Woodward-Clyde

Engineering & sciences applied to the earth & its environment

May 22, 1997

Mr. David G. Pratt
Environmental Engineer I
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414

Subject: Monthly Operation Report (3/19/97 - 4/30/97)
Interim Remedial Measure (Index No. B8-315-90-01)
Griffin Technology, Incorporated Facility; Victor, New York
(W-C Project No. 6E06191)

Dear Mr. Pratt:

On behalf of Diebold, Incorporated (Diebold), Woodward-Clyde International-Americas (W-C) is pleased to submit this second monthly progress report of the Interim Remedial Measure (IRM) at the subject facility. In accordance with the Order on Consent (Index No. B8-315-90-01) agreement between the New York State Department of Environmental Conservation (NYSDEC) and Griffin Technology, Incorporated (Griffin), which became effective on October 22, 1996, a groundwater collection system was installed during December 1996 and January 1997. The system was turned on February 18, 1997 and is currently in operation.

The second monthly progress report includes all data collected from the end of the first month of operation (March 19, 1997) through the end of calendar month April 1997. Future monthly progress reports will coincide with operations conducted during a continuous calendar month (i.e. May, June, July , August, 1997). Information describing the IRM system and monitoring data collected during the second month of operation, is presented in the following subsections.

Description of IRM System

The IRM system consists of three groundwater recovery wells (designated "RW-01" through "RW-03") equipped with submersible pumps. Water recovered from each well is transported to a central discharge pipe through individual conduits connected to the pumps. Each conduit is equipped with a flow totalizing meter to measure the quantity of water extracted from each well. The individual conduits are connected to the central discharge manifold in a common access vault. The discharge pipe is also equipped with a flow totalizing meter which is used to measure the quantity of effluent discharged by the system for treatment at a local Publicly-

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Owned Treatment Works (POTW). The POTW servicing the facility is the Canandaguia-Farmington Water and Sewer District (FWSD).

In order to measure the effectiveness of the IRM system, two sets of nested piezometers (designated "PZ-01S/D" and "PZ-02S/D") were installed mid-way between the three recovery wells. These piezometers are used to measure the water level elevations in the overburden and bedrock formations underlying the area. In addition to these piezometers, ten previously installed groundwater monitoring wells (designated "MW-01", "MW-02", "MW-03", "MW-04", "MW-05S", "MW-05D", "MW-06S", "MW-06D", "MW-10", and "MW-11D") are located in the immediate vicinity of the recovery wells. Monthly water elevations and semi-annual groundwater samples are being collected from these wells and used to measure the long-term effectiveness of the IRM system.

Upon completion of the IRM system installation activities, the location and elevation of each IRM system component was surveyed to a common reference datum by a New York State licensed surveyor. Figure 1 shows the IRM system layout, including nested piezometers and groundwater monitoring wells (with the exception of MW-11D) which located in the immediate area.

Monitoring Data Collection

Collection of monitoring data has been performed in accordance with the Final Design Document submitted to the New York State Department of Environmental Conservation (NYSDEC) during October 1996. Monitoring data collected from the site during the second month of operation consisted of groundwater elevation measurements, effluent flow rates for each recovery well, total effluent discharge to POTW, and collection of two monthly effluent samples for laboratory analysis.

On, April 15, 1997, a representative of W-C collected water elevations from each on-site well, and three off-site wells located in the immediate vicinity of the recovery wells. The measurements were recorded to the nearest 0.01 ft. In addition, flow meter readings of each recovery well and the totalizing flow meter were collected in order to determine the yield of each well and the IRM system. An effluent sample was also collected from the sample port located on the central discharge pipe. The sample was transported to CASI and analyzed for VOC's by United States Environmental Protection Agency method 8260. The analytical method was chosen to comply with the monthly discharge requirements established by the FWSD.

Groundwater Elevation Results

The groundwater elevations obtained during system operation are presented in Table 1. The data collected was used to prepare groundwater elevation contour maps of the overburden and bedrock formation in the vicinity of the IRM system. A groundwater elevation contour map for the overburden formation is presented as Figure 2. A groundwater elevation contour map for the bedrock formation is presented as Figure 3.

The groundwater contour maps indicate that the recovery wells have influenced the groundwater flow patterns of the bedrock and overburden formations in the immediate vicinity. This is evidenced by the lowering of water elevations in the well and piezometers located in immediate vicinity of the IRM system. Continued monitoring of water elevation data collected during future months of IRM system operation, and comparison of this data over time, will provide long-term information relating to the effectiveness of the hydraulic control provided by the system.

Effluent Analytical Results

The analytical results of the composite samples collected from the effluent discharge during the two sampling events are summarized in Table 2. The analytical results of the first sampling event are also included in Table 2 as a reference. The results indicate that cis 1,2-dichloroethene, 1,1,1-trichloroethane, and trichloroethene continue to be detected. The presence of these compounds in the system effluent is an indication of the effectiveness of the IRM system in that groundwater from the source area is being extracted from the formation. Continued monitoring of the system will provide additional information of the overall effectiveness of the IRM.

Effluent Discharge Measurements

The flow meter readings collected during system operation are presented in Table 3. The average daily effluent discharge and average flow rate during each week of operation have been calculated and are provided this table along with a total discharge rate for the first month of operation. During the second month of operation, approximately 255,000 gallons of water was discharged to the POTW. Flow meter readings will continue to be collected on a monthly basis for the duration of the IRM activities.

The flow measurements indicate a trend toward increasing recovery well discharge rates. This is probably attributable to the development of the recovery wells and the removal of finer grained materials from the annular space surrounding the well. The flow rate data collected

from the fourth week of system operation indicated an average recovery rate of gallons per minute (gpm). The observed flow rate increases are likely to attenuate as the wells become fully developed.

Summary

Overall, the information collected during the second month of operation indicate continued IRM system effectiveness in controlling on-site groundwater flow in that groundwater elevations indicate an on-site inward flow gradient. Future data collection will provide the long-term data trends necessary for determining the overall effectiveness of the IRM system. Should you have any questions about the information contained herein, or require additional information, please do not hesitate to contact us.

Sincerely,

Kenneth M. Armstrong

Kenneth M. Armstrong EIT, CHMM
Assistant Project Engineer

Martin L. Schmidt KMA

Martin L. Schmidt, Ph.D.
Senior Consulting Professional

Enclosures

cc: Mark Tucker, Diebold, Inc.
Dave Rinehart, Diebold, Inc.
File

Tables

TABLE 1
GROUNDWATER ELEVATION MEASUREMENTS
GRIFFIN TECHNOLOGIES, INC.
VICTOR, NEW YORK

WELL NUMBER	GROUNDWATER ELEVATION(ft.)[1] 3/14/97	4/15/97
MW-01	NM	637.53
MW-2S	634.86	634.01
MW-2D	634.90	634.09
MW-03	636.28	635.28
MW-04	633.63	632.83
MW-5S	631.73	631.03
MW-5D	624.73	624.56
MW-6S	NM	629.97
MW-6D	NM	630.45
MW-11D	NM	633.99
PZ-1S	630.18	632.68
PZ-1D	629.50	632.70
PZ-2S	633.68	629.59
PZ-2D	633.74	629.42

NOTES
1. "1" Water level elevations relative to surveyors benchmark.
2. "S" indicates overburden groundwater monitoring well or piezometer.
3. "D" indicates bedrock groundwater monitoring well or piezometer.
4. "NM" indicates not measured on date shown.

TABLE 2
SUMMARY OF EFFLUENT ANALYTICAL RESULTS
GRIFFIN TECHNOLOGY, INC.
VICTOR, NEW YORK

Parameter	3/01/97 Effluent Discharge Concentration (µg/l)	3/27/97 Effluent Discharge Concentration (µg/l)	4/15/97 Effluent Discharge Concentration (µg/l)
cis-1,2-Dichloroethene	6.5	ND	6.0
1,1,1-Trichloroethane	14.0	ND	5.8
Trichloroethene	610.0	290.0	240.0

Notes

1. Samples analyzed for VOC's by USEPA method 8260.
2. All results expressed in micrograms per liter (µg/l).
3. No other compounds detected at method detection limits.

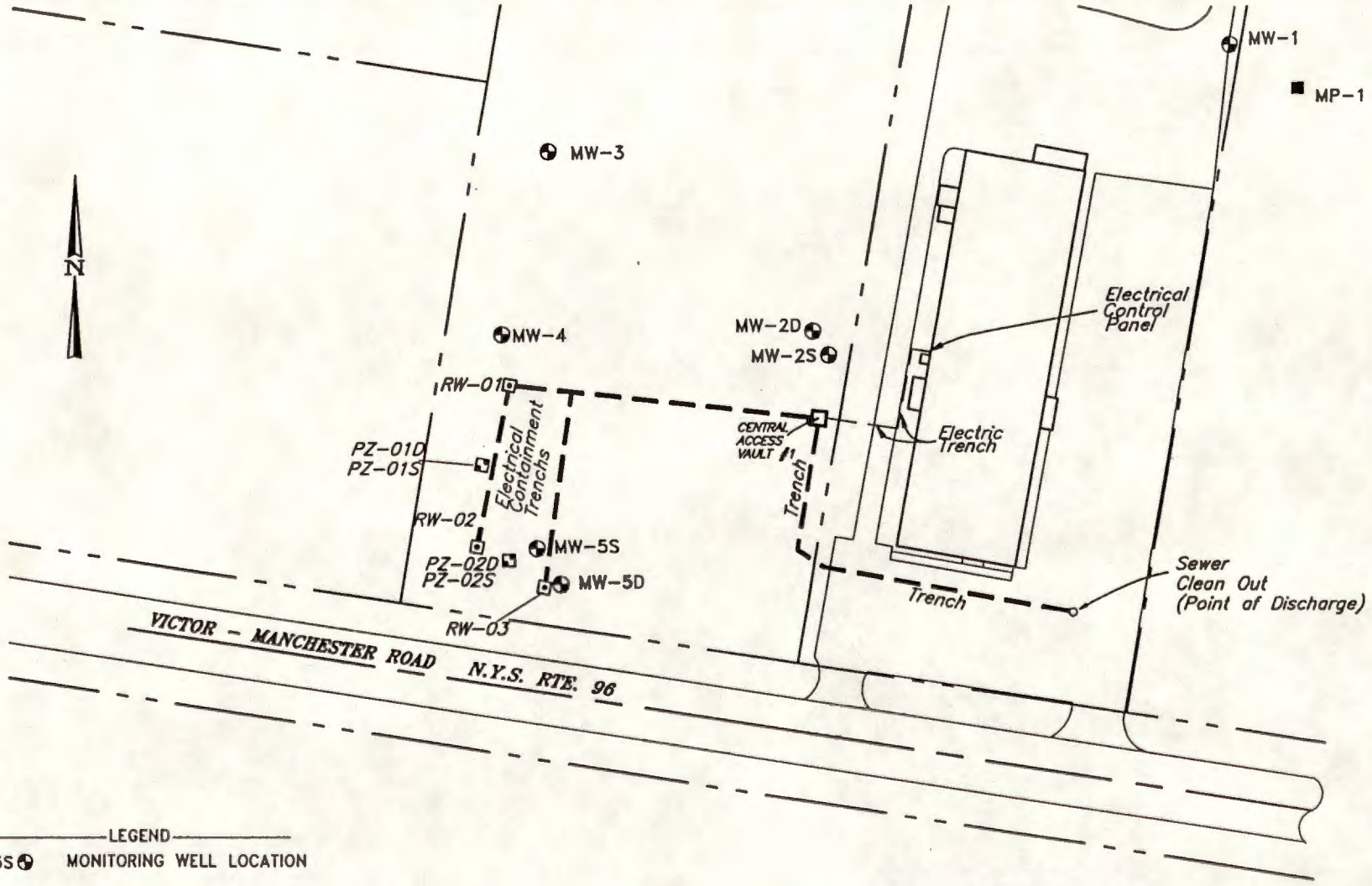
TABLE 3
FLOW METER MEASUREMENTS
GRIFFIN TECHNOLOGIES, INC.
VICTOR, NEW YORK

WELL IDENTIFICATION	FLOW METER READINGS (GAL) Month 1 03/14/97	Month 2 03/27/97	Month 2 04/15/97
RW-01	76,680	131,381	198,484
RW-02	82,290	134,733	209,206
RW-03	96,070	155,337	237,726
Operating Period (Days)	28	13	19
Total Discharge for Period (Gallons)	255,040	166,411	223,965
Average Daily Recovery (Gallons)	10,202	12,801	11,788
Average Flow Rate (gal./min.)	7.1	8.9	8.2

NOTES

1. Readings taken on date shown on column header.

Figures



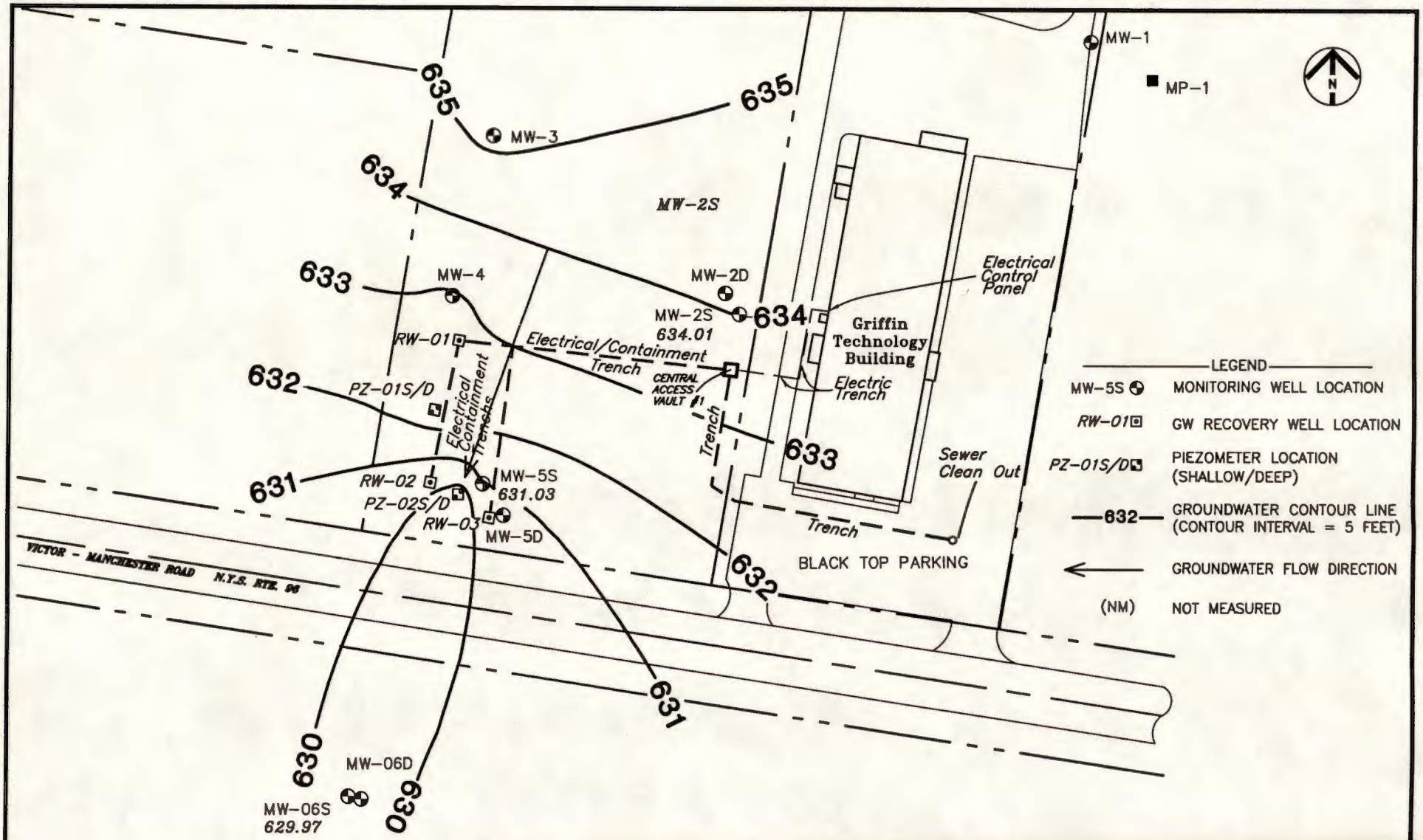
IRM SYSTEM LAYOUT

GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 4-10-97	FIGURE NO: 1

U:\6E06191\GWMAPS\FIG1.DWG

Woodward-Clyde Consultants



OVERBURDEN GROUNDWATER CONTOUR MAP
APRIL 15, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: PVC	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 05-12-97	FIGURE NO: 2

U:\6E06191\GWMAPS\415SHALW

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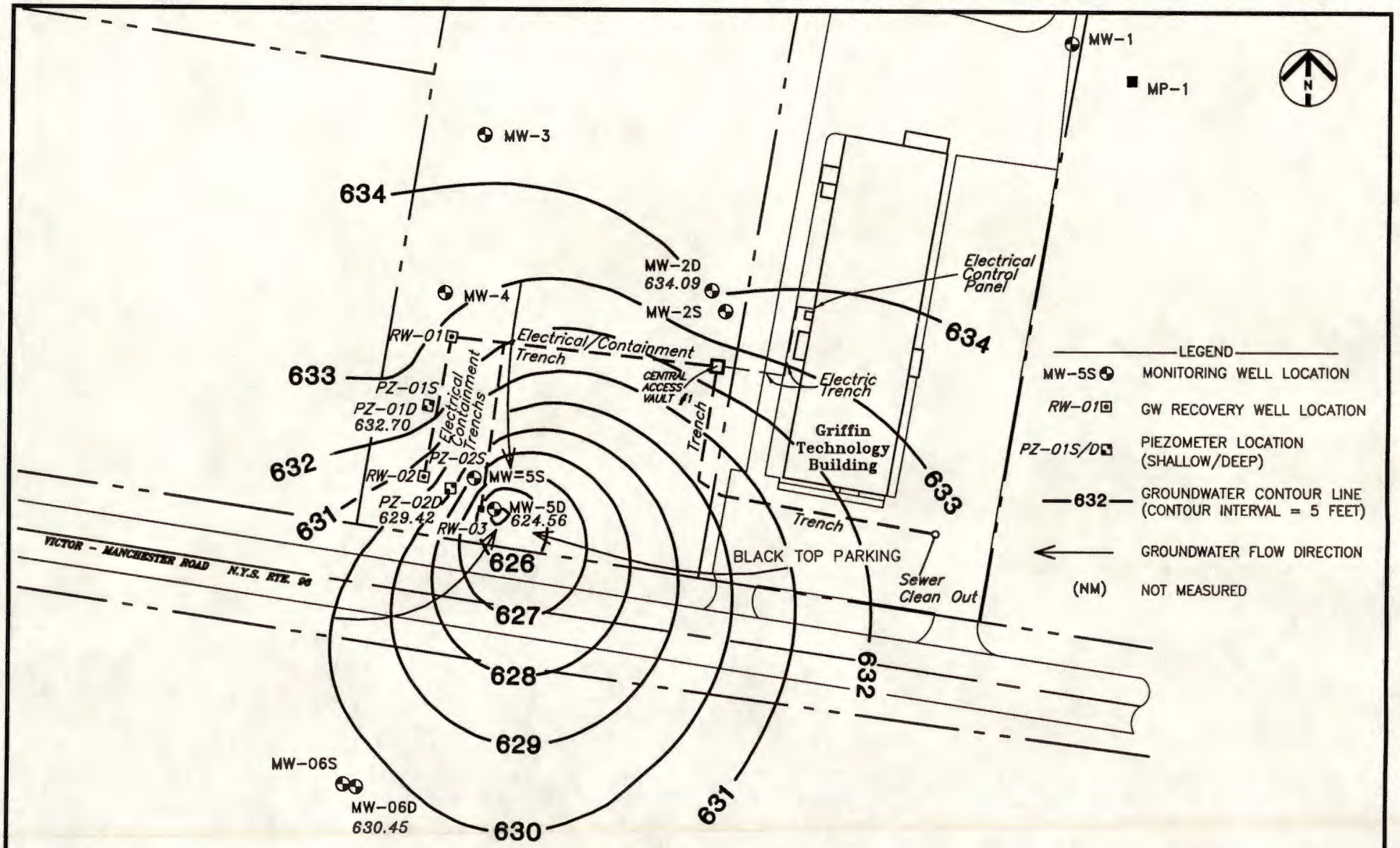

BEDROCK GROUNDWATER CONTOUR MAP
APRIL 15, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: PVC	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 05-12-97	FIGURE NO: 3

U:\6E06191\GWMAPS\415DEEP.DWG

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Appendix A

Columbia Analytical Services Inc.

Effective 04/01/96

CAS LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. For further explanation see case narrative / cover letter.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)

* - Duplicate analysis not within control limits.
(Flag the entire batch - Inorganic analysis only)

- Also used to qualify Organics QC data outside limits.

D - Spike diluted out.

S - Reported value determined by Method of Standard Additions. (MSA)

X - As specified in the case narrative.

CAS Lab ID # for State Certifications

NY ID # in Rochester:	10145	NJ ID # in Rochester:	73004
CT ID # in Rochester:	PH0556	RI ID # in Rochester:	158
MA ID # in Rochester:	M-NY032		

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 05/07/97

Woodward Clyde Consultants
Project Reference: GRIFFIN IRM
Client Sample ID : EFF-4-15-97

Date Sampled : 04/15/97 **Order #:** 142260 **Sample Matrix:** WATER
Date Received: 04/15/97 **Submission #:** 9704000281 **Analytical Run** 16950

DATE ANALYZED : 04/28/97
ANALYTICAL DILUTION: 1.0

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	6.0	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.8	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	240	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	90	%
TOLUENE-D8	(88 - 110 %)	93	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	98	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 05/07/97

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 145972 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 16950

DATE ANALYZED : 04/28/97
ANALYTICAL DILUTION: 1.0

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	91	%
TOLUENE-D8	(88 - 110 %)	94	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	99	%

[redacted] COLUMBIA ANALYTICAL SERVICES, INC.
700 Exchange Street, Rochester, New York 14608
(716) 454-6810 • FAX (716) 454-6825

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(800) 695-7222

DATE _____ PAGE _____ OF _____

PROJECT NAME Griffin IRM
PROJECT MANAGER/CONTACT Ken Armstrong
COMPANY/ADDRESS 30775 Bainbridge Rd., Ste 200 Solon, Ohio
TEL (216) 349-2708 FAX (216) 349-1514
SAMPLER'S SIGNATURE Bob Fabian

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	# OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624	GC/MS SVOA's ☐ 8270A ☐ 625	GC VOA's ☐ 8010/8020 ☐ 601/602	PESTICIDES/PCB's ☐ 8080 ☐ 608	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (LIST BELOW)	METALS, DISSOLVED (LIST BELOW)	8240							PRESERVATION pH < 2.0	pH > 12	Other
EFF-4-15-97	4-15-97	09:22	142260	WATER	2											X									

RELINQUISHED BY:
Signature: Bob Fabian
Printed Name: Bob Fabian
Firm: WCC
Date/Time: 4-15-97 10:15

RECEIVED BY:
Signature: Tom Hastings
Printed Name: Tom Hastings
Firm: CAS
Date/Time: 4/15/97 10:15

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
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
X 1. Routine Report
__ 2. Routine Rep. w/CASE Narrative
__ 3. EPA Level III Validatable Package
__ 4. N.J. Reduced Deliverables Level IV
__ 5. NY ASP/CLP Deliverables
__ 6. Site specific QC.

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

SAMPLE RECEIPT:
Shipping Via: Client
Shipping #:
Temperature:
Submission No: 4-281

SPECIAL INSTRUCTIONS/COMMENTS:
METALS
ORGANICS: ☐ TCL ☐ PPL ☐ AE Only ☐ BN Only ☐ Special List

65 RAMAPO VALLEY ROAD
MAHWAH, NJ 07430
201-512-3292
FAX 201-512-3362

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 04/17/97

Woodward Clyde Consultants
Project Reference: GRIFFIN IRM
Client Sample ID : EFF-3-27-97

Date Sampled : 03/27/97 **Order #:** 138407 **Sample Matrix:** WATER
Date Received: 03/27/97 **Submission #:** 9703000403 **Analytical Run** 16428

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 04/07/97			
ANALYTICAL DILUTION: 2.5			
ACETONE	20	50 U	UG/L
BENZENE	5.0	13 U	UG/L
BROMODICHLOROMETHANE	5.0	13 U	UG/L
BROMOFORM	5.0	13 U	UG/L
BROMOMETHANE	5.0	13 U	UG/L
2-BUTANONE (MEK)	10	25 U	UG/L
CARBON DISULFIDE	10	25 U	UG/L
CARBON TETRACHLORIDE	5.0	13 U	UG/L
CHLOROBENZENE	5.0	13 U	UG/L
CHLOROETHANE	5.0	13 U	UG/L
CHLOROFORM	5.0	13 U	UG/L
CHLOROMETHANE	5.0	13 U	UG/L
DIBROMOCHLOROMETHANE	5.0	13 U	UG/L
1,1-DICHLOROETHANE	5.0	13 U	UG/L
1,2-DICHLOROETHANE	5.0	13 U	UG/L
1,1-DICHLOROETHENE	5.0	13 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	13 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	13 U	UG/L
1,2-DICHLOROPROPANE	5.0	13 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	13 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	13 U	UG/L
ETHYLBENZENE	5.0	13 U	UG/L
2-HEXANONE	10	25 U	UG/L
METHYLENE CHLORIDE	5.0	13 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	25 U	UG/L
STYRENE	5.0	13 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	13 U	UG/L
TETRACHLOROETHENE	5.0	13 U	UG/L
TOLUENE	5.0	13 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	13 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	13 U	UG/L
TRICHLOROETHENE	5.0	290	UG/L
VINYL CHLORIDE	5.0	13 U	UG/L
O-XYLENE	5.0	13 U	UG/L
M+P-XYLENE	5.0	13 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	94	%
TOLUENE-D8	(88 - 110 %)	102	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	101	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 04/17/97

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 142037 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 16428

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 04/07/97			
ANALYTICAL DILUTION: 1.0			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	99	%
TOLUENE-D8	(88 - 110 %)	98	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	99	%

COLUMBIA ANALYTICAL SERVICES, INC.
700 Exchange Street, Rochester, New York 14608
(716) 454-6810 • FAX (716) 454-6825

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(800) 695-7222

DATE 3-27-97 PAGE 1 OF 1

PROJECT NAME GRIFFIN IRM

PROJECT MANAGER/CONTACT Ken Armstrong

COMPANY/ADDRESS 30775 Bainbridge Rd., Ste 200 Solon, Ohio

TEL (216) 349-2708 FAX (216) 349-1514

SAMPLER'S SIGNATURE Bob Fabian

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	# OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624	GC/MS SVOA's ☐ 8270A ☐ 625	GC VOA's ☐ 8010/8020 ☐ 601/602	PESTICIDES/PCB's ☐ 8080 ☐ 608	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (LIST BELOW)	METALS, DISSOLVED (LIST BELOW)	8240	PRESERVATION pH < 2.0	PRESERVATION pH > 12	PRESERVATION Other
EFF-3-27-97	3-27-97	09:00	138407	WATER	2		138407									X			
COMP-3-27-97	↓	11:18	138408	SOIL	4											X			
CP-BLU-3-27-97	↓	11:30	138409	SOIL	1											X			

RELINQUISHED BY:
Signature: Bob Fabian
Printed Name: Bob Fabian
Firm: WCC
Date/Time: 3-27-97 14:00

RECEIVED BY:
Signature: Tom Hastings
Printed Name: Tom Hastings
Firm: CAS
Date/Time: 3/27/97 14:00

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
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
__ 1. Routine Report
__ 2. Routine Rep. w/CASE Narrative
__ 3. EPA Level III Validatable Package
__ 4. N.J. Reduced Deliverables Level IV
__ 5. NY ASP/CLP Deliverables
__ 6. Site specific QC.

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

SAMPLE RECEIPT:
Shipping Via: Client
Shipping #:
Temperature:
Submission No: 3-403

SPECIAL INSTRUCTIONS/COMMENTS:
METALS
ORGANICS: ☐ TCL ☐ PPL ☐ AE Only ☐ BN Only ☐ Special List

65 RAMAPO VALLEY ROAD
MAHWAH, NJ 07430
201-512-3292
FAX 201-512-3362