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ATTORNEYS AND COUNSELORS

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Erdle

March 28, 2005

VIA FEDERAL EXPRESS PRIORITY OVERNIGHT

David Pratt
Project Manager
NYS DEC - Region 8
6274 East Avon-Lima Road
Avon, New York 14414-9519

Re: Erdle Perforating
DEC Site #828072
Our File No. 12622.5

Dear David:

As per my e-mail to you today, I am enclosing a copy of the full SSI Report by Barron & Associates with respect to the above-captioned site.

Very truly yours,

HARTER, SECREST & EMERY LLP

Craig A. Slater
DIRECT DIAL: 716-845-4223
E-MAIL: CSLATER@HSELAW.COM

CAS:jp
Enclosure
cc: F. Pfau

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MAR 30 2005

DER/HAZ. WASTE REMED
REGION 8

BARRON & ASSOCIATES, P.C.

10440 Main Street
Clarence, New York 14031

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February 28, 2005

Job No.: 02-555A

Harter, Secrest & Emery LLP
Twelve Fountain Plaza, Suite 400
Buffalo, New York 14202-2228

Attn: Craig A. Slater, Esq.

Re: **Submittal: Monitoring Well Installation, Groundwater Sampling and Analysis, Erdle Perforating, 100 Pixley Industrial Parkway, Gates, NY 14264 (NYSDEC Inactive Hazardous Waste Site #828072)**

Gentlemen:

Barron & Associates, P.C. (B&A) is pleased to submit this report discussing the field methodology that was utilized and presenting the data generated during the above referenced investigation at Erdle Perforating, 100 Pixley Industrial Parkway, Gates, NY (Figure 1, Attachment #1).

The investigative scope of services included the following activities (refer to Figure #2 for monitoring well locations):

- Installed three monitoring wells. Installed a bedrock monitoring well adjacent to MW-11, monitoring well MW-11D. Installed an overburden/bedrock monitoring well couplet southwest of MW-11 at the north end of the residential road, monitoring wells, MW-13 and MW-13D. Test borings were advanced at each monitoring well location. Continuous split spoon samples were obtained through the unconsolidated material to the top of bedrock (i.e., auger refusal). The soil samples were visually characterized and screened with a photoionization detector (PID). This field information was recorded in a waterproof field book and, subsequently, transcribed to Observation Well Schematics, Attachment #2 and Table 1, Attachment #1.
- At the completion of the test boring at the overburden (top of bedrock) monitoring well, MW-13,, a two-inch I.D., 5-foot long, Sch. 40 PVC, #10 slot screen with attached riser was installed. A sand pack was placed around the screen and one foot above the screen. A two-foot bentonite seal was placed above the sand pack and the well was completed to approximately one foot below ground surface with cement/bentonite grout. The monitoring well was completed at ground surface with a locking J-plug and a curb box that was placed in cement. Refer to the Observation Well Schematic for MW-13, Attachment #2, for the specific monitoring well construction details
- At the completion of the test borings for the two bedrock monitoring wells, MW-11D and MW-13D, a permanent, 4-inch I.D. steel casing was installed at each bedrock monitoring well location into a one- to one and half-foot deep rock socket that was created by drilling with a 5 7/8-inch roller bit. The steel casings were grouted to ground surface. Prior to placement of the 4-inch I.D. steel casings at each bedrock monitoring well location, the steel casings was steamed cleaned. The grout at each well was allowed to cure for approximately 24 hours. An open bedrock borehole was advanced to 8.5 feet below the bottom of the rock socket at MW-11D using a 3 7/8-inch diameter roller bit. At MW-13D, as the open bedrock hole was being advanced below the four-inch steel casing using the 3 7/8-inch diameter roller bit, highly

Geotechnical and Environmental Consulting Engineers

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fractured bedrock was encountered at approximately 12.5 feet below ground surface. As the borehole was advanced within this highly fractured bedrock to 16 feet below ground surface, cave-in was encountered up to a depth of 12.5 feet below ground surface as the roller bit was extracted from the borehole; hence, precluding the advancement of an open bedrock hole to the proposed depth of approximately 20 feet below ground surface without abandonment of this borehole and modification of the drilling technique. In conversation with the NYSDEC, it was agreed upon that, at this time, the bedrock monitoring well would be completed at 12.5 feet. At each bedrock monitoring well boring, the water generated during roller biting was recirculated and subsequently containerized in drums. The drums were staged on the Erdle site for characterization and disposal by Erdle. Refer to the Observation Well Schematics for MW-11D and MW-13D, Attachment #2, for the specific monitoring well construction details

- Between each test boring and monitoring well construction, the drilling equipment and split spoons were steam cleaned in a decon area that was located on the Erdle property. The decon waters were drummed for characterization and disposal by Erdle. Between split spoon samples, the split spoons were cleaned using potable water andalconox detergent and subsequently rinsed with potable water. The waters generated during this cleaning process were also drummed and handle in the same manner as noted in the item above.
- During the above intrusive field activities (i.e., sampling of the unconsolidated material), breathing zone air monitoring was performed for VOCs and particulates to comply with the site H&S plan and the NYSDOH CAMP. During the construction of the bedrock monitoring well, since coring was performed using water, breathing zone air monitoring was performed for VOCs.
- Following installation of the monitoring wells, B&A personnel returned to the site to develop the newly installed wells. Development activities were performed using dedicated, pre-cleaned PVC bailer for the newly installed monitoring wells. The bailers were pre-cleaned prior to arrival on site and were sealed separately in plastic. Waters generated during the development activity were placed in drums and staged on the Erdle property for characterization and disposal by Erdle.
- Following development of the newly installed monitoring wells, B&A personnel returned to the site to sample the three newly installed wells, MW-11D, MW-13 and MW-13D and 10 existing monitoring wells. The 10 existing monitoring wells that were sampled were MW-3D, MW-6 & 6D, MW-8 & 8D, MW-11, MW-12, GPZ-1D, GPZ-2D and GPZ-6D. Sampling activities were performed using a separate, pre-cleaned PVC bailers for each monitoring well. The bailers were pre-cleaned prior to arrival on site and were sealed separately in plastic. During sampling, field measurements for static water levels, ph, conductivity, temperature, ORP, TDS and turbidity were obtained.
- Analysis of the groundwater samples were performed for volatile organic compounds using USEPA Method 8260 TCL and for iron, manganese, TOC, alkalinity, sulfate and chloride and reported in a NYS ASP B deliverable package. The contracted laboratory was Adirondack Environmental Services, Inc., Albany, New York, a NYSDOH ELAP-approved laboratory.

Test Borings/Monitoring Wells

The field activities that were associated with the installation of three monitoring wells, MW-11D, MW-13 and MW-13D were conducted on August 24 and 25, 2004. B&A's affiliate company, *Buffalo Drilling Company, Inc. (BDC)*, mobilized a truck-mounted drill rig to the site.

During the drilling and sampling of the test borings associated with the monitoring wells, provisions for monitoring worker's breathing zone upwind and downwind for total volatile organic compounds and particulates were implemented. The on-site equipment included a RAE Systems Inc., MiniRAE Plus, Model PGM-761 S photoionization detector and two MIE DataRam Portable Real-Time Aerosol Monitor and DataRam Accessories for real time PM-10 sampling. The information that was generated during this air monitoring activity is presented on the Worker's Breathing Zone Data Sheet, Attachment #1.

Monitoring Well Development and Sampling

B&A personnel mobilized to the site on September 21, 2004 to develop the three newly installed monitoring wells, MW-11D, MW-13 and MW-13D using a separate, pre-cleaned PVC bailer at each well. Before the development process, depth to static water level and total depth of the wells were obtained using an Heron Instruments Oil/Water Interface Meter. The Heron Instruments Oil/Water Interface Meter was cleaned between wells using soap, potable water and a final distilled water rinse. The monitoring wells were developed by removing ten static-water, well volumes. The evacuated waters that were generated during development were placed into 55-gallon drums and staged at Erdle for subsequent characterization and disposal by Erdle. During the development process at each monitoring well, an initial and final pH, conductivity and temperature readings were obtained. The reader is requested to refer to the Field Development and Sampling Data Sheet, Attachment #1, for the information recorded during well development.

On October 5 and 6, 2004, B&A personnel returned to the site to sample the aforementioned three newly installed monitoring wells and ten existing monitoring wells. Prior to sampling the monitoring wells, a static water level and total depth of well were obtained at each well utilizing the same cleaning procedure for the Heron Instruments Oil/Water Interface Meter as discussed above between monitoring wells. Once the static water levels were obtained, three well volumes were removed from each well. The monitoring wells were then allowed to return to static water level condition. A pre-cleaned, designated PVC bailer was slowly lowered into the well to retrieve groundwater samples, which were then placed directly into pre-cleaned, laboratory containers provided by the analytical laboratory. The samples were labeled, chain-of-custody initiated, and placed in a cooler with ice and freighted to Adirondack Environmental Services, Inc., Albany, New York under chain of custody.

A potentiometric contour map of the upper bedrock water bearing zone has been prepared (refer to Figure #3, Attachment #1) based on the static water levels obtained during sampling from the bedrock monitoring wells. As depicted on Figure #3, groundwater flow within the bedrock is generally in a southern direction.

Groundwater Sample Analytical Program and Results

Analysis of the groundwater samples were performed for USEPA Method 8260 TCL compounds, iron, manganese, TOC, alkalinity, chloride and sulfate and reported in a NYS ASP B deliverable

Submittal
Harter, Secrest & Emery.
Page 4

package. Adirondack Environmental Services, Inc.'s NYS ASP B deliverable package for the groundwater samples is presented in Attachment #3. Table 2 presents the detectable analytical results for the groundwater samples.

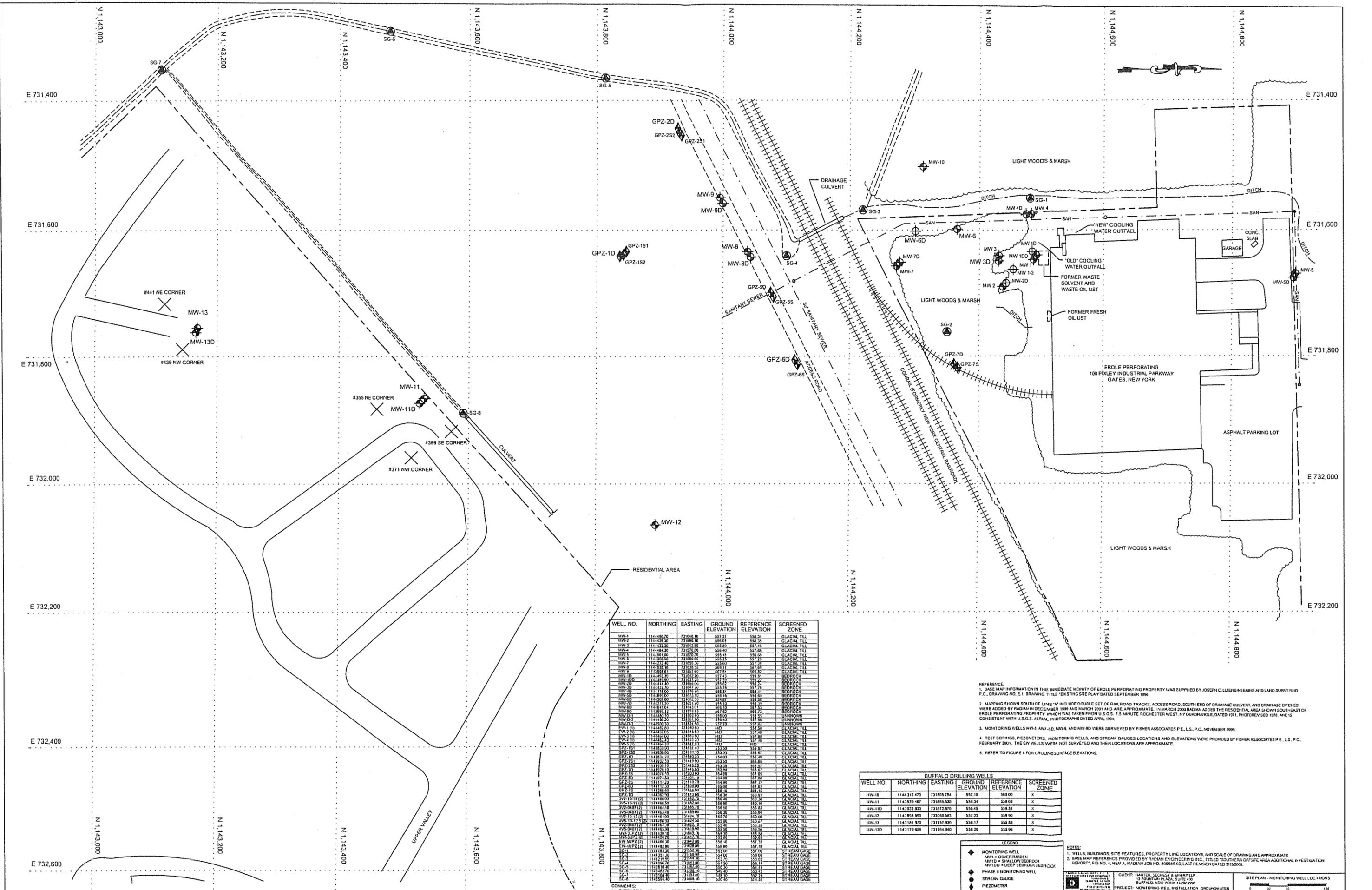
Barron & Associates, P.C. appreciates the opportunity to assist in the performance of this monitoring well installation and groundwater sampling and analysis. Please call at your earliest convenience, if questions should arise.

Yours truly,
Barron & Associates, P.C.

A handwritten signature in black ink, appearing to read "Richard L. Crouch, Jr.", written in a cursive style.

Richard L. Crouch, Jr.
Senior Hydrogeologist

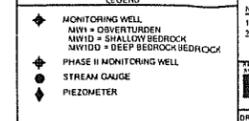
attachments



WELL NO.	NORTHING	EASTING	GROUND ELEVATION	REFERENCE ELEVATION	SCREENED ZONE
MW-1	1144490.70	731648.10	537.37	538.34	GLACIAL TILL
MW-2	1144439.30	731899.10	538.03	538.35	GLACIAL TILL
MW-3	1144432.30	731852.50	535.80	537.18	GLACIAL TILL
MW-4	1144484.30	731576.80	538.40	537.88	GLACIAL TILL
MW-5	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
MW-6	1144386.50	731860.50	535.35	537.25	GLACIAL TILL
MW-7	1144277.20	731855.20	535.50	537.30	GLACIAL TILL
MW-8	1144328.18	731834.58	536.17	537.63	GLACIAL TILL
MW-9	1144385.64	731553.60	537.81	539.87	GLACIAL TILL
MW-10	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
MW-11	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
MW-12	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
MW-13	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
MW-13D	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-1D	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-2S2	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-2S1	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-3D	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-4D	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-5D	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-6D	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-7D	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-7S	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-8D	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
GPZ-8S	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-1	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-2	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-3	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-4	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-5	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-6	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-7	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-8	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-9	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-10	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-11	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-12	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-13	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-14	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-15	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-16	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-17	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-18	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-19	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-20	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-21	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-22	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-23	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-24	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-25	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-26	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-27	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-28	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-29	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-30	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-31	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-32	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-33	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-34	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-35	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-36	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-37	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-38	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-39	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-40	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-41	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-42	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-43	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-44	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-45	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-46	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-47	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-48	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-49	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-50	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-51	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-52	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-53	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-54	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-55	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-56	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-57	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-58	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-59	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-60	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-61	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-62	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-63	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-64	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-65	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
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SG-67	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-68	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-69	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-70	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-71	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-72	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-73	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-74	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-75	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-76	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-77	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-78	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-79	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-80	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-81	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-82	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
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SG-85	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-86	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-87	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-88	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-89	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-90	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-91	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-92	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-93	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-94	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-95	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-96	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-97	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-98	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-99	1144481.00	731870.20	535.18	535.60	GLACIAL TILL
SG-100	1144481.00	731870.20	535.18	535.60	GLACIAL TILL

BUFFALO DRILLING WELLS					
WELL NO.	NORTHING	EASTING	GROUND ELEVATION	REFERENCE ELEVATION	SCREENED ZONE
MW-10	1144312.472	731583.794	537.15	540.00	X
MW-11	1144339.467	731665.530	536.34	539.62	X
MW-11D	1144332.833	731672.870	536.45	539.51	X
MW-12	1144388.890	732060.543	537.22	539.00	X
MW-13	1144318.970	731757.930	538.17	535.88	X
MW-13D	1144319.659	731764.940	538.29	535.96	X

- REFERENCE:
 1. BASE MAP INFORMATION IN THE IMMEDIATE VICINITY OF ERDLE PERFORMING PROPERTY WAS SUPPLIED BY JOSEPH C. LU ENGINEERING AND LAND SURVEYING, P.C., DRAWING NO. E.1, DRAWING TITLE "EXISTING SITE PLAN" DATED SEPTEMBER 1996.
 2. MAPPING SHOWN SOUTH OF LINE "X" INCLUDE DOUBLE SET OF RAILROAD TRACKS, ACCESS ROAD, SOUTH END OF DRAINAGE CULVERT, AND DRAINAGE DITCHES WERE ADDED BY RADIAN IN DECEMBER 1999 AND MARCH 2001 AND ARE APPROXIMATE. IN MARCH 2000 RADIAN ADDED THE RESIDENTIAL AREA SHOWN SOUTHWEST OF ERDLE PERFORMING PROPERTY WHICH WAS TAKEN FROM U.S.G.S. 7.5 MINUTE ROCHESTER WEST, NY QUADRANGLE, DATED 1971, PHOTO REVISOR 1978, AND IS CONSISTENT WITH U.S.G.S. AERIAL PHOTOGRAPHS DATED APRIL 1994.
 3. MONITORING WELLS MW-1, MW-8D, MW-9, AND MW-9D WERE SURVEYED BY FISHER ASSOCIATES P.E., L.S., P.C. NOVEMBER 1999.
 4. TEST BORINGS, PIEZOMETERS, MONITORING WELLS, AND STREAM GAUGES LOCATIONS AND ELEVATIONS WERE PROVIDED BY FISHER ASSOCIATES P.E., L.S., P.C., FEBRUARY 2001. THE EW WELLS WERE NOT SURVEYED AND THEIR LOCATIONS ARE APPROXIMATE.
 5. REFER TO FIGURE 4 FOR GROUND SURFACE ELEVATIONS.



NOTES:
 1. WELLS, BUILDINGS, SITE FEATURES, PROPERTY LINE LOCATIONS AND SCALE OF DRAWING ARE APPROXIMATE.
 2. BASE MAP REFERENCE PROVIDED BY RADIAN ENGINEERING INC., TITLED "SOUTHWEST OFFSITE AREA ADDITIONAL INVESTIGATION REPORT", FIG. NO. 4, REV. A, RADIAN JOB NO. 805985 03, LAST REVISION DATED 3/15/00.

CLIENT: HARTER, SECREST & SHRYVE LLP
 12 FERRITAN PLAZA, SUITE 400
 BUFFALO, NEW YORK 14202-2003

PROJECT: MONITORING WELL INSTALLATION GROUNDWATER
 SAMPLING AND ANALYSIS
 100 PILEY INDUSTRIAL PARKWAY
 GATES, NEW YORK 14224

DATE: 7/2/05

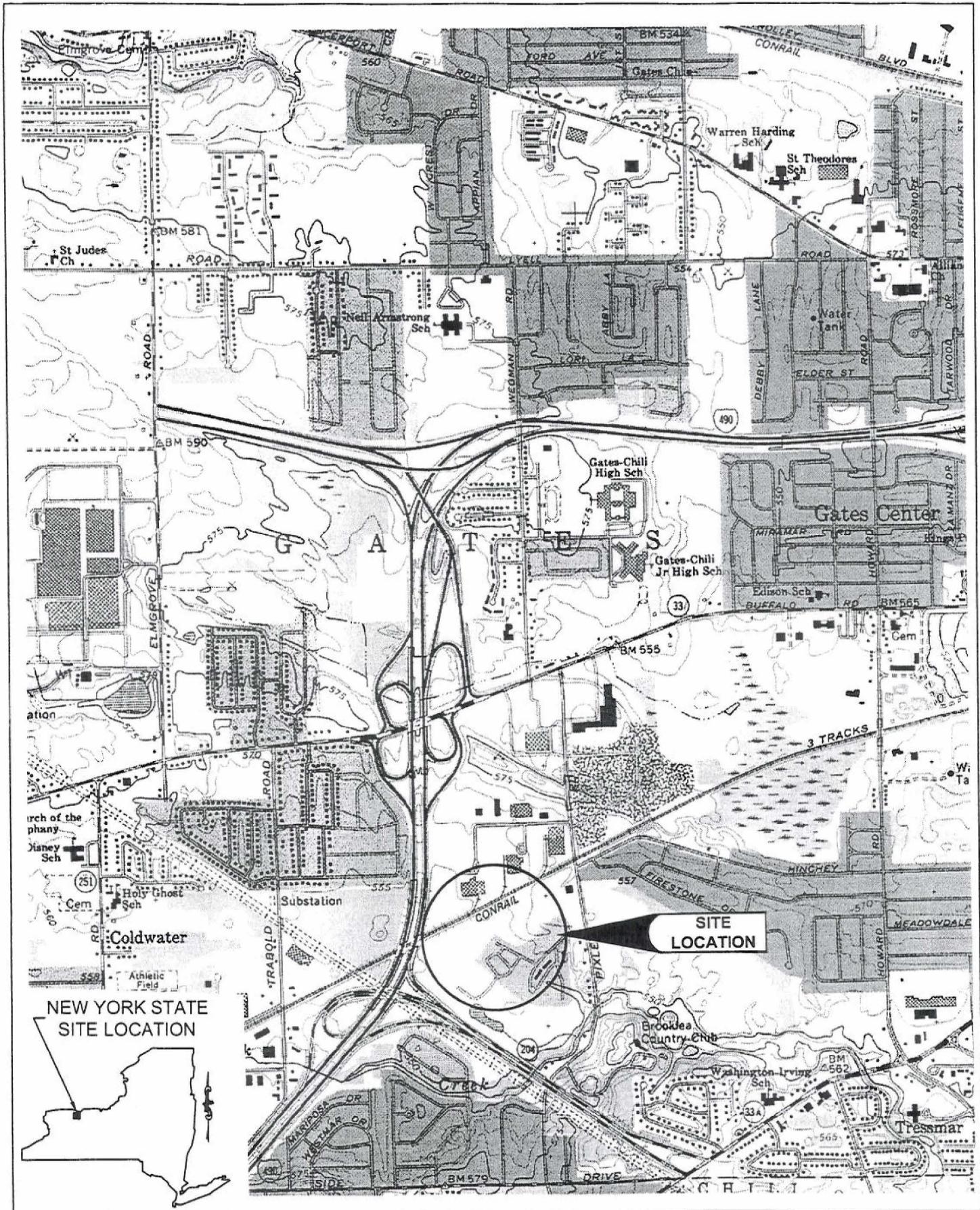
SCALE: 1" = 50' ±

FIGURE NO. 2

COMMENTS:
 (1) EXTRACTION WELLS EW-1 THROUGH EW-5 WERE NOT SURVEYED AND THE COORDINATES SHOWN ARE APPROXIMATE.
 (2) WELLS NOT SHOWN ON THIS MAP FOR CLARITY.

ATTACHMENT #1

Figures and Tables
Worker's Breathing Zone Monitoring Data Sheet
Field Development & Sampling Data Sheet



BARRON & ASSOCIATES, P.C. & BUFFALO DRILLING COMPANY
 10440 MAIN ST.
 CLARENCE, NY 14031
 (716)759-7821
 FAX (716)759-7823
 INFO@BUFFALODRILLING.COM
 INFO@BARRONANDASSOCIATESPC.COM

DRAWN: DAN KASPROWICZ

CLIENT: HARTER, SECRET & EMERY LLP
 12 FOUNTAIN PLAZA, SUITE 400
 BUFFALO, NEW YORK 14202-2293

PROJECT: MONITORING WELL INSTALLATION, GROUNDWATER SAMPLING AND ANALYSIS
 100 PIXLEY INDUSTRIAL PARKWAY
 GATES, NEW YORK 14264

USGS SITE LOCATION PLAN
 ROCHESTER WEST, NY. QUAD
 1971 - PHOTO REVISED 1978

JOB NO.: 02-555A	SCALE: 1" = 2000' ±
DATE: 2/3/2005	FIGURE NO. 1

WELL NO.	NORTHING	EASTING	GROUND ELEVATION	REFERENCE ELEVATION	SCREENED ZONE
MW-1	1144490.70	731646.10	557.37	558.34	GLACIAL TILL
MW-2	1144439.30	731690.10	556.05	558.35	GLACIAL TILL
MW-3	1144432.30	731643.50	555.80	557.16	GLACIAL TILL
MW-4	1144484.30	731576.80	556.40	557.88	GLACIAL TILL
MW-5	1144901.00	731670.30	555.18	556.68	GLACIAL TILL
MW-6	1144366.50	731600.60	555.25	557.26	GLACIAL TILL
MW-7	1144273.40	731656.30	555.60	557.39	GLACIAL TILL
MW-8	1144038.18	731638.58	566.17	567.69	GLACIAL TILL
MW-9	1143995.64	731553.60	567.81	569.82	GLACIAL TILL
MW-1D	1144493.30	731642.70	557.43	559.81	BEDROCK
MW-1DD	1144489.90	731637.20	557.59	559.22	BEDROCK
MW-2D	1144444.40	731686.00	556.62	558.24	BEDROCK
MW-3D	1144432.70	731647.90	555.78	557.76	BEDROCK
MW-4D	1144478.00	731576.70	556.51	558.41	BEDROCK
MW-5D	1144899.00	731675.10	556.18	556.60	BEDROCK
MW-6D	1144301.80	731602.90	554.87	556.58	BEDROCK
MW-7D	1144277.20	731651.70	555.10	556.39	BEDROCK
MW-8D	1144041.04	731643.01	566.10	567.53	BEDROCK
MW-9D	1143997.12	731558.83	567.62	569.73	BEDROCK
MW-D-1	1144480.70	731609.80	556.00	558.55	UNKNOWN
MW-D-2	1144456.30	731661.80	556.40	557.98	UNKNOWN
MW-D-3	1144500.30	731634.50	557.70	557.82	UNKNOWN
EW-1 (1)	1144482.80	731640.80	N/D	558.50	GLACIAL TILL
EW-2 (1)	1144437.05	731645.50	N/D	557.40	GLACIAL TILL
EW-3 (1)	1144464.00	731683.80	N/D	557.80	GLACIAL TILL
EW-4 (1)	1144462.40	731623.20	N/D	557.40	GLACIAL TILL
EW-5 (1)	1144466.30	731647.80	N/D	N/D	GLACIAL TILL
GPZ-1S1	1143839.90	731637.40	553.50	555.82	GLACIAL TILL
GPZ-1S2	1143836.80	731639.10	553.30	555.67	GLACIAL TILL
GPZ-1D	1143834.20	731640.70	554.00	556.49	GLACIAL TILL
GPZ-2S1	1143932.30	731449.90	563.50	565.88	GLACIAL TILL
GPZ-2S2	1143930.10	731448.20	563.30	565.97	GLACIAL TILL
GPZ-2D	1143928.10	731446.50	562.80	565.67	GLACIAL TILL
GPZ-5S	1144076.30	731703.90	564.80	567.89	GLACIAL TILL
GPZ-5D	1144074.50	731701.10	564.80	567.88	GLACIAL TILL
GPZ-6S	1144114.20	731810.70	564.80	567.42	GLACIAL TILL
GPZ-6D	1144112.30	731808.00	565.00	567.62	GLACIAL TILL
GPZ-7S	1144365.60	731814.90	558.40	561.15	GLACIAL TILL
GPZ-7D	1144362.90	731813.60	558.30	560.92	GLACIAL TILL
3V2-10-14 (2)	1144466.00	731682.70	556.40	560.30	GLACIAL TILL
3V5-10-12 (2)	1144468.50	731682.80	556.60	560.16	GLACIAL TILL
3V2-0407 (2)	1144464.10	731685.70	556.50	556.83	GLACIAL TILL
3V5-0407 (2)	1144463.40	731689.00	556.30	556.94	GLACIAL TILL
4V2-10-13 (2)	1144464.00	731624.70	555.70	560.00	GLACIAL TILL
4V5-10-12.5 (2)	1144466.90	731624.50	555.80	560.67	GLACIAL TILL
4V2-0407 (2)	1144464.30	731622.10	555.40	556.28	GLACIAL TILL
4V5-0407 (2)	1144465.90	731619.90	555.50	556.56	GLACIAL TILL
MW-3LPZ (2)	1144438.10	731649.70	555.30	556.58	GLACIAL TILL
MW-3UPZ (2)	1144426.20	731647.70	555.80	559.65	GLACIAL TILL
EW-5UPZ (2)	1144466.30	731642.80	556.10	557.32	GLACIAL TILL
EW-1UPZ (2)	1144482.80	731638.80	556.80	557.78	GLACIAL TILL
SG-1	1144483.30	731552.30	553.00	557.06	STREAM GAGE
SG-2	1144351.30	731760.90	554.00	558.08	STREAM GAGE
SG-3	1144219.90	731569.30	552.70	556.03	STREAM GAGE
SG-4	1144096.70	731641.80	551.50	556.14	STREAM GAGE
SG-5	1143810.40	731367.80	550.30	554.44	STREAM GAGE
SG-6	1143483.70	731298.10	549.40	553.42	STREAM GAGE
SG-7	1143108.40	731353.50	548.10	552.25	STREAM GAGE
SG-8	1143591.40	731888.10	550.40	554.51	STREAM GAGE

COMMENTS:

- (1) EXTRACTION WELLS EW-1 THROUGH EW-5 WERE NOT SURVEYED AND THE COORDINATES SHOWN ARE APPROXIMATE.
(2) WELLS NOT SHOWN ON THIS MAP FOR CLARITY.

BUFFALO DRILLING WELLS					
WELL NO.	NORTHING	EASTING	GROUND ELEVATION	REFERENCE ELEVATION	SCREENED ZONE
MW-10	1144312.473	731505.794	557.15	560.00	X
MW-11	1143539.467	731865.530	556.34	559.02	X
MW-11D	1143532.833	731872.870	556.45	559.51	X
MW-12	1143898.890	732060.583	557.22	559.90	X
MW-13	1143181.970	731757.930	556.17	555.88	X
MW-13D	1143179.659	731764.940	556.29	555.96	X

BARRON & ASSOCIATES, P.C. &
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INFO@BARRONANDASSOCIATESPC.COM

CLIENT: HARTER, SECRET & EMERY LLP
12 FOUNTAIN PLAZA, SUITE 400
BUFFALO, NEW YORK 14202-2293

PROJECT: MONITORING WELL INSTALLATION, GROUNDWATER
SAMPLING AND ANALYSIS
100 PIXLEY INDUSTRIAL PARKWAY
GATES, NEW YORK 14264

WELL INFORMATION CHARTS

0

JOB NO.: 02-555A

SCALE: NOT TO SCALE

DATE: 2/3/2005

FIGURE NO. 4

DRAWN: DAN KASPROWICZ

TABLE 2

**Detectable Analytical Results - Groundwater Samples
Erdle Perforating
100 Pixley Industrial Parkway
Gates, New York**

DETECTABLE COMPOUNDS	CONC. UNIT	GROUNDWATER SAMPLES						
		GPZ-1D	GPZ-2D	GPZ-6D	MW-3D	MW-6	MW-6D	MW-8
vinyl chloride	ppb	52	10U	41	3J	10U	17J	100U
carbon disulfide	ppb	4J	20	10U	10U	3J	20U	100U
acetone	ppb	12B	40B	34B	10U	10U	20U	100U
1,1-dichloroethane	ppb	19	10U	9J	10U	10U	20U	100U
cis-1,2-dichloroethene	ppb	27	16	56	49	9J	220	1100
chloroform	ppb	10U	10U	10U	10U	10U	20U	39J
trichloroethene	ppb	5J	28	10U	34	10U	210	410
1,2,4-trichlorobenzene	ppb	10U	10U	10U	10U	10U	20U	100U
iron	ppb	14,200	5,750	3,000	18,100	247	5,480	2,040
manganese	ppb	1090	2230	228	139	1350	172	69.6
total organic carbon	ppb	9300	4000	5800	2800	7300	2600	3000
sulfate	ppb	NA	83,400	72,100	86,600	318,000	74,700	94,000
total alkalinity	ppb	NA	580,000	410,000	315,000	325,000	305,000	325,000
chloride	ppb	NA	789,000	577,000	738,000	44,400	760,000	877,000

TABLE 2 (cont.)

Detectable Analytical Results - Groundwater Samples
 Erdle Perforating
 100 Pixley Industrial Parkway
 Gates, New York

DETECTABLE COMPOUNDS	CONC. UNIT	GROUNDWATER SAMPLES						
		MW-8D	MW-11	MW-11D	MW-12	MW-13	MW-13D	TRIP BLANK
vinyl chloride	ppb	11	17	22	10U	6J	6J	10U
carbon disulfide	ppb	11	10U	4J	10U	12	11	10U
acetone	ppb	10U	10U	10U	10U	21B	10B	10U
1,1-dichloroethane	ppb	10U	10U	10U	10U	10U	10U	10U
cis-1,2-dichloroethene	ppb	130	34	130	10U	120	120	10U
trichloroethene	ppb	170	10U	18	10U	28	27	10U
1,2,4-trichlorobenzene	ppb	10U	10U	10U	10U	10U	10U	10U
iron	ppb	4,500	2,660	2,330	1,300	3,170	3,040	NA
manganese	ppb	235	173	155	453	130	132	NA
chemical oxygen demand	ppb	3,100	3,000	3,500	6,000	3,500	3,300	NA
sulfate	ppb	79,000	339,000	63,600	55,800	83,500	84,700	NA
total alkalinity	ppb	325,000	410,000	340,000	520,000	320,000	315,000	NA
chloride	ppb	780,000	300,000	115,000	15,600	796,000	808,000	NA

TABLE 2 (cont.)

**Detectable Analytical Results - Groundwater Samples
Erdle Perforating
100 Pixley Industrial Parkway
Gates, New York**

NOTES:

1. **U - indicates compound was analyzed, but not detected.**
2. **J - indicates the presence of a compound that meets identification criteria, but the result is less than sample quantitation limit but greater than zero. The value shown is an estimated value.**
3. **MDL - method detection limit (e.g., 5 U).**
4. **B -**
5. **NA - not analyzed**

WORKER'S BREATHING ZONE MONITORING DATA SHEET

Erdle Perforating
100 Pixley Industrial Parkway
Gates, New York

August 24, 2004

The following air monitoring results were measured during the drilling of MW-13D:

PM-10 Particulate Levels During the Drilling of MW-13D

time		downwind ($\mu\text{g}/\text{m}^3$)	upwind ($\mu\text{g}/\text{m}^3$)
12:40 PM	real time	0.2 (before drilling)	0.0 (before drilling)
	TWA	0.5 (before drilling)	0.0 (before drilling)
12:55 PM	real time	7.0	0.0
	TWA	10.2	0.4
1:07 PM	real time	5.2	2.2
	TWA	9.0	2.0
1:12 PM	real time	5.9	0.1
	TWA	8.7	2.7
1:19 PM	real time	5.9	0.0
	TWA	8.3	2.5
1:33 PM	real time	5.1	0.0
	TWA	8.2	2.0

No detectable PID readings at the top of the hollow stem augers during drilling of MW-13D nor upwind or downwind at the above specified times.

August 25, 2004

The following air monitoring results were measured during the drilling of MW-11D and MW-13:

PM-10 Particulate Levels During the Drilling of MW-11D

time		downwind ($\mu\text{g}/\text{m}^3$)	upwind ($\mu\text{g}/\text{m}^3$)
8:52 AM	real time	133.6 (before drilling)	107.3 (before drilling)
	TWA	138.0 (before drilling)	111.3 (before drilling)
9:05 AM	real time	133.0	100.5
	TWA	145.6	103.2
9:16 AM	real time	129.4	96.6
	TWA	136.3	104.1
9:24 AM	real time	125.5	95.5
	TWA	133.7	101.5
9:41 AM	real time	128.3	95.9
	TWA	130.4	97.7

**WORKER'S BREATHING ZONE MONITORING
(Continued)**

**Erdle Perforating
100 Pixley Industrial Parkway
Gates, New York**

PM-10 Particulate Levels During the Drilling of MW-11D (cont.)

time		downwind ($\mu\text{g}/\text{m}^3$)	upwind ($\mu\text{g}/\text{m}^3$)
9:48 AM	real time	139.9	83.8
	TWA	134.4	96.9

No detectable PID readings at the top of the hollow stem augers during drilling of MW-11D nor upwind or downwind at the above specified times.

PM-10 Particulate Levels During the Drilling of MW-13

time		downwind ($\mu\text{g}/\text{m}^3$)	upwind ($\mu\text{g}/\text{m}^3$)
1:36 PM	real time	136.7 (before drilling)	110.9 (before drilling)
	TWA	124.3 (before drilling)	133.6 (before drilling)
1:51 PM	real time	115.6	108.5
	TWA	120.9	115.9
2:04 PM	real time	110.0	111.2
	TWA	123.0	114.6
2:14 PM	real time	116.1	112.9
	TWA	122.6	114.2

No detectable PID readings at the top of the hollow stem augers during drilling of MW-13 nor upwind or downwind at the above specified times.

FIELD DEVELOPMENT & SAMPLING DATA SHEET

Erdle Perforating
100 Pixley Industrial Parkway
Gates, New York

Monitoring Well Development

Date: September 21, 2004

Field Equipment:

Heron Instruments Oil/Water Interface Meter
Cole Palmer Model 59002-30 pH Meter
Cole Palmer Model 19815 Conductivity Meter

Calibration: Calibration of pH and conductivity meters was performed in the field prior to development activities by B&A field personnel.

Monitoring Well MW-11D

Depth to Static Water: 9.6' from top of steel casing, no free product

Depth of Well: 23.75' from top of steel casing

Volume of Water Removed: 65 gallons

Initial pH, conductivity and temperature: 7.16 s.u., 904 μ S and 14.2°C

Final pH, conductivity and temperature: 7.05 s.u., 890 μ S and 12.9°C

Observation: slightly turbid, no odors, no sheen

Monitoring Well MW-13

Depth to Static Water: 4.6' from top of PVC riser, no free product

Depth of Well: 7.8' from top of PVC riser

Volume of Water Removed: 1.5 gallons (Bailed to dryness)

Initial pH, conductivity and temperature: 6.78 s.u., 1334 μ S and 18.3°C

Final pH, conductivity and temperature: 6.7 s.u., 1243 μ S and 18.3°C

Observation: moderately turbid, no odors, no sheen

Monitoring Well MW-13D

Depth to Static Water: 5.67' from top of PVC riser, no free product

Depth of Well: 12.25' from top of PVC riser

Volume of Water Removed: 45 gallons

Initial pH, conductivity and temperature: 7.17 s.u., 2.96 mS and 15.3°C

Final pH, conductivity and temperature: 7.04 s.u., 2.90 mS and 15.2°C

Observation: slightly turbid, no odors, no sheen

FIELD DEVELOPMENT & SAMPLING DATA SHEET

Erdle Perforating
100 Pixley Industrial Parkway
Gates, New York

Monitoring Well Sampling

Date: October 5, 2004

Field Equipment:

Heron Instruments Oil/Water Interface Meter
LaMotte Turbidity Meter Model 2020
Myron Ultrameter Model 6P

Calibration: Calibration of turbidity meter and Myron Ultrameter Model 6P was performed by Ashtead Technology Rentals on October 5, 2004

Monitoring Well MW-11D

Depth to Static Water: 9.95' from top of steel casing, no free product
Depth of Well: 23.65' from top of steel casing
Volume of Water Removed: 25 gallons
pH, conductivity and temperature: 6.80 s.u., 1066 μ S and 13.9°C
ORP, TDS and Turbidity: -27 mv, 747.8 ppm and 14.1 NTU

Monitoring Well MW-11

Depth to Static Water: 8.9' from top of PVC riser, no free product
Depth of Well: 13.35' from top of PVC riser
Volume of Water Removed: 7.5 gallons
pH, conductivity and temperature: 6.83 s.u., 2080 μ S and 13.1°C
ORP, TDS and Turbidity: -30 mv, 1505 ppm and 88.5 NTU

Monitoring Well MW-12

Depth to Static Water: 9.67' from top of PVC riser, no free product
Depth of Well: 12.0' from top of PVC riser
Volume of Water Removed: 2 gallons (Bailed to dryness)
pH, conductivity and temperature: 6.74 s.u., 1001 μ S and 13.1°C
ORP, TDS and Turbidity: 42 mv, 693.7 ppm and 396 NTU

Monitoring Well Sampling

Date: October 5, 2004 (cont.)

Monitoring Well MW-13

Depth to Static Water: 9.95' from top of PVC riser, no free product

Depth of Well: 23.65' from top of PVC riser

Volume of Water Removed: 25 gallons

pH, conductivity and temperature: Parameters were not measured due to small well volume and slow recharge.

ORP, TDS and Turbidity: Parameters were not measured due to small well volume and slow recharge.

Monitoring Well MW-13D

Depth to Static Water: 5.8' from top of PVC riser, no free product

Depth of Well: 12.25' from top of PVC riser

Volume of Water Removed: 22 gallons

pH, conductivity and temperature: 6.52 s.u., 2917 μ S and 14.9°C

ORP, TDS and Turbidity: 234 mv, 3112 ppm and 14.2 NTU

Monitoring Well MW-3D

Depth to Static Water: 4.6' from top of steel casing, no free product

Depth of Well: 20.25' from top of steel casing

Volume of Water Removed: 60 gallons

pH, conductivity and temperature: 7.01 s.u., 2755 μ S and 14.2°C

ORP, TDS and Turbidity: -70 mv, 2033 ppm and 74.7 NTU

FIELD DEVELOPMENT & SAMPLING DATA SHEET

Erdle Perforating
100 Pixley Industrial Parkway
Gates, New York

Monitoring Well Sampling

Date: October 6, 2004

Field Equipment:

Heron Instruments Oil/Water Interface Meter
LaMotte Turbidity Meter Model 2020
Myron Ultrameter Model 6P

Calibration: Calibration of turbidity meter and Myron Ultrameter Model 6P was performed by Ashtead Technology Rentals on October 5, 2004

Monitoring Well MW-6

Depth to Static Water: 3.55' from top of PVC riser, no free product
Depth of Well: 10.1' from top of PVC riser
Volume of Water Removed: 4 gallons
pH, conductivity and temperature: 6.79 s.u., 1041 μ S and 16.1°C
ORP, TDS and Turbidity: 92 mv, 718 ppm and 8.17 NTU

Monitoring Well MW-6D

Depth to Static Water: 3.75' from top of steel casing, no free product
Depth of Well: 25.6' from top of steel casing
Volume of Water Removed: 64 gallons
pH, conductivity and temperature: 7.26 s.u., 2717 μ S and 15.4°C
ORP, TDS and Turbidity: -131 mv, 2002 ppm and 9.2 NTU

Monitoring Well GPZ-2D

Depth to Static Water: 12.9' from top of steel casing, no free product
Depth of Well: 27.5' from top of steel casing
Volume of Water Removed: 3 gallons
pH, conductivity and temperature: 7.01 s.u., 2847 μ S and 13.0°C
ORP, TDS and Turbidity: 5 mv, 1223 ppm and Over Range NTU

Monitoring Well GPZ-1D

Depth to Static Water: 6.05' from top of PVC riser, no free product

Depth of Well: 15.5' from top of PVC riser

Volume of Water Removed: <1 gallons (Bailed to dryness)

pH, conductivity and temperature: 7.45 s.u., 2963 μ S and 14.9°C

ORP, TDS and Turbidity: -89 mv, 2205ppm and Over Range NTU

Monitoring Well GPZ-6D

Depth to Static Water: 16.0' from top of PVC riser, no free product

Depth of Well: 28.4' from top of PVC riser

Volume of Water Removed: <1 gallons (Bailed to dryness)

pH, conductivity and temperature: 7.30 s.u., 2346 μ S and 14.5°C

ORP, TDS and Turbidity: -45 mv, 1703 ppm and 253 NTU

Monitoring Well MW-8

Depth to Static Water: 15.4' from top of PVC riser, no free product

Depth of Well: 27.9' from top of PVC riser

Volume of Water Removed: 6 gallons

pH, conductivity and temperature: 7.08 s.u., 2332 μ S and 14.2°C

ORP, TDS and Turbidity: -80 mv, 2332ppm and 11.2 NTU

Monitoring Well MW-8D

Depth to Static Water: 14.7' from top of steel casing, no free product

Depth of Well: 38.7' from top of steel casing

Volume of Water Removed: 110 gallons

pH, conductivity and temperature: 7.29 s.u., 2102 μ S and 14.5°C

ORP, TDS and Turbidity: -116 mv, 2102 ppm and 9.33 NTU

ATTACHMENT #2

Observation Well Schematics

BARRON & ASSOCIATES, P.C. & BUFFALO DRILLING COMPANY, INC.



10440 MAIN STREET
CLARENCE, NEW YORK 14031
(716) 759-7821 FAX: (716) 759-7823

OBSERVATION WELL SCHEMATIC

JOB No.: 02-555A

BORING No.: MW-11D

PROJECT: Monitoring Well Installation
Erdle Perforating, Gates, New York

DRILLER: D. Rimbeck
SAMPLING METHODS: ASTM D1586
DATE STARTED: 8/25/04
DATE COMPLETED: 8/25/04

TYPE OF DRILL RIG: Mobil B-61
SIZE AND TYPE OF BIT: 6 1/4" Hollow Stem Auger
SURFACE ELEVATION (FT): 556.45
GROUNDWATER DEPTH (FT): 9.95
(measured at completion unless indicated below)

Monitoring Well Installation Details	Elevation/Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No.	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
<p>Locking Protective Casing</p> <p>4" I.D. Steel Casing and Cement Grout to 11.5'</p> <p>5 7/8" Roller Bit Rock Socket</p> <p>3 7/8" Roller Bit Open Hole</p>	0		S-1	11	60	Topsoil (6") Brown, stiff SILT, some Clay, tr. Roots, sl. plastic, moist (ML)
	555		S-2	28	50	Brown, v. stiff CLAY, little Silt, tr. f/m Sand, mod. plastic, moist (CL)
	5		S-3	27	75	Same as S-2
	550		S-4	46	75	...grade: hard
	10		S-5	13	60	...grade: stiff, some Silt
	545		S-6	50+	40	...grade: hard, wet ONONDAGA LIMESTONE
	20					Depth to Bottom of Hole: 20.0 feet
	535					
	25					
	530					
	30					

Logged by: R. Crouch

**BARRON & ASSOCIATES, P.C. &
BUFFALO DRILLING COMPANY, INC.**



10440 MAIN STREET
CLARENCE, NEW YORK 14031
(716) 759-7821 FAX: (716) 759-7823

OBSERVATION WELL SCHEMATIC

JOB No.: 02-555A

BORING No.: MW-13

PROJECT: Monitoring Well Installation
Erdle Perforating, Gates, New York

DRILLER: D. Rimbeck

TYPE OF DRILL RIG: Mobil B-61

SAMPLING METHODS: ASTM D1586

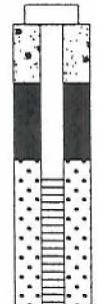
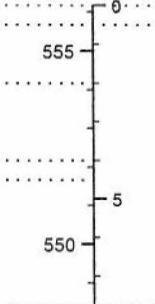
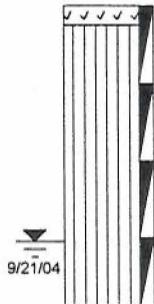
SIZE AND TYPE OF BIT: 6 1/4" Hollow Stem Auger

DATE STARTED: 8/24/04

SURFACE ELEVATION (FT): 556.17

DATE COMPLETED: 8/24/04

GROUNDWATER DEPTH (FT): 6.1
(measured at completion unless indicated below)

Monitoring Well Installation Details	Elevation/Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No.	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			<p>S-1</p> <p>S-2</p> <p>S-3</p> <p>S-4</p>	<p>24</p> <p>22</p> <p>26</p> <p>46</p>	<p>50</p> <p>60</p> <p>60</p> <p>55</p>	<p>Topsoil (6")</p> <p>Brown, hard SILT, some f. Sand, tr. Clay, tr. c. Sand, sl. plastic, moist (ML)</p> <p>Brown, v. stiff CLAY, some Silt, mod. plastic, moist (CL)</p> <p>...grade: little Silt, tr. f/c Sand, tr. Gravel</p> <p>...grade: some Silt</p>
						<p>Depth to Bottom of Hole: 7.8 feet</p>

**BARRON & ASSOCIATES, P.C. &
BUFFALO DRILLING COMPANY, INC.**



10440 MAIN STREET
CLARENCE, NEW YORK 14031
(716) 759-7821 FAX: (716) 759-7823

OBSERVATION WELL SCHEMATIC

JOB No.: 02-555A

BORING No.: MW-13D

PROJECT: Monitoring Well Installation
Erdle Perforating, Gates, New York

DRILLER: D. Rimbeck
SAMPLING METHODS: ASTM D1586
DATE STARTED: 8/24/04
DATE COMPLETED: 8/24/04

TYPE OF DRILL RIG: Mobil B-61
SIZE AND TYPE OF BIT: 6 1/4" Hollow Stem Auger
SURFACE ELEVATION (FT): 556.29
GROUNDWATER DEPTH (FT): 5.8
(measured at completion unless indicated below)

Monitoring Well Installation Details	Elevation/Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No.	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
	0 555 5 550 10 545 15 540 20 535 25 530 30 525		S-1 S-2 S-3 S-4 S-5 S-6	35 17 16 13 9 50+	50 80 80 25 10 10	Topsoil(6") Brown, hard Silt, some f. Sand, tr. Clay, tr. c. Sand, sl. plastic, moist (ML) Brown, v. stiff CLAY, some Silt, mod. plastic, moist (CL) Same as S-2 ...grade: stiff, some f/m Sand, tr. Gravel, wet Gray, loose f/c SAND, some Clay, tr. Gravel, saturated (SW) ONONDAGA LIMESTONE Caving occurred at 12.5 feet
						Depth to Bottom of Hole: 12.5 feet

Logged by: R. Crouch

ATTACHMENT #3

**Adirondack Environmental Services, Inc
NYS ASP B Deliverable Package**

(Refer to accompanying separate documents)