphenol___ U 22000 86-30-6----N-nitrosodiphenylamine 9300 U 101-55-3----4-Bromophenyl phenyl ether 9300 IJ 118-74-1-----Hexachlorobenzene U 9300 U 1912-24-9-...-Atrazine 9300 87-86-5 -----Pentachlorophenol U 22000 85-01-8-----Phenanthrene 590 J 120-12-7-----**A**nthracene 9300 560 86-74-8-----Carbazole 9300 U 84-74-2-----Di-n-butyl phthalate____ U 9300 206-44-0-----Fluoranthene ____ J 700 129-00-0-----Pyrene J 480 85-68-7-----Butyl benzyl phthalate 9300 IJ U 91-94-1----3,3'-Dichlorobenzidine 9300 56-55-3-----Benzo (a) anthracene 9300 U 218-01-9 Chrysene J 270 117-81-7-----Bis(2-ethylhexyl) phthalate 9300 U 117-84-0-----Di-n-octyl phthalate______ 9300 U 205-99-2-----Benzo (b) fluoranthene U 9300 207-08-9-----Benzo (k) fluoranthene 9300 U IJ 50-32-8-----Benzo (a) pyrene 9300 193-39-5-----Indeno (1, 2, 3-cd) pyrene Ų 9300 53-70-3-----Dibenzo (a,h) anthracene 9300 IJ

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000- METHOD 8270 SEMIVOLATILES ANALYSIS DATA SHEET

000035

Client Mo.

Lab Name: STL Buffalo Contract:	S073102EJ01 8-10
Lab Code: RECONY Case No.: SAS No.:	SDG No.: 7059
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID: ATT81602
Sample wt/vol: 30.47 (g/mL) G	Lab File ID: Z52632.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv: <u>07/31/2002</u> <u>08/01/2</u>
% Moisture: <u>12.4</u> decanted: (Y/N) <u>N</u>	Date Extracted: <u>08/05/2002</u>
Concentrated Extract Volume: 1000(uL)	Date Analyzed: 08/06/2002
Injection Volume: 2.00 (uL)	Dilution Factor:25.00
GPC Cleanup: (Y/N) <u>N</u> pH: <u>8.1</u>	
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> Q
191-24-2Benzo(ghi)perylene	9300 U

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASP 2000- METHOD 8270 SEMIVOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000036

Client No.

Lab Name: STL Buffalo Contract:		S073102EJ01 8-10
[ab Code: RECNY Case No.: SAS No.:	SDG No.: 7059	
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	<u>A2781602</u>
Sample wt/vol: <u>30.47</u> (g/mL) <u>G</u>	Lab File ID:	Z52632 RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	07/31/2002 08/01/200:
* Moisture: <u>12.4</u> decanted: (Y/N) <u>N</u>	Date Extracted:	08/05/2002
loncentrated Extract Volume: 1000 (uL)	Date Analyzed:	08/06/2002
Injection Volume:2.00 (uL)	Dilution Factor:	25.00
_PC Cleanup: (Y/N) N pH: 8.1		
Number TICs found: 1	CONCENTRATION UNIT (ug/L or ug/Kg)	

CAS NO.	Compound Name	RT	Est, Conc.	Q
1.	UNKNOWN	25.53	2100	Ĵ

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - 5 - ASPOO 8081 PESTICIDES ANALYSIS DATA SHEET

Client W

Tab Mamo. Off Duffalo Contract.		S073102EJ01 8-10
Lab Name: STL Buffalo Contract:		
Lab Code: RECONY Case No.: SAS No.:	SDG No.: 7059_	-
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	<u>A2781602</u>
Sample wt/vol: <u>30.80</u> (g/mL) <u>G</u>	Lab File ID:	RA19372,TX0
% Moisture: 12.4 decanted: (Y/N) N	Date Samp/Recv:	07/31/2002 08/01/:
Extraction: (SepF/Cont/Sonc/Soxh): <u>SONC</u>	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) <u>N</u>
	TRATION UNITS:	
CAS NO. COMPOUND (ug/L	orug/Kg) <u>UG/KG</u>	Q -
319-84-6alpha-BHC	8.9	U
319-84-6alpha-BHC 319-85-7beta-BHC 319-86-8delta-BHC	8.9	υ _
319-86-8delta-BHC	8.9	<u> </u>
58-89-9gamma-BHC (Lindane)	8.9	U
76-44-8Heptachlor	8.9	
309-00-2Aldrin	8.9	Ŭ -
309-00-2Aldrin 1024-57-3Heptachlor epoxide	8.9	ا ق
1959-98-8Endosulfan I	J 18	lσ
160=57-1Dielomn	I 18	(u) _
72-55-94,4'-DDE	18	שׁ וֹ דֹי
72-20-8Endrin	18	u
33213-65-9Endosulfan II	18	lu i
		U -
1031-07-8 Endosulfan Sulfate	18	បែ
		υ ,
72-43-5Methoxychlor	6.3	J 🗸 📒
53494-70-5Endrin ketone	[18	ן "ט"
7421-93-4Endrin aldehyde	36	ט
5103-71-9- alpha-C hlordane	44	ַ ט !
5103-74-2gamma-Chlordane	44	[ប]
8001-35-2Toxaphene	180	ប្រ

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASPOO 8082 - POLYCHLORINATED BIPHENYLS ANALYSIS DATA SHEET

Client No

Lab Name: <u>STL Buffalo</u>	Contract:		S073102EJ01 8-10
Lab Code: RECNY Case No.:			
Matrix: (soil/water) <u>SOIL</u>		Lab Sample ID:	A2781602
Sample wt/vol: <u>30,53</u> (g/mL) <u>G</u>	Lab File ID:	\$A05150.TX0
% Moisture: 12.4 decanted	: (Y/N) N	Date Samp/Recv:	07/31/2002 08/01/2003
Extraction: (SepF/Cont/Sonc/S	oxh): <u>SONC</u>	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 (leanup: (Y/N) N pH: _		Sulfur Cleamup:	(Y/N) <u>N</u>
CAS NO. COMPOUND		VIRATION UNITS: Lorug/Kg) <u>UG/KG</u>	Q
12674-11-2Aroclor 1010 11104-28-2Aroclor 122 11141-16-5Aroclor 123 53469-21-9Aroclor 124 12672-29-6Aroclor 124 11097-69-1Aroclor 125 11096-82-5Aroclor 126	1 2 2 3 4	90 90 90 90 90 90 90	บ บ บ บ บ บ
			

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - S - ASPOO - 8151 - HERBICIDES (3 CMPDS) ANALYSIS DATA SHEET

000038Д

Client F .

Lab Name: <u>STL Buffalo</u>	Contract:		S073102EJ01 2-4	
old ballato				
Lab Code: <u>RECNY</u>	SAS No.:	SDG No.: 7059		-
Matrix: (soil/water) <u>SOIL</u>		Lab Sample ID:	A2782104 _	
Sample wt/vol:30.37 (g/mL) G_		Lab File ID:	MA67018.TX0	_
% Moisture: 25.6 decanted: (Y/N)	Й	Date Samp/Recv:	07/30/2002 08/01	<u>/20</u>
Extraction: (SepF/Cont/Sonc/Soxh): <u>SON</u>	<u>ic</u>	Date Extracted:	08/09/2002	_
Concentrated Extract Volume: <u>10000</u> (wI	(ر	Date Analyzed:	08/13/2002	-
Injection Volume:1.00(uL)		Dilution Factor:	1.00	
GPC Clearup: (Y/N) N pH: _		Sulfur Cleanup:	(Y/N) <u>N</u>	-
CAS NO. COMPOUND	CONCENIRAT (ug/L or	TON UNITS: ug/Kg) <u>UC/KG</u>	Q	_
93-76-52,4,5-T 93-72-12,4,5-TP (Silvex) 94-75-72,4-D		23 420 -3 420 -3 1100	ט ט	_

BERGMANN ASSOCIATES, INC.

INORGANIC ANALYSIS DATA SHEET

Sample	NO.
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Contract:	NY01-449
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S073102EJ01 B-10

COD.	trac	t	;	N	ΥQ	ī.	- 4	4:)

_ab Code: STLBFLO

Case No.:

SAS No.:

SDG NO.: 7059

Matrix (soil/water): SOIL

Lab Sample ID: AD219810

_rvel (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	δ	м
7429-90-5	Aluminum	6630	1		P
7440-36-0	Antimony	0.60	ם	T M	P
7440-38-2	Arsenic	4.4	Τ		P
7440-39-3	Barium	45.2	Τ	N	P
7440-41-7	Bezyllium	0.39	B]	P
7440-43-9	Cadmium	0.03	Ü	Ī	P
7440-70-2	Calcium	10800	1	EJ	Þ
7440-47-3	Chromium	10.4	1	EJ	P
7440-48-4	Cobalt	6.3	T	[E J	l Þ
7440-50-8	Copper	20.3	Ţ	Ţ	P
7439-69-6	lron	15600	Π	夏ブ	P
7439-92-1	Lead	11.1	1	Ï	P
7439-95-4	Magnesium	3370	[P
7439-96-5	Manganese	198		N* J	P
7440-02-0	Nickel	17.3	1	E J	P
7440-09-7	Potassium	1060		E J	P
7782-49-2	Selenium	0.45	ס	Į.	₽
7440-22-4	Silver	0.06	В		P
7439-97-6	Mercury	0.005	ט	1	cv
7440-23-5	Sodium	56.2	В	1 :	P
7440-28-0	Thallium	0.44	ם	i -	P
7440-62-2	Vanadium	15.0	1	1	P
7440-66-6	Zinc	52.4	1	NE J	P

Color Before	: BROWN	Clarity Before:	N/A	Texture:	MOD
Color After:	YELLOW	Clarity After:	CLDY/F	Artifacts:	
Comments:					
<u> </u>					
_					

Bergmann Associates, Inc. Bergmann Assoc. - Gowanda Day Habilitation Center Wet Chemistry Analysis

000030

Client Sample No.

Date Samp/Recv: 07/30/2002 08/01/2002

Lab Name: <u>S</u>	NL Buffalo		Contract: _		S073002EJ06 18-20	_
Lab Code: R	RECNY	Case No.:	SAS No.: _		SDG No.: 7059	_
Matrix (soi	1/water): 50	T L		Lab Sample ID:	A2781601	

Units of Method Analyzed ... Measure Result С М Number Date Parameter Name Q 08/13/200. S.U. Leachable pH 9.459045

% Solids:

90.7

Comments:				_
	 <u> </u>	 	 	_
	<u> </u>	 	 	

Bergmann Associates, Inc. 000041 Bergmann Assoc. - Gowanda Day Habilitation Center Wet Chemistry Analysis

		-	·	5073102EJ0: SDG No.: 70	
Lab Sam	mple	- • то.		SDG No.: 70	<u>)59</u>
	ple	- π)•			
Data Sa			<u>A2</u>	781602	
Date Sa	mp,	/Recv:	07	/31/2002 08	3/01/200 <u>2</u>
of re Result	С	Q	м	Method Number	Analyzed Date
8.11	·			9045	08/13/2002
	of Result	of	of re Rosult C Q	of re Rosult C Q M	of Result C Q M Number

000042

Bergmann Associates, Inc. Bergmarm Assoc. - Gowanda Day Habilitation Center Wet Chemistry Analysis

Lab Name: <u>STL Buffalo</u> Lab Code: <u>RECNY</u> Case No	Contract.				L	3073102E701	2-4
Lab Code: <u>RECNY</u> Case No	.: SAS No.	:					
					2	DG No.: 70	59
Matrix (soil/water): <u>SOIL</u>		Lab Sam	ole 1	D: ,	<u>A27</u>	<u>82104</u>	_
% Solids:0.0		Date Sam	nç/R∈	ÇV: J	<u>07/</u> .	ع <u>20/2002</u> <u>08</u> وصعرته	/01/2002
Parameter Name	Units of Measure	Result	С	2 2	м	Method Number	Analyzed Date
Cyanide - Total	UG/KG	505 4000	U Z		7	9012	08/24/2002

Bergmann Associates, Inc. Bergmann Assoc. - Gowanda Day Habilitation Center Wet Chemistry Analysis

000032

						Client Sam	ple No.
Tab Name: <u>STL Buffalo</u>	Contract	= <u></u>		_		S073102EJ0	1 2-4
ab Code: RECNY Case No.:	SAS No.	:				SDG No.: 7	059
Matrix (soil/water): SOTL Solids: 0.0						782104 37-4 /20/2002 08	3/C1/20 <u>02</u>
Parameter Name	Units of Measure	Result	c	Q	м	Method Number	Analyzed Date
Cyanide - Total	UG/KG	10000	Ų			9012	08/24/2002
aments:							



STL Buffalo

10 Hazelwood Drive Suite 106 Amherst, NY 14228

Tel. 716 691 26DO Fax: 716 691 7991 www.stHing.com

ANALYTICAL REPORT

Job#: A02-8664, A02-8763

STL Project#: NYZA8896

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

> Brian J. Project Manager

> > 09/20/2002

This report contains III pages which are individually numbered.

SAMPLE SUMMARY

		SAMPLE)	RECEIVE	™
LAB SAMPLE	ID CLIENT SAMPLE ID	DATE	TIME	DATE	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			08/30/2002	
A2866414	W082802EJ-03	08/28/2002	14:20	08/30/2002	09:40
A2866412	W082802EJ-04			08/30/2002	
A2866415	W082802EJ-05			08/30/2002	
A2866413	W082802EJ-08			08/30/2002	
A2866411	W082802EJ-10			08/30/2002	
A2866416	W082802FJ-13			08/30/2002	
A2866410	W082802EJ-9			08/30/2002	
A2866418	W082902EJ-06			08/30/2002	
A2866401	W082902EJ-07D			08/30/2002	
A2866402	W082902EJ-11			08/30/2002	
A2866403	W082902EJ-12			08/30/2002	
A2866419	W082902EJ-14			08/30/2002	
A2866404	W082902EJ-FB			08/30/2002	
A2876301	W090402EJ-01D	09/04/2002	11:00	09/05/2002	13:40

Job#: <u>A02-8664</u>, <u>A02-8763</u>

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 BIPHENYUS	SW8463 8082
BERG - W - SW8463 8081 - TCL PESTICIDES	SW8463 8081
BERG - W - SW8463 8151 - HERBICTDES (3 CMPDS)	SW8463 8153
Aluminum - Total	SW8463 6010
Antimoxy - Total	SW8463 6010
Arsenic - Total	SW8463 6010
Barium - Total	SW8463 6010
Peryllium - 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.

NON-CONFORMANCE SUMMARY

Job#: <u>AD2-8664, A02-8763</u>

STL Project#: NYZA8896

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 AZB0849101 and the Matrix Spike Blank Duplicate AZB0849102 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 <u>Chemistry</u> Pata

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.

Date: 09/20/2002 Time: 15:31:13

Dilution Log W/Code Information For Project NY2A8896, Task 2, SDG 8664

Page:

Rept: AN1266

Client Sample ID	<u>Lab Sample ID</u>	Parameter (Inorganic)/Method (Organic)	Ditution	Code		
W082902EJ-070DL	A28664010L	8260/SML	2.00	800		
W082902EJ-110L	A286640ZDL	8260/5ML	40.00	008	00000	_
W082902EJ-12DL	A28664030L	8260/5ML	50.00	800	000006	-
W082802EJ-13DL	A28664160L	8260/5ML	2.00	800		
W082902EJ-060L	A28664180L	8260/5ML	4,00	008		
W09040ZEJ-01DDL	A2876301DL	B260/5ML	4.00	002		-

Ditution Code Definition:

- 002 sample matrix effects
- 003 excessive feating
- 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 semple matrix resulted in method non-compliance for Surrogate
- 007 nature of the TCLP matrix
- 008 high concentration of target analyte(s)
- 009 sample turbidity
- 010 sample color
- 011 insufficient volume for lower dilution
- 012 sample viscosity
- 013 other

ORGANIC DATA QUALIFIERS

ND or U. Indicates compound was analyzed for, but not detected

- Undertakes an estimated value. This flag is used either when estimating a concentration for tentahively identified compounds where a 1.1 response is assumed, or when the load indicates the presence of a compound that mosts the identification or tena 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.
- This flag identifies all compounds identified in an analysis at the secondary dilution factor.
- M. Indicates presumptive evidence of a compound. This flag is used only for fentatively identified compounds where the room fication is based on the Mass Spectral library search. It is applied to all TIC results.
- P This flag is used for a pesticide/Arcolor 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 ¹⁷⁹.
- A This flag indicates that a GC is a suspected aldol-condensation product.
- Indicates obelution
- Indicates, analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or Unindicates element was analyzed for, but not detected Report with the detection limit value.

- U of B Indicates a value greater than or equal to the instrument detection limit, but less than the geant-fation limit
- Indicates spike sample recovery is not within the quality control limits
- Indicates the obst digestion spike recovery is not within the quality control brints.
- S indicates value determined by the Method of Standard Addition.
- Indicates applicate injection results exceeded quality control. This
- Post digestion spike for flamace AA lenalistic cut of quality control critis (PE 195%) while sample, besorbange is less than 50% of spike absorbance.
- Employers a value estimated or not reported due to the presence of interferences.
- Holding and street and street in the control of the control of the considered an estimate
- educates: analysis is not within the quoties connectioneds.
- Indicates the correlation coefficient for the Method of Standard Abdition is loss than 3,995.

800000

Sample Data Package

STL Buffalo

Sample Reporting Sample Units Value Limit Value Limit Value Limit Value Limit Value Limit Value Limit Value Limit Value Limit Value Limit ND 5.0 10 10 10 10 10 10 10 10 10 10 10 10 10	Reporting Limit 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Sample Value No No No No No No No No No No No No No	Reporting Limit 255 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	Sample Value	S. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.
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Rept: ANG326

Bergmann Assoc. - Gowanda Day Habilitation Center SWEAGS DELIVERABLES BERG -W: METH 8260 · ICL VOLATILE ORGANICS + STARS

Dete: 09/20/2002 Time: 15:31:43

STL Buffalo

Client ID Job No Lab ID Sample Date		4082802EJ-02 A02-8664 08/28/2002	A2866417	4082802EJ-03 A02-8664 08/28/2002	A2866414	M082802E.J-04 A02-8664 06/28/2002	A2866412	W082802EJ-05 A02-8664 08/28/2002	A2866415
Analyte	Units	Semple	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample	Reporting Limit
1,1,2-Trichloro-1,2,2-trif(uer UG/L	1/90/1	무	0.0	₩ 2.0	6. N	2	5.0	OK.	3.0
Trichlorofluoromethane	1/90	윤	20.0	2 2	9.5	9	5.0	2 05	0.0
Vinyl chloride Total Xylenes	797 1297	무 문	0,0 2,0	3.1 5	5,0 5	29	6.2 0.2	2 2	0.5
n. Propy!benzene	1/30	문	5,0	2	3,0	9	2.0	€	20.5
p-Cymene	1/9n	오	5.0	9	5.0	9	5.0	æ	2.0
1,2,4.Trimethylbenzene	7/50	오	5.D	2	2.0	2	5.0	2	5.0
1, 3, 5. Trimethylbenzene	1/50	テ	5.0	2	5.0	2	5.0	물	2.0
n-Butylbenzene	7/50	2	0.0	2	2.0	2	5,0	ş	2.0
sec-Butylbenzene	UG/L	ND	5.0	ON .	5.0	Q.	5.0	ΝĎ	5.0
Chlorobenzene-05	14	8	20-200	86	20-200	R6	50-200	8	50-200
1,4-Difluorobenzene	**	8	\$0-200	25	50.200	£	20.200	86	50-200
1,4-Dichlarabenzene-D4	**	æ	20-200	56	20-200	ĸ	50.200	32	20-500
Foluene-03	**	101	77-122	100	77-122	8:	77-122	101	77.122
p-Bromofluarabenzene	**	\$	73-120	8.	73-120	3E	73-120	81	73-120
1, 2-Dichloroethane-04	31	<u>8</u>	76-136	100	76-136	5	76-136	100	76-136

Rept: ANO326

Bergmann Assoc. - Gowonda Day Habilitation Center SWB463 DELIVERABLES BERG -w- METH 8260 - ICL VOLATILE DRGANICS + STARS

Date: 09/20/2002 Time: 15:31:43 NA = Not Applicable ND = Mot Detected

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A2866416	Reporting Limit			. w . w . w . w . w . w . o . o . o . o
408280264-13 A02-8664 08/28/2002	Sample Value	- 999999999	**************************************	
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Litert 10 Job No Lab (0 Sample Date	Analyte	Actions Benzene Browdicklormethene Brownoform Prowomethene 2-Butenone Carbon Disulfide Carbon Tetrachloride	Chlorobenzene Calcroethane Cyclohexane Cyclohexane Chloroform 1,2-0ibromo-3-chioropropane 0)ibromochloromethane 1,2-0ibromochloromethane 1,2-0ibromochloromethane 1,4-0ichlorobenzene 1,4-0ichlorobenzene 1,4-0ichlorobenzene 1,1-0ichloropenee 1,2-0ichloroethane	Methyl tert butyl ether 4-Methyl tert butyl ether Methylcyclohexane Styrene 1,1,2,2-Tetrachloroethane Toluene 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,1-Trichloroethane

Rept: AN0326

Bergmann Assoc. - Gowanda Day Habilitation Center SWB463 DELIVERABLES BERG -U- METH B260 - TCL VOLATILE ORGANICS + STARS

Client ID Job No Lab ID Sample Date		VGB2B02EJ-08 A02-8664 08/28/2002	A2866413	WOB2802EJ-10 A02-8664 08/28/2002	A2866411	M082802EJ-13 A02-8664 08/28/2002	A2866416	MO82802EJ-130L A02-8664 08/28/2002	A28664160L
Analyte	Units	Semple Semple	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	elone Semple	Reporting Limit
1,1,2-Trichtoro-1,2,2-triftuar UG/L	, 1/9n (10/1	ND 1.4.1	D. 0.	MD 2.6 J	ν. υ. ο ο	350 250 £	0.00	NO 250 25	1 1
Trichlorofluoromethane Vinyl chloride	1/90	.	00	99	 		សស	QN SN	22
Total Xylenes	1/9n	9	£.	2	£.	· 오 :	₹	l-€́	ន្ត
n · Propy (benzene p · Cymene	1/9n ne/r	22	v. v.	2 <u>2</u>	0,0	22		ON ON	55
1,2,4.Trimethylbenzena	7/9n	2 9	9,0	9 4	0.0	99	9,0	di di	2 \$
1.5,5~171metnytoenzene n-Butylbenzene	1/90	2 9	90.0	2 2	9.00	2 9	9.0	2	2₽
sec-Butylbenzene	UB/L	Ş	9.0	£	5.0	Q.	5.0	ON /	9
Chlorobenzene-D5	72	82	50-200	106	20-500	66	50-200	200	50-200
1,4-Difluarobenzene	74	44	20-200	105	20-200	96	20-200	88	20-200
1,4-Dichlarobenzene-04	3 4	46	20-500	1 0	20-500	96	20-200	8	50-200
Toluene-D8	*	101	7-12	\$3	77-122	55	77-122	104	77-122
p-Bramofluarobenzene	×		71-120	22	73-120	B6	73-120	8	75-120
1,2-Dichlorocthane-04	×	\$	76-136	91	76-136	400	76-136	26	76-136

Rept: AMO326

Bergmann Assoc. - Gowanda Day Habilitation Center SWB463 DELIVERABLES BERG -W- NETH 9260 - TCL VOLATILE ORGANICS + STARS

Date: 09/20/2002 Time: 15:31:43

STL Buffalo

J-07D A2866401 02	Reporting Limit		2	2.0	5.0	5.0	F	2	2	2.0	2.0	2 "	2,5	2 5								7		D. C.	0.0			,	2.5	2.0	2.0	5	5.0	0.0	0.5	5.0	פנ	2.0	5.0	5.0	5.0		2		Ç.	•
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Client IO Job No Sample Date	Analyte		Acetore	Jerzene Jerzene	Bronodichloromethane	Brompform	Brondagethane	2. But spoone	Parkon Dien: 41de	Cachen Tetrachionide	the post residence in	chich des page	riviorethere	Chelohexane	Chloroform	1.2-Dibromo-3-chloropropane	Dibromochloromethane	Dichlorodifluoromethane	1.2.Dibeomosthans	1, Z. Diologopopopopopopopopopopopopopopopopopop	1 3. Bight probented	1. V. Dichlorahanasa		1, 1-Uichtoroethane	. C-Ulchiaractmene	i, i-Dichteratione cis-1 2-Dichteratione	trans-1 2-Dich prostance	1 2-Dichingoropare	cie-1,3-Dichloropropera	trans-1, 3-Dichloropropere	Etnylbenzene	2-Hekanore	Isopropyloenzene	Methyl acetate	Methylene chloride	Methyl tert butyl ether	4-Methyl-2-pentanone	Methylcyclohexane	Styrene	1,1,2,2-Tetrochloroethane	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1, 1, 1-Trichloroethane	1,1,2-Trichloroethane	

Rept: AN0326

Bergmawn Assoc. • Gowanda Day Habilitation Center SVB463 DELIVERABLES BERG -v- METH B260 • ICL VOLATILE ORGANICS + STARS

Date: 09/20/2002 Time: 15:31:43

000014

Reporting Limit 50-260 50-260 77-122 73-126 76-136 A2866401 M082902E1-070 A02-8664 09/29/2002 Sample Value 555588 Reppirting L∮mlt A28664100L 50-200 50-200 50-200 77-122 73-120 75-136 22222222222 NO82902EJ-060L A02-8664 08/29/2002 Sample Value **85825**58 222222222 Reporting Limit 50-200 50-200 77-122 75-120 75-136 A2866418 W082902EJ-06 A02-8664 08/29/2002 3,555555555 2 Sample Value ******* Reporting Limit 50-200 50-200 77-122 73-120 76-136 A2866410 40B2802EJ-9 AD2-8664 08/28/2002 6455555555 2. Sample Value និទីខិន្ទន 7/90 7/90 7/90 7/90 7/90 7/90 7/90 46/k UG/k 1,1,2-Trichloro-1,2,2-triftuar Trichloroethene Lab 10 Trichlorofluoromethane 1,2,4.Trimethylbenzene 1,5,5.Trimethylbenzene 1,4-Difluorobenzene 1,4-Dichlorobenzene-D4 -- IS/SURROGATE(S) p-Bromofluorobenzene 1,2-Dichloroethane-D4 Anaiyte sec-Butylbenzene Chlorobenzene-DS n-Propylibenzene Vimyl chloride n-Butylbenzene Fotal Xylenes Job No Sample Date Toluene-D8 Client 1D p. Cymene

Rept: AN0326

Bergmenn Assoc. - Gowende Day Habilitation Canter SW8463 DELIVÉRABLES BERG -W. METH 8260 - TCL VOLATILE ORGANICS + STARS

Date: 09/20/2002 Time: 15:31:43 STL Buffalo

a Not Applicable ND = Not Detected

STL Buffalo

Units Sample Reporting Sample Limit Value Limit Limit Value Limit Value Limit Value Limit	Units Sample Reportion Units Value Utility Units Value Utility Units Uni		Reporting Limit 1 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0	Sample Value	Reporting Limit Limit 200 200 200 200 200 200 200 2	Serrote Value NO NO NO NO NO NO NO NO NO NO NO NO NO	Report and a separate
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USA NO O O O O O O O O	105/1 ND 105/1	글 글 글 글 글 글 로 호 호 로 호 호 로 로 로 로 호 			500 00 00 00 00 00 00 00 00 00 00 00 00	9 <u>9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 </u>	
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UG/L	100/1 ND ND ND ND ND ND ND ND ND ND ND ND ND	<u></u>	ក្នុង ស្តេសសសសសសស ក្នុងក្នុង ប្រុស្ធសសសសស 		500 00 00 00 00 00 00 00 00 00 00 00 00	999999999999	
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The control of the co	DECT NO NO NO NO NO NO NO NO NO NO NO NO NO	<u>—</u>	ស ស្រុសស្សសសសសសស ទៀបបំពុស្សសសសសសស	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5000 500 500 500 500 500 500 500 500 50	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
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Chloroethene UG/L NO 10 ND 5.0 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 10 ND 5.0 ND 5.0 ND 10 ND 5.0 ND 5.0 ND 5.0 ND 5.0 ND 5.0 ND 5.0 ND 5.0 ND 5.0 ND 6.10 ND 6	chloroethene UG/L ND / propane UG/L ND / NO / NO / NO / NO / NO / NO / NO /	₿:	٠.٠	5 nns7		¥	2,0
therms	propane UG/L ND / ND / ND / ND / ND / ND / ND / ND	2	0.0	2	2007	28	5.0
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Sene MD/L ND 10 ND <th< td=""><td>2ene 105/L ND / ND / ND / ND / ND / ND / ND / ND</td><td>Q</td><td>2.0</td><td>9</td><td>500</td><td>9</td><td>5.0</td></th<>	2ene 105/L ND / ND / ND / ND / ND / ND / ND / ND	Q	2.0	9	500	9	5.0
DG/L ND 10 ND 5.0 UG/L ND 10 ND 5.0 UG/L ND 10 ND 5.0 UG/L ND 10 ND 5.0 UG/L ND 10 ND 5.0 UG/L ND 10 ND 5.0 UG/L ND 10 ND 5.0 UG/L ND 10 ND 5.0 UG/L ND 10 ND 5.0 UG/L ND 10 ND 5.0	UG/L NO / NO / NO / NO / NO / NO / NO / NO	-	5.0	2	500	9	2.0
Her UG/L NO 10 NO 5.0 Her UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0	UG/L NO / UG/L NO / UG/L NO / UG/L NO / UG/L NO / UG/L NO / UG/L NO /	₽	₽	9	7007	£	₽
her UG/L NO 10 ND 5.0 ND 5.0 ND 10 ND 5.0 ND 5.0 ND 10	UG/L NO / 100 / 10	읖	2.0	9	200	9	2.0
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ther UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0 UG/L NO 10 NO 5.0	NG/L NG UG/L NG UG/L NG UG/L NG	9	5.0	140 803	200	£	2.0
UG/L ND 20 ND 10 ND 10 ND 10 ND 10 ND 10 ND 5.0 ND 5.0 ND 10	ON, 1/50 ON 1/50 ON 1/50	9	2.0	9.	먒	9	٥.٠
905/L NO 10 ND 5.0 5.0 UG/L NO 10 ND 5.0 UG/L NO 10 ND 5.0 UG/L NO 10 ND 5.0 UG/L NO 10 ND 5.0 UG/L NO 10 ND 5.0 UG/L NO 10 ND 5.0 UG/L NO 10 ND 5.0	ON 1/50	문	2	€.		9	2
UG/L NO 10 ND 5.0 UG/L NO 10 ND 5.0 UG/L NO 10 ND 5.0 UG/L NO 10 ND 5.0	0W 1/50	웃	5.0	₹.	500	£	5.0
roethane UG/L / NO 10 NO 5.0 UG/L / NO 10 NO 5.0 UG/L / NO 10 NO 5.0 UG/L / NO 10 NO 5.0		9	2.0	9	500	£	5.0
0.5 ON OL ON 1/500	· Tetrachloroethane UG/L / NO	Ç.	2.0	글 ~.	500		5.0
0.5 ON 10 NO 2.0	01/50n	9	2.0	≘	5002	ſO	_
	ON / 1/50	9	2.0	<u>≘</u>	200	2	
/ NO 10 NO 200	richlorobenzene (UG/L / NO	<u>-</u>	5.0	2	500		<u>ء</u> ي
/ 1/5n	ON / 7/5n	ş	2.0	9	500	9	
UG/L NO 10 ND 5.0	חפ/ר ווס	9	2.0	2	200		

Rept: AND326

Bergmenn Assoc. - Gowanda Day Habilitation Center \$48463 OELIVERABLES BERG -W- METH 8260 - TCL VOLATILE ORGANICS + STARS

Date: 09/20/2002 Time: 15:31:43

000016

= Not Detected

= Not Applicable

Client ID Job No Sample Date		NO82902E1-07001 A02-8664 08/29/2002		12866403bi	. W082902EJ-11 A02-8664 08/29/2002	A2866402	4082902EJ-11DL AOZ-8664 08/29/2002	A2866402DL	V082902EJ-12 A02-8664 08/29/2002	A2866403
Analyte	Units	Sample Value	Rep.	Reporting Lymit	Sample	Reporting Limit	enjek Semple	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor U5/L Trichloroethene	1/9n 1/9n	85 52 52		55	ND 23.00 4500 €	5.0	0 0052 ON		9600 2680E	5.0
Trichlorafluoromethane Vinyl chloride	1/8n	40 3.3 0.1	****	2	₽™	5.0 0.8	59	902	G# 21	0.0
Total Xylenes	7/90	2 5	٠ <u></u>	25	99	ž.	99	000	99	Ð
	1/90	9		2	2 9	5.0	9	200	2 9	20
-	V6/1			₽:	9	5.0	2	002	9	2.0
1, 3, 5 · Trinethylbenzene n-Butylbenzene	79	2 2		2 2	9 9		₹	200	2 5	0.0
	1/80	NO /		: ₽	9	5.0	.	200	9	0.0
Chiarabenzene-D5	247	88	ı.	50-200	105	20-200	£6 /	50-200	106	50-200
1,4-Difluorobenzene	×	04/		0-200	106	50-200	. 93	20-200	201	50-200
1,4-Dichtorobenzene-04	×t	68 \	•	50-200	\$	20-500	50	\$0.200	100	50-200
Toluene-D8	*	/ 101	~	7-122	101	77-122	- E	77-122	ğ	77-122
p-Bromofluorobenzene	×	7.	~	73-120	8%	021-57	52	55.120	\$	73-120
1,2-Dichloroethane-D4	≥4	26	Γ-	76-136	66	76-136	8	76·136	2.6	76-136

Rept: ANG326

Bergmann Assoc. - Gowanda Day Habilitation Center SV8463 DELIVERABLES BERG - W- METH 8260 - IEL VOLATILE ORGANICS + STARS

Date: 09/20/2002 Time: 15:31:43

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Client 10 Job No Lab ID Sample Date	-	VD82902EJ-120L AD2-8664 08/29/2002	A28654030£	40829026J-14 A02-8664 08/29/2002	A2366419	4082902E J· FB A02-8664 08/29/2002	A2866404	4090402EJ-010 A02-5763 09704/2002	A2876301
Апајуте	Units	Sample	Reporting Limit	Sample Value	Reparting Limit	Sample Value	Reporting Limit	Sample	Reporting Limit
Acetone	V6/1		/1200	2	52	 	K	NO 5-2 E	K
Behzene	1/9/	2	- 520 	웆	5.0	2	5.0		5.5
Bramadichtaramethane	1/9/	2		2	5.0	2	5.0	윺	0,5
Bromofarm	1/5/1	2	520	2	5.0	2	5.0	2	2.0
Gromomethane	1/90	ş	56	2	2	È	10	모	2
Z-Butanone	1/9/1	2 :	8	2 !	<u>۽</u> ۽	숲	2	믚	10
Carbon Discition	13	2 9	S K	2 9	0.0	2 9	o, s	문 :	o c
Chlorogethane	1/90	2 5	3.5	2 5	9.5		2.5	2 9	2.5
Chlorobenzene	DG/L	: ♀	- R	₽	2.0	2	, P.	2 2	2 5
Chloroethane	1/90	9	2005	2	2	2	2	9	2
Cyclohexane	N6/L	¥	250	⊋	5.0	2	5.0	皇	5.0
Chloroform 1 1 0 theres 3 thereses	7/90	<u>.</u>	200	9 9	0.0	2 (S.	5.0
L, c - V I Dr Onto - J - Ch L Dr Opropane In i be ontoch L occuret have	7 7	29	P. 5	2 5	>.v	2 9		모 :	 5.1
Dichlocodifluoromethane	1 2 2 2		3 £	2 5	9.0	2 5	- C	⊋ ⊊	9.0
1,2-Dibromoethane	1/90	2	និ	₽ ₽	0.5	2	9 0	2 5	9.0
1,2-Dichtorobenzene	7/90	2	220	£	5.0	2	5.0	9	
1,3-Jichlorobenzene	1/90	g.	ž	£	5.0	2	5.0	Ç	9,0
1,4.Jichlorobenzene	1/90	~ .	- - - - - - - - - - - - - - - - - - -	Q	5.0	2	5.0	유	5.0
1,1-Dichtoroethane	7,90	- -	S 1	글 !	2,0	呈	0.0	₽	5.0
1,2-Dichtoroethane	7/90	 	3	2 9). 0.0	2:	ا ا	9 9	5.0 1.0
I,I-Dichtoroethene	7/0/1	2000		2 -	> °	2 :		2	2.0
trans-1.2-Dichiproethere	16/1	2	3 2	7 9	0.0	2 5		1000	0.0
1.2-Dichloropropere	UG/L	- 2	និ		5.0	2 5			0.0
cis-1,3-Dichloropropere	7/50	 Q	250	Ŷ	5.0	물	5.0	9	2.5
trans-1,3-Dichloropropene	7/20	Q.	230	£	5.0	9	5.0	ş	2.0
Ethylbenzene	7/90	운	250	9 !	9.0	2	₽.₽	9	5.0
2-Hexanone	7/90	- -	200	2 !	a ;	2	D	2	9
Lsopropy Denzene	1,00	29	20 20	2 9		2 :	0.0	⊋ :	0.0
methyl acetata	7	140,021	5 5	2 5	9.0	200		} } } }	D.
Mathyl test butyl ether	12	. 5	3 %	2 9	9.0		9.4	* * §	
4-Methyl-2-pentanone	1/90	9	3.5	ġ	- C	2 2	?=	3 5	2.5
Methylcyclohexane	7/9n	È	33	윺	5.0	2	5.0	9	2 -
Styrene	1/9n	2	250	€	3.0		5.0	=======================================	2.0
1,1,2,2-Tetrachloroethane	1/9/I	<u>-</u>	2 <u>2</u>	2	5,0	오	2,0	2	
Tetrachloroethene	7/9/1	€.	S i	9 !	e i	모 :	0,1	_	
Toluene	78	 2	28	€ €	9.0	2 9	0.0	1	
1,2,4*frichioropenzene	1,00	2 9	25	2 5	9.0		0,0	2 5	
1.1.2-Trichloroethane	ne/L	9	លីវិ	?	0.5	2	0.0	9	0
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Bergmann Assoc. · Gowanda Day Habilitation Center SuB463 DELIVERABLES BERG -u- METH 8260 · TCL VOLATILE ORGANICS · STARS

Luare: 09,207,2002

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A2876301	Reporting Limit	0.0	2.0	5.0 5.	2.0	5.0	D. 0	 	2.0	50-200	50-200	50-200	77-122	73-120	76-136
4090402EJ-01D A02-8763 09/04/2002	Sample Value	32.0 400 E	-	2.4	2	9	<u>s</u>	2 9	ON.	88	\$	82	102	45	95
A2866404	Reparting Limit	5.0	0.0		2.0	2.0	0.0	90	5.0	50-200	50-200	20-500	77-122	73-120	76-136
MOB2902EJ-FB A02-8664 08/29/2002	andmes aldmes	29	9 9 9	2 2	£	윤	9 9	9 9	£	63	<i>3</i> 5	102	105	26	91
A2866419	Reporting Limit	5.0	0.0	 	2.0	5.0	0.0	9.00	5.0	20-500	50-2dd	50-200	77-122	73-120	76-136
MO82902EJ-14 A02-8664 D8/29/2002	Sample Value	#0 180	물.		£	윤 (2 £	2	9	66	8 2	66	100	. 26	100
A286640301.	Reporting /Limit	022	00 K	38	22	00.5	20 X	383	220	002-05	20-500	50-200	77-122	73-120	76-136
u082902EJ-12DL A02-8664 08/29/2002	Sampte Value	Q 0096	95	2	2	2 !	2 5	2	MP	18/	. 38	23	150	63	88
	Units	UG/L UG/L	1/5/L	7/9n	1/9n	1/9n	790	UG/L	UG/L	7.	×	*	st:	×	54
Client 10 Job No Lab ID Sample Date	Analyte	1,1,2-Trichloro-1,2,2-trifluor UG/L Trichloraethene	Inichlorofluoromethane	Total Xylenes	n-Propyl benzene	p-Cymene	1,6,4-irlmethytbenzene 1 3 5-Irimethytbenzene	n-Butylbenzene	gec-Butylbenzene _ts/subspectors.	Chi probenzene-05	1,4-Difluorobenzene	1,4-8ichlorobenzene-04	Toluene-08	p-Bromofluorobenzene	1,2-Dichloroethane-D4

Rept: ANOS26

Bergmann Assoc. - Gowanda Day Mabilitation Center SMB463 DELIVERABLES BERG -W- METH 8260 - TCL VOLATILE ORGANICS + STARS

Dete: 09/20/2002 Time: 15:31:43 STL Buffato

STL Buffato

NA = Not Applicable ND = Not Detected

Analyte Uni	/60	A02-8763 09/04/2002	A28763010L						
	S Unita N	Sample Value	Reporting Limit	Sample	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone U6/L	 	73 BD	001			A.	 -	¥¥	
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as a	. بد	₽!	20	<u>.</u>		¥ :		₹	_
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ŧ		9	25	¥.		ď.		NA.	
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c.s-1,5-Urchidropropene trans-1,5-Urchidropropene	_	2 5	3 8	4 77		Ŧ #		4 :	
	_	2	2 2	¥ 3		4			
	_	ş	9	¥		ş		4	
tsopropytbenzene UG/L	_	 ₽	20	NA		¥		N.A.	
	_	9	2	¥.		Ž.		¥	
		. Lag 90.	2.5	¥:		¥ :		4.2	_
, far		⊋ 9	25.5	¥:		S :		4	_
4-Rethyl-Z-pentanone US/L		2 9	3 5	X X				¥ :	
Caronado Constante de Caronado		2 9	3 5	£ 3		=		£ :	
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	· · ·	9	8	¥		ž		*	į
Totuene 166/L	_	2	20	≨		ž	_	¥	0
•	_	9	2	≨		¥		ž	0
	_	2	ୟ	≨.		ž		¥	0
1,1,2-Trichloroethane UG/L		2	- ج	ź	_	¥	_	\$	0

Rept: AND326

Bergmann Assoc. - Gowanda Day Habilitation Center Swa463 DELIVERABLES
BERG -V- METH 8260 - TCL VOLATILE ORGANICS + STRRS

Date: 09/20/2002 Time: 15:31:43

999920

Reporting Limit Sample Value \$\$\$\$\$\$\$\$\$\$\$\$ **** Reporting Limit Sampte Vetue 555555<u>55555</u> **\$\$**\$\$\$\$ Reporting Limit Sample Vatue ******* ££££££ Reporting Limit A23763010L 50-200 50-200 77-122 75-136 22222222222 4090402EJ-0100L A02-8763 09/04/2002 Sample Value 8885282 1,1,2.Trichloro-1,2,2.trifluar UG/L frichloroethene UG/L Trichlorofluaromethane UG/L Vinyl chloride UG/L Total Xylenes UG/L p.Cymene UG/L p.Cymene UG/L 1,2,4.Trimethylbenzene UG/L 1,3,5.Trimethylbenzene UG/L n.Butylbenzene UG/L sec.Butylbenzene UG/L Lab 10 4-Dichlorobenzene-D4 -- I S/SURROGATE(S) p-Bromofluorobenzene 1,2-Dichloroethane-D4 ,4-Difluarabenzene Analyte Chlorobenzene-D\$ Sample Date Client 10 Job No foluene-08

Rept: AND326

BERG -V- NETH 8260 - TOL VOLATILE DRGANICS + STARS

SWB463 DELIVERABLES

- Gowanda Day Habilitation Center

Bergmann Assoc.

Date: 09/20/2002 Time: 15:31:43

STL Buftalo

s Not Detected £

⇒ Not Applicable

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A2876301	Reporting Limit		ው	ው	D	O.	o.	D.	ሱ	Φ.	2.5	6	ዕ ጉ የ	.	h 04	. Dv	۰	φ.	о.	ф. (D. (2.0	- 0	. 0	۰.	6	٥	G.	5	Φ.	~ 0	• •	24	24	-	o - 0	> 0	- 0		•	0	0
M090402EJ-01D ADZ-8763 09/04/2002	Somple Value		2	2	2	2	<u> </u>	9	2	2	2	윤 !	9 9	2 5			2	2	9	운 :	2 5	2 5	2 5		NO 0.5 4-	운	Ŷ	호 :	9 :	2 9	2 9	呈		\Box	2 4	2 9	2 5	2 5	_		· £	
A2866404	Reporting Limit	-	2	2	2	₽:	2	2	2	2 :	9	2	2 \$	2 \$	2 2	2	5	2 ;	2 ;	2 5	⊒ ∓	2 5	2 5	2 2	: 	1	10	2 9	6.	2 5	2 =	무	B.7	80 C	2 \$	2 5	2 5	2 ₽	2 5	0		
A02-8664 08/29/2002	Sample		₽ :	£	₽.	₽	2	2	₽:	₽ :	⊋ ;	-	2 9	2 9	2	ę	유	-	⊋ 9	⊋ 9	2 9	-	₽ ⊊	2	0.7.1	2	₽	운 (9 9	⊋ €	2	ę		는) 全 9	⊋ ⊊	⊋ ≨	⊋ ⊊	2 9	2 2	9	: 운	
A2866403	Reporting Limit		₽:	2:	2:	≘:	2:	2:	≘:	2 9	7	2 5	2 5	2 2	. 5	10	ē	2 5	2 :	2 9	2 9	29	2 5	2.2	. p	2	P.	2 :	2:	25	2 2	5	87	87°	2.5	2 5	2 5	2 5	2 5	2	20	1
A02-8664 08/29/2002	Sample Value		2 :	2 :	₽.	₽ :	2 :	₽	2 :	2 :	2 :	2 4	2 5	15	12	2	2	2 !	2 !	2 5	2 5	25	2 5	2	NO 4-1	9	2	2 :	2 :	2 9	2 2	2		h, ≘:		2 5	2 5	2 5	2 2	2 2	2	
A286641B	Reporting Limit		2:	₽:	2 :	₽:	≘:	2 :	2 :	2∶	, t	2 5	2 5	2 2	5	우	5	2 :	2 :	2 \$	2 5	2 5	2 =	2 5	2 12	2	Ď.	₽ 9	5 5	≥ Ę	2 2	ē	8,5	9;	2 :	2 \$	2 \$	2 5	2 2	2 =	: -	-
AOZ-8664 08/29/2002	Sample Velue		⊋ :	₽ :	₽:	⊋ \$	₽ :	₽:	2 9	⊋ :	₽ 9	2 9	2 5	2 5	F 9	2	2	€ :	₽ !	2 5	2 5	25	2 5	3	£	÷	윺	글 :	달!	2 9	2	2	호	たっ 呈!	<u>-</u>	2 9	2 5	2 5	2 5	2 5	2	
	Units		7,5	7 P	3	7/1	7	7	7	1/90	7	7/2	1 2 2		1,790 1,000	7/50	NG/L	7/5/ 06/1	UG/L	1,27	7.00	100	120	1/90	1/90	1/50:	1/97	1/90	1/90	7,5	1/97	1/90	1/90	1/90	1/97	7,07	7,50	1/9/1	1790	1/20	1/90	1
Job No Lab ID Sample Oste	Analyte		Acenaphthene	Reenaphthytene	Anthracene	Behzo(ajanthracene	Benzol Dji tuorantmene	Benzo(K)1tuoranthene	Benzo(gn) peryvene	Benzo(a)pyrene	Benzolc acid	benzyl alcohol	6)5(2-chloroethoxy) methane 6:4/2-chloroethyll othox	ista-circlescripty edici-	Bis(2-ethylhoxyl) phthalate	4.8 cmophenyl phenyl ether	Butyl benzyl phthalate	-chtoroaniline	4 - Chioro - 5 -methy (phenol	- Chiloronaphthalene - Chiloronaphthalene	2. Chilorophemul	throughouth prompt etter	Cilyanio Dianthracena	Diberzofuran	Di-n-Sutyl phthalate	1,2-Dichlorobenzene	1,3-Dichtorobenzene	1,4-Dichlorobenzene	3,3'-Oichtorobenzidine	i,4-Dichlorophenal	Orecupt parmarace 2.6-Dimethylohena(Dimetry Chthalate	4,6-Dinltra-2-methylphenol	Z, 4-Dinitrophenal	, 4-Dinitrotoluene	Z, 6-Dinitrotoluene	CI-n-cctyl pathmente Elimphithio		T (OCTOR B E CALTA () 11 DE STANDA		nekacing docyclopentadiene Hexacingorocyclopentadiene	

Bergmarn Assoc. - Gowanda Oay Habilitation Center SNEAG3 DELIVERABLES BERG - W- METHOD 8270 - ICL SEMI-VOLATILE ORGANICS

AM0326	
Rept:	

Date: 09/20/2002 Time: 15:32:07

Bergmann Assoc. - Gowande Day Habilitation Center SW8463 DELIVERABLES BERG - W- METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client ID Job No Lab ID Sample Date	:	ND82902EJ-06 AD2-8664 O8/29/2002	A2866418	M082902EJ-12 A02-8664 08729/2002	A2866403	W082902EJ-FB A02-8464 08/29/2002	A28664D4	4090402EJ-01D A02-8763 09/04/2002	A2876301
Analyte	Units	anje, ajdwes	Reporting Limit	enje.	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Hexach loroethane	ng/r	₽ €	29	9	2:	2:	10	9:	0.1
ingeno(1, 2, 3 · 04.)pyrene Hsochornne	7/2	2 \$	2 5	2 5	2 5	2 5	25	2 5	о о
2-Wethylnaphthalene	13	2	- F	2 3	20	2	200	2 2	• 0
2-Hethylphenal	UG/L	오	2	2	2	9	2	9	, on
4-Hethylphenol	7/9n	읖	=	2	2	2	무	뎦	6 ×
Naphthalene	UG/L	오	=	2	2	2	우	2	Ç.
2-Nitroaniline	7/5n	₽	9	2	97	2	8 9	2	<i>t.</i> 3
3-Ni troani Line	7/9n	9	9	£	eç.	₽	6 7	£	7.
4.Ni Eroani Line	1/9n	2	1 2	€ :	6 2	9	*	2	7.7
Nitrobenzene	750	2	2 9	9 !	= :	9 !	2	2	<u>o</u>
Z-Ni trophenol	1/50	2 :	2 5	€ !	≘ :	2 !	؛ ع	2	<u>-</u>
4-Nitrophenol	1/10	2	9:	9 !		9 !	9	호 :	47
N-mitrosociphenylamine	1/50	⊋ :	2 :	€ !	2;	€ :	2 :	2	C * 1
N-Ni troso-Di-n-propylamine	1/90	2:	2:	2 !	2 9	9	2 :	2	ሱ ነ
Pentachi orophenoi	1/90	2 !	9;	2	9	2 :	.	2 :	47
Phenanthrene	1/90	₽!	2;	2 :	2 ;	2 :	2;	2 :	OK 1
Phenal	1/9n	₽:	2 :	2 !	2:	9 !	21	₽:	ο. ·
Pyrene	1/9n	2	2 :	2	2:	2	2 :	운	•
1,2,4-Trichlarobenzene	106/1	₽	₽	2	₽	2	₽ :	₽	•
Z,4,5-Trichlorophenol	1/90	2	=	2	2	2	Ď.	문	σ.
2,4,6-Trichlorophenol	_U6/L	=	2	2	2	2	Ē	<u></u>	φ.
	,		***					,	
1.4.Oichlorobenzene-04	et :	2:	007-06	7	007-00	£;	107-05	8 3	20-200
Naphthalene-DB	N.	4.1	202-00	<u>.</u>	002-DC	2 (007-05	in f	002-DC
Acenaphthene-010	ĸ:	o I	007-00	qI i	002-00	521	M2.02	? ;	20-500
Phenanthrene-010	at :	121	20-500	121	20-500	<u></u>	20-200	20.	20-500
Chrysene-D12	×	911	20-500	122	20-200	123	20-50	器 :	20-200
Perylene-012	×	114	50-200	<u> </u>	20-500	122	20-200	æ	20-200
Nitrobenzene-D5	×	22	24-125	- T	24-125	₹	24-125	8	24-125
,2-Fluorobiphenyt	×	.	25-125	3 5 (25-125	25	50 S	2	25-125
p-Terphenyl-d14	N.	28	19-152	R 1	19-152	BY 1	19-152	2 :	19-152
Phenol-05	׳	&	10-110	35	10-110	35	011-01	FA :	10-110
2-Fluorophenol	×	2 †	20-120	5	20-120	3	50-120	*	20-150
2,4,6-Tribromophenot	×	77	2B-152	B2.	28-152	7E	28-152	118	28-152
			-1						

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STL Buffalo

= Not Detected 윺 = Not Applicable

Rept: AN0326

Client ID Job No Sample Date		W082902EJ-06 A02:8664 08/29/2002	A2866418	4082902EJ-12 A02-8664 08/29/2002	A2866403	M082902EJ-F9 R02-8664 08/29/2002	A2866404	W090402EJ-01D A02-8763 09/04/2002	A2876301
Anslyte	Units	Sample Value	Reparting Limit	Sample Value	Reporting Limit	Sampte Value	Reporting Limit	anlev Selue	Reporting Limit
Aldrin	ne/1	<u>v</u> ∠-	0700	\$!	0.049	Q.	290.0	₽.	0.048
alpha-ght beta-640	1/90/1		0.050	4 5	0.0%	<u> </u>	0.047	₽ ₽	0.048 0.048
gamma-BHC (Lindane)	1/90	<u>-</u> -	0.050	\$ 3	0.0%	25	7,0,0	 2 9	0.048
Chlordane	1 Z	9	05.0	ģ	67.0	2 2	740.0		0.48
.4,4000	1/30 1/30	\$ \$	0.030	À \$	0.049	99	0.047	2 9	0.048
100-,4,4	1/90	. 学	0.050	.	0.049	2 9	0.047	2 9	0.048
Dieldrin Endernifen	1/90 1/91	ģ s	0,00	÷	0.049	9 9	7,0,0	9 9	0.048
Endosulfan 11	33	2	0.050	<u></u>	670.0	2 2	0.047	2 9	0.048
Endosultan Sultate	7/9n	<u>é</u>	0,050	<u>s</u>	640.0	9	0.047	오	0.048
	7/91	£ €	0.05	¥ \$	640.0	9 9	7,000	₽ 9	0.048
Heptach (or	1/90	Ę	0.050	- E	0.049	£	0.047	2 2	900
Heptechlor epoxide	1/90	- 왕	0.050	₽	0.049	2	270.0	윤	0.048
Methoxychlor Toxaphene	7/9n 1/9n	څ څ خ	0.050	₽ ₽	0.049	-	0.047	무유	0.048
Tetrachtoro-m-xyteme	× ;	31.	36-132	97	36-132	2	36-132	288	36-132
pecachiorapiphenyi		0.0	761-07	- 0.4	261-65	- ! - -	751.07	Z97	28 132

Date: 09/23/2002 Time: 15:54:27			Bergmarch A	Assoc Gowerds Day Hebilitation Center SW8463 DELIVERABLES - METHOD 8082 - POLYCHLORINATED BIPHENYLS	omy Habilitation PRABLES LYCHLORINATED BII	Center			Rept: ANO326
Client ID Job No Sample Date	GI del	UGB2902EJ-06 NOZ-8654 CB/29/2002	A2866418	W082902EJ-12 A02-8664 08/29/2002	A2866403	HD62902EJ-F6 A02-B664 08/29/2002	A2866404	M090402EJ-01D N02-8763 B9/04/2002	A2876301
Analyte	Units	endes entex	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Vatue	Reporting Limit
Araclar 1016	N8/L	h-	0.53	\- 2 £	25.0	29	0.52	9	0.48
Aroctor 1232	1/90	2 2	0.53		0.52	2 2	0.52	2 9	0.48
Aractar 1242	1/9n	S	0.53	9	0.52	2	0.52	2	0.48
Aracier 1248	1/90	2	0.53	₽	0.52	윤	0.52	2	87.0
Arector 1254	1/9/1	GZ .	0.53	2	0.52	물	0.52	2	B7.0
Aroctor 1260	1/9/1	→ ₽	0.53	÷	0.52	오	0.52	숲	0.48
19/0841/08/10 ·				*					

36-132 28-132

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STL Buffalo

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STL Buffalo

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Date: 09/20/2002 Time: 15:32:18

Rept: ANG326

Bergmann Assoc. - Gowanda Day Habilitation Center SWE463 OELIVERABLES
BERG - U - SWE463 B151 - HERBICIDES (3 CMPDS)

A2876301	Reporting Limit	0.49	17-133
M090402EJ-01D A02-8763 09/04/2002	Sample	299	120
A2866404	Reporting Limit	0.48 0.48 0.48	17-133
4082902EJ-FB A0Z-8664 08/29/2002	Sample Value	GN ON ON	114
A2866403	Reporting Limit	0.48 0.48 0.48	17-133
90829026J-12 802-8664 08/29/2002	Sample Value	222	414
A2866418	Reporting Limit	87.0 87.0	17-133
M082902EJ-06 A02-8664 09/29/2002	Sample Value	2 2 2 2 2 2	106
	Units	7/5n 7/5n 7/5n	ĸ
Client ID Job No Sample Date	Anelyte	2,4.5 2,4,5.TP (Silvex) 2,4,5.T SURROGATE(S)	Dichtorophemyl Acetic Acid

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Rept

Bergmann Assoc. • Gowanda Day Habilftation Center SV8463 DELIVERABLES BERGMANN • W• SV8463 TAL METALS

Date: 09/20/2002 Time: 15:32:27

A2876301	Reporting Limit	0.20	0,020	0.0070	0,0010	0.0050	0.0010	0.50	0.0020	0.0050	0.0050	0.050	0.010	0.20	0.0030	0.00020	0.010	0.50	0.010	0.0030	0.	0.020	0.0050	0.020
V090402EJ-010 A02-8763 09704/2002	Sample	0.32		Ş	0.32	₽	œ	7.00	2	2	문	8.0	₽	16.5	0.71	₽	9	5.6	ŝ	9	26.1	9	2	9
A2866404	Reporting Limit	0.20	0,020	0.00.0	0.0010	0.0050	0.0010	0.50	0.0020	0,0050	0.0050	0,050	0.010	0,20	0.0030	0.00020	0.010	0.50	0.019	0.0030	0.1	0,020	0,0050	0.020
W082902EJ-F8 A02-8664 08/29/2002	Sample Value	章	2	9	0.011	윺	9	2	9	읖	2	9	9	흪	2	욮	윤	CN.	오	유	윤	皇	읖	CN.
A2866403	Reporting Limit	0.30	0.020	0.0070	0.0010	0.0950	0.0010	0,50	0.0020	0,0050	0.0050	0.050	0.010	07.0	0.0030	0.00020	0,010	0.50	0.010	0.0030	1.0	0.020	0.0050	0.020
WD82902EJ-12 A02-8664 D8/29/2002	Sample Value	£	2	2	0.40	2	=	74.6	2	2	2	7.4	2	74.5	0.86	9	9	:	2	2	35.3	9	金	
A2866418	Reporting Limit	0.20	0.020	0.0370	0.00.0	0.0050	0.00.0	0.50	0.0020	0.0050	0.0050	0.050	0.010	0.20	0.0030	0.00020	0.010	0.50	0,010	0.0030	1.0	0.020	0.0050	0.020
4082902EJ-06 402-8664 08/29/2002	Sample Value	3.8	읖	웃	0,58	R	읒	5.86	0.0057	윤	£600-0	9.6	읖	15.9	0.67	₽	흦	3.0	₽	웃	8.07	æ	0.0061	0.033
_	Units	1/5W	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MS/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	H3/L	MG/L	MG/L	MG/L	MG/L
Client 10 Job No Leb 10 Semple Date	Analyte	Aluminum · Total	Antimony Total	Arsenic - Total	Barium - Total	Beryllium · Total	Cadmium · Total	Calcium · Total	Chromican - Total	Cobalt - Total	Copper · Total	Iron · Total	Lead · Total	Magnesium · Totai	Manganese · Total	Hercumy · Total	Nickel - Total	Potassium - Total	Selenium - Iotai	Silver - Total	Sodium - Total	That tium - Total	Vanadium - total	Zinc - Total

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STL Guffalo

 Not Detected 읖 * Not Applicable

STL Buffals

	4 V090402EJ-010 A02-8763 09/04/2002
	A2866404
Center	M062902E1-F8 A02-B664 08/29/2002
imy Habilitation ERABLES ANALYSIS	A2866403
Bërgmann Assot, - Govanda Day Habilitation Center SWB463 DELIVERABLES VET CHEMISTRY ANALYSIS	WD82902EJ-12 A02-8664 D8/29/2002
Bērgmann A	A286641B
•	MD82902EJ-06 RD2-8664 D8/29/2002
	_

Rept: AN0326

Reporting Limit

Sample Vatue

Reporting Limit

Sample Value

Reporting limit

Sample Value

Reporting Limit

Sumple Value

Uni ts 1/94

Analyte

Cyanide - Total

Lab ID

Client 10 Job Mo Sample Date

June: 15:32:32

A2876301

0.010

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0.010

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0.010

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0.010

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	MD = Not Detected
	£
	NA = Not Applicable
	Z



STL Buffalo

10 Hazelwood Drive Suite 166 Amherst, NY 14228

Tei: 736 691 2600 Fax: 716 691 7991 www.stHnc.com

ANALYTICAL REPORT

Job#: A02 8673, A02-8761

STL Project#: NY2A8896

SDG#: 083002

Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

Task: ASPOO LEVEL IV DELIVERABLES

ASO GROUNDWATER Samples

Mr. Edward Jones Bergmann Associates 28 East Main Street Rochester, NY 14614

> Brian J. Nischer Project Manager

STT: Buffalo

Susán h. Marii Laboratory Director

This report contains $\frac{133}{23}$ pages which are individually numbered.



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 LD, 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

1.D. #083002 #NY2A8896

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SAMPLE DATA SUMMARY PACKAGE

SAMPLE SUMMARY

		SAMPLE	D	RECEIVE	⊡D
<u>LAB SAMPLE ID</u>	<u>CLIENT SAMPLE ID</u>	DATE	TIME	DATE	TIME_
A2867303	W082902EJ-07			08/30/2002	
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
A2876101 <i>S</i> D	W090402EJ-01	09/04/2002	11:00	09/05/2002	11:00

METHODS SUMMARY

Job#: <u>A02-8673, A02-8761</u>

SIL Project#: NYZA8896

SDG#: 083002

Site Name: Bergmann Assoc. - Gowanda Day Habilitation Center

PARAMETER	A	NALYTICAL METHOD
BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS	ASP00	
BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES	ASP00	8270
BERG - W - ASPOO - 8081 PESTICIDES BERG - W - ASPOO - 8151 - HERBICIDES (3 CMPDS) BERG - W - ASPOO 8082 - POLYCHLORINATED BIPHENYLS		8151
Aluminum - Total Antimony - Total Arsenic - Total Barium - Total Beryllium - Total Cadmium - Total Calcium - Total Chromium - Total Cobalt - Total Copper - Total Iron - Total Lead - Total Magnesium - Total Menganese - Total Mercury - Total	ASP00 ASP00 ASP00 ASP00 ASP00 ASP00 ASP00 ASP00 ASP00 ASP00 ASP00 ASP00 ASP00 ASP00 ASP00	6010 6010 6010 6010 6010 6010 6010 6010
Nickel - Total Potassium - Total Selenium - Total Silvar - Total Sodium - Total	ASP00 ASP00 ASP00 ASP00	6010 6010 6010 6010 6010
Thallium - Total Vanadium - Total Zinc - Total Cyanide - Total	ASPOO ASPOO ASPOO	6010
Cyalifae - Iocal	ADE OU	2016

References:

ASPOO "Analytical Services Protocol", New York State Department of Conservation, June 2000.

NON-CONFORMANCE SUMMARY

Job#: <u>A02-8673</u>, 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.

<u>Sample Receipt Comments</u>

A02-8673

Sample Cooler(s) were received at the following temperature(s); 306 °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.

OC/MS Volatile Data

The analytes Toluene, Mathylene 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.

<u>GC/MS Semivolatile Data</u>

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 A2R0862601 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 W0904025J-01 and W0904025J-01 MSD was cutside 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.

<u>Metals Data</u>

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."

W Susan I. Mazur

Laboratory Director

Date

RESUBMISSION COMMUNICATIONS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER	LABORATORY	ANALYTICAL REQUIREMENTS					
SAMPLE ID	SAMPLE ID	VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
W082902EJ-07	A2867303	ASP00	-	-	-	-	7
W082902EJ-15	A2867302	ASP00	-	-	-	-	-
W090402EJ-01	A2876101	ASP00	ASP00	-	ASP00	ASP00	ASP00

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	 T
W082902EJ-07	WATER	08/29/2002	08/30/2002		09/04/2002	"
W082902EJ-15	WATER	08/29/2002	08/30/2002	-	09/04/2002	T
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

TAB 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

TAB 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 RÉQUIRED	AS REQUIRED

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSIS

TAB NAME: SEVERN TRENT LABORATORIES, INC.

LAEORATOR Y SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
W082902EJ-01	WATER	ASP00	ASP00	AS REQUIRED	AS REQUIRED
₩090402EJ-01	WATER	ASP00	ASP00	AS REQUIRED	AS REQUIRED

Date: 09/23/2002 Fime: 15:19:16

Dilution Log w/Code Information For Project MY2A8896, Task 1, SDG 083002

000014 Page: AN126.

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	Parameter (Inorganic)/Method (Organic)	<u>Dilution</u>	Code
W082902EJ-15	A2867302	8260/5ML	2.00	005
W082902EJ-15 DL	A28673020L	5260/5HL	4.00	008
W082902EJ-07 DL	A28673030E	8260/5HL	5.00	008
W090402EJ-01 MSDL	A2876101A	8260/5ML	4.00	008
₩090402EJ-D1 SDDL	A2876101B	8260/5ML	4.00	008
W090402EJ-01 DL	A2876101DL	826D/5ML	4.00	008

Dilution Code Definition:

002 - sample matrix effects

003 - excessive foaming

004 - non-target compounds (TICS) exceeded 5% 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

- Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1-1 response is assumed for when the lidata indicates the presidence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- This flag applies to pesticide results where the identification has been confirmed by GC/MS.
 - This flag is used when the analyte is found in the associated blank, as well as in the sample
- 2 This flag identifies compounds whose concentrations exceed the calibration range of the inistrument for that specific analysis.
 - D This tlag 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/Arodor larget energic which there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is retinged on the data page and flagged with a "P"
 - A. This flag indicates that a TIC is a suspected aldot condensation product.
 - Indicates coclution
 - 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.
 - G or G Indicates a value greater than or equal to the instrument detection limit, but less than the evantitation limit
 - Indicates spike sample recovery is not within the quality control limits.
 - 4. Indicates the past 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 passity control limits.
- W Post didestion spike for Furnace AA analysis is out of quality control smith (85-115%) while sample, advoibance is less than 50% of spike absorbance.
 - 4 redinates a value estimated or not reported due to the presence of interferences.
 - Experience analytical holding time exceedance. The value obtained choosing remainstered an estimate.
 - Indicates, analysis is not witten the quarty control limits.
- Indicates the correlation coefficient for the Method of Standard Addition is sess than 0.995.

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER

BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

Client No.

Lab Name: STL_Buffalo Contract:	พ	082902EJ-07
Lab Code: RECONY Case No.: SAS No.: SDG:	Mo . negono	***
THE COLE. MARKET COLD TO SEC. 10 SEC. 10	10 <u>003002</u>	
Matrix: (soil/water) WATER Lab S	ample ID: A2	- 8673 03
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{ML} Lab F	ile ID: <u>F5</u>	310.RR
Level: (low/med) <u>Low</u> Date:	Samp/Recv: <u>08</u> ,	/29/2002 <u>08/30/2002</u>
% Moisture: not dec Heated Purge: N Date 2	Analyzed: <u>09</u> ,	/04/2002
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm) Dilut.	ion Factor:	1.00
Soil Extract Volume: (uL) Soil 2	Aliquot Volume	:(uL) _
CONCENTRA	TION INTES	
	ug/Kg) <u>UG/I</u>	
67-64-1Acetone	25	U Edet
171-43-2 	. 5	
75-27-4Bromodichloromethane	5	υ "5u=
175-25-2 Bromoform	5	U ro
74-83-9Bromomethane		177
178-43-3		UJ 10 L
75-15-0Carbon Disulfide		U "
56-23-5Carbon Tetrachloride	5	ប
74-87-3Chloromethane		Ū
108-90-7Chlorobenzene	- 1 5	Ü -
75-00-3Chloroethane		Ū
110-82-7Cyclohexane		
167-66-1	. 5	-
96-12-81,2-Dibromo-3-chloropropane	i 5	ਰ ਰਿਤਾ
124-48-1Dibromochloromethane	5	lū l
75-71-8Dichlorodifluoromethane	s	l ū
106-93-41,2-Dibromethane	<u> </u>	Ū -
95-50-11,2-Dichlorobenzene		ΰ
541-73-11,3-Dichlorobenzene	5	ا تا
106-46-71,4-Dichlorobenzene	S	υ
75-34-31,1-Dichloroethane	<u> </u>	ַ ע
107-06-2 1,2-Dichloroethane	5	Ū
75-35-41,1-Dichloroethene	 5	Ū _
156-59-2cis-1,2-Dichloroethene	420 - 470 -	
156-60-5trans-1,2-Dichloroethene	',,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	υ
78-87-51,2-Dichloropropane	5	Ū
10061-01-5cis-1,3-Dichloropropene	<u> </u>	
10061-02-6trans-1,3-Dichloropropene	5	Ū
100-41-4Ethylbenzene	<u></u> 5	បី
591-78-62-Hexanone		ប័ភ 🕒
98-82-8Tsopropylbenzene		บั
79-20-9Methyl acetate		ŭ
75-09-2Methylene chloride	<u> </u>	
1634-04-4 Methyl tert butyl ether	10	บ็

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8250 VOLATILES + STARS ANALYSIS DATA SHEET

000017

Client No.

	 	
Lab Name: SIL Buffalo Contract;	W082902EJ-07	_
Lab Code: <u>RECNY</u> Case No.: SAS No.:	SDG No.: <u>083002</u>	
_Matrix: (soil/water) <u>WATER</u>	Lab Sample ID: <u>A2867303</u>	
Sample wt/vol:5.00 (g/mL) ML	Lab File ID: <u>F5310.RR</u>	
Level: (low/med) LOW	Date Samp/Recv: 08/29/2002 08/30/200	2
% Moisture: not dec Heated Purge: N	Date Analyzed: 09/04/2002	
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:1.00	
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)	
	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u> Q	
108-10-14-Methyl-2-pentanone 108-87-2Methylcyclohexane 100-42-5Styrene 79-34-51,1,2,2-Tetrachloroethane 127-18-4Tetrachloroethene 108-88-3Toluene 120-82-11,2,4-Trichloroethane 71-55-61,1,1-Trichloroethane 79-00-51,1,2-Trichloroethane 79-01-6Trichloroethene 75-69-4Trichloroethene 75-69-4Vinyl chloride 1330-20-7Total Xylenes 103-65-1Propylbenzene 99-87-6	10 U "54" 5 U FE 5 U FE 5 U FE 7 EATL FE 7 EAT	,

BERGMANN ASSOCIATES, INC.

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

000018

Client	N_
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	W082902EJ-07
Lab Name: STL Buffalo Contract:	
Lab Code; RECONY Case No.: SAS No.:	SDG No.: <u>083002</u>
Matrix: (soil/water) WATER	Lab Sample ID: <u>A2867303</u>
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{ML}	Lab File ID: <u>F5310.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 08/29/2002 08/30/200
% Moisture: not dec.	Date Analyzed: 09/04/2002
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: 1.00
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL) _
Number TICs found: _2	CONCENTRATION UNITS:

CAL NO.	Compound Name	RT	Est. Canc.	Q
	UPINADAN - INDROCARBON	1.43 2.23	17	13 7—

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

Client No.

Lab Name: STL Buffalo Contract:		W082902EJ-	-07 DL
Lab Code: RECINY Case No.: SAS No.:		<u>2</u>	
Matrix: (soil/water) WATER	Lab Sample ID:	A2867303DL	
Complex to (see) . E. OO (color) MI	I-b Dil- to	553.4 DD	
Sample wt/vol:5.00 (g/mL) ML	Lab File ID:	<u>F5314.RR</u>	
Level: (low/med) LOW	Date Samp/Recv:	08/29/2002	08/30/2002
i Moisture: not dec Heated Purge: N	Date Analyzed:	09/04/2002	
GC Column: <u>DB-624</u> ID: <u>0.25</u> (nm)	Dilution Factor:	<u>5,00</u>	
_oil Extract Volume: (uL)	Soil Aliquot V ol	une:	_ (uL)
	CONCENTRATION UNITS: (ug/L or ug/Kg)		Q
57.54.1		100	
67-64-1		120	
/ - 4 .5 - X 2001 7201 720 7		25 U	
75-27-4Bromodichloromethane		25 U	
75-25-2Bromoform	 -	25 U	-
74-83-9Bromomethane 78-93-32-Butanone	 _	25 U	1
78-93-3Z-Bularkine	·	120 U	
56-23-5Carbon Tetrachloride		25 U	- 1
74 97 3 Chloremethana		25 U	i
74-87-3Chloromethane		25 U	
108-90-7Chlorobenzene		25 U	
75-00-3Chloroethane		50 U	
110-82-7Cyclohexane 67-66-3Chloroform	 [25 U	1
96-12-81,2-Dibromo-3-chloropropane		25 U	1
124-48-1Dibromochloromethane		25 U	1
75-71-8Dichloredifluoromethane		25 Ü	i
106-93-41,2-Dibromethane	 -	25 Ŭ	- 1
95-50-11,2-Dichlorobenzene	 -	25 U	- 1
541-73-11,3-Dichlorobenzene		25 U	
106-46-71,4-Dichlorobenzene		25 Ü	
75-34-31,1-Dichloroethane		25 U	
107-06-21,2-Dichloroethane		25 U	1
75-35-41,1-Dichlorcethene		25 U	
156-59-2cis-1,2-Dichloroethene		420 D	
156-60-5trans-1,2-Dichloroethene		25 U	
78-87-51,2-Dichloropropane		25 U	
■ 10061-01-5cis-1,3-Dichloropropene		25 U	
10061-02-6trans-1,3-Dichloropropene		25 U	
100-41-4Ethylbenzene		25 U	
591-78-62-Hexanone		120 ປັ	
98-82-8Isopropylbenzene		25 U	1
79-20-9Methyl acetate		50 U	
75-09-2 Methylene chloride		22 BD	ਹ

1634-04-4----Methyl tert butyl ether

50

BERGMANN ASSOCIATES, INC.

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER 000020 BERG - W - EPA ASPOO-METHOD 8260 VOLATTLES + STARS ANALYSIS DATA SHEET

Client Nc_

Lab Name: STL Buffalo Contract:	W082902EJ-07 DL
Lab Code: RECNY Case No.: SAS No.:	SDG No.: <u>083002</u>
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID: A2867303DL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: <u>F5314.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/Recv: <u>08/29/2002</u> <u>08/30/2002</u>
% Moisture: not dec Heated Purge: N	Date Analyzed: 09/04/2002
3C Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:5.00
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u> Q
79-34-51,1,2,2-Tetrachloroethane 127-18-4Tetrachloroethene 108-88-3Toluene 120-82-11,2,4-Trichloroethane 71-55-61,1,1-Trichloroethane 79-00-51,1,2-Trichloroethane 76-13-11,1,2-Trichloroethane 79-01-6Trichloroethene 75-69-4Trichlorofluoromethane 75-01-4Vinyl chloride 1330-20-7Total Xylenes 103-65-1Propylbenzene 103-65-1	50 U 25 U 25 U 25 U 25 U 39 HU 25 U 25 U 25 U 25 U 25 U 25 U 25 U 25

EFROMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER

BERG - W - EPA ASPOO-METHOD 8260 VOLATTLES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

Client	No.
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			W082902EJ-07 DL
Lab Name: <u>STL_Buffalo</u>	Contract:	_	
Lab Code: <u>RECNY</u> Case No	.: SAS No.:	SDG No.; <u>083002</u>	
Matrix: (soil/water) WATER		Lab Sample ID:	A2867303DL
Sample wt/vol: 5.0	<u>0</u> (g/mL) <u>ML</u>	Lab File ID:	F5314.RR
Level: (low/med) <u>LOW</u>		Date Samp/Recv:	08/29/2002 08/30/2002
% Moisture: not dec	-	Date Analyzed:	09/04/2002
GC Column: <u>DB-624</u> ID	: <u>0.25</u> (mm)	Dilution Factor:	5.00
Soil Extract Volume:	(uL)	Soil Aliquot Vol	ume: (uL)
Number TICs found: 2		CONCENTRATION UNIT (ug/L or ug/Kg)	
CAS NO	Compound Name	RT Est	Orner O

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 2.	UNKNOWN HYDROCARBON	1.43 2.23	29 28	BJ BJ

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BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS

ANALYSIS DATA SHEET

Client No.

			W08290ZEJ-15
Lab Name: STL Buffalo	Contract:	_ <u></u>	·
Lab Code: <u>RECNY</u> Ca	ase No.: SAS No.:	SDG No.: <u>08300</u> 2	2
Matrix: (soil/water)	WATER	Lab Sample ID;	A2867302 -
Sample wt/vol:	<u>5.00</u> (g/mL) <u>ML</u>	Lab File ID:	F5313.RR
Level: (low/med)	LOM	Date Samp/Recv:	08/29/2002 08/30/2002
% Moisture: not dec.	Heated Purge: N	Date Analyzed:	09/04/2002
GC Column: <u>DB-624</u>	ID: <u>0.25</u> (mm)	Dilution Factor:	: <u>2.00</u>
Soil Extract Volume:	(uL)	Soil Aliquet Vol	lume: (uL) 🕳
CAS NO.		CONCENTRATION UNITS: (ug/L or ug/Kg)	
71-43-2 75-27-4 75-25-2 74-83-9 78-93-3 75-15-0 56-23-5 74-87-3 108-90-7 110-82-7 67-66-3 96-12-8 124-48-1 75-71-8 106-93-4 95-50-1 106-46-7 75-34-3 107-06-2 75-35-4 156-59-2 156-60-5 78-87-5 10061-01-5 10061-02-6 100-41-4	BromodichloromethaneBromomethaneBromomethane2-Butanone		50 10 10 10 10 10 10 10 10 10 10 10 10 10

98-82-8-----Isopropylbenzene

75-09-2----Methylene chloride

1634-04-4----Methyl tert butyl ether

79-20-9-----Methyl acetate

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BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

Client No.

		IMAR 2	902EJ-15	- -
Lab Name: STL Buffalo Contract:		NV-52		
Lab Code: <u>RECNY</u> Case No.: SAS No.:	SDG No.: 0830	02		
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID:	<u>A</u> 2867	302	
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID:	F5313	.RR	
Level: (low/med) LOW	Date Samp/Recv	08/29	/2002 <u>08/</u> 3	30/2002
% Moisture: not dec Heated Purge: N	Date Analyzed:	09/04	/2002	
GC Column: <u>DB-624</u> TD: <u>0.25</u> (mm)	Dilution Factor	r: <u>2</u>	.00	
Soil Extract Volume: (uL)	Soil Aliquot Vo	olume: _	{ı	ıL)
CAS NO. COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg)		0	
				1
108-10-14-Methyl-2-pentanone		50	כט	all.
108-87-2Methylcyclohexane		20	U	, ,
79-34-51,1,2,2-Tetrachlorocthane		10	ប្រ	*low
127.19-4Totrophlomothere	—- ·-·-	10	ū	to
127-18-4Tetrachloroethene 108-88-3Toluene	 -,	10 2 -5-	U Bou	to to
120-82-11,2,4-Trichlorobenzene			ט מבו	-
71-55-61,1,1-Trichlomethane		10 10	ช	
79-00-51,1,2-Trichloroethane		10	ซ	
• 76-13-11,1,2-Trichloro-1,2,2-triflu	varnat have	20		
1 m m m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m		350	U E	
75-69-4Trichlorofluoromethane	<i></i> _ <i></i>		U	
75-01-4Virgl. chloride	·	10	Ü	
75-01-4Vinyl chloride 1330-20-7Total Xylenes		10	นี	
103-65-1n-Poores honores		10	u .	
103-65-1n-Propylbenzone 99-87-6p-Cymene		10	Ü	
55-07-0		10	4	
95-63-61,2,4-Trimethylbenzene		10	ប	
108-67-81,3,5-Trimethylbenzene		10		
104-51-8n-Butylbenzene		10	lu l	
■ 135-98-8sec-Butylbenzene		10	ប	

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BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

Client N-

Lab Name: STL Buffalo Contract:	_	W082902EJ-15
Lab Code: RECNY Case No.: SAS No.:	SDG No.: <u>083002</u>	_
Matrix: (soil/water) WATER	Lab Sample ID:	A2867302 -
Sample wt/vol:5.00 (g/mL) ML	Lab File ID:	F5313.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	08/29/2002 08/30/200
% Moisture: not dec	Date Analyzed:	09/04/2002
GC Column: <u>DB-624</u> ID: 0.25 (mm)	Dilution Factor	:2.00
Soil Extract Volume: (uL)	Soil Aliquot Vol	iume: (uL) 🛥
Number TTCs found: 4	CONCENTRATION UNIT	

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	ENRICANI	1.43	12	BJ
2.	LINKNOMI	1.68		J
3.	L RICHOMI HYDROCARDON	2.23		BJ
4.	LINK NOMI —	3.22		BJ

Soil Aliquot Volume: ____ (uL)

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

Client No.

CONCENTRATION UNITS:

_Soil Extract Volume: ____ (uL)

CAS NO.	COMPOUND	(ug/L or ug/Kg)	w./L_	0
CAS NO.		(23) 2 2: (33) 1-3;		<u> </u>
	Acetone		100	U
	Benzene		20	U
	Bromodichloromethane		20	ប
	Bromoform		20	U
	Bromomethane		20	υ
	2-Butanone		100	ט
	Carbon Disulfide		20	U
	Carbon Tetrachloride		20	IJ
74-87-3	Chloromethane		20	U
	Chlorobenzene		20	ŢŪ
75-00-3	Chloroethane		20	įυ
110-82-7	Cyclohexane		40	U
67-66-3	Chloroform		20	ប
96-12-8	1,2-Dibromo-3-chloropropane		20	ט
124-48-1	Dibromochloromethane		20	U ,
75-71-8	Dichlorodifluoromethane		20	U
106-93-4	1,2-Dibromethane		20	ប
95-50-1	1,2-Dichlorobenzene		20	ប
	1,3-Dichlorobenzene		20	ប
106-46-7	1,4-Dichlorobenzene		20	ប
75-34-3	1,1-Dichloroethane	_	50	U
	1,2-Dichloroethane		20	U
	1,1-Dichlomethene		20	ប
	cis-1,2-Dichloroethene		380	D
	trans-1,2-Dichloroethene		20	tī
	1,2-Dichloropropane		20	U
	cis-1,3-Dichloropropene		20	U
	trans-1,3-Dichloropropenc		20	ប
	Ethylbenzene		20	U
591-78-6	2-Hexanone		100	Ū
	Isopropylbenzene_		30	Ū
	Methyl acetate		40	Ū
	Methylene chloride		21	EDJ
	Methyl tert butyl ether	———i	40	U
1034-04-4-			-14	.,

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Client Na

Lab Name: <u>S</u>	<u>T. Ruffalo</u> Contrac	t:	W0829	02EJ-15 E	OL.
Lab Code: <u>R</u>	XXIVY Case No.: SAS	No.: SDG No.: <u>0830</u>	<u>02</u>		_
Matrix: (so	1/water) <u>WATER</u>	Lab Sample ID:	<u>A28673</u>	02DL	-
Sample wt/v	ol: <u>5,00</u> (g/mL) <u>ML</u>	Lab File ID:	<u>F5316.</u> 1	RR	
Level: (le	w/med) <u>LOW</u>	Date Samp/Recv	: <u>08/2</u> 9/2	20 <u>0</u> 2 <u>08/3</u>	0/2002
% Moisture:	not dec Heated Purge:	N Date Analyzed:	<u>09/04/</u> :	2002	
90 Column: 1	B-624 ID: <u>0.25</u> (mm)	Dilution Factor	r:4.0	00	_
Soil Extract	Volume: (uL)	Soil Aliquot Vo	olume:	(u	L) =
CA	NO. COMPOUND	CONCENTRATION UNITS (Ug/L or Ug/Kg)		Q	
108	-1(14-Methyl-2-pentanon	=	100	U	
100	-87-2Methylcyclohexane		40	Ü	
1100	-42-5Styrene	i	20	ប	•
79	34-51,1,2,2-Tetrachloro	ethane	20	יט	
12	-18-4Tetrachloroethene		20	บิ	
1108	-88-3Toluene		4	BDJ	_
120	-82-11,2,4-Trichlorobenz	enc	20	U	_
71-	55-61,1,1-Trichlorcetha	ne.	20	Ū	
79-	00-51,1,2-Trichloroetha	ne -	22	ϋ	
	13-11,1,2-Trichloro-1,2		40	Ū	-
	01-6Trichloroethene		320	D	

75-69-4----Trichlorofluoromethane

95-63-6-----1,2,4-Trimethylbenzene

108-67-8-----1,3,5-Trimethylbenzene

75-01-4-----Vinyl chloride

103-65-1----n-Propylbenzene

104-51-8----n-Butylbenzene

135-98-8-----sec-Butylbenzene

1330-20-7----Total Xylenes

99-87-6----p-Cymene_

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BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

7 ab 37a	. Our Doffalo	7 ~	ntroet -		W	1082902EJ-1	.5 DL
Lad Name	: SIP RUITATO	CO.	ntract:	_	_		
Lab Code	: <u>RECNY</u> Case N	o.:	SAS No.:	SDG No.:	<u>083002</u>		
Matrix:	(soil/water) <u>WATE</u>	3		Lab Samp	de ID:	A2867302DL	,
Sample w	t/vol:5.6	<u>00</u> (g/πL) <u>M</u>	<u>L</u>	Lab File	ID:	F5316.RR	
Level:	(low/med) LOW			Date Sam	p/Recv:	08/29/2002	08/30/200
* Moistu	re: not dec	_		Date Ana	lyzed:	09/04/2002	
GC Colum	n: <u>DB-624</u> II	D: <u>0.25</u> (mm))	Dilution	Factor:	4.00	
Soil Extr	ract Volume:	(uL)		Soil Ali	quot Volu	me:	(uL)
Number Ti	ICs found: <u>1</u>			CONCENTRAT (ug/L or)		-	
	CAS NO.	Co	ompound Name	RT	Est. O	one. Q	

CAS NO.	Compound Name	RT	Est. Conc.	æ
1. 110-54-3	HEXANE	3.22	27	BIN

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Client Na.

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BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS

ANALYSIS DATA SHEET

Lab Name: STL Buffalo	Contract:	<u>.</u>	W090402	EJ-01
lab Code: <u>RFCNY</u> Ca	se No.: SAS No.:	SDG No.: <u>08300</u>	2	
Matrix: (soil/water)	WATER	Lab Sample ID:	<u>A2876101</u>	
Sample wt/vol:	5.00 (g/mL) <u>ML</u>	Lab File ID:	F5332.RR	
Level: (low/med)	TOM	Date Samp/Recv:	09/04/200	<u>02</u>
% Moisture: not dec.	Heated Purge: N	Date Analyzed:	09/06/201	<u>02</u>
GC Column: <u>DB-624</u>	ID: <u>0.25</u> (mm)	Dilution Factor	: 1.00	
Soil Extract Volume:	(uL)	Soil Aliquot Vol	lume:	(uL)
CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg)		Q
108-87-2	1,1,2,2-TetrachloroethaneTetrachloroethene Toluene1,2,4-Trichloroethane1,1,1-Trichloroethane1,1,2-Trichloroethane1,1,2-Trichloro-1,2,2-trifluTrichloroetheneTrichlorofluoromethaneVinyl chlorideTotal Xylenes	oroethane 350	2 ១១៦១១១១១១១១១១១១១១១១១១១១១១១១១១១១១១១១១១	40 dd 45 m dd dd dd dd dd dd dd dd dd dd dd dd d

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

Client Na

Lab Name: STL Buffalo Contract:	_	W090402EJ-01
Lab Code: RECNY Case No.: SAS No.:	SDG No.: <u>083002</u>	_
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID:	A2876101 -
Sample wt/vol:5.00 (g/mL) ML	Lab File ID:	F5332.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	09/04/2002 09/05/2003
% Moisture: not dec	Date Analyzad:	09/06/2002
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume: (uL)	Soil Aliquot Vol	ume: (uL) =
Number TICs found: <u>1</u>	CONCENTRATION UNIT (ug/L or ug/Kg)	· · ·
		 _

CAS NO.	Compound Name	RT	Est. Canc.	Q
1.	M OGRACIONOLII MACHNIM L	2.05	14	DJ

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS ANALYSIS DATA SHEET

Client No.

1			
Lab Name: STL Buffalo Contract:		W090402EJ-	01 DL
Lab Code: <u>RECNY</u> Case No.; SAS No.:	SDG No.: <u>08300</u>	2	
Matrix: (soil/water) WATER	Lab Sample ID:	A2876101DL	
Sample wt/vol:5.00 (g/mL) ML	Lab File ID:	F5336.RR	
Level: (low/med) <u>LOW</u>	Date Samp/Recv:		
	Date Analyzed:		<u> </u>
GC Column: DB-624 1D; 0.25 (mm)	Dilution Factor		
Soil Extract Volume:(uL)	Soil Aliquot Vol	ևտ։	_ (uL)
CAS NO. COMPOUND	CONCENIRATION UNLIS (ug/L or ug/Kg)		Q
67-64-1 Acetone		100 U	
71-43-2Benzene	 i	20 0	
75-27-4Bromodichloromethane		20 U	[
175-25-2Bromoform		20 Ü	
75-25-2Bromoform		20 U	1
78-93-32-Butanone		100 U	
DE 15 0 Contract D1 23 51 1-		20 U	
190-89-9:CARDAR TESTACIDITIES		20 Ü	
74-87-3Chloromethane		20 U	İ
108-90-7Chlorobenzene	·	20 U	- 1
75-00-3Chloroethane		20 U	ļ
110 82-7Cyclohexane		40 U	1
167-66-3Chloroform	I	20 U	1
96-12-81,2-Dibromo-3-chloropropane		20 U	
124-48-1Dibromochloromethane		20 U	
75-71-8Dichlorodifluoromethane		20 U	!
■ 1.06-93-41,2-Dibromethane		20 U	
95-50-11,2-Dichlorobenzene		20 U	1
541-73-11,3-Dichlorobenzene		20 U	
106-46-71,4-Dichlomberizene		20 U	
75-34-3 1,1-Dichloroethane	i	20 ប	
107-06-21,2-Dichlorcethane		20 U	
75-35-41,1-Dichlorcethene	i	20 U	
156-59-2cis-1,2-Dichlorocthene	··	380 D	
156-60-5trans-1,2-Dichloroethene		20 U	
78-87-51,2-Dichloropropane		20 U	
10061-01-5cis-1,3-Dichloropropene		20· U	
10061-02-6trans-1,3-Dichloropropere		20 U	
100-41-4Ethylbenzene		20 U	-
591-78-62-Hexanone		100 U	
98-82-8Isopropylher/ette		20 U 40 U	
79-20-9Methyl acetate 75-09-2Methylene chloride	——— l	40 U 10 BD	7
1/3-03-2		TO 1017	

1634-04-4----Methyl tert butyl ether

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BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS

ANALYSIS DATA SHEET

Client Ne

Lab Name: STL Buffalo Contract:		90402EJ-01 DL
Lab Code: RECNY Case No.: SAS No.:		•
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID: A287	76101DL -
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{ML}	Lab File ID: F533	6.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 09/0	4/2002 09/05/2002
% Moisture: not dec Heated Purge: N	Date Analyzed: 09/0	06/2002
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor:	4.00
Soil Extract Volume: (uL)	Soil Aliquot Volume:	(uL) =
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	0
108-10-14-Methyl-2-pentanone 108-87-2Methylcyclohexane 100-42-5Styrene 79-34-51,1,2,2-Tetrachloroethane 127-18-4Tetrachloroethene 108-88-3Toluene 120-82-11,2,4-Trichloroethane 79-00-51,1,1-Trichloroethane 79-00-51,1,2-Trichloroethane 76-13-11,1,2-Trichloro-1,2,2-triflu 79-01-6Trichloroethene 75-69-4Trichlorofluoromethane 75-01-4Vinyl chloride 1330-20-7Total Xylenes 103-65-1Propylbenzene 99-87-6	40 20 20 20 20 20 20 20 20 20 20 20 20 20	ממחחמת שמחשמח ממחחח

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EERGMANN ASSOCIATES, INC.

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - EPA ASPOO-METHOD 8260 VOLATILES + STARS TENTATIVELY IDENTIFIED COMPOUNDS

		W090402E	AT-01 Dt.
Lab Name: STL Buffalo Contract	:		
Lab Code: RECNY Case No.: SAS	No.: SDG No.;	083002	
Matrix: (soil/water) <u>WATER</u>	Lab Samp	le ID: <u>A287610</u>	<u>id</u>
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Lab File	ID: <u>F5336.R</u>	<u>R</u>
•Level: (low/med) <u>LOW</u>	Date Sam	p/Recv: <u>09/04/2</u>	<u>002</u> <u>09/05/200</u>
% Moisture: not dec	Date Ana	lyzed: <u>09/06/2</u>	002
GC Column: <u>DB-624</u> ID: 0.25 (mm)	Dilution	Factor: 4.0	<u>o</u>
Soil Extract Volume: (uL)	Soil Alic	quot Volume:	(uL)
Number TICs found: <u>2</u>	CONCENTRATE (ug/L or t	ION UNITS: ug/Kg) <u>UG/L</u>	

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN	2.05	34	BJ
2. 110-54-3	HEXANE	3.21	20	JN

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES ANALYSIS DATA SHEET

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Lab Name: SIL Buffalo Contract:		W090402E	J-01
Lab Code: RECNY Case No.: SAS No.:	SDG No.: 08300	2	-
Matrix: (soil/water) WATER	Lab Sample ID:	A2876101	
Sample wt/vol: <u>1040.0</u> (g/mL) <u>ML</u>	<pre>fab File ID:</pre>	Z52915.RR	-
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	09/04/200	09/05/2002 =
% Moisture: decanted: (Y/N) N	Date Extracted:	09/09/2002	2
Concentrated Extract Volume: 1000(uL)	Date Analyzed:	09/11/200	2
Injection Volume: 2.00 (uL)	Dilution Factor	:1.00	_
GPC Cleanup: (Y/N) N pH: _7.0			·
	CONCENIRATION UNITS	:	_
CAS NO. COMPOUND	(ug/Lorug/Kg)	UG/L	Q
100-52-7Benzaldehyde		10	J _
1108-95-2Phenol	;	10 [
111-44-4Bis(2-chloroethyl) ether		10 [
95-57-82-Chlorophenol		10 t	I
95-48-72-Methylphenol		10 [1	
108-60-12,2'-Oxybis(1-Chloropropane)		10 [7	J]

100-52-7Berizatderiyae	TO	(0	•
108-95-2Phenol	10	U	1
111-44-4Bis(2-chloroethyl) ether	10	ប	ŀ
95-57-82-Chlorophenol	10	Ü	f
95-48-72-Methylphenol	10	U	
108-60-12,2'-Oxybis(1-Chloropropane)	10	U	
98-86-2Acetophenone	10	ט	ı
106-44-54-Methylphenol	10	ŭ	Į
621-64-7Nitroso-Di-n-propylamine	10	U	ŀ
67-72-1Hexachloroethane	10	U	l
98-95-3Nitrobenzene	10	U	ı
78-59-1Isophorone	10	U	ŀ
88-75-52-Nitrophenol	10	ប	ļ
105-67-92,4-Dimethylphenol	10	U	ı
111-91-1Bis(2-chloroethoxy) methane	10	Ų	ļ
120-83-22,4-Dichlorophenol	10	U	ļ
91-20-3Naphthalene	10	Ū	
106-47-84-Chlorcaniline	10	U	
87-68-3Hexachlorobutadiene	10	U	Ì
105-60-2Caprolactam	25 18	U	
59-50-74-Chloro-3-methylphenol	10	U	
91-57-62-Methylnaphthalene	10	U	ŀ
77-47-4Hexachlorocyclopentadiene	10	U	
88-06-22,4,6-Trichlorophenol	10	U	1
95-95-42,4,5-1richlorophenol	10	U	
92-52-4Biphenyl	10	υ	
91-58-72-Chloronaphthalene	10	U	
88-74-42-Nitroaniline	24	U	
131-11-3Dimethyl phthalate	10	U	
208-96-8Acenaphthylene	10	U	
606-20-22,6-Dinitrotoluene	10	U	
99-09-23-Nitroaniline	24	ט	

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BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES ANALYSIS DATA SHEET

Client No.

-			
'ab Name: <u>STL Buffalo</u> Contract:		W090402EJ	01
Tab Code: RECNY Case No.: SAS No.;	SDG No.: <u>083002</u>	!	
atrix: (soil/water) <u>WATER</u>	Lab Sample ID:	A287 <u>6101</u>	
Sample wt/vol: <u>1040.0</u> (g/mL) <u>ML</u>	Lab File ID:	Z52915.RR	
_evel: (low/med) <u>LOW</u>	Date Samp/Recv:	09/04/2002	<u>09/05/2002</u>
^Q Moisture: decanted: (Y/N) <u>N</u>	Date Extracted:	09/09/2002	
Concentrated Extract Volume: 1000(uL)	Date Analyzed:	09/11/2002	
njection 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))		Q
83-32-9	per	10 U 24 U 10 U 10 U 10 U 24 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U 1	
85-01-8Phenanthrene 120-12-7Anthracene 86-74-8Carbazole 84-74-2Di-n-butyl phthalate 206-44-0Pyrene 85-68-7		10 U U U U U U U U U U U U U U U U U U U	u
207-08-9Benzo(k) fluoranthene		10 U	

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

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

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

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES ANALYSIS DATA SHEET

000036

		W090402E	J-01	
ab Name: STL Buffalo Contract:				
Lab Code: RECNY Case No.: SAS No.:	SDG No.: <u>083002</u>			,
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID:	A2876101	_	
Sample wt/vol: <u>1040.0</u> (g/mL) ML	Lab File ID:	<u>Z52915.RR</u>		
bevel: (low/med) <u>LOW</u>	Date Samp/Recv:	09/04/200	2 <u>09/05/200</u>	<u>)2</u>
Moisture: decanted: (Y/N) N	Date Extracted:	09/09/200	2	
Concentrated Extract Volume: 1000(uL)	Date Analyzed:	09/11/200	2	1
Injection Volume: 2.00 (uL)	Dilution Factor:	1.00		
GPC Cleanup: (Y/N) N pH: 7.0				
_	ONCENTRATION UNITS: (ug/L or ug/Kg)		Q	•
191-24-2Benzo (ghi) perylene		10	U	

BERGMANN ASSOCIATES, INC. BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - ASP 2000 - METHOD 8270 SEMIVOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000037

-				W090402E	7-01
ap Name	: <u>STL Buffalo</u>	Contract:	_	<u> </u>	
Lab Code	:: <u>RECNY</u> Case No	o.: SAS No.:	SDG No.: <u>083002</u>		
atrix:	(soil/water) WATE	3	Lab Sample ID:	A2876101	
- Sample w	t/vol: <u>1040</u>	<u>.0</u> (g/mL) <u>ML</u>	Iab File ID:	<u>Z52915.</u> F	R
evel:	(low/med) <u>LOW</u>		Date Samp/Recv	: 09/04/20	09/05/2002
⁹ Moistu	re:decar	nted: (Y/N) <u>N</u>	Date Extracted	: 09/09/20	002
concentr	ated Extract Volum	ne: <u>1000</u> (uL)	Date Analyzed:	09/11/20	02
njectic	n Volume:2.00) (ul.)	Dilution Factor	r:1.00	<u> </u>
GPC Clea	nunp: (Y/N) N	рН: <u>7.0</u>			
Number T	ICs found: <u>0</u>		CONCENTRATION UN. (ug/L or ug/Kg)		
-	CAS NO.	Compound Name	RT Est	. Conc.	Q

BERG-W-ASPOO - 8081 PESTICIDES ANALYSIS DATA SHEET

000038

Client 🝋.

Lab Name: <u>SIL Buffalo</u> Contract	W090402EJ-01
Lab Code: RECNY Case No.: SAS No.:	SDG No.: 083002
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID: <u>A2876101</u>
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): <u>SEPF</u>	Date Extracted: 09/05/2002
Concentrated Extract Volume: <u>10000</u> (uL)	Date Analyzed: 09/07/2002
Injection Volume:1.00(uL)	Dilution Factor:1.00
GPC Clearup: (Y/N) N pH: 6.00	Sulfur Cleanup: (Y/N) N
	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u> Q
58-89-9gamma-EHC (Lindane) 76-44-8	0.050 U 0.050 U 0.050 U 0.050 U 0.050 U 0.050 U 0.050 U 0.10 U 0.10 U 0.10 U 0.10 U 0.10 U 0.10 U 0.10 U 0.10 U

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - ASPOO 8082 - POLYCHLORINATED BIPHENYLS ANALYSIS DATA SHEET

000039

Lab Name: SIL Buffalo Contract	I:	W090402EJ-01
Lab Code: RECNY Case No.: SAS No.:	SDG No.: <u>083002</u>	
Matrix: (soil/water) WATER	Lab Sample ID:	<u>A2876101</u>
Sample wt/vol:1040.00 (g/mL) ML	Lab File ID:	IA07205.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 Clearup: (Y/N) N pH: _6.00	Sulfur Cleanup:	(Y/N) <u>N</u>
_	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
12674-11-2Aroclor 1016 11104-28-2Aroclor 1221 11141-16-5Aroclor 1232 53469-21-9Aroclor 1242 12672-29-6Aroclor 1248 11097-69-1Aroclor 1254 11096-82-5Aroclor 1260	0.48 0.48 0.48 0.48 0.48 0.48	0 0 0 0 0 0 0 0

BERGMANN ASSOC. - GOWANDA DAY HABILITATION CENTER BERG - W - ASPOO - 8151 - HERBICIDES (3 OMPDS) ANALYSIS DATA SHEET 000040

Client N_

Lab Name: STL Buffalo Contrac	#090402EJ-01
Lab Code: <u>RECNY</u> Case No.: SAS No.:	SDG No.: <u>083002</u>
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID: <u>A2876101</u>
Sample wt/vol: <u>1000.00</u> (g/mL) <u>ML</u>	Lab File ID: MA67304.TX0
% Moisture: decanted: (Y/N) N	Date Samp/Recv: 09/04/2002 09/05/200
Extraction: (SepF/Cont/Sonc/Soxh): <u>SEPF</u>	Date Extracted: 09/06/2002
Concentrated Extract Volume: <u>10000</u> (uL)	Date Analyzed: <u>09/13/2002</u>
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: Q
93-76-52,4,5-T 93-72-12,4,5-TP (Silvex) 94-75-72,4-D	2.0 U 2.0 U 10 U

Bergmann Associates, Inc.

INORGANIC ANALYSIS DATA SHEET

W090402EJ-01	
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Contract: NY01-449

Lab Code: STL BFLO

Case No.:

SAS No.:

SDG NO.: 083002

Matrix (soil/water): WATER

Lab Sample ID: AD224983

Tevel (low/mad):

LOW

Date Received: 9/5/02

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

CAS No.	Analyte	Concentration	Ια	0	Тм
			-	_	"
7429-90-5	Aluminum	33.1	ប	7	P
7440-36-0	Antimony	2.2	[U	-	P
7440-38-2	Arsenic	2.8	B	<u> </u>	P
7440-39-3	Barium	342	1	Ī	P
7440-41-7	Beryllium	0.30	Įσ		P
7440-43-9	Cadmium	0.30	ļΰ	l	P
7440-70-2	Calcium	81000	ļ	l	P
7440-47-3	Chromium	0.60	U	<u> </u>	₽
7440-48-4	Cobalt	1.5	ļ Ü	 	P
7440-50-8	Copper	0.91	B]	Þ
7439-89-6	Iron	8390	1	1	₽
7439-92-1	Lead	2.3	В	1.5	P
7439-95-4	Magnesium	16600		;	P
7439-96-5	Manganese	716	┨	ŀ	P
7440-02-0	Nickel	4.7	'n	ļ	P
7440-09-7	Potassium	2570	В		P
7782-49-2	Selenium	4.9	ם		₽
7439-97-6	Mercury	0.092	<u></u> ס	5	CV
7440-22-4	Silver	0.90	Įσ		P
7440-23-5	Sodium	26100	I	1	P
7440-28-0	Thallium	5.6	B	IJ	P
7440-62-2	Vanadium	1.1	[₿	1	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:					
_					
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000042

Bergmann Associates, Inc. Bergmann Assoc. - Gowanda Day Habilitation Center Wet Chemistry Analysis

Client Sample No.

Lab Name: STL <u>Buffalo</u>	Contract:			Ĺ	W090402EJ-01		
Lab Code: RECNY Case No.:	SAS No.:				SDG No.: <u>083002</u>		
Matrix (soil/water): WATER	Lab Sample ID: <u>A2876101</u>						
% Solids:0.0		Date Sar	np/	Reçv:	<u>09</u>	<u>/04/2002 09</u>	9/05/2002 =
Parameter Name	Units of Measure	Result	c	Q	м	Method Number	Analyzed Date
Cyanide - Total	UG/L	10	Ū		1	9012	09/12/200
Comments:							-

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: Data Usability Summary Report 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,

Indy Harry

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