REPORT

SUPPLEMENTAL OFF-SITE INVESTIGATION

GRIFFIN TECHNOLOGY, INC. SITE

(Index No. B8-315-90-01)

Prepared for:
Griffin Technology, Inc.
Victor, New York
July 1996

Woodward-Clyde

30775 Bainbridge Road, Suite 200
Solon, Ohio 44139

Project No: 4E06282

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GRIFFIN TECHNOLOGY, INC. SITE
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1.0 BACKGROUND

The Griffin Technology, Inc. (GTI) site is located at 6132 Victor-Manchester Road in Victor, Ontario County, New York. A site vicinity map is included as Figure 1-1.

GTI entered into an Order on Consent on March 28, 1991 with the NYSDEC (Index No. B8-315-90-01). In accordance with the Order on Consent, GTI performed a Phase II investigation of the potential impacts of past disposal practices (BB&L, January 1991) and an off-site groundwater evaluation of the surrounding area (BB&L, February 1995).

On July 12, 1995, a meeting was held between representatives of the NYSDEC, the New York State Department of Health (NYSDOH), GTI, and BB&L to discuss the response comments submitted by the NYSDEC and NYSDOH for supplemental groundwater investigation activities. These activities were described in the off-site groundwater evaluation report (BB&L February 1995) in order to further the delineate the extent of migration of a groundwater plume containing TCE.

2.0 SCOPE OF WORK

The scope of work for supplemental activities agreed to by involved parties at this meeting was summarized in a letter report to NYSDEC from BB&L dated August 23, 1995 and consisted of the following:

- Installing one bedrock monitoring well (MW-13D) approximately 200 feet north of monitoring well cluster MW-7 on the north side of New York State (NYS) Route 96.

  Installing one bedrock monitoring well (MW-12D) approximately 500 feet west of monitoring well cluster MW-7 on the south side of New York State (NYS) Route 96.

- Installing one bedrock monitoring well (MW-11D) east of cluster MW-6 and due south of the GTI facility.

- Performance of continuous split-spoon sampling of the overburden materials during the installation of these bedrock monitoring wells to characterize the potential impacts in the saturated and unsaturated overburden. Overburden materials were to be screened using a photoionization detector and a maximum of one sample per borehole was to be submitted for laboratory analysis of volatile organic compounds (VOCs) based on visual observation and the soil screening results.

- Collecting groundwater samples and water level measurements from all monitoring wells upon completion of the new monitoring well installations.

- Collecting surface water and sediment samples from Beaver Creek, located south and directly behind Wade's Surefine Market, at the time of groundwater sample collection.

- Preparing a map identifying New York State-classified wetlands and streams located within a one-mile radius north, west and south of the GTI facility.

- Performing a survey of residences and businesses in the area to identify the presence of basement sumps. This survey was to consist of research, including local records and municipal departments, and include the area between the GTI facility and Beaver Creek to the south, areas west of the GTI facility along Route 96, and north and south along Mertensia Road.

- Collecting a basement air sample from the residence located at 6162 Victor-Manchester Road (west of the GTI facility). This air sample was to be collected using a SUMMA canister following United States Environmental Protection Agency (USEPA) Method TO-14. In addition, one sump water sample and an inventory of all household and chemical products stored in the basement of this residence was to be completed.

These activities were performed from July 1995 through May 1996 with one exception. Proposed monitoring well MW-12D, which was to be located approximately 500 feet west of monitoring well cluster MW-7, was not installed because the property owner would not provide the necessary access to the property.

The methods of investigation used to complete this Scope of Work are further described in the following subsections. The results of these investigations are presented in Section 3.0.

2.1 Monitoring Well Installation

During March 13-18, 1996, Nothnagle Drilling (Nothnagle) installed two bedrock groundwater monitoring wells south and west of the GTI facility. The locations of these wells (designated "MW-11D" and "MW-13D", respectively) are shown on Figure 2-1. All drilling activities performed by Nothnagle were observed by an on-site Woodward Clyde Consultants (WCC) geologist. All soil cuttings generated during the installation activities were placed into 55 gallon drum containers and are currently stored at the GTI facility for later disposal.

Prior to initiating the monitoring well installation activities at each location, all drilling equipment was cleaned to minimize the potential for cross-contamination. This was accomplished using a high pressure-low volume steam cleaner. Water for the steam cleaner was supplied by the GTI facility. Soil borings were advanced into the overburden using 6.25 inch hollow stem augers equipped with a split-spoon sampler. Samples were collected continuously in two foot intervals using ASTM D-1586 methods, in order to characterize the overburden stratigraphy at each monitoring well location. As each split spoon sample was opened, the materials were screened for the presence of volatile organic compounds (VOCs) using an organic vapor analyzer (OVA). Samples from each interval were collected for possible laboratory analysis. The on-site WCC geologist classified each split spoon with respect to blow count, color, grain size, moisture content and percent recovery. Drilling continued into the overburden until auger refusal was encountered. Auger refusal was encountered at approximate depths of 18.2 feet for MW -11D and 20.5 feet for MW-13D.

The borings were then advanced a minimum of fifteen feet into the bedrock using an H core barrel. Core samples were collected and stored in wooden core boxes. The bedrock boreholes were then reamed using a H-size roller bit. The on-site WCC geologist classified the core samples with respect to color, grain size, lithology, fossilization, solution pitting (vugs), degree of weathering, percent of recovery, rock quality degree (RQD) and the location, orientation and surface character of fractures. Overburden and bedrock descriptions are provided in the subsurface well logs included as Appendix A of this report.

Each monitoring well was constructed of a 2 inch diameter, Schedule 40 polyvinyl chloride (PVC) riser pipe which was flush threaded with 10 feet of 0.010 inch slotted PVC well screen. A grade 0N quartz sand pack was placed in the annular space surrounding the well screen from the bottom of the borehole to approximately 2 feet above the top of the screen. This was followed by placing a minimum of 6 inches of grade 00N fine sand above the sand pack. A minimum 3 foot thick hydrated bentonite slurry seal was then placed above the fine sand layer to straddle the soil/ bedrock interface. The remaining annular space was then filled with a cement/bentonite grout. Both wells were secured with locking pressure-fit caps.

MW-11D was finished above-grade with an outer protective casing equipped with a locking cap, while MW-13D was completed flush with the existing grade and covered with a water sealed, flush-mount box cover set in a 2 foot round concrete pad. The location of each well and the top of casing elevations were surveyed by Crandall Surveyors of Victor, New York. The elevations were surveyed relative to a benchmark located on the GTI property.

2.2 Monitoring Well Development

Following installation and prior to collection of groundwater samples, each monitoring well was developed to create an effective filter pack around the well screen, to rectify damage to the formation caused by drilling and to remove fine particles from the formation near the borehole. Development of the wells was performed in general accordance with the procedures outlined in the EPA Technical Guidance "RCRA Groundwater Monitoring" (November 1992) and was accomplished by surging and bailing each well with a submersible pump. The pump was decontaminated before and between the development activities performed at each well.

Prior to initiating well development activities, the static water level and total well depth were measured using a decontaminated electronic water level indicator. These measurements were performed in order to calculate the volume of water contained in the well casing. In addition, the turbidity, conductivity and temperature were measured using a decontaminated Horiba U-10 water quality analyzer. All measurements were recorded in a field logbook by WCC's on-site representative.

Development of each well was performed until a minimum of 7 to 10 volumes of groundwater had been removed or the measured parameters had stabilized (i.e. within 10 percent deviation). Upon completion, the following information was recorded in the field logbook:

- Date and time of start of development
- Initial static water level
- Measured depth of well
- Volume of water removed
- Date and time of development completion
- Post pumping water level
- Final field parameters

Groundwater samples were collected from each well following these procedures and submitted to Columbia Analytical Services, Inc. (CASI) for analysis of VOCs.

Water generated by the well development activities was placed into 55 gallon drum containers and is currently stored at the GTI facility for later disposal. Upon completion of development activities, all non-disposable well development equipment was decontaminated using a high pressure low volume steam cleaner.

Disposable well development equipment (i.e., gloves, nylon rope, tubing, plastic sheeting, etc.) was placed into a 55 gallon container and also stored at the GTI facility for later disposal.

2.3 Groundwater Sampling and Analysis

On May 21, 1996, WCC field personnel collected groundwater samples from each of the monitoring wells to evaluate the groundwater quality. Groundwater samples were not collected at this time from MW-10S or MW-10D because they could not be located. On May 28, 1996, MW-10S and MW-10D were surveyed and located under three inches of gravel and soil debris. On May 29, 1996, groundwater samples were subsequently collected from these wells. In addition, surface water samples and sediment samples were collected from Beaver Creek near SG-1, located approximately 30 feet south of the MW-10 well cluster.

Prior to sampling each well, WCC measured the static water level in each well using a decontaminated electronic water level indicator and determined the volume of water contained in each well. The monitoring well was then purged of a minimum of three volumes of water or until dry using a disposable polyethylene bailer equipped with a nylon cord. Groundwater samples were collected within 24 hours of purging each well. Samples were placed into laboratory supplied containers and placed into a cooler with ice for preservation until delivery to the laboratory for analysis. One duplicate sample was collected from MW-6S and a matrix spike/matrix spike duplicate (MS/MSD) sample was collected from MW-3 for Quality Assurance/Quality Control (QA/QC) purposes. Groundwater samples were submitted to Columbia Analytical Services, Inc. (CASI), 700 Exchange Street, Rochester, New York and analyzed for volatile organic compounds (VOCs) by NYSDEC Method ASP 91-1 and major ions. Chain of custody procedures were followed during sampling. Copies are provided in Appendix D.

The static water level elevations obtained prior to sampling the wells were subsequently converted to groundwater elevations relative to SG-1 and used to produce overburden and bedrock groundwater contour maps for the area.

2.4 Residential Sampling of Basement Air and Sump Water

On March 18, 1996, WCC personnel placed two SUMMA air sample canisters in the basement of the residential property located at 6162 Victor-Manchester Road (NYS Route

96). Each canister was placed near the basement sump. The air sample was collected following USEPA Method TO-14. In addition to the air sample, WCC collected a water sample from the basement sump of this residence. The SUMMA air sample canisters were shipped directly to Quanterra Laboratories for analysis of VOCs. The water sample was transferred directly into laboratory supplied containers and placed into a cooler with ice until delivery to CASI for analysis of VOCs by NYSDEC ASP 91-1.

At the time of the sample collection, a physical inventory of chemical materials currently being stored in the basement of the residence was performed by the WCC representative. Chemical materials being stored in the basement at that time consisted of one small container of drain cleaner which contained sodium hydroxide, and six one-gallon paint containers which contained dried paint. No other chemical materials were observed in the basement.

2.5 Additional Data Collection

During July 1995, a representative of GTI performed a survey of residences and businesses in the area in order to identify the presence of basement sumps. This survey area was comprised of the area between the GTI facility and Beaver Creek to the south, and the areas west of the GTI facility located along Route 96 and north and south along Mertensia Road. The survey consisted of researching local records and municipal department records to identify buildings in the survey area which have basements and subsequent discussions with residents and local workers regarding the presence of any sumps in these buildings.

3.0 RESULTS

The results of the supplemental investigation activities are presented in the following subsections.

3.1 Soil Analytical Results

The results of the field screening activities performed during the installation of MW-11D and MW-13D are presented in Table 3-1. The analytical results from CASI indicate no VOCs

were present in detectable concentrations in the samples submitted for laboratory analysis. The soil analytical results from CASI and chain-of-custody are included as Appendix B.

3.2 Groundwater Analytical Results

A summary of groundwater analytical results obtained from MW-11D and MW-13D collected on April 11, 1996, is presented in Table 3-2. These results indicate the presence of VOCs, primarily TCE, in MW-13D. No VOCs were detected in MW-11D during this sample event. The analytical reports from CASI are included as Appendix C.

A summary of groundwater elevation data collected on May 24 and May 29, 1996 is presented in Table 3-3. A summary of groundwater analytical results for VOCs obtained from sampling all existing wells on May 21 and May 29, 1996 is presented in Table 3-4. This summary also compares the analytical data to previous samples collected from each of the wells on-site. The analytical reports from CASI are included as Appendix D.

The TCE concentrations obtained from the May 1996 sample event are presented on Figure 3-1. These results are consistent with the 1994 results collected by BB&L and indicate that volatile organic compounds are present in both the overburden and bedrock wells.

Groundwater contour maps of the overburden and bedrock groundwater are presented as Figures 3-2 and 3-3, respectively. These maps were prepared using the data in Table 3-3 collected on May 29, 1996. The results indicate a south to southwest groundwater flow for the overburden groundwater. The bedrock groundwater flow direction is generally to the west-southwest. However, the additional data collected from MW-13D and MW-7D indicate the occurrence of a groundwater low in the area surrounding MW-7D. In order to evaluate this apparent anomalous condition, groundwater elevation data will continue to be collected during the IRM.

3.3 Surface Water and Sediment Analytical Results

No volatile organic compounds were detected in the surface water sample (SURF-2) collected from Beaver Creek. A trace concentration of acetone was reported in the sediment sample (22 parts per billion) and may be attributed to laboratory contamination. No other VOCs were detected in the sediment sample. These results indicate that the Beaver Creek has not been impacted by the groundwater plume. The analytical reports from CASI are included as Appendix E of this report.

3.4 Basement Sump and Air Sample Analytical Results

The analytical results of the basement sump water sample and air samples collected from the residential property located at 6162 Victor-Manchester Road are included as Table 3-5. This location represents the basement sump closest to the GTI facility to the west. The analyses found no compounds related to the GTI facility. Chloroform was detected in trace concentrations in both air samples and the sump water sample. The presence of chloroform in these samples may be attributed to the chlorination of the domestic potable water supply. Chloroform is a common by-product of water chlorination. Chloroform was not identified in groundwater samples collected from the GTI site. No other VOCs were detected in basement air or sump water, indicating that this location has not been impacted by groundwater. The analytical reports from CASI are included as Appendix F of this report.

3.5 Additional Investigation Results

Per the request from NYSDEC, a map identifying all New York State-classified wetland areas and streams located within one mile of the GTI facility has been included as Figure 3-4.

The results of the basement sump survey identified 20 buildings with basements located in the survey area. Of these, 8 buildings were determined to have sumps located in the basement. A listing of the 20 buildings identified during this survey, and the status of each building is included as Table 3-6. A map showing the approximate locations and orientations

orientations of these buildings is included as Figure 3-5. The numeric designations on this map correspond to the listing of sumps provided in Table 3-6.

3.6 Analytical Data Validation

Analytical data were reviewed and qualified by a WCC chemist. The results of the data validation were included in Appendix G. The validation indicated that all data were usable, with minor qualifications that have been incorporated into the data summaries presented in this report.

4.0 SUMMARY AND CONCLUSIONS

Based on the information collected during this supplemental investigation, the following conclusions have been developed regarding environmental conditions at the GTI site:

- Groundwater flow in the shallow overburden and bedrock zones is primarily to the west-southwest. This is generally consistent with previous reports. However, the presence of TCE at MW-13D indicates a westerly component of flow. Anomalous groundwater elevations in MW-7D preclude an accurate determination of bedrock flow patterns based on available data. This groundwater condition will be further evaluated during data collection tasks in the IRM.

- The upgradient limits of the plume to the east have been defined by MW-1 and MW-11D.

- The approximate limits of the plume to the southwest have been defined by MW-10S, MW-10D, MW-9S and MW-9D

- The western limit of the plume has not been defined.

- The groundwater plume is not affecting water or sediment quality in Beaver Creek.

- The groundwater plume has not affected the quality of air or sump water at the sump located closest to the GTI facility.

- No state regulated wetlands or streams other than Beaver Creek were identified in the immediate vicinity of the site. Regulated wetlands within a one-mile radius were identified. The closest potentially downgradient wetland area is located approximately one-half mile west of the site, well beyond the limits of the currently defined groundwater plume.

5.0 REFERENCES

USEPA, 1987, "A Compendium of Superfund Field Operations Methods". EPA/540/P-87/001, December 1987.

USEPA, 1989, "Region II CERCLA Quality Assurance Manual - Revision 1". October 1989.

USEPA, 1986, "RCRA Groundwater Monitoring Technical Enforcement Guidance Document". OSWER Directive-9950.1, September 1986.

Blasland Bouck & Lee, 1995, Off-Site Ground Water Investigation Report Prepared by BB&L for NYSDEC, February 1995.

Tables

TABLE 3-1
SOIL HEADSPACE SCREENING RESULTS
MW-11D AND MW-13D WELL INSTALLATION
GRIFFIN TECHNOLOGY, INC.
VICTOR, NEW YORK

MW-11D		MW-13D	
Depth (ft)	Result (ppm)	Depth (ft)	Result (ppm)
0-2	<1	0-2	5.0
2-4	<1	2-4	<1
4-6	<1	4-6	2.0
6-8 [1]	2.0	6-8	6.0
8-10	<1	8-10 [1]	7.0
10-12	1.0	10-12	1.0
12-14	<1	12-14	<1
14-16	<1	14-16	<1
16-18 [1]	5.0	16-18	3.0
		18-20	5.0
		20-22	5.0
Auger refusal at 18.2'		Auger refusal at 20.5'	

NOTES
"1" indicates sample interval submitted to CASI for laboratory analysis.

TABLE 3-2
SUMMARY OF ANALYTICAL RESULTS OF
GROUNDWATER SAMPLES COLLECTED ON APRIL 11, 1996
GRIFFIN TECHNOLOGY, INC.
VICTOR, NEW YORK

Parameter	MW-11D	MW-13D
Trichloroethene	N.D.	610
1,1,1-Trichloroethane	N.D.	5
cis 1,2-Dichloroethene	N.D.	4

Notes:

1. "ND" indicates not detected at method detection limit.
2. No other compounds detected.
3. All results expressed in micrograms per liter (µg/l).

TABLE 3-3
SUMMARY OF GROUNDWATER ELEVATION DATA
GRIFFIN TECHNOLOGY, INC.
VICTOR, NEW YORK

Well Number	Top of Casing (ft)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)
MW-01	641.79	12/19/94	5.60	636.19
		5/24/96	3.32	638.47
		5/29/96	3.81	637.98
MW-02	641.28	12/19/94	7.50	633.78
		5/24/96	3.60	637.68
		5/29/96	4.47	636.81
MW-03	642.17	12/19/94	7.83	634.34
		5/24/96	4.82	637.35
		5/29/96	5.77	636.40
MW-04	641.75	12/19/94	8.48	633.27
		5/24/96	4.42	637.33
		5/29/96	5.29	636.46
MW-05S	640.85	12/19/94	8.00	632.85
		5/24/96	3.85	637.00
		5/29/96	4.83	636.02
MW-05D	641.01	12/19/94	8.44	632.57
		5/24/96	4.48	636.53
		5/29/96	5.52	635.49
MW-06S	636.61	12/19/94	7.36	629.25
		5/24/96	3.70	632.91
		5/29/96	4.89	631.72
MW-06D	636.83	12/19/94	7.43	629.40
		5/24/96	3.77	633.06
		5/29/96	5.03	631.80
MW-07S	634.29	12/19/94	7.53	626.76
		5/24/96	4.26	630.03
		5/29/96	5.18	629.11

Note:

Data elevations are in feet (ft) and are surveyed relative to mean sea level (MSL).

TABLE 3-3
SUMMARY OF GROUNDWATER ELEVATION DATA
GRIFFIN TECHNOLOGY, INC.
VICTOR, NEW YORK

Well Number	Top of Casing (ft)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)
MW-07D	634.16	12/19/94	32.95	601.21
		5/24/96	32.51	601.65
		5/29/96	31.85	602.31
MW-08S	633.64	12/19/94	11.39	622.25
		5/24/96	NA	NA
		5/29/96	NA	NA
MW-08D	633.91	12/19/94	13.16	620.75
		5/24/96	NA	NA
		5/29/96	NA	NA
MW-09S	630.16	12/19/94	11.56	618.60
		5/24/96	9.17	620.99
		5/29/96	10.24	619.92
MW-09D	630.29	12/19/94	12.71	617.58
		5/24/96	17.02	613.27
		5/29/96	14.78	615.51
MW-10S	629.00	12/19/94	14.87	614.13
		5/24/96	NA	
		5/29/96	15.26	613.74
MW-10D	626.80	12/19/94	16.82	609.98
		5/24/96	NA	
		5/29/96	4.78	622.02
MW-11D	641.89	12/19/94	NA	
		5/24/96	7.10	634.79
		5/29/96	8.71	633.18
MW-13D	636.58	12/19/94	NA	
		5/24/96	3.45	633.13
		5/29/96	4.78	631.80

Note:

Data elevations are in feet (ft) and are surveyed relative to mean sea level (MSL).

TABLE 3-4
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
GRIFFIN TECHNOLOGY INC.
VICTOR, NEW YORK

Monitoring Well No.	Analysis Date	TCE	1,1,1-TCA	1,2-DCE	Acetone	Benzene
MW-01	12/19/94	ND	ND	ND	ND	ND
	5/21/96	ND	ND	ND	ND	ND
MW-02	12/19/94	850	ND	ND	50	ND
	5/21/96	30	ND	1	3	4
MW-03	12/19/94	190	ND	ND	ND	ND
	5/21/96	120	ND	2	ND	ND
MW-04	12/19/94	710	6.7	23	ND	ND
	5/21/96	16	ND	2	ND	ND
MW-05S	12/19/94	580	15	ND	ND	ND
	5/21/96	350	16	ND	ND	ND
MW-05D	12/19/94	820	23	ND	ND	ND
	5/21/96	1000	48	8	ND	ND
MW-06S	12/19/94	270	7.8	ND	170	ND
	5/21/96	ND	2	ND	ND	9
MW-06D	12/19/94	190	7.5	ND	ND	ND
	5/21/96	240	10	ND	ND	15
MW-07S	12/19/94	250	6.6	8	ND	ND
	5/21/96	310	7	6	ND	13
MW-07D	12/19/94	260	ND	7	14	ND
	5/21/96	290	4	12	ND	17
MW-08D	12/19/94	55	ND	ND	42	ND
	5/21/96	NA	NA	NA	NA	NA
MW-08S	12/19/94	29	ND	ND	ND	ND
	5/21/96	NA	NA	NA	NA	NA

Notes:

1. 12/19/94 measurements collected by Blasland, Bouck & Lee.
2. "NA" indicates no sample collected because well was abandoned.
3. No other VOC compounds detected at method detection limit.
4. ND indicates not detected at method detection limit.
5. All results expressed in micrograms per liter (µg/l).
6. Refer to Appendix G for an explanation of data results.

TABLE 3-4
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
GRIFFIN TECHNOLOGY INC.
VICTOR, NEW YORK

Monitoring Well No.	Analysis Date	TCE	1,1,1-TCA	1,2-DCE	Acetone	Benzene
MW-09S	12/19/94	ND	ND	ND	ND	ND
	5/21/96	ND	ND	ND	6	3
MW-09D	12/19/94	ND	ND	ND	ND	ND
	5/21/96	ND	ND	ND	ND	15
MW-10S	12/19/94	7.8	ND	ND	370	ND
	5/29/96	30	1	ND	3	ND
MW-10D	12/19/94	8.2	ND	ND	ND	ND
	5/29/96	8	ND	ND	ND	ND
MW-11D	4/11/96	ND	ND	ND	ND	ND
	5/21/96	ND	ND	ND	ND	6
MW-13D	4/11/96	610	5	4	ND	ND
	5/21/96	190	5	4	ND	8

Notes:

1. 12/19/94 measurements collected by Blasland, Bouck & Lee.
2. "NA" indicates no sample collected because well was abandoned.
3. No other VOC compounds detected at method detection limit.
4. ND indicates not detected at method detection limit.
5. All results expressed in micrograms per liter (µg/l).
6. Refer to Appendix G for an explanation of data results.

TABLE 3-5
SUMMARY OF ANALYTICAL RESULTS
BASEMENT AIR AND SUMP WATER SAMPLES
GRIFFIN TECHNOLOGY, INC.
VICTOR, NEW YORK

Sample ID.	Type	Parameter	Result
S-1	Sump Water	Chloroform	21
S-2	Sump Water	Chloroform	22
A-1	Air	Chloroform	7.5
A-2	Air	Chloroform	10

Notes

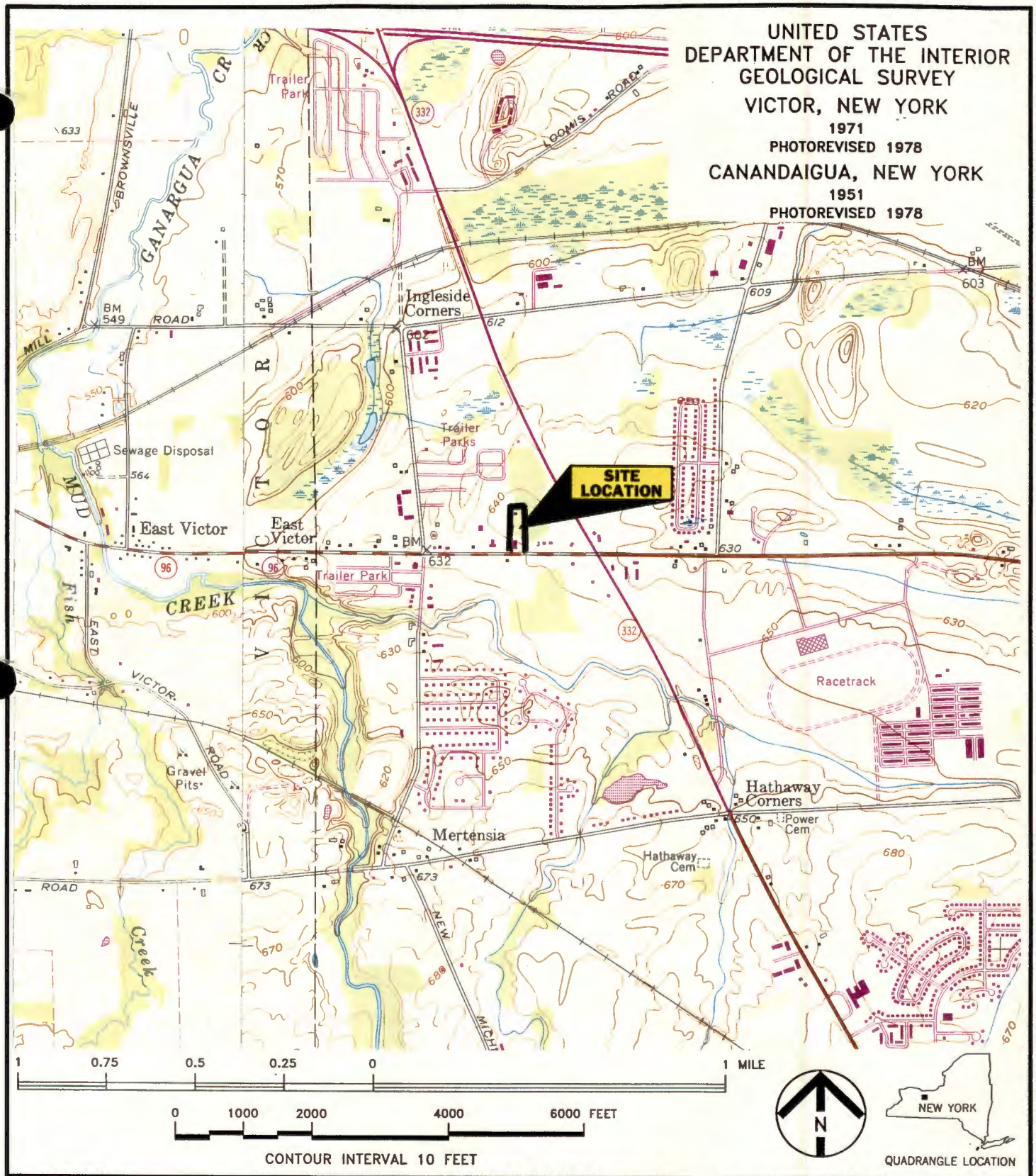
1. Results expressed in parts per billion (ppb).
2. Samples analyzed for VOCs by NYS ASP 91-1.
3. Air samples collected in SUMMA canisters using EPA Method TO-14.
4. No other compounds detected above Method Detection Limit (MDL).

TABLE 3-6
BASEMENT SUMP SURVEY RESULTS
GRIFFIN TECHNOLOGY, INC.
VICTOR, NEW YORK

No.	Identification	Status
1	1309 Mertensia Road	No Sump
2	1305 Mertensia Road	No Sump
3	1297 Mertensia Road	No Sump
4	1295 Mertensia Road	No Sump
5	6162 NYS Route 96	Sump
6	Former Fish Market	No Sump
7	6200 NYS Route 96	No Sump
8	1304 Mertensia Road	Sump
9	Apartment Complex	Sump
10	Trailer	No Sump
11	Trailer	No Sump
12	6215 NYS Route 96	No Sump
13	Beauty Salon	Sump
14	6226 NYS Route 96	No Sump
15	6214 NYS Route 96	No Sump
16	Farmington Court	Sump
17	Farmington Court	Sump
18	Farmington Court	Sump
19	Farmington Court	Sump
20	1198 Mertensia Road	Sump

Notes
1. Survey performed on July 21, 1996.
2. Corresponds to Figure 3-5 of Report.

Figures

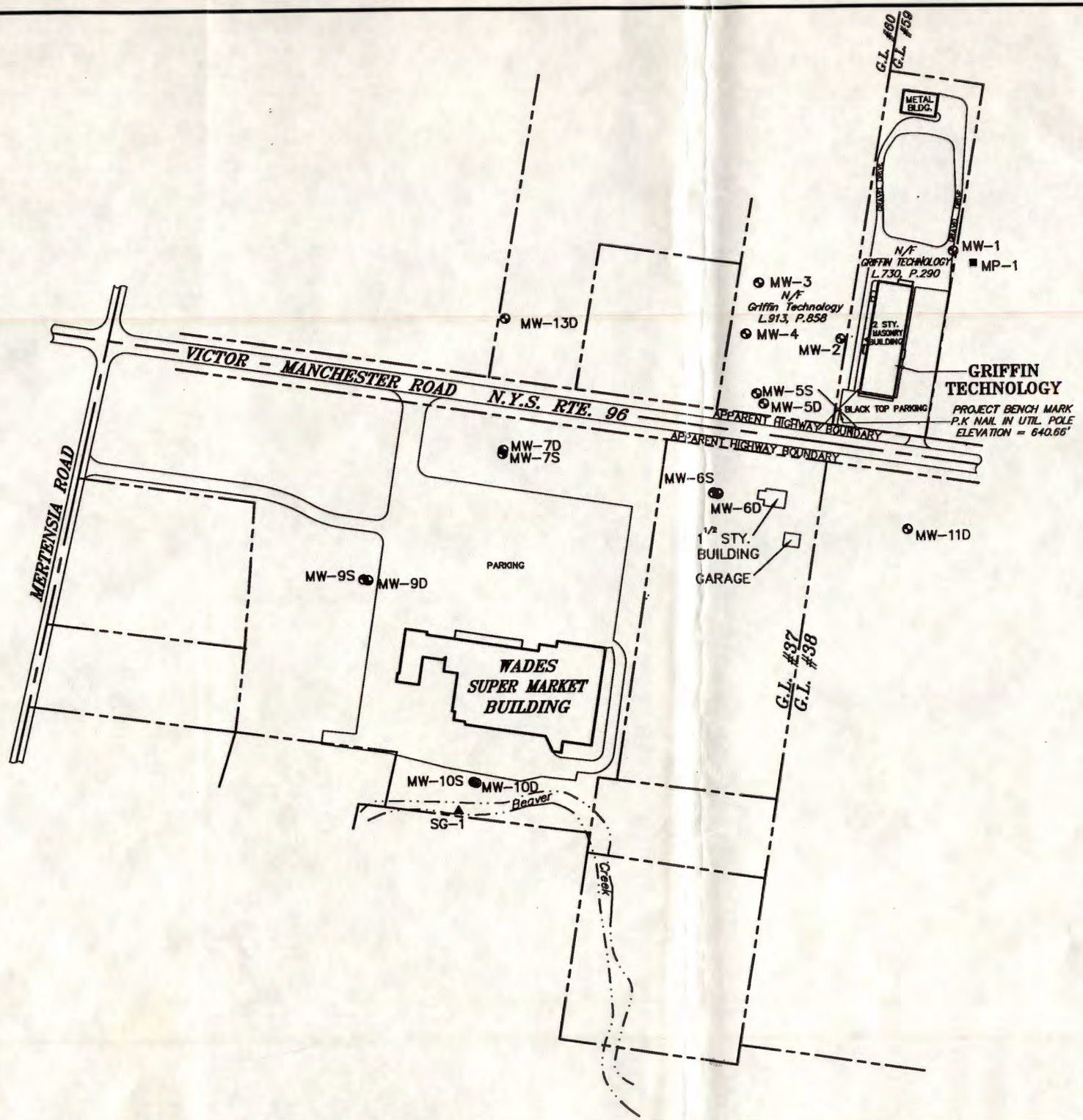


GENERAL LOCATION MAP

GRIFFIN TECHNOLOGY INC. - ONTARIO COUNTY - FARMINGTON, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 4E06282	DATE: 6-10-96	FIGURE NO: 1-1

Woodward-Clyde Consultants



N

LEGEND

- ⊗ MONITORING WELL
- ▲ STAFF GAUGE

References:

1.) Map prepared by Paul V. Crandall P.L.S. titled "LANDS OF R.D. PRODUCTS INC." Last dated June 17, 1983. Job #83138.

2.) Map prepared by Paul V. Crandall P.L.S. titled "GRIFFIN TECHNOLOGY 6132 VICTOR-MANCHESTER ROAD, SOIL BORINGS & MONITORING WELLS" Last dated June 19, 1991. Job #911767.

3.) Map prepared by Paul V. Crandall P.L.S. titled "MAP SHOWING LANDS OF JAMES V. ALAIMO - ANTHONY S. ALAIMO, M.D. - STEPHEN L. ALAIMO, M.D. - SAMUEL R. ALAIMO & JOSEPH W. ALAIMO ESTATE TO BE CONVEYED" Last dated August 25 1993. Job #932113.

4.) Map prepared by Blasland & Bouck Engineers, P.C. titled "GRIFFIN TECHNOLOGY INC. VICTOR, NEW YORK OFF-SITE GROUND-WATER EVALUATION PROGRAM - PROPOSED MONITORING WELL LOCATION" Last dated July 1993.

5.) Map prepared by CRANDALL SURVEYORS, titled "GRIFFIN TECHNOLOGY INC. - ON - SITE / OFF - SITE GROUND WATER EVALUATION PROGRAM - PART OF GRIFFIN TECHNOLOGY PROPERTY NORTH OF N.Y.S. ROUTE 96 & JOHN W. & JANE A. WADE PROPERTY SOUTH OF N.Y.S. ROUTE 96. Last dated 12-22-1994. Job #942296

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 200 ft.

Woodward-Clyde Consultants

Engineering & sciences applied to the earth & its environment

30775 Bainbridge Road, Suite 200
Solon, Ohio 44139

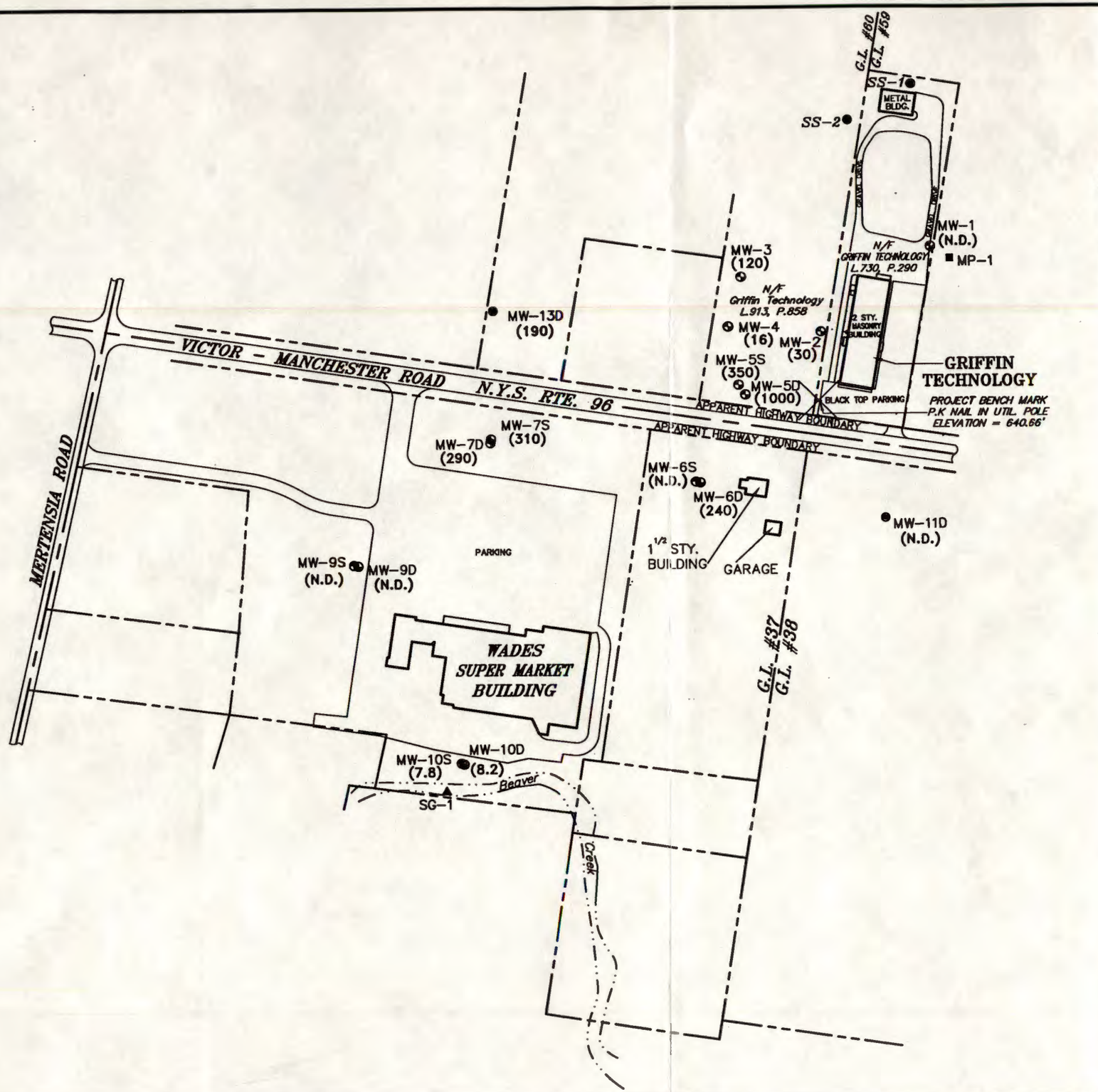
CLIENT: GRIFFIN TECHNOLOGY, INC.

LOCATION: FARMINGTON, ONTARIO COUNTY, NEW YORK

GROUNDWATER MONITORING WELL LOCATION MAP

DRAWN BY:	CHECKED BY:	PROJECT NO:	DATE:	FIGURE NO:
MMS	KMA	4E06282	6-18-96	2-1

U:\6282\SUPPLMNT\FIG-2-1.DWG



LEGEND

- ⌖ MONITORING WELL
- ● SOIL SAMPLE
- ▲ STAFF GAUGE
- ● NEW MONITORING WELL
- (850) TCE CONCENTRATION
- (N.D.) NOT DETECTED

NOTE: ALL RESULTS PRESENTED ARE TRICHLOROETHENE CONCENTRATIONS IN MICROGRAMS PER LITER (ug/l).

References:

1. Map prepared by Paul V. Crandall P.L.S. titled "LANDS OF R.D. PRODUCTS INC." Last dated June 17, 1983. Job #83138.
2. Map prepared by Paul V. Crandall P.L.S. titled "GRIFFIN TECHNOLOGY 6132 VICTOR-MANCHESTER ROAD, SOIL BORINGS & MONITORING WELLS" Last dated June 19, 1991. Job #911767.
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GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 200 ft.

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Solon, Ohio 44139

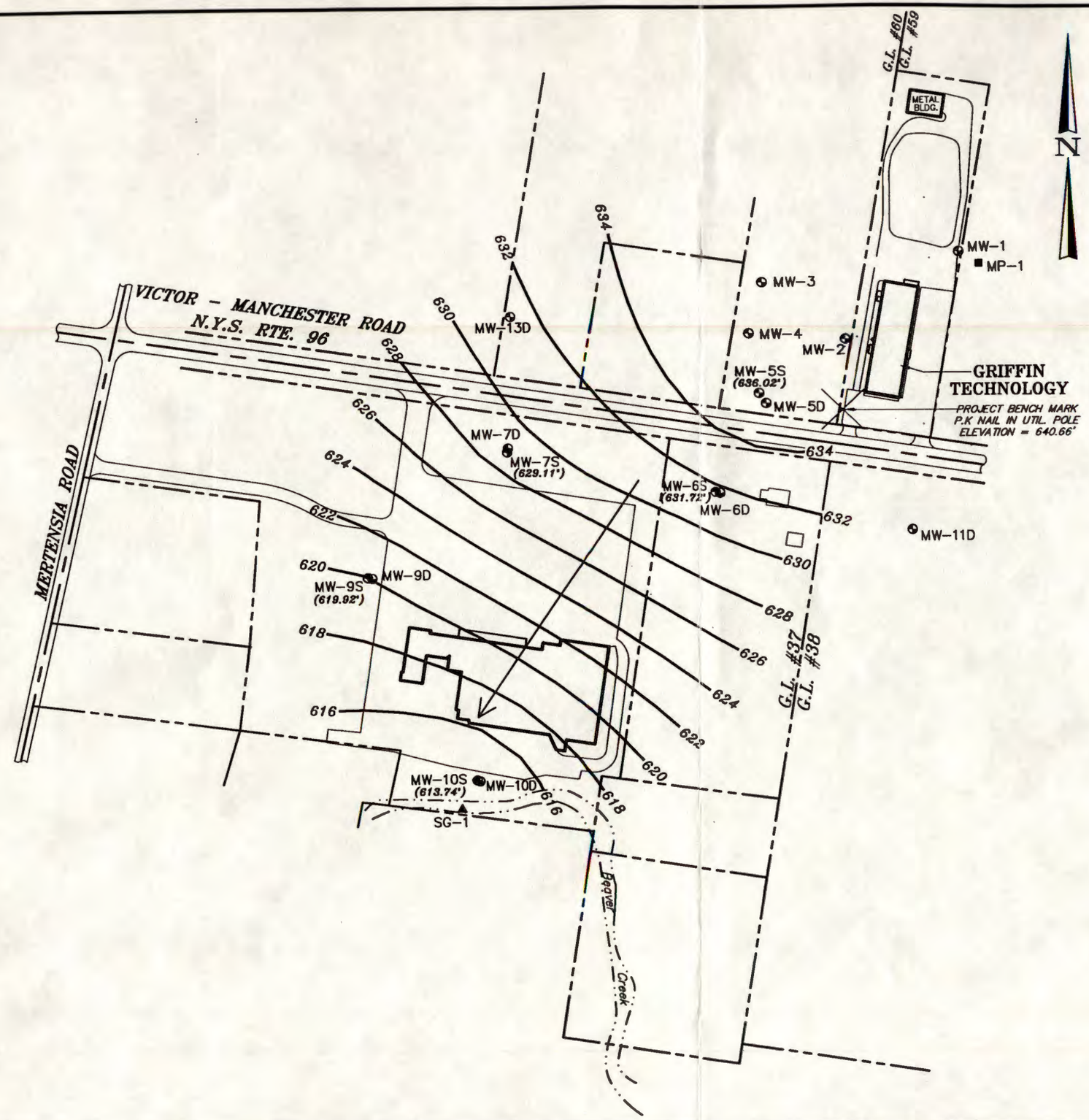
CLIENT: GRIFFIN TECHNOLOGY, INC.

LOCATION: FARMINGTON, ONTARIO COUNTY, NEW YORK

TCE CONCENTRATIONS MAY, 1996 SAMPLE EVENT

DRAWN BY:	CHECKED BY:	PROJECT NO:	DATE:	FIGURE NO:
MMS	KMA	4E06282	6-18-96	3-1

U:\6282\SUPPLMNT\FIG-3-1.DWG



LEGEND

- ⊙ MONITORING WELL
- ▲ STAFF GAUGE
- —632— GROUNDWATER CONTOUR (INTERVAL = 2 FEET)
- (636.02') GROUNDWATER ELEVATION 05-29-96
- ← GROUNDWATER FLOW DIRECTION

NOTE:
CONTOUR LINES ARE INTERPOLATED USING MAY 29, 1996 GROUNDWATER ELEVATION DATA AND ARE APPROXIMATE.

OVERBURDEN MONITORING WELLS ARE DENOTED WITH AN "S" (MW-6S).

References:

1.) Map prepared by Paul V. Crandall P.L.S. titled "LANDS OF R.D. PRODUCTS INC." Last dated June 17, 1983. Job #83138.

2.) Map prepared by Paul V. Crandall P.L.S. titled "GRIFFIN TECHNOLOGY 6132 VICTOR-MANCHESTER ROAD, SOIL BORINGS & MONITORING WELLS" Last dated June 19, 1991. Job #911767.

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GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 200 ft.

Woodward-Clyde Consultants

Engineering & sciences applied to the earth & its environment

30775 Bainbridge Road, Suite 200
Solon, Ohio 44139

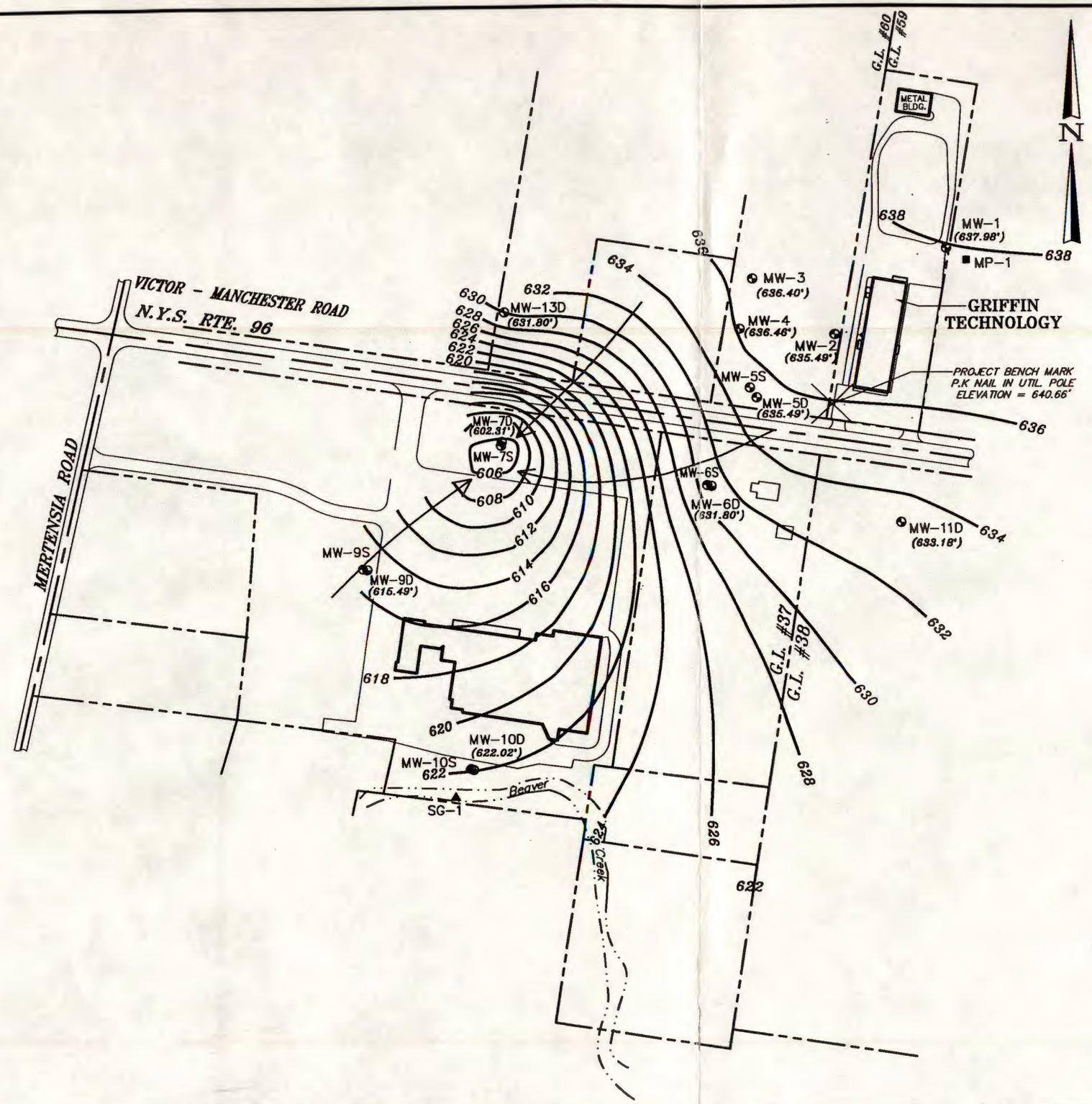
CLIENT: GRIFFIN TECHNOLOGY, INC.

LOCATION: FARMINGTON, ONTARIO COUNTY, NEW YORK

OVERBURDEN GROUNDWATER CONTOUR MAP MAY 29, 1996

DRAWN BY:	CHECKED BY:	PROJECT NO:	DATE:	FIGURE NO:
MMS	KMA	4E06282	6-19-96	3-2

U:\6282\SUPPLMNT\FIG-3-2.DWG



LEGEND

- MONITORING WELL
- STAFF GAUGE
- —632— GROUNDWATER CONTOUR (INTERVAL = 2 FEET)
- (633.02') GROUNDWATER ELEVATION 05-29-96
- GROUNDWATER FLOW DIRECTION

NOTE:
CONTOUR LINES ARE INTERPOLATED USING MAY 29, 1996 GROUNDWATER ELEVATION DATA AND ARE APPROXIMATE.

BEDROCK MONITORING WELLS ARE DENOTED WITH A "D" (MW-6D).

References:

1.) Map prepared by Paul V. Crandall P.L.S. titled "LANDS OF R.D. PRODUCTS INC." Last dated June 17, 1983. Job #83138.

2.) Map prepared by Paul V. Crandall P.L.S. titled "GRIFFIN TECHNOLOGY 6132 VICTOR-MANCHESTER ROAD, SOIL BORINGS & MONITORING WELLS" Last dated June 19, 1991. Job #911767.

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GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 200 ft.

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Engineering & sciences applied to the earth & its environment

30775 Bainbridge Road, Suite 200
Solon, Ohio 44139

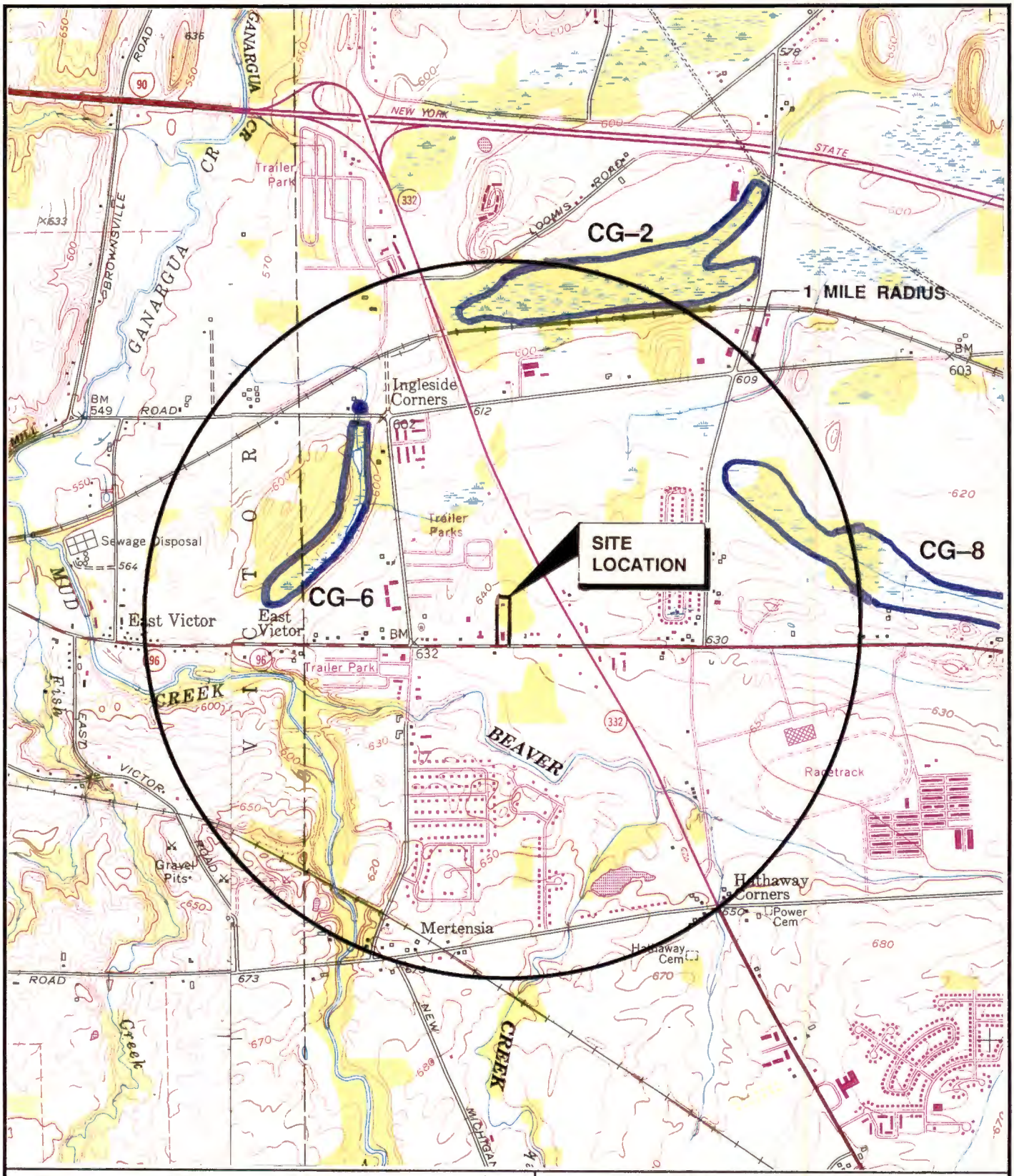
CLIENT: GRIFFIN TECHNOLOGY, INC.

LOCATION: FARMINGTON, ONTARIO COUNTY, NEW YORK

BEDROCK GROUNDWATER CONTOUR MAP MAY 29, 1996

DRAWN BY:	CHECKED BY:	PROJECT NO:	DATE:	FIGURE NO:
MMS	KMA	4E06282	6-19-96	3-3

U:\6282\SUPPLMNT\FIG-3-3R.DWG

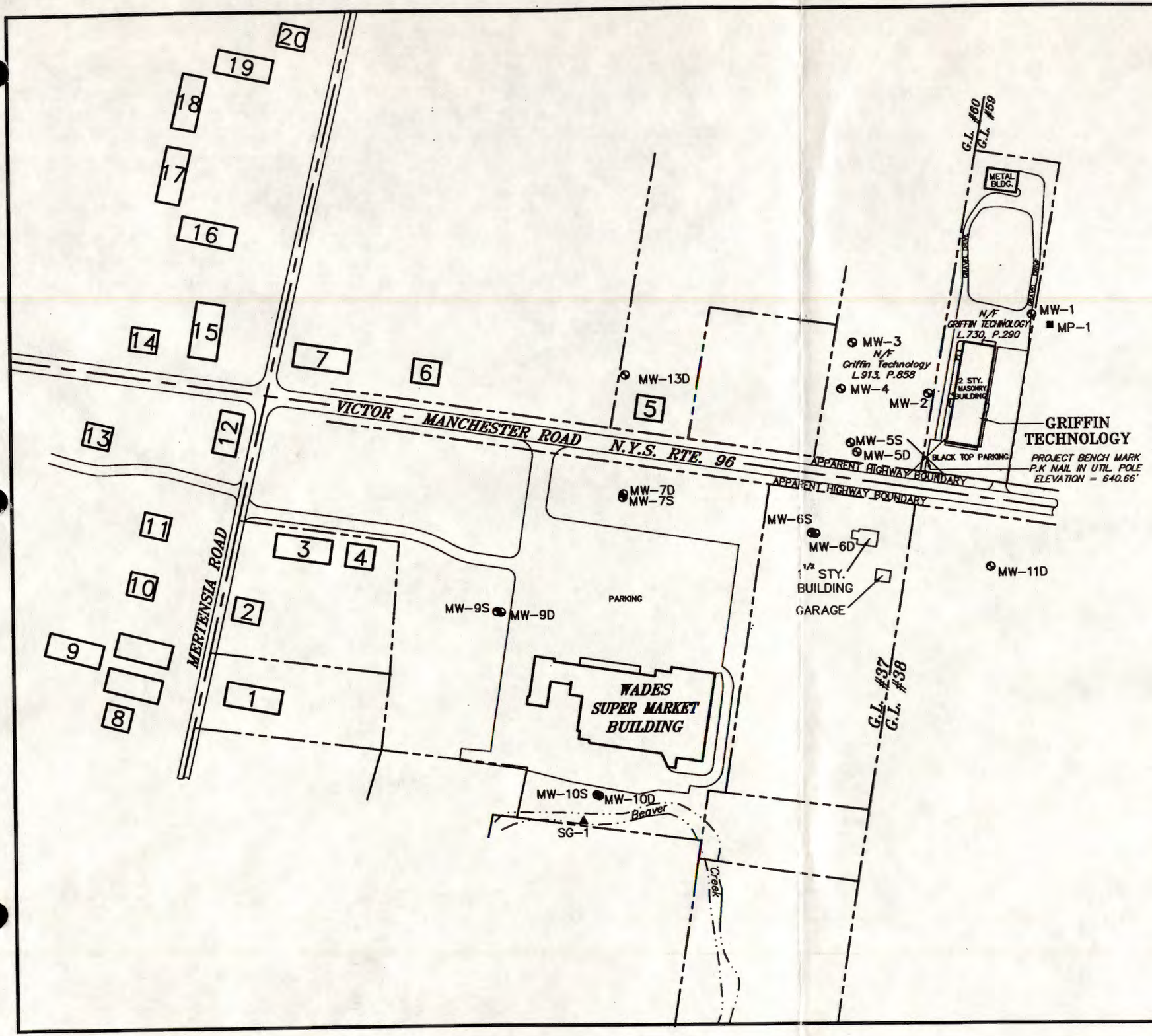


MAP SOURCE:
U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES OF CANANDAIGUA, N.Y., DATED 1951, PHOTO REVISED 1978, AND VICTOR, N.Y., DATED 1971, PHOTOREVISED 1978.

NEW YORK STATE REGULATED WETLANDS
GRIFFIN TECHNOLOGY INC.
VICTOR, NEW YORK

WOODWARD-CLYDE CONSULTANTS
ENGINEERING & SCIENCES APPLIED TO THE EARTH & ITS ENVIRONMENT
WAYNE, NEW JERSEY

DR. BY:	BAS	SCALE:	AS SHOWN	PROJ. NO.:	4E06282
CK'D. BY:	ABB	DATE:	JUNE 4, 1996	FIG. NO:	3-4



LEGEND

- ⊙ MONITORING WELL
- ▲ STAFF GAUGE

References:

1.) Map prepared by Paul V. Crandall P.L.S. titled "LANDS OF R.D. PRODUCTS INC." Last dated June 17, 1983. Job #83138.

2.) Map prepared by Paul V. Crandall P.L.S. titled "GRIFFIN TECHNOLOGY 6132 VICTOR-MANCHESTER ROAD, SOIL BORINGS & MONITORING WELLS" Last dated June 19, 1991. Job #911767.

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GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 200 ft.

Woodward-Clyde Consultants

Engineering & sciences applied to the earth & its environment

30775 Bainbridge Road, Suite 200
Solon, Ohio 44139

CLIENT: GRIFFIN TECHNOLOGY, INC.

LOCATION: FARMINGTON, ONTARIO COUNTY, NEW YORK

BASEMENT SUMP SURVEY MAP

DRAWN BY:	CHECKED BY:	PROJECT NO:	DATE:	FIGURE NO:
MMS	KMA	4E06282	6-19-96	3-5

H:\4E06282\SUPPLIMENT\FIG-3-5.DWG

Appendix A

Project: GRIFFIN TECHNOLOGY INC. Project Location: 6132 Victor-Manchester Road - Victor, NY Project Number: 4E06282	**Log of Core Boring MW-11D** Sheet 1 of 3

Date(s) Drilled	3/13/96 - 3/14/96		Logged By	K.M. Forster	Checked By	
Drilling Method	Rotary and Air Rotary Drilling		Drill Bit Size/Type	6.25 in. HSA (0-18 ft)"H" Core Barrel	Total Depth Drilled (feet)	33.5
Drill Rig Type	BK-81		Drilled By	Nothnagle Drilling	Hammer Weight/ Drop (lbs/in.)	
Groundwater Level (feet)			Date Measured		Approx. Surface Elevation (feet)	
Diameter of Hole (inches)		Diameter of Well (inches) 2	Type of Well Casing	PVC	Screen Perforation	0.010 inch
Type of Sand Pack	00N (21 to 21.5 ft.bgs) 0N (21.5 to 33.5ft.bgs)		Type/Thickness of Seal(s)	Bentonite Pellets from 17 ft to 21 ft bgs		
Comments						

Depth, feet	SOIL SAMPLES Type	Number	Recovery, in.	Blows per foot	FID, ppmv	ROCK CORE Run No.	Box No.	Recovery, %	R Q D, %	Drill Rate, feet/hour	Lithology	MATERIAL DESCRIPTION	Well Completion Log	REMARKS
0		1	16	7	<1							Soft, brown, silt, some clay [TOPSOIL]		
												Soft, moist, brown, Silty CLAY, some to trace gravel		
		2	11	63	<1							becomes hard, trace gravel		
		3	15	59	<1							becomes some gravel		
5		4	12	85	2							becomes trace sand		
		5	24	75	<1									
10														

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Figure

5/8/96 1GL14C 6282

Project: GRIFFIN TECHNOLOGY INC.
Project Location: 6132 Victor-Manchester Road - Victor, NY
Project Number: 4E06282

Log of Core Boring MW-11D

Sheet 2 of 3

Depth, feet	SOIL SAMPLES Type Number	Recovery, in.	Blows per foot	FID, ppmv	ROCK CORE Run No.	Box No.	Recovery, %	R Q D, %	Drill Rate, feet/hour	Lithology	MATERIAL DESCRIPTION	Well Completion Log	REMARKS
10	6	15	74	1							becomes no sand		
	7	24	63	<1									
	8	24	24	<1							Very stiff, moist, brown, CLAY, trace gravel		
15											becomes with coarse sand layers		
	9	18	29	5*							Soft, wet, brown, SAND		
											becomes with gravel		
					1		6		1		Light to dark gray-green, DOLOMITE, with some vugs, filled veins, and a few fossils		
											Horizontal fracture		
											Irregular slightly rough fractures, at 18.9, 19.2, and 19.3 ft		
											Horizontal mechanical break		
											Low angle mechanical break		
20											Broken rock zone		
											Horizontal rough fracture		
											Horizontal mechanical breaks at 21 and 21.3 ft		
											Two horizontal mechanical breaks		
											Horizontal slightly rough fracture		
											Horizontal fracture		
											No recovery		

5/8/96 1GL14C 6282

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Figure

Project: GRIFFIN TECHNOLOGY INC.
Project Location: 6132 Victor-Manchester Road - Victor, NY
Project Number: 4E06282

Log of Core Boring MW-11D

Sheet 3 of 3

Depth, feet	SOIL SAMPLES: Type Number	Recovery, in.	Blows per foot	FID, ppmv	ROCK CORE: Run No.	Box No.	Recovery, %	R Q D, %	Drill Rate, feet/hour	Lithology	MATERIAL DESCRIPTION	Well Completion Log	REMARKS
					2		14		1		← Broken rock zone		
25											← Horizontal slightly rough fracture ← High angle mechanical break ← Partially crystallized vugs ← Irregular mechanical break along a completely crystallized vug ← High angle fracture ← Partially filled vug ← Completely filled vug ← Horizontal mechanical breaks at 26.8 and 27.2 feet		
					3		21		2		← Broken rock zone ← Horizontal mechanical break ← Irregular mechanical break		
30											← Low angle mechanical break ← Irregular mechanical break ← Low angle fracture ← High angle mechanical breaks at 32.3 and 32.5 ft		
35											END OF BORING at 33.5 feet.		

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Figure

5/8/96 1GL14C 6282

Project: GRIFFIN TECHNOLOGY INC.
Project Location: 6132 Victor-Manchester Road - Victor, NY
Project Number: 4E06282

Log of Core Boring MW-13D

Sheet 1 of 3

Date(s) Drilled	3/15/96 - 3/18/96	Logged By	K.M. Forster	Checked By	
Drilling Method	Rotary and Air Rotary Drilling	Drill Bit Size/Type	6.25 in.HSA (0-20.5 ft)"H" Core Barrel	Total Depth Drilled (feet)	35.5
Drill Rig Type	BK-81	Drilled By	Nothnagle Drilling	Hammer Weight/ Drop (lbs/in.)	
Groundwater Level (feet)		Date Measured		Approx. Surface Elevation (feet)	
Diameter of Hole (inches)	Diameter of Well (inches) 2	Type of Well Casing	PVC	Screen Perforation	0.020 inch
Type of Sand Pack	00N (23 to 23.5 ft.bgs) 0N (23.5 to 35.5ft.bgs)	Type/Thickness of Seal(s)	Bentonite Pellets from 19 ft to 23 ft bgs		
Comments					

Depth, feet	SOIL SAMPLES: Type Number	Recovery,in.	Blows per foot	FID, ppmv	ROCK CORE: Run No.	Box No.	Recovery, %	R Q D, %	Drill Rate, feet/hour	Lithology	MATERIAL DESCRIPTION	Well Completion Log	REMARKS
0	1	11	23	5							Topsoil (3") underlain by hard sand, gravel, and cinders, some clay [FILL]		
	2	10	35	<1							Hard, moist, brown, Silty CLAY, some gravel		
	3	21	45	2									
5											Hard, moist to wet, brown, SILT		
	4	18	83	6							becomes wet		
											Hard, moist, brown, Silty CLAY, some to trace gravel		
	5	10	94	7*							becomes with some cobbles		
10													

Project: GRIFFIN TECHNOLOGY INC.
Project Location: 6132 Victor-Manchester Road - Victor, NY
Project Number: 4E06282

Log of Core Boring MW-13D

Sheet 2 of 3

Depth, feet	SOIL SAMPLES Type	Number	Recovery, in.	Blows per foot	FID, ppmv	ROCK CORE Run No.	Box No.	Recovery, %	R Q D, %	Drill Rate, feet/hour	Lithology	MATERIAL DESCRIPTION	Well Completion Log	REMARKS
10		6	20	106	1							some gravel		
		7	24	59	<1							Hard, moist, brown, CLAY, some to trace silt and gravel		
		8	24	34	<1							becomes trace gravel		
15		9	24	33	3							Wet sand layer (1.5") becomes wet		
		10	24	79	5							Hard, moist, brown, SILT, with gravel, trace clay		
20		11	4	100/.3	5							becomes some sand, large fragments of rock		
						1			89	1		Light to dark gray, DOLOMITE, with vugs, trace fossils		

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Figure

5/8/96 1GL14C 6282

Project: GRIFFIN TECHNOLOGY INC.
Project Location: 6132 Victor-Manchester Road - Victor, NY
Project Number: 4E06282

Log of Core Boring MW-13D

Sheet 3 of 3

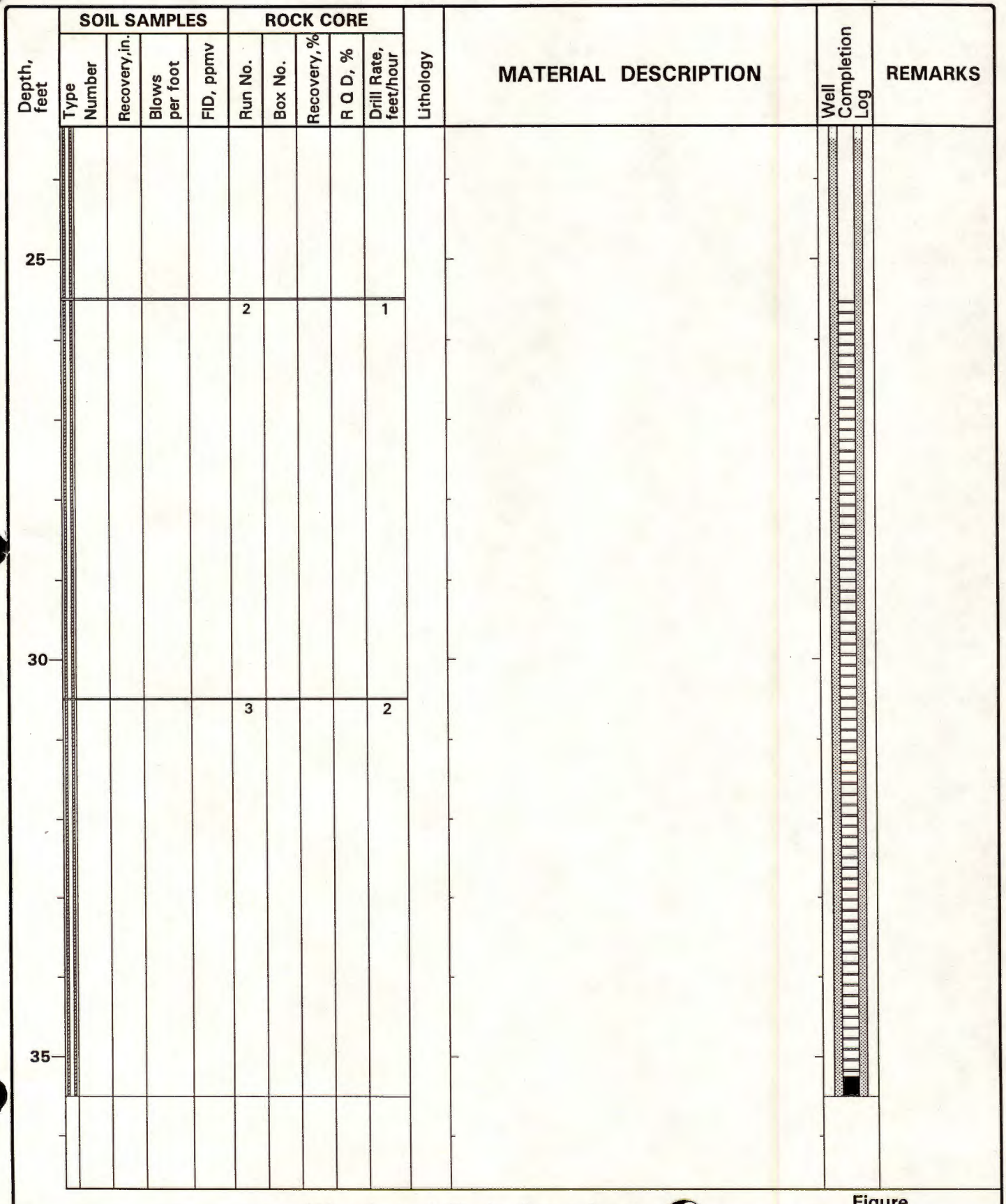

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Figure

5/8/96 1GL14C 6282

Appendix B

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street, Rochester, NY 14608 | 85 Trinity Place, Hackensack, NJ 07601 | 435 Lawrence Bell Drive, Amherst, NY 14221-7077

GTC Job. No. _____

Client Project No. 4E06282-10

Sample Origination & Shipping Information

Collection Site GRIFFIN TECH. (WOODWARD CLYDE CONSULTANTS).

Address 6132 Victor-MANCHESTER Rd (Street) FARMINGTON (City) NY (State) (Zip)

Collector KENNETH M. FORSTER (Print) Kenneth M. Forster (Signature)

Bottles Prepared by _____ Rec'd by _____

Bottles Shipped to Client via KENNETH M. FORSTER Seal/Shipping # _____

Samples Shipped via KENNETH M. FORSTER Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date//Time
1. Sign Kenneth M. Forster	1. Sign Tom Hastings	3 / 15 / 96
for GTC	for GTC	15:15
2. Sign	2. Sign	/ /
for	for	:
3. Sign	3. Sign	/ /
for	for	:

Sample(s) Received in Laboratory by _____ / / @ :

	Client I.D. # / Lab #	Sample Location / Date/Time	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Y	Preserved N	Filtered Y	Filtered N	Bottle Set(s) (see below)	
1	GRIFF-MW-11D 16-18	MW-11D								
		3/13/96 :11:50	S	VOC - 8240/8270		X		X	10 & 11	
2	GRIFF-MW-13D 8-10									
		3/15/96 :8:54	S	VOC 8240/8270 and MS/MSD		X		X	10 & 11	
3	GRIFF-MW-100 -038									
		3/15/96 :8:30	I	VOC 8240/8270					1	
4	GRIFF-MW-130D 8-10									
		3/15/96 :8:59	S	VOC 8240/8270		X		X	10	
5										
		/ / :								

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.	4oz WMGB	2oz WMGB
# of each											

Additional Analytes ★ NOTE: SEND Report to JIM Rooter

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), (X), (Y)

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D11 Griff-mw-111 cpm

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:D11

Matrix: (soil/water) SOIL Lab Sample ID:67405

Sample wt/vol: 5.00 (g/ml) G Lab File ID: J7612

Level: (low/med) LOW Date Received: 3/15/96

% Moisture: not dec. 17 Date Analyzed: 3/19/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene chloride	12.	U
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	12.	U
75-35-4	1,1-Dichloroethene	12.	U
75-34-3	1,1-Dichloroethane	12.	U
156-60-5	trans-1,2-Dichloroethene	12.	U
67-66-3	Chloroform	12.	U
107-06-2	1,2-Dichloroethane	12.	U
78-93-3	2-Butanone	12.	U
156-59-2	cis-1,2-Dichloroethene	12.	U
71-55-6	1,1,1-Trichloroethane	12.	U
56-23-5	Carbon tetrachloride	12.	U
75-27-4	Bromodichloromethane	12.	U
78-87-5	1,2-Dichloropropane	12.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U
79-01-6	Trichloroethene	12.	U
124-48-1	Dibromochloromethane	12.	U
79-00-5	1,1,2-Trichloroethane	12.	U
71-43-2	Benzene	12.	U
50061-02-6	trans-1,3-Dichloropropene	12.	U
75-25-2	Bromoform	12.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	12.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U
108-88-3	Toluene	12.	U
108-90-7	Chlorobenzene	12.	U
100-41-4	Ethylbenzene	12.	U
100-42-5	Styrene	12.	U
108-38-3	(m+p)Xylene	12.	U
95-47-6	o-Xylene	12.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D11 Griff-MW-110 ogw

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:D11

Matrix: (soil/water) SOIL Lab Sample ID:67405

Sample wt/vol: 5.00 (g/ml) G Lab File ID: J7612

Level: (low/med) LOW Date Received: 3/15/96

% Moisture: not dec. 17 Date Analyzed: 3/19/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	6.95	15.	J
2.					
3.					
4.					
5.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D130

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:D11

Griff-MW-130D

Matrix: (soil/water) SOIL Lab Sample ID:67407

Sample wt/vol: 5.00 (g/ml) G Lab File ID: J7613

Level: (low/med) LOW Date Received: 3/15/96

% Moisture: not dec. 12 Date Analyzed: 3/19/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene chloride	11.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	trans-1,2-Dichloroethene	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
156-59-2	cis-1,2-Dichloroethene	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
50061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
108-38-3	(m+p)Xylene	11.	U
95-47-6	o-Xylene	11.	U

00013

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D130

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:D11 GRIFF-MW-B2D gm

Matrix: (soil/water) SOIL Lab Sample ID:67407

Sample wt/vol: 5.00 (g/ml) G Lab File ID: J7613

Level: (low/med) LOW Date Received: 3/15/96

% Moisture: not dec. 12 Date Analyzed: 3/19/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D13 GRIFF-MW-13D

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:D11

Matrix: (soil/water) SOIL Lab Sample ID:67406

Sample wt/vol: 5.00 (g/ml) G Lab File ID: J7609

Level: (low/med) LOW Date Received: 3/15/96

% Moisture: not dec. 12 Date Analyzed: 3/19/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene chloride	11.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	trans-1,2-Dichloroethene	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
156-59-2	cis-1,2-Dichloroethene	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
50061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
108-38-3	(m+p)Xylene	11.	U
95-47-6	o-Xylene	11.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D13 GRIFF-MW-13D gw

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:D11

Matrix: (soil/water) SOIL Lab Sample ID:67406

Sample wt/vol: 5.00 (g/ml) G Lab File ID: J7609

Level: (low/med) LOW Date Received: 3/15/96

% Moisture: not dec. 12 Date Analyzed: 3/19/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	6.98	9.	J
2.					
3.					
4.					
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Appendix C

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street, Rochester, NY 14608 | 85 Trinity Place, Hackensack, NJ 07601 | 435 Lawrence Bell Drive, Amherst, NY 14221-7077

GTC Job. No._____

Client Project No._____

Sample Origination & Shipping Information

Collection Site Diebold - Griffis

Address _____ Victor (Street / City) N.Y. (State) _____ (Zip)

Collector Bob Fabian (Print) Bob Fabian (Signature)

Bottles Prepared by _____ Rec'd by _____

Bottles Shipped to Client via _____ Seal/Shipping # _____

Samples Shipped via _____ Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date//Time
1. Sign Bob Fabian	1. Sign	4/11/96
for Woodward-Clyde Consultants	for	2:00
2. Sign	2. Sign	/ /
for	for	:
3. Sign	3. Sign	/ /
for	for	:

Sample(s) Received in Laboratory by _____ / / @ :

	Client I.D. # / Lab #	Sample Location / Date/Time	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Y	Preserved N	Filtered Y	Filtered N	Bottle Set(s) (see below)	
1		MW-11D		VOC's ASP	✓				2-#1	
		4/11/96 : 11:25								
2		MW-13D		VOC's ASP	✓				2-#1	
		4/11/96 : 12:37								
3		FB-1		VOC's ASP	✓				2-#1	
		4/11/96 :								
4										
		/ / :								
5										
		/ / :								

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Soil
# of each	2								

Additional Analytes _____

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Wat
River or Stream (R), Pond (P), Industrial Discharge (I),

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11D

Lab Name:Columbia Analytical Contract:Roetzer

Lab Code:10145 Case No.: SAS No.: SDG No.:MW11D

Matrix: (soil/water) WATER Lab Sample ID:72421

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8884

Level: (low/med) LOW Date Received: 4/11/96

% Moisture: not dec. Date Analyzed: 4/16/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00010

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW11D

Lab Name:Columbia Analytical Contract:Roetzer

Lab Code:10145 Case No.: SAS No.: SDG No.:MW11D

Matrix: (soil/water) WATER Lab Sample ID:72421

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8884

Level: (low/med) LOW Date Received: 4/11/96

% Moisture: not dec. Date Analyzed: 4/16/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW13D

Lab Name:Columbia Analytical Contract:Roetzer

Lab Code:10145 Case No.: SAS No.: SDG No.:MW11D

Matrix: (soil/water) WATER Lab Sample ID:72422

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8887

Level: (low/med) LOW Date Received: 4/11/96

% Moisture: not dec. Date Analyzed: 4/16/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	4.	J
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	300.	E
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00012

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW13D

Lab Name:Columbia Analytical Contract:Roetzer

Lab Code:10145 Case No.: SAS No.: SDG No.:MW11D

Matrix: (soil/water) WATER Lab Sample ID:72422

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8887

Level: (low/med) LOW Date Received: 4/11/96

% Moisture: not dec. Date Analyzed: 4/16/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW13DDL

Lab Name:Columbia Analytical Contract:Roetzer

Lab Code:10145 Case No.: SAS No.: SDG No.:MW11D

Matrix: (soil/water) WATER Lab Sample ID:72422DL

Sample wt/vol: 1.00 (g/ml) ML Lab File ID: Q8889

Level: (low/med) LOW Date Received: 4/11/96

% Moisture: not dec. Date Analyzed: 4/16/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene chloride	50.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	50.	U
75-35-4	1,1-Dichloroethene	50.	U
75-34-3	1,1-Dichloroethane	50.	U
156-60-5	trans-1,2-Dichloroethene	50.	U
67-66-3	Chloroform	50.	U
107-06-2	1,2-Dichloroethane	50.	U
78-93-3	2-Butanone	50.	U
156-59-2	cis-1,2-Dichloroethene	50.	U
71-55-6	1,1,1-Trichloroethane	50.	U
56-23-5	Carbon tetrachloride	50.	U
75-27-4	Bromodichloromethane	50.	U
78-87-5	1,2-Dichloropropane	50.	U
10061-01-5	cis-1,3-Dichloropropene	50.	U
79-01-6	Trichloroethene	610.	D
124-48-1	Dibromochloromethane	50.	U
79-00-5	1,1,2-Trichloroethane	50.	U
71-43-2	Benzene	50.	U
50061-02-6	trans-1,3-Dichloropropene	50.	U
75-25-2	Bromoform	50.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	50.	U
108-88-3	Toluene	50.	U
108-90-7	Chlorobenzene	50.	U
100-41-4	Ethylbenzene	50.	U
100-42-5	Styrene	50.	U
108-38-3	(m+p)Xylene	50.	U
95-47-6	o-Xylene	50.	U

00014

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW13DDL

Lab Name:Columbia Analytical Contract:Roetzer

Lab Code:10145 Case No.: SAS No.: SDG No.:MW11D

Matrix: (soil/water) WATER Lab Sample ID:72422DL

Sample wt/vol: 1.00 (g/ml) ML Lab File ID: Q8889

Level: (low/med) LOW Date Received: 4/11/96

% Moisture: not dec. Date Analyzed: 4/16/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB1

Lab Name:Columbia Analytical Contract:Roetzer

Lab Code:10145 Case No.: SAS No.: SDG No.:MW11D

Matrix: (soil/water) WATER Lab Sample ID:72423

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8890

Level: (low/med) LOW Date Received: 4/11/96

% Moisture: not dec. Date Analyzed: 4/16/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00008

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB1

Lab Name:Columbia Analytical Contract:Roetzer

Lab Code:10145 Case No.: SAS No.: SDG No.:MW11D

Matrix: (soil/water) WATER Lab Sample ID:72423

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8890

Level: (low/med) LOW Date Received: 4/11/96

% Moisture: not dec. Date Analyzed: 4/16/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00008

Appendix D

Columbia Analytical Services, Inc. 1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

DATE 5/21/96 PAGE 1 OF 2

PROJECT NAME Diebold-Griffin
PROJECT MANAGER Marty Schmidt/Bill Rish
COMPANY/ADDRESS Woodward Clyde Consultants
30775 Bainbridge Rd. Solon, Ohio 44139
PHONE (216) 349-4908
SAMPLERS SIGNATURE Bob Fabian

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	Base/Neu/Acid Organics GC/MS 625/8270	Volatile Organics GC/MS 624/8240	Halogenated or Aromatic Volatiles 601/8010 ☐ 602/8020 ☐	Pesticides/PCBs 608/8080	Total Petroleum Hydrocarbons EPA/418.1 ☐ OR/418.1 ☐ WA/418.1 ☐	TPH/Gas/BTEX 5030/8015/8020 Gas ☐ BTEX ☐	TPH/8015 Modified Diesel ☐ Hydrocarbon Scan ☐	TPH/HCID ☐ Hydrocarbon Scan ☐ WA/HCID ☐ OR/HCID ☐	TCLP Metals ☐ VOA ☐	Semi Pest/ VOA ☐ Herb ☐ Metals (total or dissolved) List Below	Cyanide	pH, Cond. Cl, SO_4, PO_4, F, Br NO_2, NO_3, (circle)	NH_3-N, COD, Total-P, TKN, TOC (circle)	Total Organic Halides (TOX) 9020 ☐ (AOX) 1650A ☐	Major Ions	REMARKS
MW-9D	5-21-96	9:51	67461	WATER	5		X													X	
R-1		9:32	~~Rinsate~~ 67471		5		X													X	
MW-9S		10:05	67460		5		X													X	
MW-7S		10:15	67458		5		X													X	
MW-7D		10:28	67459		5		X													X	
MW-6S		10:40	67462		5		X													X	
MW-6D		10:48	67463		5		X													X	
MW-11D		11:13	67457		5		X													X	
MW-13D		11:02	67456		5		X													X	
Dup			67469		5		X													X	

RELINQUISHED BY:
Signature: Bob Fabian
Printed Name: Bob Fabian
Firm: Woodward-Clyde
Date/Time:

RECEIVED BY:
Signature: Tom Hastings
Printed Name: Tom Hastings
Firm: CAS
Date/Time: 5/21/96 14:14

TURNAROUND REQUIREMENTS
___ 24 hr ___ 48 hr. ___ 5 day
X Standard (10-15 working days)
___ Provide Verbal Preliminary Results
___ Provide FAX preliminary Results
Requested Report Date ___

REPORT REQUIREMENTS
___ I. Routine Report
___ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Data Validation Report (includes All Raw Data)
X IV. CLP Deliverable Report

INVOICE INFORMATION:
P.O.# ___
Bill To ___

SAMPLE RECEIPT:
Shipping VIA: ___
Shipping #: ___
Condition: ___
Lab No: 3-168

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

SPECIAL INSTRUCTIONS/COMMENTS:

DISTRIBUTION: WHITE - return to originator; YELLOW - lab; PINK - retained by originator

400-05

Columbia Analytical Services, Inc.

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

DATE 5-21-96 PAGE 2 OF 2

PROJECT NAME Diebold-Griffin #

PROJECT MANAGER Marty Schmidt / Bill Risk

COMPANY/ADDRESS Woodward-Clyde Consultants
30775 Bainbridge Rd, Solon, Ohio 44139 PHONE (216) 349-2700

SAMPLERS SIGNATURE

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	Base/Neu/Acid Organics GC/MS 625/8270	Volatile Organics GC/MS 624/8240	Halogenated or Aromatic Volatiles 601/8010 ☐ 602/8020 ☐	Pesticides/PCBs 608/8080	Total Petroleum Hydrocarbons EPA/418.1 ☐ OR/418.1 ☐ WA/418.1 ☐	TPH/Gas/BTEX 5030/8015/8020	TPH/8015 Modified Diesel ☐ Hydrocarbon Scan ☐	TPH/HCID ☐ OR/HCID ☐ WA/HCID ☐	TCLP Metals ☐ VOA ☐ Semi VOA ☐ Pest/Herb ☐	Metals (total or dissolved) List Below	Cyanide	pH, Cond, Cl, SO_4, PO_4, F, Br NO_2, NO_3, (circle)	NH_3-N, COD, Total-P, TKN, TOC (circle)	Total Organic Halides (TOX) 9020 ☐ (AOX) 1650A ☐	Major Ions	REMARKS
mw-3	5-21-96	11:52	67455	GC WATER	5		X												X		
MSD		11:52	67470		5		X												X		
MS		11:52	67707		5		X												X		
mw-4		12:02	67464		5		X												X		
mw-5S		12:14	67465		5		X												X		
mw-5D		12:19	67466		5		X												X		
mw-2		12:28	67467		5		X												X		
mw-1		12:37	67468		5		X												X		
SURF-1		13:01	67454		4		X												X		hold per client
SED-1		13:15	67454	SEDIMENT	4		X												X		

RELINQUISHED BY:
Signature: Bob Fabian
Printed Name: Bob Fabian
Firm: Woodward-Clyde
Date/Time:

RECEIVED BY:
Signature: Tom Hastings
Printed Name: Tom Hastings
Firm: CAS
Date/Time: 5/21/96 14:14

TURNAROUND REQUIREMENTS
___ 24 hr ___ 48 hr. ___ 5 day
X Standard (10-15 working days)
___ Provide Verbal Preliminary Results
___ Provide FAX preliminary Results
Requested Report Date:

REPORT REQUIREMENTS
___ I. Routine Report
___ II. Report (includes DUP.MS. MSD, as required, may be charged as samples)
___ III. Data Validation Report (includes All Raw Data)
X IV. CLP Deliverable Report

INVOICE INFORMATION:
P.O.#
Bill To

SAMPLE RECEIPT:
Shipping VIA:
Shipping #:
Condition:
Lab No: 3-168

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

SPECIAL INSTRUCTIONS/COMMENTS:

DISTRIBUTION: WHITE - return to originator; YELLOW - lab; PINK - retained by originator

400-05

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW1

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67768

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8209

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67767

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8208

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	3.	J
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	1.	J
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	30.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	4.	J
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67755

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8191

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/26/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	2.	J
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	120.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW4

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67764

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8205

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	2.	J
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	16.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWS5

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67765

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q9422

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/25/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	16.	
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	530.	E
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWD5

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67766

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q9423

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/25/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	8.	J
71-55-6	1,1,1-Trichloroethane	48.	
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	1200.	E
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWS5DL

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67765DL

Sample wt/vol: 1.00 (g/ml) ML Lab File ID: J8206

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene chloride	50.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	50.	U
75-35-4	1,1-Dichloroethene	50.	U
75-34-3	1,1-Dichloroethane	50.	U
156-60-5	trans-1,2-Dichloroethene	50.	U
67-66-3	Chloroform	50.	U
107-06-2	1,2-Dichloroethane	50.	U
78-93-3	2-Butanone	50.	U
156-59-2	cis-1,2-Dichloroethene	50.	U
71-55-6	1,1,1-Trichloroethane	12.	DJ
56-23-5	Carbon tetrachloride	50.	U
75-27-4	Bromodichloromethane	50.	U
78-87-5	1,2-Dichloropropane	50.	U
10061-01-5	cis-1,3-Dichloropropene	50.	U
79-01-6	Trichloroethene	350.	D
124-48-1	Dibromochloromethane	50.	U
79-00-5	1,1,2-Trichloroethane	50.	U
71-43-2	Benzene	50.	U
50061-02-6	trans-1,3-Dichloropropene	50.	U
75-25-2	Bromoform	50.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	50.	U
108-88-3	Toluene	50.	U
108-90-7	Chlorobenzene	50.	U
100-41-4	Ethylbenzene	50.	U
100-42-5	Styrene	50.	U
108-38-3	(m+p)Xylene	50.	U
95-47-6	o-Xylene	50.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWD5DL

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67766DL

Sample wt/vol: 1.00 (g/ml) ML Lab File ID: J8207

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100.	U
74-83-9	Bromomethane	100.	U
75-01-4	Vinyl chloride	100.	U
75-00-3	Chloroethane	100.	U
75-09-2	Methylene chloride	100.	U
67-64-1	Acetone	100.	U
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	100.	U
75-34-3	1,1-Dichloroethane	100.	U
156-60-5	trans-1,2-Dichloroethene	100.	U
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	100.	U
156-59-2	cis-1,2-Dichloroethene	100.	U
71-55-6	1,1,1-Trichloroethane	34.	DJ
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	1000.	D
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	100.	U
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWS6

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67762

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8217

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	2.	J
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	52.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	9.	J
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWD6

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67763

Sample wt/vol: 2.50 (g/ml) ML Lab File ID: J8215

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene chloride	20.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	20.	U
75-35-4	1,1-Dichloroethene	20.	U
75-34-3	1,1-Dichloroethane	20.	U
156-60-5	trans-1,2-Dichloroethene	20.	U
67-66-3	Chloroform	20.	U
107-06-2	1,2-Dichloroethane	20.	U
78-93-3	2-Butanone	20.	U
156-59-2	cis-1,2-Dichloroethene	20.	U
71-55-6	1,1,1-Trichloroethane	10.	J
56-23-5	Carbon tetrachloride	20.	U
75-27-4	Bromodichloromethane	20.	U
78-87-5	1,2-Dichloropropane	20.	U
10061-01-5	cis-1,3-Dichloropropene	20.	U
79-01-6	Trichloroethene	240.	
124-48-1	Dibromochloromethane	20.	U
79-00-5	1,1,2-Trichloroethane	20.	U
71-43-2	Benzene	15.	J
50061-02-6	trans-1,3-Dichloropropene	20.	U
75-25-2	Bromoform	20.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	20.	U
79-34-5	1,1,2,2-Tetrachloroethane	20.	U
108-88-3	Toluene	20.	U
108-90-7	Chlorobenzene	20.	U
100-41-4	Ethylbenzene	20.	U
100-42-5	Styrene	20.	U
108-38-3	(m+p)Xylene	20.	U
95-47-6	o-Xylene	20.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWS7

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67758

Sample wt/vol: 2.00 (g/ml) ML Lab File ID: J8214

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	25.	U
74-83-9	Bromomethane	25.	U
75-01-4	Vinyl chloride	25.	U
75-00-3	Chloroethane	25.	U
75-09-2	Methylene chloride	25.	U
67-64-1	Acetone	25.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	trans-1,2-Dichloroethene	25.	U
67-66-3	Chloroform	25.	U
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	25.	U
156-59-2	cis-1,2-Dichloroethene	6.	J
71-55-6	1,1,1-Trichloroethane	7.	J
56-23-5	Carbon tetrachloride	25.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	310.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	13.	J
50061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	25.	U
591-78-6	2-Hexanone	25.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
108-38-3	(m+p)Xylene	25.	U
95-47-6	o-Xylene	25.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWD7

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67759

Sample wt/vol: 2.50 (g/ml) ML Lab File ID: J8197

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/26/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene chloride	20.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	20.	U
75-35-4	1,1-Dichloroethene	20.	U
75-34-3	1,1-Dichloroethane	20.	U
156-60-5	trans-1,2-Dichloroethene	20.	U
67-66-3	Chloroform	20.	U
107-06-2	1,2-Dichloroethane	20.	U
78-93-3	2-Butanone	20.	U
156-59-2	cis-1,2-Dichloroethene	12.	J
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon tetrachloride	20.	U
75-27-4	Bromodichloromethane	20.	U
78-87-5	1,2-Dichloropropane	20.	U
10061-01-5	cis-1,3-Dichloropropene	20.	U
79-01-6	Trichloroethene	290.	
124-48-1	Dibromochloromethane	20.	U
79-00-5	1,1,2-Trichloroethane	20.	U
71-43-2	Benzene	17.	J
50061-02-6	trans-1,3-Dichloropropene	20.	U
75-25-2	Bromoform	20.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	20.	U
79-34-5	1,1,2,2-Tetrachloroethane	20.	U
108-88-3	Toluene	20.	U
108-90-7	Chlorobenzene	20.	U
100-41-4	Ethylbenzene	20.	U
100-42-5	Styrene	20.	U
108-38-3	(m+p)Xylene	20.	U
95-47-6	o-Xylene	20.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWS9

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67760

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8198

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/26/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	6.	J
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	3.	J
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWD9

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67761

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8216

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	15.	
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWD11

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67757

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8195

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/26/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	6.	J
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWD13

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67756

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8194

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/26/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	4.	J
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	210.	E
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	8.	J
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWD13DL

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67756DL

Sample wt/vol: 2.50 (g/ml) ML Lab File ID: J8213

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene chloride	20.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	20.	U
75-35-4	1,1-Dichloroethene	20.	U
75-34-3	1,1-Dichloroethane	20.	U
156-60-5	trans-1,2-Dichloroethene	20.	U
67-66-3	Chloroform	20.	U
107-06-2	1,2-Dichloroethane	20.	U
78-93-3	2-Butanone	20.	U
156-59-2	cis-1,2-Dichloroethene	4.	DJ
71-55-6	1,1,1-Trichloroethane	4.	DJ
56-23-5	Carbon tetrachloride	20.	U
75-27-4	Bromodichloromethane	20.	U
78-87-5	1,2-Dichloropropane	20.	U
10061-01-5	cis-1,3-Dichloropropene	20.	U
79-01-6	Trichloroethene	190.	D
124-48-1	Dibromochloromethane	20.	U
79-00-5	1,1,2-Trichloroethane	20.	U
71-43-2	Benzene	8.	DJ
50061-02-6	trans-1,3-Dichloropropene	20.	U
75-25-2	Bromoform	20.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	20.	U
79-34-5	1,1,2,2-Tetrachloroethane	20.	U
108-88-3	Toluene	20.	U
108-90-7	Chlorobenzene	20.	U
100-41-4	Ethylbenzene	20.	U
100-42-5	Styrene	20.	U
108-38-3	(m+p)Xylene	20.	U
95-47-6	o-Xylene	20.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP1

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67770

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8210

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	2.	J
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	55.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	8.	J
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

R1

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67771

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8211

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/27/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:67778

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q9428

Level: (low/med) LOW Date Received: 5/21/96

% Moisture: not dec. Date Analyzed: 5/25/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW1

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67768
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	176	MG/L	05/31/96	1.0
IRON	0.00900	0.330	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	26.9	MG/L	05/31/96	1.0
POTASSIUM	0.449	1.62 B	MG/L	05/31/96	1.0
SODIUM	0.108	14.7	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW1

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67768
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	444	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	444	MG/L	05/30/96	1.0
CHLORIDE	1.00	28.3	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	530	MG/L	05/30/96	1.0
SULFATE	5.00	46.1	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW2

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67767
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	85.3	MG/L	05/31/96	1.0
IRON	0.00900	0.421	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	15.9	MG/L	05/31/96	1.0
POTASSIUM	0.449	2.83 B	MG/L	05/31/96	1.0
SODIUM	0.108	21.6	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW2

Date Sampled : 05/21/96 Order #: 67767 Sample Matrix: WATER
Date Received: 05/21/96 Submission #: 9603000168

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	199	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	199	MG/L	05/30/96	1.0
CHLORIDE	1.00	38.6	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	262	MG/L	05/30/96	1.0
SULFATE	5.00	31.6	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW3

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67755
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	98.3	MG/L	05/31/96	1.0
IRON	0.00900	0.350	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	39.8	MG/L	05/31/96	1.0
POTASSIUM	0.449	1.05 B	MG/L	05/31/96	1.0
SODIUM	0.108	4.95 B	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW3

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67755
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	362	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	362	MG/L	05/30/96	1.0
CHLORIDE	1.00	8.40	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	392	MG/L	05/30/96	1.0
SULFATE	5.00	33.2	MG/L	05/28/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW4

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67764
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	163	MG/L	05/31/96	1.0
IRON	0.00900	0.0333 B	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	25.4	MG/L	05/31/96	1.0
POTASSIUM	0.449	1.65 B	MG/L	05/31/96	1.0
SODIUM	0.108	5.62	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW4

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67764
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	398	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	398	MG/L	05/30/96	1.0
CHLORIDE	1.00	13.6	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	441	MG/L	05/30/96	1.0
SULFATE	5.00	24.8	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW55

Date Sampled : 05/21/96 Order #: 67765 Sample Matrix: WATER
Date Received: 05/21/96 Submission #: 9603000168

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	117	MG/L	05/31/96	1.0
IRON	0.00900	0.360	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	35.0	MG/L	05/31/96	1.0
POTASSIUM	0.449	1.81 B	MG/L	05/31/96	1.0
SODIUM	0.108	20.0	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW55

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67765
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	350	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	350	MG/L	05/30/96	1.0
CHLORIDE	1.00	45.1	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	415	MG/L	05/30/96	1.0
SULFATE	5.00	63.2	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW05

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67766
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	140	MG/L	05/31/96	1.0
IRON	0.00900	0.222	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	40.9	MG/L	05/31/96	1.0
POTASSIUM	0.449	4.42 B	MG/L	05/31/96	1.0
SODIUM	0.108	29.9	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWD5

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67766
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	410	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	410	MG/L	05/30/96	1.0
CHLORIDE	1.00	69.4	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	520	MG/L	05/30/96	1.0
SULFATE	5.00	40.2	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWS6

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67762
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	127	MG/L	05/31/96	1.0
IRON	0.00900	2.06	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	39.6	MG/L	05/31/96	1.0
POTASSIUM	0.449	3.66 B	MG/L	05/31/96	1.0
SODIUM	0.108	54.5	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWS6

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67762
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	330	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	330	MG/L	05/30/96	1.0
CHLORIDE	1.00	95.0	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	465	MG/L	05/30/96	1.0
SULFATE	5.00	51.8	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWD6

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67763
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	175	MG/L	05/31/96	1.0
IRON	0.00900	0.304	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	55.7	MG/L	05/31/96	1.0
POTASSIUM	0.449	5.30	MG/L	05/31/96	1.0
SODIUM	0.108	225	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWD6

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67763
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	379	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	379	MG/L	05/30/96	1.0
CHLORIDE	1.00	485	MG/L	05/28/96	5.0
TOTAL HARDNESS	2.00	634	MG/L	05/30/96	1.0
SULFATE	5.00	59.8	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWS7

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67758
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	171	MG/L	05/31/96	1.0
IRON	0.00900	2.44	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	49.9	MG/L	05/31/96	1.0
POTASSIUM	0.449	2.93 B	MG/L	05/31/96	1.0
SODIUM	0.108	54.5	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWS7

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67758
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	413	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	413	MG/L	05/30/96	1.0
CHLORIDE	1.00	134	MG/L	05/28/96	2.0
TOTAL HARDNESS	2.00	610	MG/L	05/30/96	1.0
SULFATE	5.00	51.6	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW07

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67759
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	POL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	154	MG/L	05/31/96	1.0
IRON	0.00900	0.516	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	50.2	MG/L	05/31/96	1.0
POTASSIUM	0.449	4.11 B	MG/L	05/31/96	1.0
SODIUM	0.108	54.9	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW07

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67759
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	414	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	414	MG/L	05/30/96	1.0
CHLORIDE	1.00	158	MG/L	05/28/96	2.0
TOTAL HARDNESS	2.00	590	MG/L	05/30/96	1.0
SULFATE	5.00	54.8	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWS9

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67760
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	116	MG/L	05/31/96	1.0
IRON	0.00900	0.754	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	39.0	MG/L	05/31/96	1.0
POTASSIUM	0.449	1.83 B	MG/L	05/31/96	1.0
SODIUM	0.108	17.2	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWS9

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67760
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	281	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	281	MG/L	05/30/96	1.0
CHLORIDE	1.00	96.0	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	430	MG/L	05/30/96	1.0
SULFATE	5.00	32.1	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWD9

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67761
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	99.0	MG/L	05/31/96	1.0
IRON	0.00900	0.156	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	50.3	MG/L	05/31/96	1.0
POTASSIUM	0.449	2.82 B	MG/L	05/31/96	1.0
SODIUM	0.108	18.2	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW09

Date Sampled : 05/21/96 Order #: 67761 Sample Matrix: WATER
Date Received: 05/21/96 Submission #: 9603000168

ANALYTE	POL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	352	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	352	MG/L	05/30/96	1.0
CHLORIDE	1.00	63.2	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	430	MG/L	05/30/96	1.0
SULFATE	5.00	32.7	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWD11

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67757
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	142	MG/L	05/31/96	1.0
IRON	0.00900	0.239	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	50.0	MG/L	05/31/96	1.0
POTASSIUM	0.449	5.77	MG/L	05/31/96	1.0
SODIUM	0.108	194	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWD11

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67757
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	331	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	331	MG/L	05/30/96	1.0
CHLORIDE	1.00	441	MG/L	05/28/96	10.0
TOTAL HARDNESS	2.00	549	MG/L	05/30/96	1.0
SULFATE	5.00	43.4	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MWD13

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67756
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	116	MG/L	05/31/96	1.0
IRON	0.00900	0.0791 B	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	34.5	MG/L	05/31/96	1.0
POTASSIUM	0.449	8.16	MG/L	05/31/96	1.0
SODIUM	0.108	26.4	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : MW013

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67756
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	351	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	351	MG/L	05/30/96	1.0
CHLORIDE	1.00	45.2	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	450	MG/L	05/30/96	1.0
SULFATE	5.00	44.6	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : DUP1

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67770
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	123	MG/L	05/31/96	1.0
IRON	0.00900	1.74	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	37.7	MG/L	05/31/96	1.0
POTASSIUM	0.449	3.43 B	MG/L	05/31/96	1.0
SODIUM	0.108	52.9	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : DUP1

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67770
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	334	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	334	MG/L	05/30/96	1.0
CHLORIDE	1.00	96.2	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	451	MG/L	05/30/96	1.0
SULFATE	5.00	52.7	MG/L	05/28/96	2.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : R1

Date Sampled : 05/21/96
Date Received: 05/21/96

Order #: 67771
Submission #: 9603000168

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
CALCIUM	0.0371	0.0989 B	MG/L	05/31/96	1.0
IRON	0.00900	0.0207 B	MG/L	05/31/96	1.0
MAGNESIUM	0.0846	0.0846 U	MG/L	05/31/96	1.0
POTASSIUM	0.449	0.449 U	MG/L	05/31/96	1.0
SODIUM	0.108	0.330 B	MG/L	05/31/96	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 06/04/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY; VICTOR, NY
Client Sample ID : R1

Date Sampled : 05/21/96 Order #: 67771 Sample Matrix: WATER
Date Received: 05/21/96 Submission #: 9603000168

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
TOTAL ALKALINITY	2.00	2.00 U	MG/L	05/30/96	1.0
CHLORIDE	1.00	1.00 U	MG/L	05/28/96	1.0
TOTAL HARDNESS	2.00	2.00 U	MG/L	05/30/96	1.0
SULFATE	5.00	5.00 U	MG/L	05/28/96	1.0

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

Columbia Analytical Services, Inc. 1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068 DATE_____ PAGE _____ OF_____

PROJECT NAME Diebdd - Griffin # _____

PROJECT MANAGER Marty Schmidt

COMPANY/ADDRESS Woodward - Clyde

30775 Bainbridge Rd., Ste 200

Solon, OH PHONE (216) 349-2708

SAMPLERS SIGNATURE Bob Fabian

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	Base/Neu/Acid Organics GC/MS 625/8270	Volatile Organics GC/MS 624/8240	Halogenated or Aromatic Volatiles 601/8010 ☐ 602/8020 ☐	Pesticides/PCBs 608/8080	Total Petroleum Hydrocarbons EPA418.1 ☐ OR/418.1 ☐ WA/418.1 ☐	TPH/Gas/BTEX 5030/8015/8020 Gas ☐ BTEX ☐	TPH/8015 Modified Diesel ☐	TPH/HCID ☐ Hydrocarbon Scan ☐ WA/HCID ☐ OR/HCID ☐	TCLP Metals ☐ VOA ☐ Semi VOA ☐ Pest/Herb ☐	Metals (total or dissolved) List Below	Cyanide	pH, Cond, Cl, SO_4, PO_4, F, Br NO_2, NO_3, (circle)	NH_3-N, COD, Total-P, TKN, TOC (circle)	Total Organic Halides (TOX) 9020 ☐ (AOX)	1650A ☐	mg/ℓ Ions	REMARKS
MW-10D	5-29-96	14:55		WATER	5		X													X		
MW-10S	5-29-96	15:05		WATER	5		X													X		
Trip-3	5-29-96			WATER	2		X															

RELINQUISHED BY:

Bob Fabian
Signature
Bob Fabian
Printed Name
Woodward-Clyde
Firm
5-29-96 16:50
Date/Time

RECEIVED BY:

Tom Hastings
Signature
Tom Hastings
Printed Name
CAS
Firm
5/29/96 16:50
Date/Time

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr. ____ 5 day
____ Standard (10-15 working days)
____ Provide Verbal Preliminary Results
____ Provide FAX preliminary Results
Requested Report Date _____

REPORT REQUIREMENTS

____ I. Routine Report
____ II. Report (includes DUP.MS. MSD, as required, may be charged as samples)
____ III. Data Validation Report (includes All Raw Data)
____ IV. CLP Deliverable Report

INVOICE INFORMATION:

P.O.# _____
Bill To _____

SAMPLE RECEIPT:

Shipping VIA: _____
Shipping #: _____
Condition: _____
Lab No: _____

RELINQUISHED BY:

Signature
Printed Name
Firm
Date/Time

RECEIVED BY:

Signature
Printed Name
Firm
Date/Time

SPECIAL INSTRUCTIONS/COMMENTS:

Batch 'QC'

DISTRIBUTION: WHITE - return to originator; YELLOW - lab; PINK - retained by originator

400-05

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DMW10

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DMW10

Matrix: (soil/water) WATER Lab Sample ID:80937

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8260

Level: (low/med) LOW Date Received: 5/29/96

% Moisture: not dec. Date Analyzed: 5/31/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	1.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	8.	J
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DMW10

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DMW10

Matrix: (soil/water) WATER Lab Sample ID:80937

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8260

Level: (low/med) LOW Date Received: 5/29/96

% Moisture: not dec. Date Analyzed: 5/31/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SMW10

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DMW10

Matrix: (soil/water) WATER Lab Sample ID:80938

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8264

Level: (low/med) LOW Date Received: 5/29/96

% Moisture: not dec. Date Analyzed: 5/31/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	1.	J
67-64-1	Acetone	3.	J
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	1.	J
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	30.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SMW10

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DMW10

Matrix: (soil/water) WATER Lab Sample ID:80938

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8264

Level: (low/med) LOW Date Received: 5/29/96

% Moisture: not dec. Date Analyzed: 5/31/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP3

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DMW10

Matrix: (soil/water) WATER Lab Sample ID:80939

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8268

Level: (low/med) LOW Date Received: 5/29/96

% Moisture: not dec. Date Analyzed: 6/01/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	2.	JB
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP3

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DMW10

Matrix: (soil/water) WATER Lab Sample ID:80939

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8268

Level: (low/med) LOW Date Received: 5/29/96

% Moisture: not dec. Date Analyzed: 6/01/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

DMW10_

Lab Name: CAS - ROCHESTER Contract: WCC

Lab Code: 10145 Case No.: SAS No.: SDG No.: DMW10

Matrix (soil/water): WATER Lab Sample ID: 80937

Level (low/med): LOW Date Received: 05/29/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	116000			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	509		E	P
7439-92-1	Lead				
7439-95-4	Magnesium	39700			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	2050	B		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	50000			P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SMW10_

Lab Name: CAS - ROCHESTER Contract: WCC

Lab Code: 10145 Case No.: SAS No.: SDG No.: DMW10

Matrix (soil/water): WATER Lab Sample ID: 80938

Level (low/med): LOW Date Received: 05/29/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	191000			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	8190		E	P
7439-92-1	Lead				
7439-95-4	Magnesium	76800			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	2930	B		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	40600			P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: LT.BROWN Clarity Before: CLOUDY Texture:

Color After: LT.BROWN Clarity After: CLOUDY Artifacts:

Comments:

00020

Columbia Analytical Services Inc

Reported: 06/19/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY, VICTOR, NY
Client Sample ID : DMW10

Date Sampled : 05/29/96
Date Received: 05/29/96
Order #: 80937
Submission #: 9605000434
Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	326	MG/L	06/03/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	06/03/96	1.0
TOTAL ALKALINITY	2.00	326	MG/L	06/03/96	1.0
CHLORIDE	1.00	110	MG/L	06/11/96	2.0
TOTAL HARDNESS	2.00	424	MG/L	06/11/96	4.0
SULFATE	5.00	50.7	MG/L	06/10/96	4.0

Columbia Analytical Services Inc

Reported: 06/19/96

Woodward Clyde Consultants
Project Reference: GRIFFIN TECHNOLOGY, VICTOR, NY
Client Sample ID : SMW10

Date Sampled : 05/29/96
Date Received: 05/29/96
Order #: 80938
Submission #: 9605000434
Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
BICARBONATE ALKALINITY	2.00	328	MG/L	06/03/96	1.0
CARBONATE ALKALINITY	2.00	2.00 U	MG/L	06/03/96	1.0
TOTAL ALKALINITY	2.00	328	MG/L	06/03/96	1.0
CHLORIDE	1.00	110	MG/L	06/11/96	2.0
TOTAL HARDNESS	2.00	758	MG/L	06/11/96	10.0
SULFATE	5.00	71.7	MG/L	06/10/96	4.0

00022

Appendix E

Columbia Analytical Services, Inc.

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

DATE 5-24-96 PAGE 1 OF 1

PROJECT NAME Diebold - Griffin

PROJECT MANAGER Marty Schmidt

COMPANY/ADDRESS Woodward-Clyde

30775 Bainbridge Rd., Ste 200

Solon, OH PHONE (216) 349-2708

SAMPLERS SIGNATURE Bob Fabian

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	Base/Neu/Acid Organics GC/MS 625/8270	Volatile Organics GC/MS 624/8240	Halogenated or Aromatic Volatiles 601/8010 ☐ 602/8020 ☐	Pesticides/PCBs 608/8080	Total Petroleum Hydrocarbons EPA/418.1 ☐ OR/418.1 ☐ WA/418.1 ☐	TPH/Gas/BTEX Gas ☐ BTEX ☐ 5030/8015/8020	TPH/8015 Modified Diesel ☐ Hydrocarbon Scan ☐	TPH/HCID ☐ OR/HCID ☐ WA/HCID ☐	TCLP Metals ☐ VOA ☐	Semi. Pest/ VOA ☐ Herb ☐ Metals (total or dissolved) List Below	Cyanide	pH, Cond, Cl, SO_4, PO_4, F, Br NO_2, NO_3 (circle)	NH_3-N, COD, Total-P, TKN, TOC	Total Organic Halides (TOX) 9020 ☐ (AOX) 1650A ☐			REMARKS
SURF-2	5-24-96	12:50	80531 840672	WATER	6		X															
SED-2	5/24/96	12:55	80532 479973	SEDIMENT	2		X															
TRIP-2			80533	WATER	2		X															

RELINQUISHED BY:

Signature: Bob Fabian

Printed Name: Bob Fabian

Firm: Woodward-Clyde

Date/Time:

RECEIVED BY:

Signature: Tom Hastings

Printed Name: Tom Hastings

Firm: CAS

Date/Time: 5/24/96 13:55

TURNAROUND REQUIREMENTS

___ 24 hr ___ 48 hr. ___ 5 day

___ Standard (10-15 working days)

___ Provide Verbal Preliminary Results

___ Provide FAX preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

___ I. Routine Report

___ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)

___ III. Data Validation Report (includes All Raw Data)

___ IV. CLP Deliverable Report

INVOICE INFORMATION:

P.O.#: _____

Bill To: _____

SAMPLE RECEIPT:

Shipping VIA: _____

Shipping #: _____

Condition: _____

Lab No: 3-443168

RELINQUISHED BY:

Signature

Printed Name

Firm

Date/Time

RECEIVED BY:

Signature

Printed Name

Firm

Date/Time

SPECIAL INSTRUCTIONS/COMMENTS:

91-1

DISTRIBUTION: WHITE - return to originator; YELLOW - lab; PINK - retained by originator

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SURF2

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:80531

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8225

Level: (low/med) LOW Date Received: 5/24/96

% Moisture: not dec. Date Analyzed: 5/28/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED2

Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) SOIL Lab Sample ID:80532

Sample wt/vol: 5.00 (g/ml) G Lab File ID: J8235

Level: (low/med) LOW Date Received: 5/24/96

% Moisture: not dec. 49 Date Analyzed: 5/29/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene chloride	20.	U
67-64-1	Acetone	22.	
75-15-0	Carbon Disulfide	20.	U
75-35-4	1,1-Dichloroethene	20.	U
75-34-3	1,1-Dichloroethane	20.	U
156-60-5	trans-1,2-Dichloroethene	20.	U
67-66-3	Chloroform	20.	U
107-06-2	1,2-Dichloroethane	20.	U
78-93-3	2-Butanone	20.	U
156-59-2	cis-1,2-Dichloroethene	20.	U
71-55-6	1,1,1-Trichloroethane	20.	U
56-23-5	Carbon tetrachloride	20.	U
75-27-4	Bromodichloromethane	20.	U
78-87-5	1,2-Dichloropropane	20.	U
10061-01-5	cis-1,3-Dichloropropene	20.	U
79-01-6	Trichloroethene	20.	U
124-48-1	Dibromochloromethane	20.	U
79-00-5	1,1,2-Trichloroethane	20.	U
71-43-2	Benzene	20.	U
50061-02-6	trans-1,3-Dichloropropene	20.	U
75-25-2	Bromoform	20.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	20.	U
79-34-5	1,1,2,2-Tetrachloroethane	20.	U
108-88-3	Toluene	20.	U
108-90-7	Chlorobenzene	20.	U
100-41-4	Ethylbenzene	20.	U
100-42-5	Styrene	20.	U
108-38-3	(m+p)Xylene	20.	U
95-47-6	o-Xylene	20.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB2

Lab Name:Columbia Analytical Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:DUP1

Matrix: (soil/water) WATER Lab Sample ID:80533

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: J8224

Level: (low/med) LOW Date Received: 5/24/96

% Moisture: not dec. Date Analyzed: 5/28/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

Appendix F

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No._____
Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No._____

Sample Origination & Shipping Information

Collection Site [illegible]

Address [illegible] NY [illegible]
Street City State Zip

Collector [illegible]
Print Signature

Bottles Prepared by_____ Rec'd by_____
Bottles Shipped to Client via [illegible] Seal/Shipping #_____
Samples Shipped via [illegible] Seal/Shipping #_____

Sample(s) Relinquished by:	Received by:	Date//Time
1. Sign [illegible]	1. Sign [illegible]	/ /
for	for	:
2. Sign	2. Sign	/ /
for	for	:
3. Sign	3. Sign	/ /
for	for	:

Sample(s) Received in Laboratory by _____ / / @ :

	Client I.D. # / Lab #	Sample Location / Date/Time	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Y	Sample Prep Preserved N	Sample Prep Filtered Y	Sample Prep Filtered N	Bottle Set(s) (see below)	
1		[illegible]	T	VOC's, NYSDEC 391		X			1	
		/ / :								
2		[illegible]	T	VOC's 91 1		X			1	
		/ / :								
3										
		/ / :								
4										
		/ / :								
5										
		/ / :								

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each	2										

Additional Analytes _____

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I) (X) (X)

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S1

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:MW100

Griff-6162-S1-0396

Matrix: (soil/water) WATER Lab Sample ID:67478

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8633

Level: (low/med) LOW Date Received: 3/18/96

% Moisture: not dec. Date Analyzed: 3/20/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	21.	
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	1.	J
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00012

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S1

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:MW100

GRFF-6162-31-0396

Matrix: (soil/water) WATER Lab Sample ID:67478

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8633

Level: (low/med) LOW Date Received: 3/18/96

% Moisture: not dec. Date Analyzed: 3/20/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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30.					

00013

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S2

GRIFF-6162-S2-0396

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:MW100

Matrix: (soil/water) WATER Lab Sample ID:67479

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8635

Level: (low/med) LOW Date Received: 3/18/96

% Moisture: not dec. Date Analyzed: 3/20/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	22.	
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00014

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S2

GRIFF-6162-52-0396

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:MW100

Matrix: (soil/water) WATER Lab Sample ID:67479

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8635

Level: (low/med) LOW Date Received: 3/18/96

% Moisture: not dec. Date Analyzed: 3/20/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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27.					
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29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW100-0396

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:MW100

Matrix: (soil/water) WATER Lab Sample ID:67412

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8629

Level: (low/med) LOW Date Received: 3/15/96

% Moisture: not dec. Date Analyzed: 3/20/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00010

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW100-039b

Lab Name:General Testing Corp Contract:WCC

Lab Code:10145 Case No.: SAS No.: SDG No.:MW100

Matrix: (soil/water) WATER Lab Sample ID:67412

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q8629

Level: (low/med) LOW Date Received: 3/15/96

% Moisture: not dec. Date Analyzed: 3/20/96

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.84	34.	J
2.		Unknown	4.34	6.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
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22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Quanterra Environmental Services

Volatile Organics by GCMS - EPA TO14

Client Name: Woodward Clyde Consultants
Client ID: GRIFF-6162-A-1-0396
LAB ID: 117742-0001-SA
Matrix: AIR
Authorized: 20 MAR 96
Instrument: GC/MS-B

Sampled: 18 MAR 96
Prepared: N/A
Dilution: 1.0

Received: 20 MAR 96
Analyzed: 27 MAR 96

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		2.0	ppb (v/v)
Chloromethane	ND		4.0	ppb (v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.0	ppb (v/v)
Vinyl chloride	ND		2.0	ppb (v/v)
Bromomethane	ND		2.0	ppb (v/v)
Chloroethane	ND		4.0	ppb (v/v)
Trichlorofluoromethane	ND		2.0	ppb (v/v)
1,1-Dichloroethene	ND		2.0	ppb (v/v)
Carbon disulfide	ND		10	ppb (v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ppb (v/v)
Acetone	ND		10	ppb (v/v)
Methylene chloride	ND		2.0	ppb (v/v)
trans-1,2-Dichloroethene	ND		2.0	ppb (v/v)
1,1-Dichloroethane	ND		2.0	ppb (v/v)
Vinyl acetate	ND		10	ppb (v/v)
cis-1,2-Dichloroethene	ND		2.0	ppb (v/v)
2-Butanone	ND		10	ppb (v/v)
Chloroform	7.5		2.0	ppb (v/v)
1,1,1-Trichloroethane	ND		2.0	ppb (v/v)
Carbon tetrachloride	ND		2.0	ppb (v/v)
Benzene	ND		2.0	ppb (v/v)
1,2-Dichloroethane	ND		2.0	ppb (v/v)
Trichloroethene	ND		2.0	ppb (v/v)
1,2-Dichloropropane	ND		2.0	ppb (v/v)
Bromodichloromethane	ND		2.0	ppb (v/v)
cis-1,3-Dichloropropene	ND		2.0	ppb (v/v)
4-Methyl-2-pentanone	ND		10	ppb (v/v)
Toluene	ND		2.0	ppb (v/v)
trans-1,3-Dichloropropene	ND		2.0	ppb (v/v)
1,1,2-Trichloroethane	ND		2.0	ppb (v/v)
Tetrachloroethene	ND		2.0	ppb (v/v)
2-Hexanone	ND		30	ppb (v/v)
Dibromochloromethane	ND		2.0	ppb (v/v)
1,2-Dibromoethane (EDB)	ND		2.0	ppb (v/v)
Chlorobenzene	ND		2.0	ppb (v/v)
Ethylbenzene	ND		2.0	ppb (v/v)
Xylenes (total)	ND		2.0	ppb (v/v)
Styrene	ND		2.0	ppb (v/v)
Bromoform	ND		2.0	ppb (v/v)
1,1,2,2-Tetrachloroethane	ND		2.0	ppb (v/v)
Benzyl chloride	ND		10	ppb (v/v)
4-Ethyl toluene	ND		2.0	ppb (v/v)
1,3,5-Trimethylbenzene	ND		2.0	ppb (v/v)
1,2,4-Trimethylbenzene	ND		2.0	ppb (v/v)

ND = Not Detected

Quanterra Environmental Services

Volatile Organics by GCMS - EPA TO14 (cont.)

Client Name: Woodward Clyde Consultants
Client ID: GRIFF-6162-A-1-0396
LAB ID: 117742-0001-SA
Matrix: AIR
Authorized: 20 MAR 96
Instrument: GC/MS-B

Sampled: 18 MAR 96
Prepared: N/A
Dilution: 1.0

Received: 20 MAR 96
Analyzed: 27 MAR 96

Parameter	Result	Qualifier	RL	Units
1,3-Dichlorobenzene	ND		2.0	ppb (v/v)
1,4-Dichlorobenzene	ND		2.0	ppb (v/v)
1,2-Dichlorobenzene	ND		2.0	ppb (v/v)
1,2,4-Trichlorobenzene	ND		20	ppb (v/v)
Hexachlorobutadiene	ND		4.0	ppb (v/v)

ND = Not Detected

Quanterra Environmental Services

Volatile Organics by GCMS - EPA TO14

Client Name: Woodward Clyde Consultants
Client ID: GRIFF-6162-A-2-0396
LAB ID: 117742-0002-SA
Matrix: AIR
Authorized: 20 MAR 96
Instrument: GC/MS-B

Sampled: 18 MAR 96
Prepared: N/A
Dilution: 1.0

Received: 20 MAR 96
Analyzed: 27 MAR 96

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		2.0	ppb (v/v)
Chloromethane	ND		4.0	ppb (v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.0	ppb (v/v)
Vinyl chloride	ND		2.0	ppb (v/v)
Bromomethane	ND		2.0	ppb (v/v)
Chloroethane	ND		4.0	ppb (v/v)
Trichlorofluoromethane	ND		2.0	ppb (v/v)
1,1-Dichloroethene	ND		2.0	ppb (v/v)
Carbon disulfide	ND		10	ppb (v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ppb (v/v)
Acetone	ND		10	ppb (v/v)
Methylene chloride	ND		2.0	ppb (v/v)
trans-1,2-Dichloroethene	ND		2.0	ppb (v/v)
1,1-Dichloroethane	ND		2.0	ppb (v/v)
Vinyl acetate	ND		10	ppb (v/v)
cis-1,2-Dichloroethene	ND		2.0	ppb (v/v)
2-Butanone	ND		10	ppb (v/v)
Chloroform	10		2.0	ppb (v/v)
1,1,1-Trichloroethane	ND		2.0	ppb (v/v)
Carbon tetrachloride	ND		2.0	ppb (v/v)
Benzene	ND		2.0	ppb (v/v)
1,2-Dichloroethane	ND		2.0	ppb (v/v)
Trichloroethene	ND		2.0	ppb (v/v)
1,2-Dichloropropane	ND		2.0	ppb (v/v)
Bromodichloromethane	ND		2.0	ppb (v/v)
cis-1,3-Dichloropropene	ND		2.0	ppb (v/v)
4-Methyl-2-pentanone	ND		10	ppb (v/v)
Toluene	ND		2.0	ppb (v/v)
trans-1,3-Dichloropropene	ND		2.0	ppb (v/v)
1,1,2-Trichloroethane	ND		2.0	ppb (v/v)
Tetrachloroethene	ND		2.0	ppb (v/v)
2-Hexanone	ND		30	ppb (v/v)
Dibromochloromethane	ND		2.0	ppb (v/v)
1,2-Dibromoethane (EDB)	ND		2.0	ppb (v/v)
Chlorobenzene	ND		2.0	ppb (v/v)
Ethylbenzene	ND		2.0	ppb (v/v)
Xylenes (total)	ND		2.0	ppb (v/v)
Styrene	ND		2.0	ppb (v/v)
Bromoform	ND		2.0	ppb (v/v)
1,1,2,2-Tetrachloroethane	ND		2.0	ppb (v/v)
Benzyl chloride	ND		10	ppb (v/v)
4-Ethyl toluene	ND		2.0	ppb (v/v)
1,3,5-Trimethylbenzene	ND		2.0	ppb (v/v)
1,2,4-Trimethylbenzene	ND		2.0	ppb (v/v)

ND = Not Detected

Quanterra Environmental Services

Volatile Organics by GCMS - EPA TO14 (cont.)

Client Name: Woodward Clyde Consultants
Client ID: GRIFF-6162-A-2-0396
LAB ID: 117742-0002-SA
Matrix: AIR
Authorized: 20 MAR 96
Instrument: GC/MS-B

Sampled: 18 MAR 96
Prepared: N/A
Dilution: 1.0

Received: 20 MAR 96
Analyzed: 27 MAR 96

Parameter	Result	Qualifier	RL	Units
1,3-Dichlorobenzene	ND		2.0	ppb (v/v)
1,4-Dichlorobenzene	ND		2.0	ppb (v/v)
1,2-Dichlorobenzene	ND		2.0	ppb (v/v)
1,2,4-Trichlorobenzene	ND		20	ppb (v/v)
Hexachlorobutadiene	ND		4.0	ppb (v/v)

ND = Not Detected

Quanterra Environmental Services

Volatile Organics by GCMS - EPA TO14

Client Name: Woodward Clyde Consultants
Client ID: N2 BLANK
LAB ID: 117742-0003-SA
Matrix: AIR
Authorized: 20 MAR 96
Instrument: GC/MS-B

Sampled: 13 MAR 96
Prepared: N/A
Dilution: 1.0

Received: 20 MAR 96
Analyzed: 27 MAR 96

Parameter	Result	Qualifier	RL	Units
Dichlorodifluoromethane	ND		2.0	ppb (v/v)
Chloromethane	ND		4.0	ppb (v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.0	ppb (v/v)
Vinyl chloride	ND		2.0	ppb (v/v)
Bromomethane	ND		2.0	ppb (v/v)
Chloroethane	ND		4.0	ppb (v/v)
Trichlorofluoromethane	ND		2.0	ppb (v/v)
1,1-Dichloroethene	ND		2.0	ppb (v/v)
Carbon disulfide	ND		10	ppb (v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ppb (v/v)
Acetone	ND		10	ppb (v/v)
Methylene chloride	ND		2.0	ppb (v/v)
trans-1,2-Dichloroethene	ND		2.0	ppb (v/v)
1,1-Dichloroethane	ND		2.0	ppb (v/v)
Vinyl acetate	ND		10	ppb (v/v)
cis-1,2-Dichloroethene	ND		2.0	ppb (v/v)
2-Butanone	ND		10	ppb (v/v)
Chloroform	ND		2.0	ppb (v/v)
1,1,1-Trichloroethane	ND		2.0	ppb (v/v)
Carbon tetrachloride	ND		2.0	ppb (v/v)
Benzene	ND		2.0	ppb (v/v)
1,2-Dichloroethane	ND		2.0	ppb (v/v)
Trichloroethene	ND		2.0	ppb (v/v)
1,2-Dichloropropane	ND		2.0	ppb (v/v)
Bromodichloromethane	ND		2.0	ppb (v/v)
cis-1,3-Dichloropropene	ND		2.0	ppb (v/v)
4-Methyl-2-pentanone	ND		10	ppb (v/v)
Toluene	ND		2.0	ppb (v/v)
trans-1,3-Dichloropropene	ND		2.0	ppb (v/v)
1,1,2-Trichloroethane	ND		2.0	ppb (v/v)
Tetrachloroethene	ND		2.0	ppb (v/v)
2-Hexanone	ND		30	ppb (v/v)
Dibromochloromethane	ND		2.0	ppb (v/v)
1,2-Dibromoethane (EDB)	ND		2.0	ppb (v/v)
Chlorobenzene	ND		2.0	ppb (v/v)
Ethylbenzene	ND		2.0	ppb (v/v)
Xylenes (total)	ND		2.0	ppb (v/v)
Styrene	ND		2.0	ppb (v/v)
Bromoform	ND		2.0	ppb (v/v)
1,1,2,2-Tetrachloroethane	ND		2.0	ppb (v/v)
Benzyl chloride	ND		10	ppb (v/v)
4-Ethyl toluene	ND		2.0	ppb (v/v)
1,3,5-Trimethylbenzene	ND		2.0	ppb (v/v)
1,2,4-Trimethylbenzene	ND		2.0	ppb (v/v)

ND = Not Detected

Quanterra Environmental Services

Volatile Organics by GCMS - EPA TO14 (cont.)

Client Name: Woodward Clyde Consultants
Client ID: N2 BLANK
LAB ID: 117742-0003-SA
Matrix: AIR
Authorized: 20 MAR 96
Instrument: GC/MS-B

Sampled: 13 MAR 96
Prepared: N/A
Dilution: 1.0

Received: 20 MAR 96
Analyzed: 27 MAR 96

Parameter	Result	Qualifier	RL	Units
1,3-Dichlorobenzene	ND		2.0	ppb (v/v)
1,4-Dichlorobenzene	ND		2.0	ppb (v/v)
1,2-Dichlorobenzene	ND		2.0	ppb (v/v)
1,2,4-Trichlorobenzene	ND		20	ppb (v/v)
Hexachlorobutadiene	ND		4.0	ppb (v/v)

ND = Not Detected

Appendix G

APPENDIX G
ANALYTICAL DATA VALIDATION REPORT
GRIFFIN TECHNOLOGY, INC.
VICTOR, NEW YORK

INTRODUCTION

This appendix presents the findings of a validation of analytical data for air, soil boring, sump water, surface water, sediment and groundwater samples collected from March through May 1996 at the Griffin Technology Inc. (GTI) Site. Sampling was conducted by Woodward-Clyde Consultants (WCC) and analytical services were provided by Columbia Analytical Services, Inc. (CASI) of Rochester, New York. All samples were analyzed for volatile organic compounds (VOCs). Collected air samples were analyzed by U.S. EPA Method TO-14 and remaining VOC analyses were conducted by New York State Department of Environmental Conservation (NYSDEC) Analytical Service Protocol (ASP) Method 91-1. Additionally, groundwater samples collected in May were analyzed for select major ions, which included metals (calcium, iron, magnesium, potassium, and sodium), alkalinity, hardness chloride, and sulfate. These analyses were also conducted in accordance with NYSDEC ASP methodologies.

The procedures for validation of the data followed guidance from the following documents:

1. Evaluation of metals data for the Contract Laboratory Program (CLP). S.O.P. No. HW-2, Revision XI. January 1992. Prepared by USEPA Region II.

2. CLP Organics Data Review and Preliminary Review. S.O.P. No. HW-6 No. 8, January 1992. Prepared by USEPA Region II.

The above "Guidelines" provided the criteria to review. Additional quantitative criteria are given in the analytical methods. Validation of provided air sample results was limited since data for instrument tuning, calibration, surrogate spikes, internal standard recoveries, and chromatograms were not included with the data package.

The criteria evaluated included the following:

VOCs

Significant problems identified in case narrative
Results reported from secondary dilutions
Sample holding times
Instrument performance and calibration
Method blank and trip blank contamination
Surrogate spike recoveries
MS/MSD recoveries and relative percent difference (RPD) values
Internal standard areas and retention times (VOCs)
Field duplicate results
Compound identification and quantitation
Overall assessment of data

Major Ions

Significant problems identified in case narrative
Results reported from secondary dilutions
Sample holding times
Instrument performance and calibration
Initial and continuing calibration blank and method blank contamination
Laboratory control samples and ICP interference check sample recoveries
Matrix spike recoveries and laboratory duplicate sample RPD values
ICP serial dilution results (metals only)
Field duplicate results
Analyte identification and quantitation
Overall assessment of data

The following sections present the data validation:

SIGNIFICANT PROBLEMS IDENTIFIED IN CASE NARRATIVE

- The MS/MSD analysis performed on groundwater sample MW-3 (May 1996) had one outlying relative percent difference (RPD) value. Further discussion is provided in the MS/MSD section of this appendix.

- The ICP serial dilution analysis performed on groundwater sample MW-10D (May 1996) had one outlying percent difference (%D) value. Further discussion is provided in the ICP serial dilution section of this appendix.

No other problems were identified in the laboratory's case narrative.

RESULTS REPORTED FROM SECONDARY DILUTIONS

For samples that required dilutions, part of the validation process is to evaluate which set of results (initial or diluted) are considered to be more usable. For this data set, one groundwater sample from the April sampling event and four groundwater samples from the May sampling event required dilutions for VOC analyses.

- For the initial VOC analysis of groundwater sample MW-13D (April sampling event), the trichloroethene (TCE) concentration exceeded the instrument's linear calibration range, and the sample was reanalyzed at a dilution. For this sample, the TCE concentration reported from the diluted analysis is considered to be more representative of the sample's concentration and was transcribed onto the data summary table, along with any appropriate qualifier.

- For the initial VOC analyses of groundwater samples MW-5D, MW-5S, and MW-13D (May sampling event), the corresponding TCE concentrations exceeded the instrument's linear calibration range, and the samples were reanalyzed at a dilution. For these samples, the TCE concentrations reported from the diluted analyses are considered to be

more representative of the samples' concentration and were transcribed onto the data summary table, along with any appropriate qualifiers.

- All VOC results for groundwater sample MW-7S (May sampling event) were reported at a dilution since screening prior to final analysis indicated analyte concentrations above the instrument's linear calibration range. For this sample, results of an undiluted sample analysis were not reported by the laboratory.

SAMPLE HOLDING TIMES

Holding time criteria for the analyses performed are defined in the respective analytical methods. All samples were extracted and/or analyzed prior to expiration of the prescribed holding times. Therefore, qualification of the data based on holding time exceedances was not required.

GC/MS INSTRUMENT PERFORMANCE

GC/MS instrument performance checks are performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for instrument performance checks included evaluation of possible transcription or calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. All criteria for bromofluorobenzene (BFB) for VOCs were met for this data set. Additionally, no transcription errors or calculation errors were found.

INITIAL AND CONTINUING CALIBRATION

Initial and continuing calibration criteria are established to ensure the instruments are capable of producing acceptable qualitative and quantitative data for VOCs and the inorganic parameters. All initial and continuing calibrations were performed at the required frequency.

All VOC initial calibration relative response factor (RRF) values and relative standard deviation (%RSD) values met the acceptance criteria presented in the "Guidelines".

All VOC continuing calibration RRF values met the acceptance criterion presented in the "Guidelines". One VOC continuing calibration %D value exceeded the "Guidelines" criterion of 25 percent. Per the "Guidelines", compounds having outlying %D values require qualification of both detected and non-detected results as estimated (J for detects, UJ for non-detects). Presented as follows are the samples and applicable data qualifiers based on the outlying continuing calibration %D value:

Cont. Calibration Std.	Compound	%D Value
Q8878(4/16/96)	chloroethane	47.3

Associated Samples:

	Compound	Data Qualifier
FB-1 (4/11/96)	chloroethane	UJ
MW-11D (4/11/96)	chloroethane	UJ
MW-13D (4/11/96)	chloroethane	UJ

R - unusable result
UJ - estimated result for non-detects

Review of the provided inorganic calibration results noted no deviations from the required method acceptance criteria. Additionally, no errors in calculations or transcriptions were noted during the validation of the calibration data from this data set.

LABORATORY METHOD BLANKS

Laboratory method blanks (including initial and continuing calibration blanks for inorganics) evaluate the existence and magnitude of contamination problems resulting from laboratory activities. All laboratory method blanks were analyzed at the prescribed method frequencies.

All inorganic method blanks were contaminant-free for the target analytes. This indicated that the potential for laboratory contamination from laboratory activities was minimal. One VOC method blank had a detection of methylene chloride at 3 µg/l. Per the "Guidelines", sample results less than five times the associated method blank result are qualified as non-detected (U). One associated sample, Trip Blank-3 (5/29/96) required qualification of its methylene chloride result to non-detected at the CRQL.

No other sample results required qualification based on method blank contamination.

RINSATE BLANK SAMPLES

Rinsate blank samples are used to assess sampling equipment decontamination procedures. Rinsate blank samples were collected during the soil boring investigation (MW-100-0396), April groundwater sampling event (FB-01) and the May groundwater sampling event (R-1). A rinsate blank was not collected with the sump water sampling event since samples were collected directly into laboratory supplied containers.

The analytical results for the rinsate blanks were reported as non-detected for the target compounds/analytes, and no qualification was required.

TRIP BLANK SAMPLES

Trip blank samples are used to assess VOC cross-contamination during shipment to the laboratory. With the exception of the April groundwater samples, one trip blank sample was submitted with each cooler containing aqueous samples for VOC analyses.

Following qualification due to method blank contamination, all trip blank samples were VOC-free, indicating the potential for cross contamination of samples during shipping was minimal. During the April groundwater sample event, rinsate blank FB-01 was in the same cooler as the investigative samples. The VOC results for FB-01 were reported as non-detected for the target compounds. Therefore, for the April groundwater sampling event, cross contamination during shipping was not considered a concern.

SURROGATE SPIKE RECOVERIES

Samples analyzed for VOCs were spiked with surrogate compounds prior to analysis. Surrogate compounds are used to evaluate overall laboratory performance for sample preparation efficiency on a per sample basis. The "Guidelines" require that all VOC surrogate spike recoveries meet acceptance criteria.

All VOC surrogate spike recoveries were within the laboratory's established control limits, which indicated that the laboratory's preparation procedure was acceptable.

LABORATORY CONTROL SAMPLES AND INTERFERENCE CHECK SAMPLES

Laboratory control samples (LCS) were analyzed for all parameters and serve to monitor the overall performance of the steps in an analysis, including sample preparation. The interference check sample (ICS) is analyzed for metals and is used to verify that the laboratory properly calibrated their instruments to account for potential interference problems.

A review of the provided data showed that all associated LCS and ICS analyses yielded recoveries within the laboratory's established control limits. Therefore, no qualification of data was required.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSES

Matrix effects on the analytical results are checked by analyzing matrix spike/matrix spike duplicate (MS/MSD) samples for VOCs and MS/lab duplicate samples for inorganics. MS/MSD and MS/lab duplicate analyses were performed at the required method frequency by the laboratory. All inorganic MS recoveries and RPD values were within the laboratory's or methods' established control limits, indicating that acceptable analytical accuracy and precision were achieved for these analyses.

All VOC MS recoveries were acceptable. The MS/MSD analysis of groundwater sample MW-3 (May 1996) had an outlying RPD value associated with toluene at 17 percent (control

limit of 13 percent). The associated MS/MSD recoveries indicated satisfactory accuracy whereas the outlying RPD value indicated a moderate variability of the toluene data. Since the associated spike recoveries were acceptable and toluene was not detected in any of the May groundwater samples, data qualification was not considered necessary.

INTERNAL STANDARDS

Internal standards (I.S.) performance criteria ensures that the GC/MS sensitivity and response are stable during each analytical run. All VOC I.S. retention times and area responses were within the established control limits.

Validation of the I.S. data also included spot checking the retention times and areas summarized on Form-8 to those on the instrument chromatograms; no anomalies were noted.

ICP SERIAL DILUTION

Metals detected at concentrations 50 times (or greater) the instrument detection limit in an undiluted extract are required to have an ICP serial dilution performed. An ICP serial dilution was performed on one sample from each data set, in accordance with the method protocol. Results between the diluted sample and undiluted sample were reviewed to ensure the percent differences (%Ds) were less than or equal to 10 percent. With one exception, all ICP serial dilution results were acceptable.

For the ICP serial dilution performed on groundwater sample MW-10D (May 1996), iron had a %D value of 20.2%. In accordance with the "Guidelines", the iron result for sample MW-10D and the associated iron sample results from this data package (MW-10S) require qualification as estimated (J for detects, UJ for non-detects) based on the variability in serial dilution results.

FIELD DUPLICATE RESULTS

Field duplicate results were used to evaluate representativeness. For aqueous samples, when analytes for both duplicate and sample values are greater than five times the quantitation

limit, satisfactory representativeness is indicated by an RPD less than or equal to 50 percent. Where one or both of the analytes of a field duplicate pair are reported at less than five times the quantitation limit, satisfactory representativeness is indicated if the field duplicate results agree within 2.5 times the quantitation limit. Field duplicate results that do not meet these criteria may indicate unsatisfactory representativeness of the results.

One field duplicate sample pair was collected with each groundwater sampling event. The field duplicate sample pairs included: GRIFF-6162-A-1-0396/GRIFF-6162-A-2-0396 (air samples), GRIFF-MW-13D 8'-10'/GRIFF-MW-130D 8'-10' (soil boring samples), GRIFF-6162-S1-0396/GRIFF-6162-S2-0396 (sump water), and MW-6S/DUP-1 (groundwater).

The results reported for the field duplicate sample pairs are in agreement with the above criteria, which indicates that the aggregate sampling and analytical precision was acceptable.

COMPOUND IDENTIFICATION AND QUANTITATION

Data for one or more detected compound/analytes were checked for potential identification errors and were recalculated from the raw data. No anomalies or transcription errors were noted during validation of the reported analyte identifications and quantitations.

OVERALL DATA ASSESSMENT

Based on the criteria outlined, it is recommended that the results reported for these analyses be accepted for their intended use. Acceptable levels of accuracy, precision, and representativeness (based on MS/MSD analyses and field duplicate results) were achieved for this data set, except where noted in this appendix. In addition, completeness, defined to be the percentage of analytical results which are judged to be valid, including estimated (J or UJ) values, for this data set was 100 percent. Sample results from this investigation required some qualification based on minor QC deficiencies as summarized below:

Chloroethane results for three samples were qualified as estimated (UJ) based on outlying continuing calibration data. One methylene chloride result was qualified as non-detected (U)

based on method blank contamination, and iron results for two samples were qualified as estimated (J) due to an ICP serial dilution %D value in excess of 10 percent.