Axiohm Ltr. 5
Item #24

Environmental
Resources
Management

5788 Widewaters Parkwa
Dewitt, NY 13214
(315) 445-2554
(315) 445-2543 (fax)

14 April 2004

Mr. Lindsey Allen
Axiohm USA, Inc.
c/o Transaction Printer Group, Inc
25 Tri-State International, Suite 200
Lincolnshire, IL 60069

ERM

RE: Supplemental Investigation
Bedrock Monitoring Well Installation & Sampling
Axiohm TPG
Ithaca, New York
ERM Project No.: 0013172

Dear Mr. Allen:

On 9 March 2004, Environmental Resources Management, Inc. (ERM) conducted a subsurface investigation at the Axiohm Facility located at 950 Danby Road, Ithaca, New York (Figure 1, Attachment A). The bedrock aquifer investigation consisted of installing shallow and deep bedrock-monitoring wells and the collection of ground water samples for laboratory analysis. Subsequent sections of this report present a summary of events and findings related to the subsurface investigation.

PROJECT BACKGROUND

ERM identified extensive areas of affected soil and ground water at the Facility during the Phase II investigation. The investigation also identified that bedrock is located within approximately 13 to 16-feet of the ground surface throughout the property. Affected soil and ground water was identified in contact with the bedrock surface in the affected areas. This supplemental investigation is designed to evaluate the potential impacts to ground water within the shallow and deep bedrock aquifers at downgradient locations of the previously identified source areas.

At the completion of the Phase II investigation, ERM recommended the installation of shallow and deep bedrock monitoring wells to assess ground water quality within the bedrock aquifers.

SOIL & BEDROCK BORINGS

To assess the vertical and lateral extent of affected ground water within the shallow and deep bedrock aquifers (Figure 2, Attachment A) four bedrock-monitoring wells were completed and sampled in March 2004. The bedrock wells were advanced downgradient of the previously identified source areas that were drill rig accessible and clear of underground utilities. The Drilling subcontractor, Parratt-Wolff, Inc. of East Syracuse, New York used a hydraulically activated truck mounted drill rig (CME 75) equipped with $6^1/_4$-inch hollow stem augers, down hole air-hammers and ancillary equipment to advance the borings and bedrock wells. Rock core samples were collected using a NX core barrel in general accordance with ASTM Method D 2113-83. Recovered rock core samples were immediately screened for volatile organic compounds (VOCs) with a photoionization detector (PID). Subsequent to field screening, rock samples were described by an on-site ERM geologist for color, texture, structure, competence, and moisture content. Shallow bedrock monitoring wells were terminated at approximately 34 and 40-feet below grade in wells BRW-1S and BRW-2S, respectively. Deep bedrock monitoring wells were terminated at approximately 109 to 110-feet below grade in wells BRW-1D and BRW-2D, respectively. Boring details are included on the monitoring well construction logs included in Attachment B.

MONITORING WELL INSTALLATION DETAILS

Four bedrock-monitoring wells were installed during the investigation (BRW-1S, BRW-1D, BRW-2S and BRW-2D) for the purpose of collecting ground water samples. The shallow bedrock monitoring wells were completed using 4-inch inside diameter steel casing that was grouted approximately 5-feet into the bedrock. The deeper bedrock monitoring wells were completed next to the shallow wells using 4-inch inside diameter steel casing that was grouted into the bedrock approximately two feet below the bottom of the adjacent shallow wells. Both shallow and deep wells were completed naturally in the bedrock at the termination depths. Bedrock monitoring well construction logs are included in Appendix B.

SAMPLING

Water level measurements were obtained with an electronic water level indicator. Ground water samples were collected at the site from the four bedrock-monitoring wells during the coarse of the investigation for laboratory analysis. Ground water samples were collected with disposable bailers. All samples were transferred immediately into laboratory supplied sample containers and placed in a thermally insulated container and chilled. Samples were delivered to the project laboratory within twenty-four hours of sample collection by ERM personnel. Chain of custody procedures were followed during all sample handling and transport. All samples were analyzed by Spectrum Analytical, Inc. (Spectrum) of Agawam, Massachusetts for target compound list (TCL) VOCs by USEPA Method 8260. Samples collected from bedrock monitoring wells BRW-1S, BRW-1D and BRW-2D were also analyzed for Resource Conservation Recovery Act (RCRA) metals. Tables 1-1 & 1-2 presents a summary of sampling results from the ground water samples collected during this investigation.

FINDINGS

In general, the soil borings encountered eight to sixteen feet of soil overlaying bedrock. A shallow perched saturated zone was encountered on top of the bedrock at all four bedrock well locations. Soils encountered in borings advanced at the site consisted predominantly of a medium to dark brown, fine-grained sand and silt with varying amounts of fine to medium and gravel. Bedrock encountered at the site was classified as gray medium-weathered sitlstone, thin-bedded with some fractures. PID readings were not observed above background levels during bedrock drilling activities.

On 14 March 2004, ground water levels were obtained from the shallow and deep bedrock monitoring wells prior to sampling. Ground water levels were recorded in the shallow wells at 9.14 feet and 39.25 feet in BRW-1S and BRW-2S, respectively. Ground water levels were recorded in the deep wells at 103.26 feet and 72.28 feet in BRW-1D and BRW-2D, respectively.

Ground water flow within the fractured bedrock is difficult to define and is significantly influenced by the presence or absence of vertical joints in

relation to horizontal bedding plane fracture distributions. Due to variable spacing of vertical joints in relation to the variable horizontal bedding plane fracture distributions, ground water flow characteristics in the shallow bedrock is most-likely very different than that in the deeper bedrock. Based on a general knowledge of flow in fractured media, experiences at other locations near Ithaca, and in a literature review conducted as part of this investigation, ERM anticipates that flow is generally to the southwest. Flow is dominated in a lateral direction by the southwesterly dipping bedding planes and vertically by tectonic fracture sets.

ANALYTICAL RESULTS

Four ground water samples were submitted to the laboratory for analysis for TCL VOCs by USEPA Method 8260. Three ground water samples were analyzed for RCRA metals. Tables 1-1 and 1-2 (Attachment C) present a summary of ground water analytical data for the samples collected during this investigation. A copy of the laboratory analytical report is included in Attachment D. Ground water sampling records are included in Attachment E.

The bedrock monitoring well sampling event was conducted on 14 March 2004 after the installation of bedrock monitoring wells BRW-1S, BRW-1D, BRW-2S and BRW-2D. VOCs ranged from 1.32 ug/l in monitoring well BRW-2D to 192.23 ug/l in monitoring well BRW-1S. Acetone, benzene, cis-1,2-dichloroethene, trichloroethene and vinyl chloride were detected at concentrations that exceeded NYSDEC Ambient Water Quality Standard and Guidance Values. The detectable VOC concentrations along with the NYSDEC Ambient Water Quality Standard and Guidance Values are summarized on Table 1-1 in Attachment C.

CONCLUSIONS

Based on the data obtained during this investigation it appears that affected ground water from the previously identified Areas of Concern (AOC) is affecting bedrock across the site. Several VOCs were detected in the ground water samples obtained from the bedrock wells at concentrations that exceeded NYSDEC Ambient Water Quality Standard and Guidance Values.

If you should have any questions regarding this letter please contact me at 315-445-2554.

Sincerely,

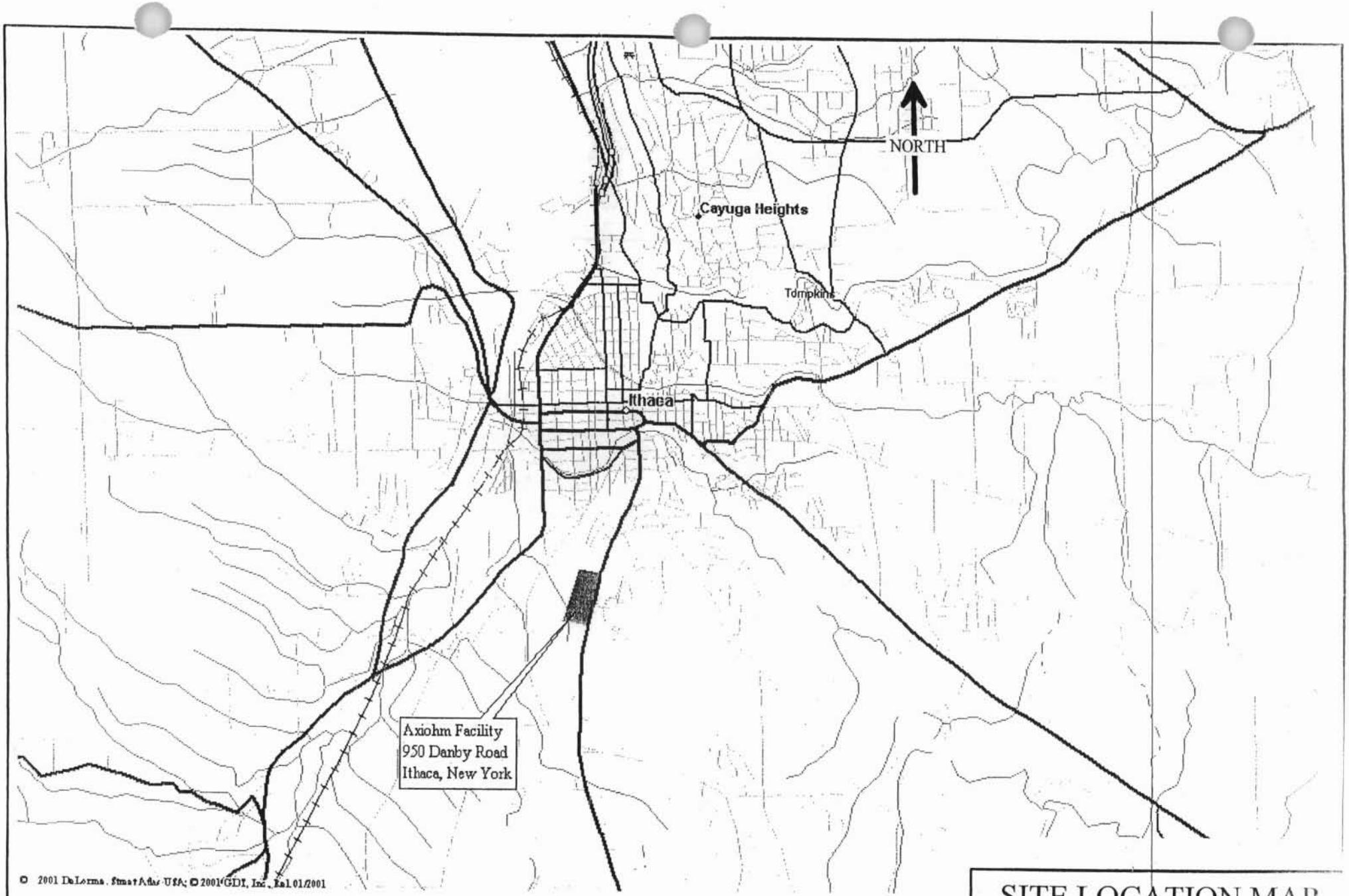
for

Christopher D. Wunderlich, C.P.G.
Project Manager

Edward Hinchey, P.G.
Principal

Attachments

ATTACHMENT A
FIGURES



SITE LOCATION MAP

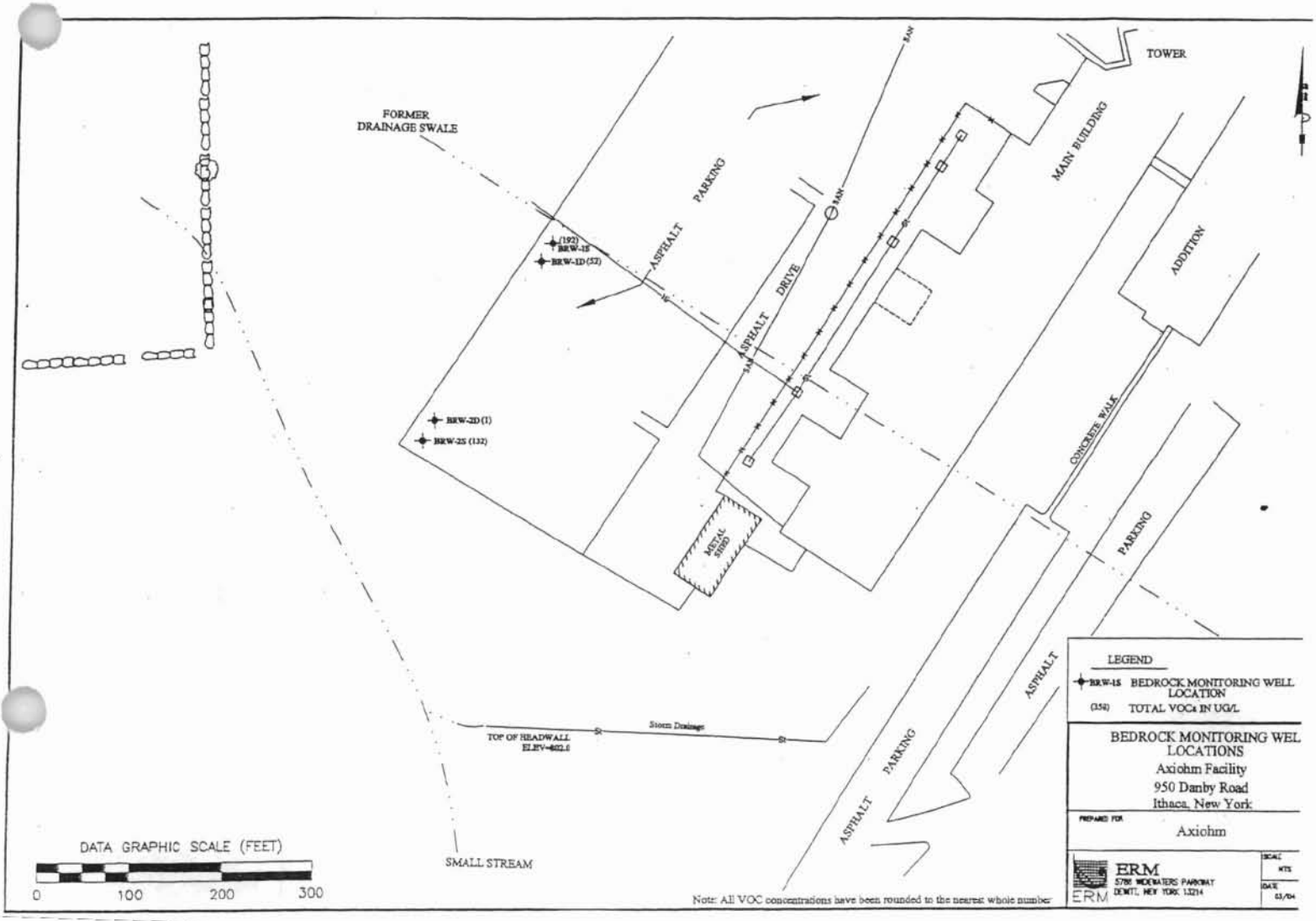
PREPARED FOR: **Axiohm**

ERM

SCALE: As Shown

DATE: February 2004

FIGURE: 1


FORMER
DRAINAGE SWALE
ASPHALT PARKING
(192)
BRW-1S
BRW-1D (52)
BRW-2D (1)
BRW-2S (132)
ASPHALT DRIVE
MAIN BUILDING
TOWER
ADDITION
CONCRETE WALK
PARKING
METAL SHED
Storm Drainage
TOP OF HEADWALL
ELEV=602.6
SMALL STREAM
ASPHALT PARKING
ASPHALT
DATA GRAPHIC SCALE (FEET)
0
100
200
300
LEGEND
BRW-1S BEDROCK MONITORING WELL LOCATION
(354) TOTAL VOCs IN UG/L
BEDROCK MONITORING WEL LOCATIONS
Axiohm Facility
950 Danby Road
Ithaca, New York
PREPARED FOR
Axiohm
ERM
5788 WIDEWATERS PARKWAY
DEWITT, NEW YORK 13214
SCALE
NTS
DATE
03/04
Note: All VOC concentrations have been rounded to the nearest whole number

ATTACHMENT B
BORING LOGS

ERM

WELL : BRW-1S

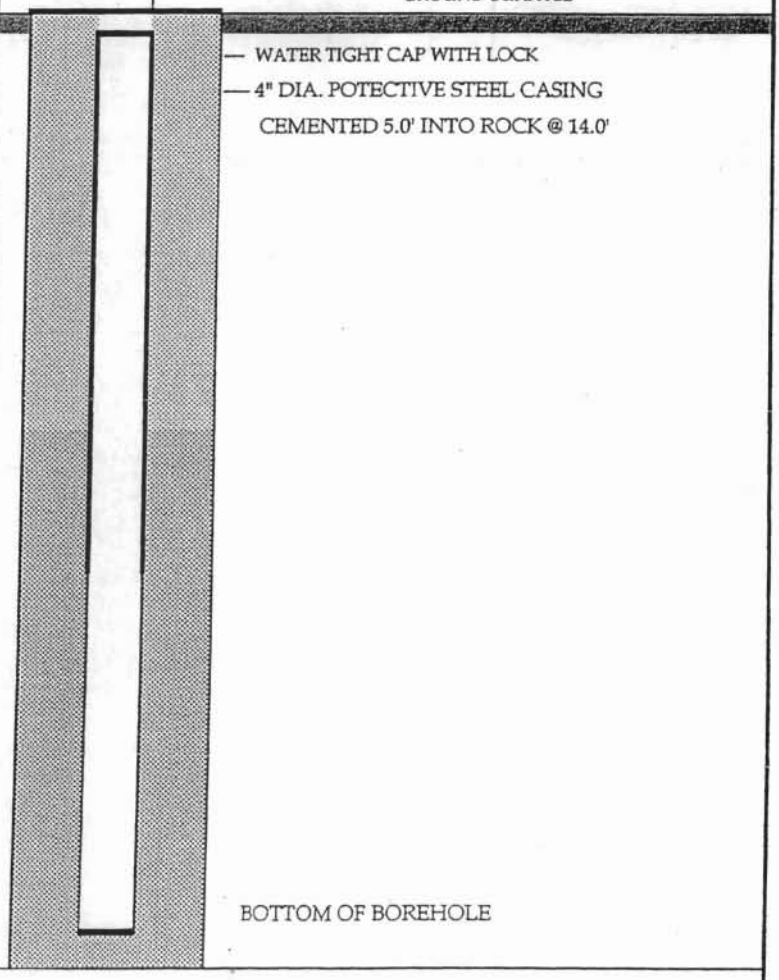
5788 Widewaters Parkway, Dewitt, NY 13214 (315) 445-2554

MONITORING WELL CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
AXIOHM	13172				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
PARRATT WOLFF, INC	Lane Peck				
Surveyor					Top of Protective Steel Cap Elevation (feet)
Date and Time of Completion	Geologist	3/11/03	6:30	31.0'	Top of Riser Pipe Elevation (feet)
3/10/2004	CW				

Generalized Soil Description	*Elevation	**Depth
Asphalt	0.00	0.0
Fill: Brown F-C Sand & Silt with some M Gravel		
Bedrock Encountered		8.0
Core Run #1 (14.5' - 19.5') Recovery - 86% RQD - 28% Gray medium weathered Siltstone with some fractures		14.0
		34.0

CONSTRUCTION DETAILS



REMARKS The drilling was completed with a CME 75 hydraulacally activated drill rig that utilized 6 1/4-inch HAS to bedrock; 5 7/8-inch DHAH to install 4" steel casing into rock; a 3 5/8-inch DHAH to complete the well; and a NX core to sample the bedrock.

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM

WELL : BRW-1D

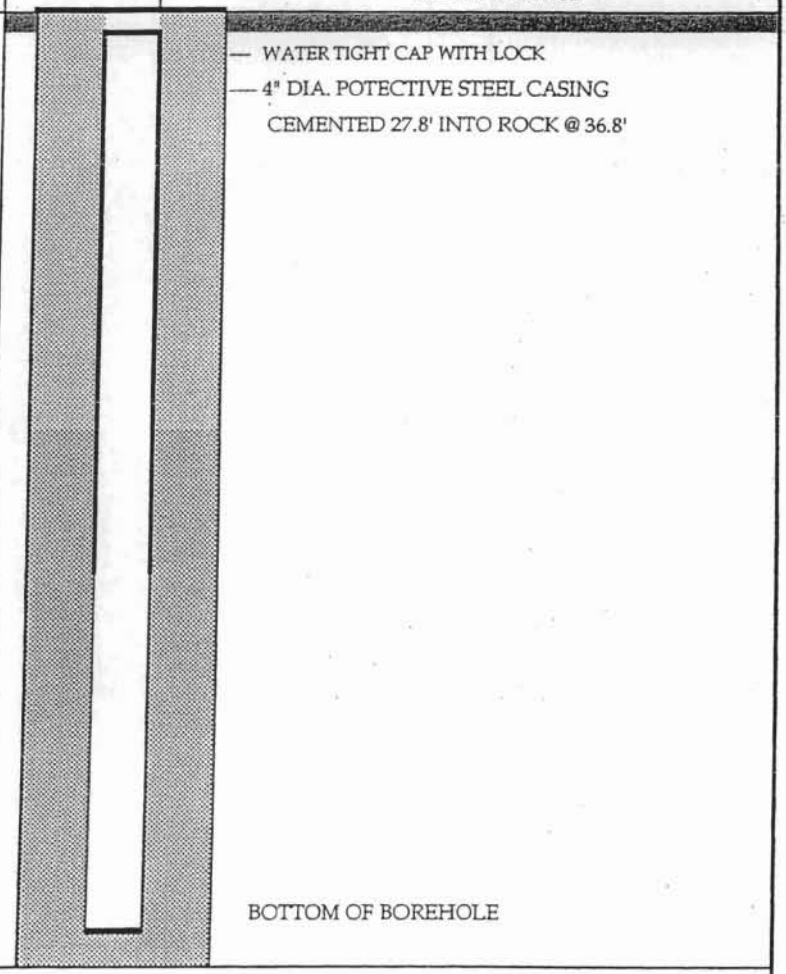
5788 Widewaters Parkway, Dewitt, NY 13214 (315) 445-2554

MONITORING WELL CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
AXIOHM	13172				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
PARRATT WOLFF, INC	Lane Peck				
Surveyor					Top of Protective Steel Cap Elevation (feet)
Date and Time of Completion	Geologist	3/11/03	14:30	105.2	Top of Riser Pipe Elevation (feet)
3/12/2004	CW				

Generalized Soil Description	*Elevation	**Depth
Asphalt	0.00	0.0
Fill: Brown F-C Sand & Silt with some M Gravel		
Bedrock Encountered		9.0
		36.8'
Core Run #2 (44' - 49') Recovery - 83% RQD - 80% Gray medium weathered Siltstone with some fractures		
		109.0

CONSTRUCTION DETAILS



REMARKS The drilling was completed with a CME 75 hydraulacally activated drill rig that utilized 6 1/4-inch HAS to bedrock; 5 7/8-inch DHAH to install 4" steel casing into rock; a 3 5/8-inch DHAH to complete the well; and a NX core to sample the bedrock.

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM

WELL : BRW-2S

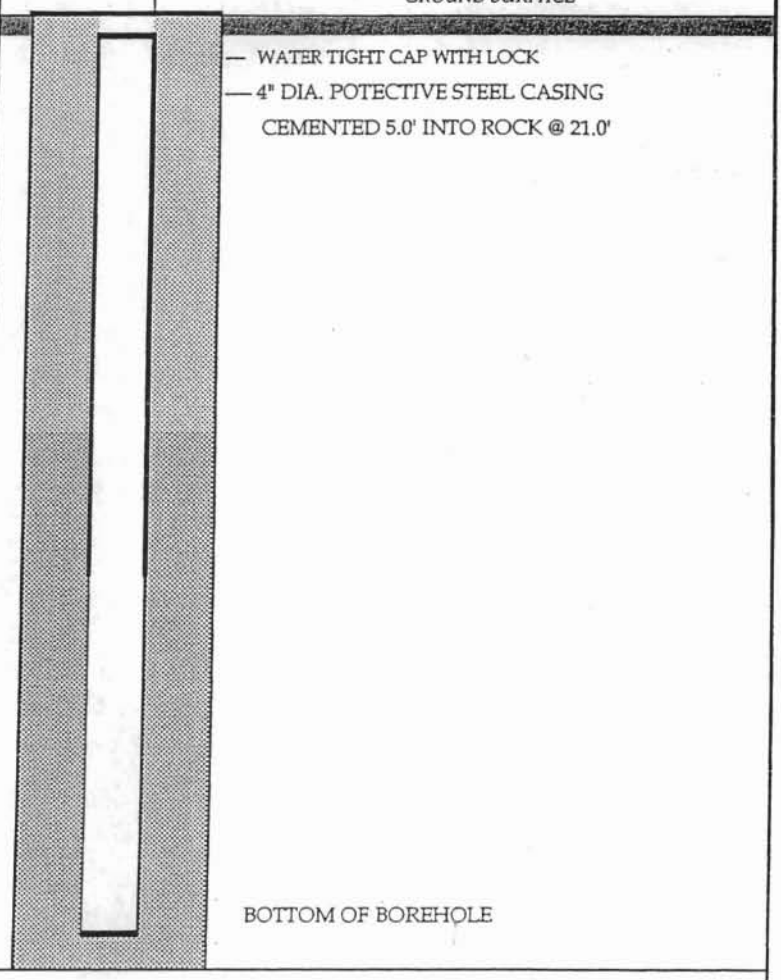
5788 Widewaters Parkway, Dewitt, NY 13214 (315) 445-2554

MONITORING WELL CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
AXIOHM	13172				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
PARRATT WOLFF, INC	Lane Peck				
Surveyor					Top of Protective Steel Cap Elevation (feet)
Date and Time of Completion	Geologist	3/11/03	6:30	39.3'	Top of Riser Pipe Elevation (feet)
3/10/2004	CW				

Generalized Soil Description	*Elevation	**Depth
Asphalt	0.00	0.0
Fill: Brown F-C Sand & Silt with some M Gravel		
Bedrock Encountered		16.0
Gray medium weathered Siltstone with some fractures		21.0
		40.0

CONSTRUCTION DETAILS



REMARKS The drilling was completed with a CME 75 hydraulacally activated drill rig that utilized 6 1/4-inch HAS to bedrock; 5 7/8-inch DHAH to install 4" steel casing into rock; a 3 5/8-inch DHAH to complete the well.

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM

WELL : BRW-2D

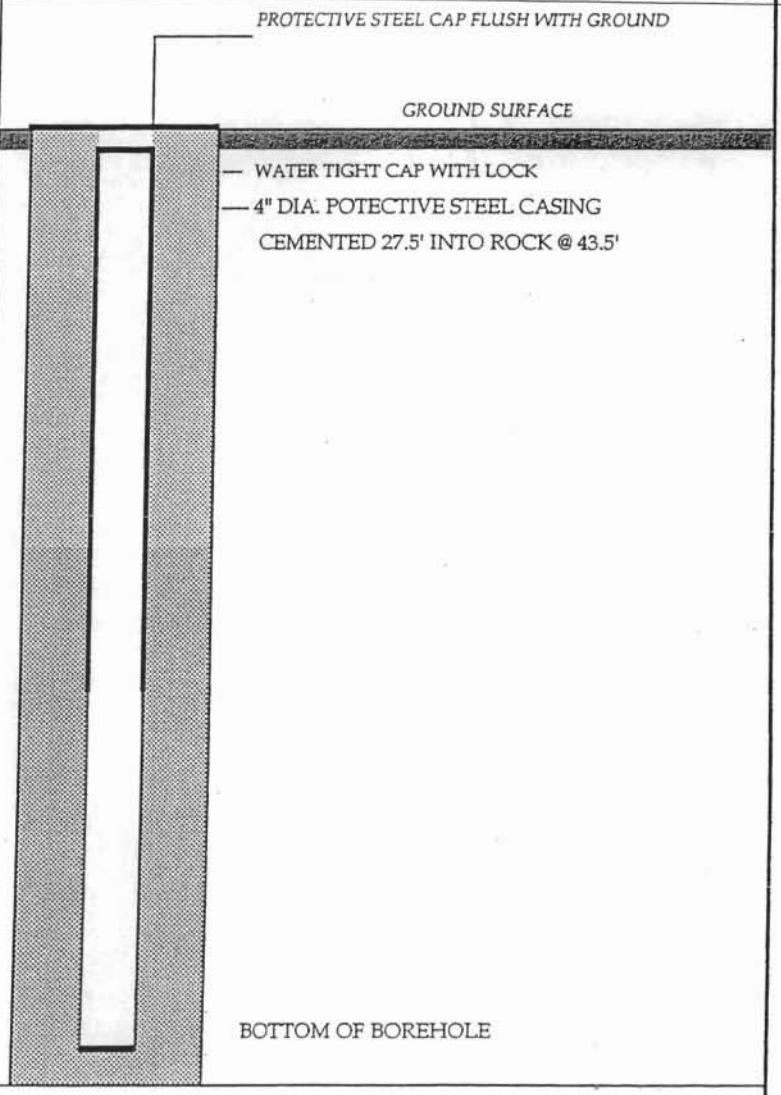
5788 Widewaters Parkway, Dewitt, NY 13214 (315) 445-2554

MONITORING WELL CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
AXIOHM	13172				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
PARRATT WOLFF, INC	Lane Peck				
Surveyor					Top of Protective Steel Cap Elevation (feet)
Date and Time of Completion	Geologist	3/12/03	18:30	99.2'	Top of Riser Pipe Elevation (feet)
3/11/2004	CW				

Generalized Soil Description	*Elevation	**Depth
Asphalt	0.00	0.0
Fill: Brown F-C Sand & Silt with some M Gravel		
Bedrock Encountered		16.0
Core Run #3 (105' - 110') Recovery - 100% RQD - 43% Gray medium weathered Siltstone with some fractures		43.5
		110.0

CONSTRUCTION DETAILS



REMARKS The drilling was completed with a CME 75 hydraulacally activated drill rig that utilized 6 1/4-inch HAS to bedrock; 5 7/8-inch DHAH to install 4" steel casing into rock; a 3 5/8-inch DHAH to complete the well; and a NX core to sample the bedrock.

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ATTACHMENT C
TABLES

TABLE 1-1
SUMMARY OF VOC DETECTIONS IN GROUND WATER
AXIOHM FACILITY
ITHACA, NEW YORK
ERM PROJECT NUMBER 0013172

SAMPLE ID DATE COLLECTED	Axi BRW-1S 3/14/2004	Axi BRW-1D 3/14/2004	Axi BRW-2S 3/14/2004	Axi BRW-2D 3/14/2004	NYSDEC Standards
VOCs (ug/L)					
Acetone	—	33.8	110	—	50
Benzene	—	2.74	3.19	—	1
Bromochloromethane	—	—	—	—	5
2-Butanone (MEK)	—	—	12.8	—	50
n-Butylbenzene	—	—	—	—	5
sec-Butylbenzene	—	—	—	—	5
Chloroform	—	—	—	—	7
Dibromochloromethane	—	—	—	—	50*
1,1-Dichloroethane	—	—	—	—	5
1,1-Dichloroethene	—	—	—	—	5
cis-1,2-Dichloroethene	52	11	—	—	5
trans-1,2-Dichloroethene	3.19		—	—	5
Napthalene	—	—	1.53	—	10*
1,1,1,2-Tetrachloroethane	—	—	—	—	5
Toluene	1.78	4.06	4.22	1.32	5
1,1,1-Trichloroethane	—	—	—	—	5
Trichloroethene	132	—	—	—	5
1,2,4-Trimethylbenzene	—	—	—	—	5
Vinyl chloride	3.26	—	—	—	2
TOTAL VOCS	192.23	51.6	131.74	1.32	NA

NOTES:

ug/L = Micrograms per liter

VOCs - volatile organic compounds determined by USEPA Method 8260

NYSDEC Standards - NYS Division of Water Technical and Operational Guidance Series (1.1.1) 1998

— = the compound was not detected at a concentration above the laboratory reporting limit

- Bold white type with black background indicates exceedance of the NYSDEC Standards or Guidance Value

* - indicates guidance value from New York State Ambient Water Quality Standards and Guidance Values June 1998

NA - not applicable

NS - location was not sampled for this parameter

TABLE 1-2
SUMMARY OF TOTAL METAL DETECTIONS IN GROUND WATER
AXIOHM FACILITY
ITHACA, NEW YORK
ERM PROJECT NUMBER 0013172

SAMPLE ID DATE COLLECTED	Axi BRW-1S 3/14/2004	Axi BRW-1D 3/14/2004	Axi BRW-2S 3/14/2004	Axi BRW-2D 3/14/2004	NYSDEC Standards
Total Metals (mg/L)					
Silver	—	—	NS	—	0.05
Arsenic	—	0.0322	NS	0.0138	0.025
Barium	0.304	0.322	NS	0.109	1
Cadmium	0.0167	—	NS	—	0.005
Chromium	—	0.252	NS	0.103	0.05
Mercury	—	—	NS	—	0.7
Lead	—	0.007	NS	—	0.025
Vanadium	—	—	NS	—	NG
Selenium	—	—	NS	—	0.2

NOTES:

ug/L = Micrograms per liter

NYSDEC Standards - NYS Division of Water Technical and Operational Guidance Series (1.1.1) 1998

— = the compound was not detected at a concentration above the laboratory reporting limit

- Bold white type with black background indicates exceedance of the NYSDEC Standards or Guidance Value

NG - no guidance value or standard provided

NS - location was not sampled for this parameter

ATTACHMENT D
ANALYTICAL DATA

ATTACHMENT E

GROUND WATER SAMPLING LOGS

GROUND WATER SAMPLING RECORD

SITE Axiohm DATE 3-14-04

PROJECT NUMBER: 0013172

SAMPLE ID: AXI-BRW-1S

WELL ID: BRW-1S Time Onsite: Time Offsite:

SAMPLERS: Chris Wunderlich 1200 1500

Depth of well (from top of casing)	34.0'	Time:
Static water level (from top of casing)	9.14	Time:
Water level after purging (from top of casing)		Time:
Water level before sampling (from top of casing)		Time:

Purging Method:

- ___ Airlift
- ___ Low-Flow Pump
- X Bailer
- ___ Peristaltic Pump
- ___ Submersible
- ___ Ded. Pump

Well Volume Calculation:

		1 volume	3 volumes
2 in. well:	___ ft. of water x 0.16 =	___ gal.	x 3 = ___ gal.
3 in. well:	___ ft. of water x 0.36 =	___ gal.	x 3 = ___ gal.
4 in. well:	___ ft. of water x 0.65 =	___ gal.	x 3 = ___ gal.
6 in. well:	___ ft. of water x 1.47 =	___ gal.	x 3 = ___ gal.

Volume of water removed: 8.5 gal on 3-12-04 >3 volumes: yes ___ no ___ purged dry? yes X no ___

Field Tests:

	pH	Cond.	Turb.	DO	Temp.	DEP	SAL	TDS	ORP
units	-	mg/cm	NTU	g/L	C F	-	-	g/L	mV
Initial									
1 Volume									
2 Volumes									
3 Volumes									

Sampling

Time of Sample Collection: 1300

Collection Method:	Analyses:	Analytical Method:
X Disposable bailer	X VOCs -	8260 X 503.1 ___ Other ___
___ Teflon bailer	___ SVOCs	
___ Dedicated pump	X Metals	
___ Submersible Pump	___ PCB/Pest	
___ Low-Flow Sampling	___ MNA	
___ Other: ___	___ Other	

Observations

Weather/Temperature: 48° P-Cloudy

Sample Description: Gray/Brown silty

Free Product? yes ___ no X describe ___

Sheen? yes ___ no X describe ___

Odor? yes ___ no X describe ___

Comments:

None

GROUND WATER SAMPLING RECORD

SITE Axiohm DATE 3-14-04

PROJECT NUMBER: 0813172

SAMPLE ID: AXI-BRW-1D

WELL ID: BRW-1D

SAMPLERS: Chris Wunderlich

	Time Onsite:	Time Offsite:
	1200	1500

Depth of well (from top of casing)	109'	Time:
Static water level (from top of casing)	103.26	Time:
Water level after purging (from top of casing)		Time:
Water level before sampling (from top of casing)		Time:

Purging Method:

- ___ Airlift
- ___ Low-Flow Pump
- X Bailer
- ___ Peristaltic Pump
- ___ Submersible
- ___ Ded. Pump

Well Volume Calculation:

		1 volume	3 volumes
2 in. well:	___ ft. of water x 0.16 =	___ gal.	x 3 = ___ gal.
3 in. well:	___ ft. of water x 0.36 =	___ gal.	x 3 = ___ gal.
4 in. well:	___ ft. of water x 0.65 =	___ gal.	x 3 = ___ gal.
6 in. well:	___ ft. of water x 1.47 =	___ gal.	x 3 = ___ gal.

Volume of water removed: 5.6 gal. on 3-12-04

>3 volumes: yes ___ no ___ purged dry? yes X no ___

Field Tests:

	pH	Cond.	Turb.	DO	Temp.		DEP	SAL	TDS	ORP
units		mg/cm	NTU	g/L	C	F	-	-	g/L	mV
Initial										
1 Volume										
2 Volumes										
3 Volumes										

Sampling

Time of Sample Collection: 1330

Collection Method:	Analyses:	Analytical Method:
X Disposable bailer	X VOCs -	8260 X 503.1 ___ Other ___
___ Teflon bailer	___ SVOCs	
___ Dedicated pump	X Metals	
___ Submersible Pump	___ PCB/Pest	
___ Low-Flow Sampling	___ MNA	
___ Other: ___	___ Other	

Observations

Weather/Temperature: 48° P-Cloudy

Sample Description: Gray-Brown silty

Free Product? yes ___ no X describe ___

Sheen? yes ___ no X describe ___

Odor? yes ___ no X describe ___

Comments:

None.

GROUND WATER SAMPLING RECORD

SITE Axiohm DATE 3-14-04

PROJECT NUMBER: 0013172

SAMPLE ID : AXI-BRW-25

WELL ID : BRW-25 Time Onsite: 1200 Time Offsite: 1510

SAMPLERS : Chris Wunderlich

Depth of well (from top of casing) ..... 40.00' Time: _____

Static water level (from top of casing) ..... 39.25' Time: _____

Water level after purging (from top of casing)..... _____ Time: _____

~~Water level before sampling~~ (from top of casing) ..... _____ Time: _____

Purging Method:

___ Airlift ___ Low-Flow Pump

X Bailer ___ Peristaltic Pump

___ Submersible ___ Ded. Pump

Well Volume Calculation:

		1 volume	3 volumes
2 in. well:	___ ft. of water x 0.16 =	___ gal.	x 3 = ___ gal.
3 in. well:	___ ft. of water x 0.36 =	___ gal.	x 3 = ___ gal.
4 in. well:	___ ft. of water x 0.65 =	___ gal.	x 3 = ___ gal.
6 in. well:	___ ft. of water x 1.47 =	___ gal.	x 3 = ___ gal.

Volume of water removed: 0.5 gal. on 3-12-04

>3 volumes: yes ___ no ___ purged dry? yes X no ___

Field Tests:

	pH	Cond.	Turb.	DO	Temp.	DEP	SAL	TDS	ORP
units	-	mg/cm	NTU	g/L	C F		-	g/L	mV
Initial									
1 Volume									
2 Volumes									
3 Volumes									

Sampling

Time of Sample Collection: 1400

Collection Method:		Analyses:		Analytical Method:	
X	Disposable bailer	X	VOCs -	8260 X	503.1 ___ Other ___
___	Teflon bailer	___	SVOCs		
___	Dedicated pump	~~X~~	~~Metals~~	Not enough water to Sample	
___	Submersible Pump	___	PCB/Pest		
___	Low-Flow Sampling	___	MNA		
___	Other: ___	___	Other		

Observations

Weather/Temperature: 48° P-Cloudy

Sample Description: Gray - Brown silty

Free Product? yes ___ no X describe ___

Sheen? yes ___ no X describe ___

Odor? yes ___ no X describe ___

Comments:

None.

GROUND WATER SAMPLING RECORD

SITE Axiom DATE 3-14-04

PROJECT NUMBER: 0013172

SAMPLE ID: Ax1-BRW-2D

WELL ID: BRW-2D	Time Onsite:	Time Offsite:
SAMPLERS: Chris Wunderlich	1200	1500

Depth of well (from top of casing)	110'	Time:
Static water level (from top of casing)	72.28'	Time:
Water level after purging (from top of casing)		Time:
Water level before sampling (from top of casing)		Time:

Purging Method:

- X Airlift
- ___ Bailer
- ___ Submersible
- ___ Low-Flow Pump
- ___ Peristaltic Pump
- ___ Ded. Pump

Well Volume Calculation:

		1 volume	3 volumes
2 in. well:	___ ft. of water x 0.16 =	___ gal.	x 3 = ___ gal.
3 in. well:	___ ft. of water x 0.36 =	___ gal.	x 3 = ___ gal.
4 in. well:	___ ft. of water x 0.65 =	___ gal.	x 3 = ___ gal.
6 in. well:	___ ft. of water x 1.47 =	___ gal.	x 3 = ___ gal.

Volume of water removed: 25-35 gal. on 3-12-04

>3 volumes: yes ___ no ___ purged dry? yes X no ___

Field Tests:

	pH	Cond.	Turb.	DO	Temp.	DEP	SAL	TDS	ORP
units	-	mg/cm	NTU	g/L	C F	-	-	g/L	mV
Initial									
1 Volume									
2 Volumes									
3 Volumes									

Sampling

Time of Sample Collection: 1430

Collection Method:	Analyses:	Analytical Method:
X Disposable bailer	X VOCs -	8260 X 503.1 ___ Other ___
___ Teflon bailer	___ SVOCs	
___ Dedicated pump	X Metals	
___ Submersible Pump	___ PCB/Pest	
___ Low-Flow Sampling	___ MNA	
___ Other: ___	___ Other	

Observations

Weather/Temperature: 48°, P-Cloudy

Sample Description: Gray Brown - silty

Free Product? yes ___ no X describe ___

Sheen? yes ___ no X describe ___

Odor? yes ___ no X describe ___

Comments:

None.