FINAL REPORT

INTERIM REMEDIAL MEASURE PROGRAM

SEMI-ANNUAL PROGRESS REPORT GRIFFIN TECHNOLOGY, INC. TOWN OF FARMINGTON, ONTARIO COUNTY, NEW YORK

Prepared for:
Diebold, Inc.
Canton, Ohio

November 21, 1997

Woodward-Clyde

30775 Bainbridge Road
Suite 200
Solon, Ohio 44139
216/349/2708
Project No. 6E06191

CERTIFICATION

INTERIM REMEDIAL MEASURE SEMI-ANNUAL PROGRESS REPORT

GRIFFIN TECHNOLOGY, INC. FACILITY

TOWN OF FARMINGTON

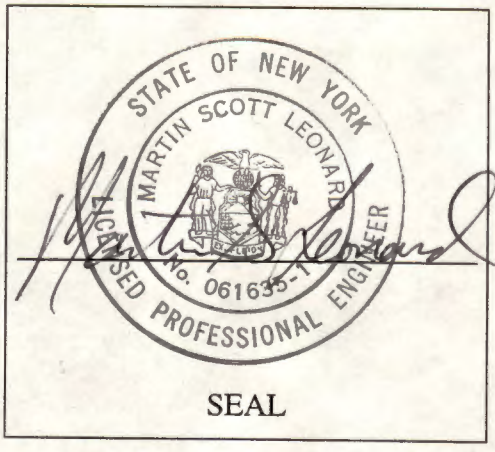
ONTARIO COUNTY, NEW YORK

The enclosed Semi-Annual Progress Report has been reviewed by the undersigned, and has been found to be consistent with the requirements of the Order on Consent (Index No. B8-315-90-01), entered into by the New York State Department of Environmental Conservation and Griffin Technology, Inc.

Name: Martin S. Leonard P.E.

Title: Consulting Professional Engineer

Date: November 25, 1997



SEAL

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

TABLE OF CONTENTS

LIST OF APPENDICES

This report presents the information collected during the first six months of operation of the Interim Remedial Measure (IRM) at the Griffin Technology, Inc. (GTI) site located at 6132 Victor-Manchester Road in the Town of Farmington, Ontario County, New York. The IRM system consists of three wells equipped with groundwater extraction pumps which have been plumbed to discharge groundwater into the local sanitary sewer system. A general location map is included as Figure 1-1.

The IRM system was proposed in the IRM Work Plan submitted to the New York State Department of Environmental Conservation (NYSDEC) on July 10 1996. The Work Plan was prepared in accordance with the Order on Consent agreement (Index No. B8-315-90-01) entered into by GTI and the NYSDEC. Information supporting the selected IRM, such as a Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP), were included in the Work Plan.

On September 27, 1996, GTI submitted an Interim Remedial Measure Program, Final Design Document to the NYSDEC. This document contained the proposed layout and detail drawings for the IRM system and a copy of the letter approving the discharge of recovered groundwater into the local publicly-owned treatment works (POTW) sanitary sewer. In addition, an implementation schedule to construct the system and a proposed two year sample collection and reporting schedule were included in the design document.

During December 1996 and January 1997, the IRM components were installed at the site. Following approval by the NYSDEC and the Canandaguia-Farmington Water and Sewer District to discharge recovery water into the sanitary sewer system, the system was placed on-line. The IRM system began operating on February 18, 1997.

The activities performed during the installation of the IRM and during the first six months of operation are described in Section 2.0. Information collected during the first six months of operation are presented in Section 3.0. A summary of IRM operations is presented in Section 4.0.

The Scope of Work for the IRM was presented in the Final Design Document presented to the NYSDEC on September 27, 1996. Implementation of the IRM consisted of the following elements:

- Installing an IRM system in the undeveloped parcel of land located downgradient of the source area. The IRM system consisted of installing three groundwater extraction wells, one bedrock monitoring well located in the source area which could potentially be used for additional recovery, two sets of nested piezometers located between each of the three extraction wells to monitor groundwater elevations between each well, a groundwater recovery and collection system to convey water to a central access vault, electrical power supply and controllers for each recovery pump, sample collection and flow monitoring appurtenances, and a force main sewer to discharge effluent from the access vault to a sanitary sewer located on the southeast portion of the site.
- Monitoring the quantity and quality of groundwater recovered from the system monthly and reporting this data to the local POTW.
- Monitoring the groundwater elevations in all on-site wells and piezometers to evaluate the effectiveness of the IRM as a groundwater extraction system and hydraulic barrier.
- Collecting groundwater samples from all wells located on-site and off-site semi-annually beginning six months after initiation of the system and continuing for a period of two years. All groundwater samples collected during these semi-annual activities will be analyzed for volatile organic compounds (VOCs) by NYSDEC Test Method ASP 91-1.
- Preparing progress reports for submission to the NYSDEC. The reports should include data collected during the preceding months of operation as well as information and activities to be performed during subsequent reporting periods.

2.1 IRM SYSTEM INSTALLATION

The IRM installation activities were performed during December 1996 and January 1997. Operation of the IRM system was initiated on February 18, 1997. The system is currently in operation. The components comprising the IRM system and the installation activities performed are discussed in greater detail below.

2.1.1 Well Installation

During December 5-22, 1996, Nothnagle Drilling (Nothnagle) installed three groundwater recovery wells (designated as "RW-01", "RW-02", and "RW-03"), and one bedrock groundwater monitoring well (designated as "MW-2D") in the undeveloped southwest portion of the GTI site. The locations of these installations are shown on Figure 2-1. These wells were installed in accordance with Section 5.2.1 of the Field Sampling Plan (Appendix A of the IRM Work Plan). All drilling activities performed by Nothnagle were observed by an on-site geologist from Woodward-Clyde (W-C).

Prior to initiating the 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 for the recovery wells and bedrock groundwater monitoring well were advanced into the overburden using 8.25-inch hollow stem augers (HSA). The HSA for MW-2D was equipped with a split-spoon sampler. Samples from this boring were collected continuously in 2-foot intervals using ASTM D-1586 methods, in order to characterize the overburden stratigraphy at each monitoring well location. Overburden samples were collected from each 2-foot interval and submitted to Columbia Analytical Services, Inc. (CASI) of Rochester, New York for analysis of VOCs by ASP 91-1. The on-site W-C representative 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 approximately 12.2 feet below ground surface (bgs) for RW-01, 18.4 feet bgs for RW-02 and RW-03, and 10.5 feet bgs for MW-2D.

The well borings were then advanced a minimum of fifteen feet into the bedrock, using an H-core barrel. The bedrock boreholes were then reamed using a H-size roller bit. Overburden and bedrock descriptions are provided in the boring logs included as Appendix A of this report. All drill cuttings were placed into 55 gallon drum containers and stored on-site until being characterized for ultimate disposal.

Each well was constructed of a 6-inch diameter, Schedule 40 polyvinyl chloride (PVC) riser pipe which was flush threaded with 20 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. A minimum of 6 inches of grade 00N fine sand was placed above this 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. The recovery wells were fitted with temporary plastic covers while MW-2D was fitted with a locking pressure-fit cap.

Each recovery well was completed flush with the existing surface grade and covered with a 24-inch water sealed, flush-mount box cover set in a 2-foot square concrete pad. MW-2D was finished above-grade with an outer protective casing equipped with a locking cap. The location of each well and the top of casing elevations were then surveyed by Crandall Surveyors (Crandall) of Victor, New York. The elevations were surveyed relative to a common benchmark located on the GTI property.

2.1.2 Piezometer Installation

Four piezometers (designated as "PZ-01S", "PZ-01D", "PZ-02S", and "PZ-02D") were installed as part of the IRM in a similar fashion to the monitoring and recovery wells. The difference between the well installation and the piezometer installation occurred during the installation activities, when the piezometers were installed as two 1-inch diameter PVC "nested pairs" (one overburden piezometer and one bedrock piezometer located adjacent to one another). Each piezometer was installed with a 2-foot well screen located in the upper two feet of the bedrock zone while the overburden piezometers were installed using a 10-foot section of well screen straddling the overburden saturated zone. The piezometers were finished above-grade with an outer protective casing equipped with a locking cap. The location of each piezometer and the top of casing elevations were also surveyed by Crandall relative to the common benchmark located on the GTI property.

2.1.3 Power Supply and Collection System Installation

Following installation of the wells and piezometers, trenches were excavated to facilitate the installation of a groundwater collection system and power supply conduit. These activities were performed in accordance with the design documents included in the Final Design Document submitted to the NYSDEC on September 27, 1996. All trench excavation were approximately 18 inches in width with a bottom depth located approximately 54 inches bgs.

The groundwater collection system consisted of recovery pumps located inside recovery wells RW-01, RW-02, and RW-03 connected to a 1-inch ID polyethylene tubing which was routed to each recovery well inside of a secondary containment pipe system. The secondary containment pipe consisted of Schedule 80 PVC pipe. The pipes ranged from 2 to 6 inches in diameter and were sized to accommodate the tubing inside. All elbows and pipe ends were glued to provide a containment seal. The groundwater conveyance pipes were placed at a depth of 48 inches bgs.

The electrical conduits consisted of 1 and 2-inch diameter Schedule 20 PVC piping. The electrical conduits were installed at a depth of 24 inches bgs. Electrical lines were routed through these conduits from a control panel mounted on the exterior of the western wall of the GTI facility, to the Central Access Vault and subsequently to each of the three recovery wells. The supply conduits were terminated inside weatherproof boxes at each junction and wellhead. Separate wires were installed from the control panel to each wellhead to allow separate circuits and independent operation of the recovery pumps.

Goulds Model 10GS submersible pumps were selected and installed in each recovery well. These pumps required a 230 volt, single phase power source for proper operation. Each pump was connected to a PumpTec® "Load-Sensor" type controller to automate the operation of the pump. The controllers are currently operating on 4-minute reset time intervals. This interval allows the wells to recharge sufficiently before the next pumping cycle begins.

The groundwater conveyance pipes were routed to the Central Access Vault and connected to a manifold which contains a common header discharge port. Each conduit connection on the manifold is equipped with a shut-off valve, sample port, and totalizing flow meter to facilitate individual well monitoring. In addition, a shut-off valve, sample port, and totalizing flow meter has been installed on the common header pipe prior to discharge.

2.1.4 Effluent Discharges

The groundwater flows from the manifold and header in the Central Access Vault through a force main pipe and into a sanitary clean-out located on the southeast portion of the site. The sanitary clean-out was installed in-line with the existing sanitary sewer to facilitate discharges into a gravity sewer. Effluent is discharged into the clean-out riser pipe, down into the sanitary sewer where it is travels by gravity to the Canandaguia-Farmington Water and Sewer District for ultimate disposal. Prior to installation of the force main discharge and subsequent system start-up, it was necessary for the Canandaguia-Farmington Water and Sewer District to receive permission from the NYSDEC to receive this wastewater.

2.2 IRM SYSTEM MONITORING

During the first six months of operation, groundwater elevation and discharge volume data was collected to monitor the effectiveness of the IRM system. The data collected is discussed in the following sections.

2.2.1 Hydraulic Head Measurement

During the first four weeks of operation, hydraulic head (groundwater elevation) measurements were collected weekly from each groundwater well and piezometer located on-site. Following this initial monitoring period, the groundwater wells and piezometers were measured a minimum of once per month. All groundwater measurements were collected using an electronic water level indicator capable of measuring the water elevation to the nearest 0.01 ft.

Following the first four weeks of operation, the number of wells being measured was expanded to include off-site wells located in the immediate vicinity of the site. During the semi-annual groundwater sampling event, the water level in all groundwater monitoring wells was measured and recorded to evaluate groundwater flow conditions. No measurement was collected from staff gauge SG-1 because the elevation of the creek was below this gauge's minimum depth.

2.2.2 Groundwater Well Development

Following installation and prior to collection of groundwater samples, monitoring well MW-2D and piezometers PZ-01S, PZ-01D, PZ-02S, and PZ-02D were developed to create an effective filter pack around the well screen, rectify damage to the formation caused by drilling, and remove fine particles from the formation near the borehole. Development of the wells and piezometers was performed in general accordance with the procedures outlined in the EPA Technical Guidance "RCRA Groundwater Monitoring" (November 1992) and was accomplished by purging and bailing each well with a dedicated high density polyethylene (HDPE) bailer or submersible pump. The pump was decontaminated before the development activities performed on MW-2D. Well development activities on each recovery well were performed by initiating groundwater recovery activities.

Prior to initiating well development activities, the static water level and total well depth were measured using a decontaminated electronic water level indicator. In addition, the turbidity, conductivity, and temperature were measured using a decontaminated Horiba U-10 water quality analyzer. The measurements were recorded in a field book by Woodward-Clyde's on-site representative.

Development of MW-2D was performed until a minimum 7 to 10 volumes of groundwater had been removed or measured parameters had stabilized (i.e. within 10 percent deviation). Upon completion, the following information was recorded in the field book:

- - 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

Water generated during the well development activities was placed into 55-gallon drums and was stored at the GTI facility until receipt of analytical data. Upon receipt of analytical data from CASI, water disposal was accomplished by discharging the contents of each drum into a nearby sanitary sewer. Approval from the Canandaguia-Farmington Water and Sewer District for the discharge of all purge water was obtained prior to the discharge of the water into the sanitary sewer system. 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 also placed into a 55-gallon drum and stored at the GTI facility for disposal off-site.

2.2.3 Groundwater Sampling and Analysis

During the first six months of operation, composite effluent samples were collected monthly from the common header discharge in the Central Access Vault. These samples were submitted to CASI for analysis of volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) method 8260. The analytical results of these composite samples were used to report estimated loadings on the POTW.

On August 13, 1997, groundwater samples were collected from all monitoring wells by W-C to evaluate regional groundwater quality. Prior to sample collection the static water level in each well was measured. Using the static water level measurements, the volume of water (the well volume) contained in each well was calculated. The monitoring well was then purged of a minimum of three well volumes of water or until dry using a disposable HDPE 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 monitoring well MW-13D. Groundwater samples were submitted to CASI and analyzed for VOCs by NYSDEC Test Method ASP 91-1. Chain of custody procedures were followed during sampling.

The data collected during the IRM installation and operation activities and the results of the first semi-annual groundwater sampling event are presented in the following subsections.

3.1 SOIL ANALYTICAL RESULTS

The analytical results obtained from soil samples collected during the installation of MW-2D are presented in Table 3-1. The results indicate that the upper 6 feet of overburden soil did not contain detectable concentrations of trichloroethene (TCE). The analytical results of the soil sample collected from the 6-8 foot bgs interval indicate a TCE concentration of 11 micrograms per kilogram (mg/kg) was detected. The laboratory data sheets and chain-of-custody forms are provided in Appendix B.

3.2 RECOVERY WELL ANALYTICAL RESULTS

A summary of groundwater analytical results for samples obtained from RW-01, RW-02, and RW-03 on January 8, 1997 are presented in Table 3-2. These results indicate the presence of VOCs, primarily TCE, in the three recovery wells prior to start-up of the IRM. This data is consistent with previous findings completed on the GTI site in that TCE concentrations were detected below 1 part per million (ppm). The laboratory data sheets are provided in Appendix C.

3.3 EFFLUENT OPERATING DATA AND ANALYTICAL RESULTS

A summary of the operating data and effluent analysis collected during each month of IRM system operation is presented in Table 3-3. The results indicate that groundwater containing COC's is being removed from underneath the GTI site. The quantity of water removed by the system has decreased during the summer months. The laboratory data sheets are provided in Appendix D.

3.4 GROUNDWATER ANALYTICAL RESULTS

A summary of groundwater analytical data collected from all wells on August 13, 1997 is presented in Table 3-4. The laboratory data sheets and a data validation report from the QA/QC reviewer are provided in Appendix E. Table 3-4 also summarizes the data from previous sampling events. Results obtained from the first 6 months of IRM operation indicate that COC's were detected at concentrations similar to previous sampling events. Several on-site wells could not be sampled during this event due to lowering of the groundwater table.

3.5 HYDRAULIC HEAD MEASUREMENT RESULTS

Groundwater elevations collected for selected on-site and off-site monitoring wells during the first six months of operation are presented in Table 3-5. Groundwater elevations collected on August 29, 1997 from all on-site and off-site monitoring wells are presented in Table 3-6. This data was used to prepare groundwater elevation and flow maps for the overburden and bedrock groundwater zones. Overburden groundwater zone contour maps for the GTI site are presented as Figures 3-1 through 3-9. Figure 3-10 is a contour map illustrating overburden groundwater zone flow conditions at locations both on-site and off-site and was prepared using the data from Table 3-6. Bedrock groundwater zone contour maps of the GTI site are presented as Figures 3-

11 through 3-19. Figure 3-20 is a contour map illustrating bedrock groundwater zone flow conditions at locations both on-site and off-site and was also prepared using the data from Table 3-6.

The groundwater zone contour maps from the GTI site indicate that water levels in both the overburden and bedrock zones have been depressed near the GTI site boundary with a low area being present in the vicinity of RW-03. The data indicate that the RIM system is influencing groundwater patterns on the GTI site.

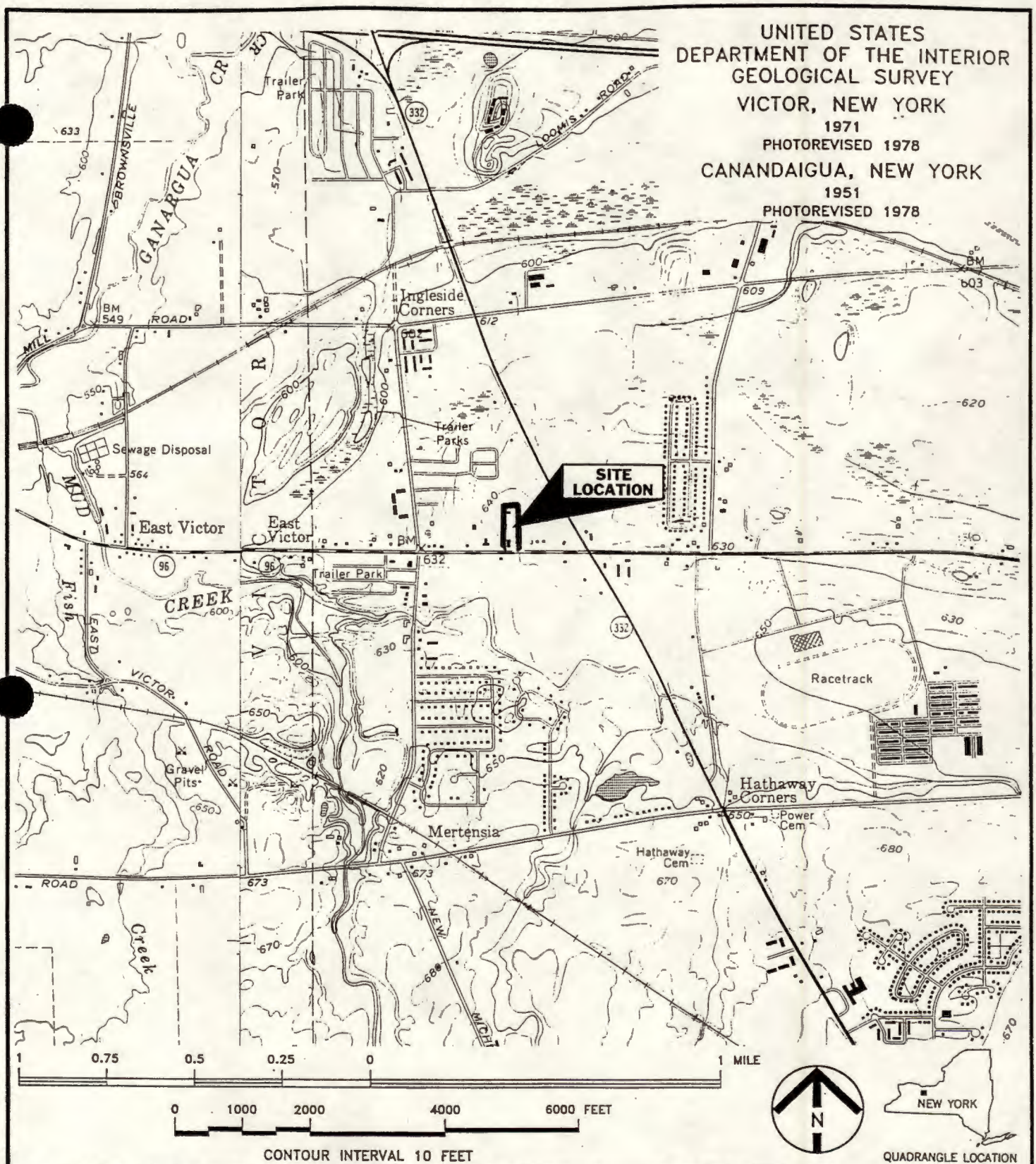
Figures 3-10 and indicate a regional south to southwest groundwater flow for the overburden groundwater. Figure 3-20 indicates that regional bedrock groundwater flow is generally towards the west-southwest. This data is consistent with previous observed site conditions.

Based on the information collected during the first six months of IRM system operation, the following summary has been developed regarding environmental conditions at the GTI site:

- The IRM system is affecting groundwater flow patterns in the vicinity of the GTI facility. The groundwater contour maps prepared using water elevation data from the bedrock and overburden zones, indicate that the elevation of groundwater in the immediate vicinity of the IRM system has been depressed.
- Groundwater flow in the overburden and bedrock zones at off-site locations is primarily to the west-southwest. This is consistent with previous reports for the GTI site.

Continued monitoring of the site and additional data collection during the next six months of operation will provide additional long term effectiveness for the IRM system. Additional data collection activities will consist of the same activities performed during the first 6 months of IRM operation.

Figures



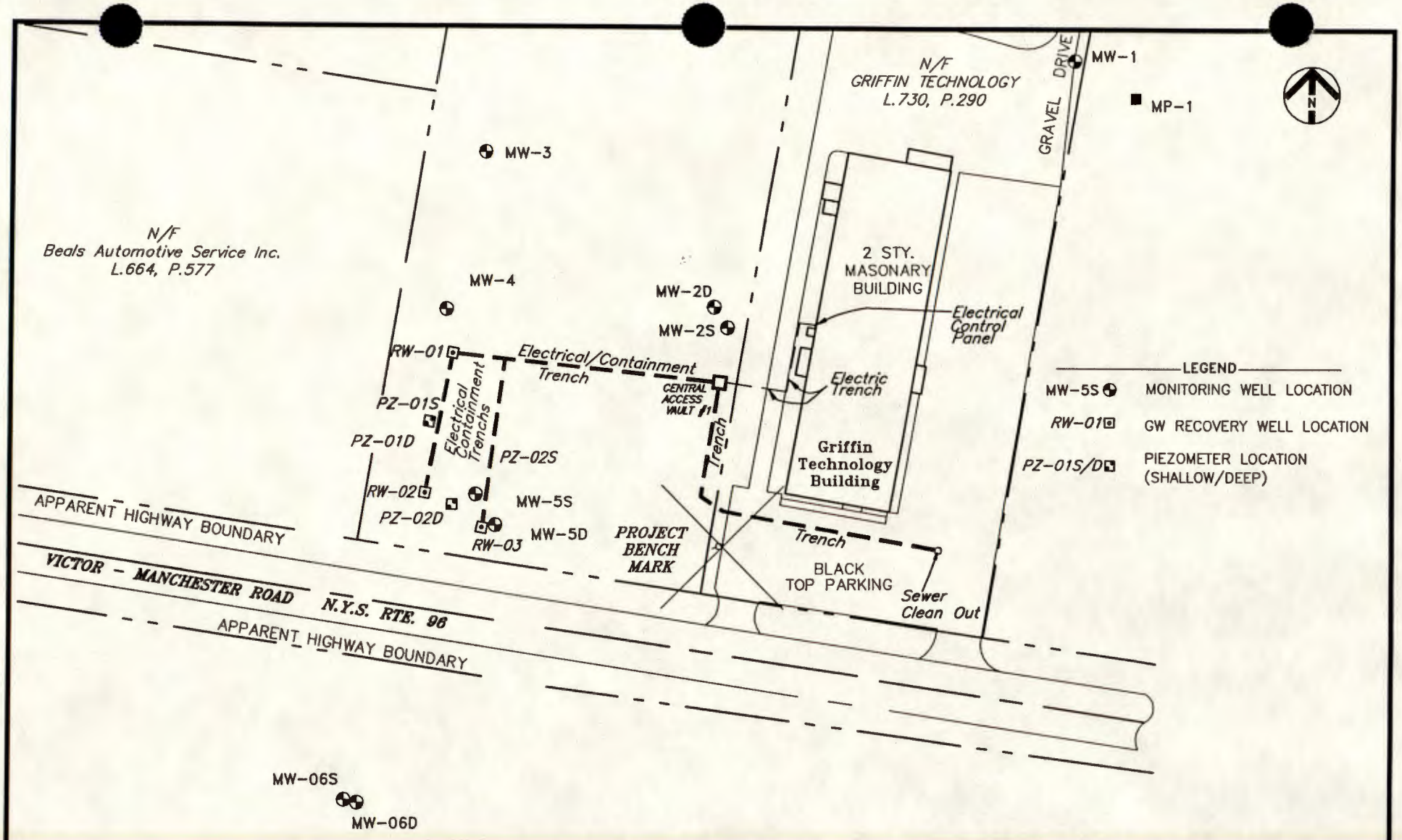
GENERAL LOCATION MAP

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

6282\GLM

Woodward-Clyde Consultants



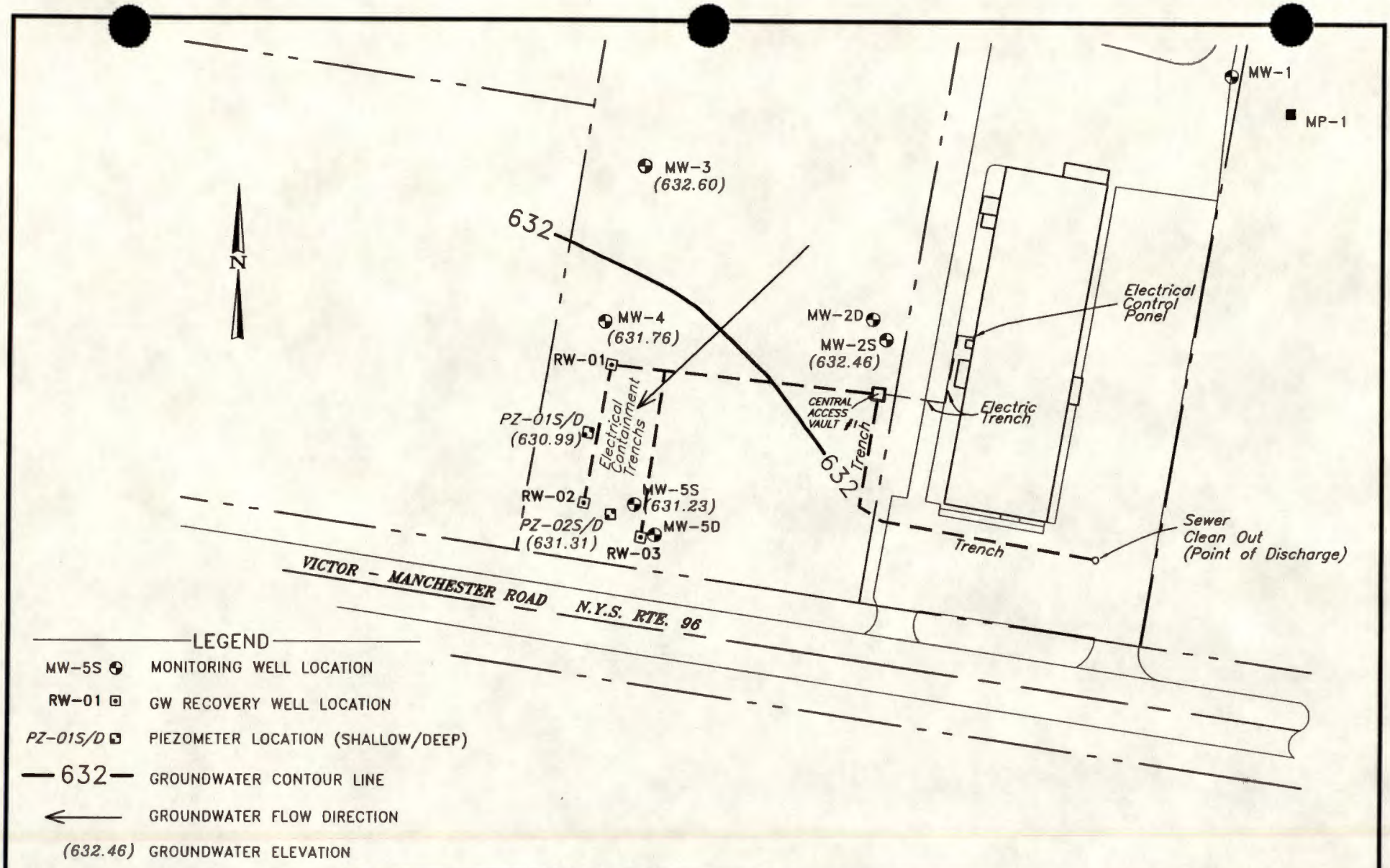
IRM SYSTEM LAYOUT

GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 06/06/97	FIGURE NO: 2-1

U:\6E06191\GWMAPS\BASEMAP.DWG

Woodward-Clyde
Consultants

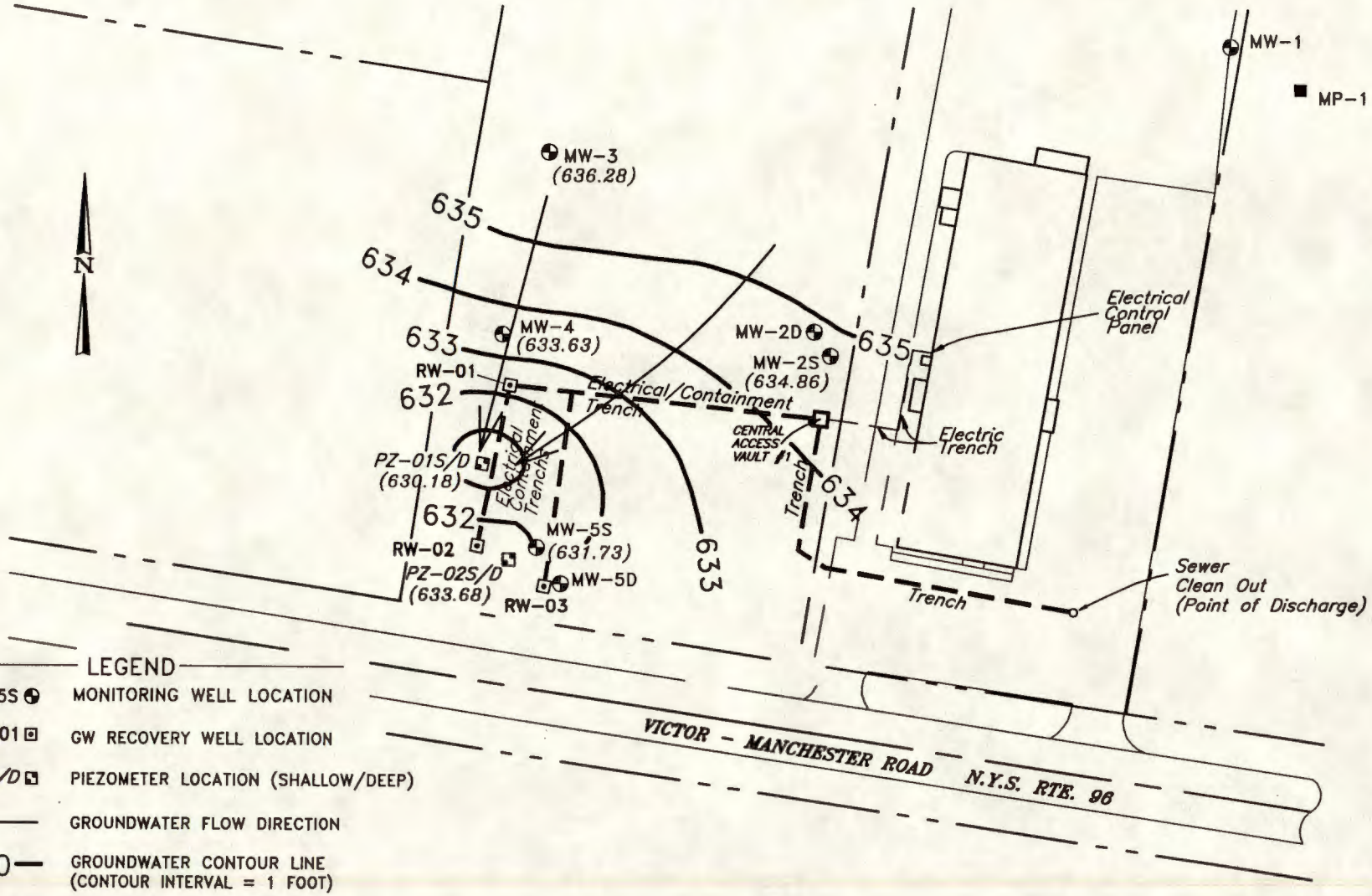


OVERBURDEN GROUNDWATER CONTOUR MAP
FEBRUARY 14, 1997 (PRIOR TO IRM START-UP)
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-1

U:\6E06191\GWMAPS\21497sh1

Woodward-Clyde

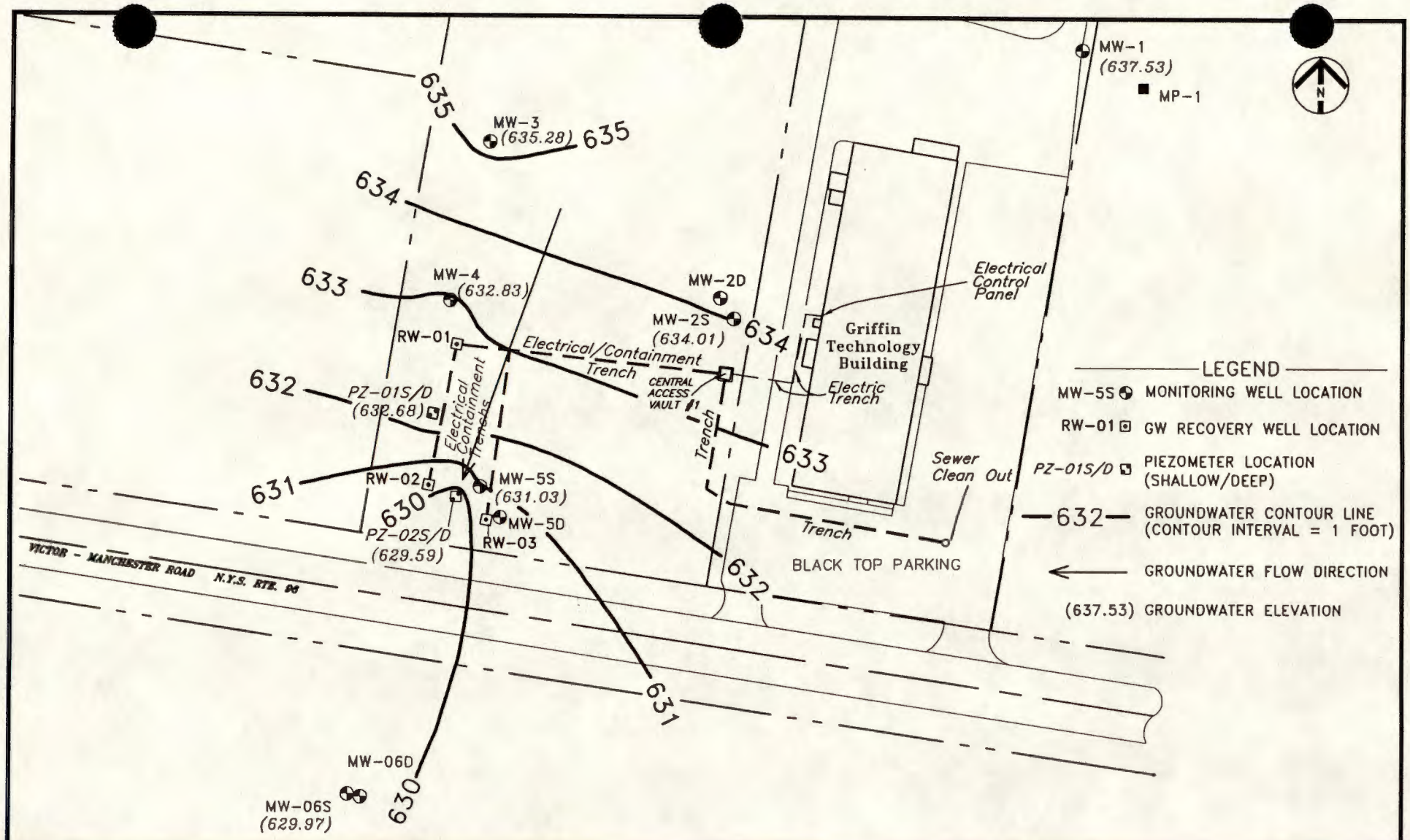


OVERBURDEN GROUNDWATER CONTOUR MAP
MARCH 14, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-2

U:\6E06191\GWMAPS\31497SH1

Woodward-Clyde

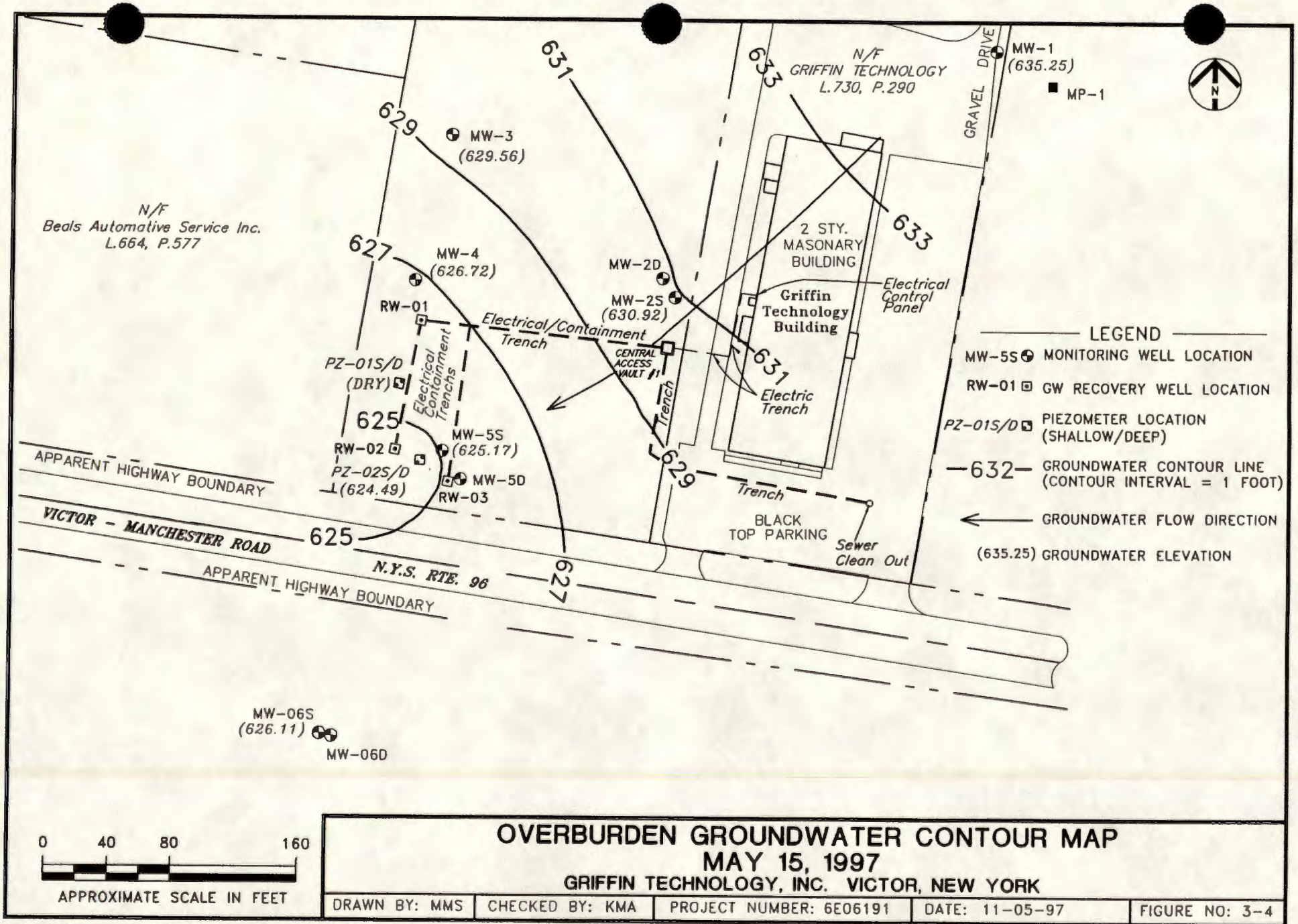


OVERBURDEN GROUNDWATER CONTOUR MAP
APRIL 15, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: PVC	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-03-97	FIGURE NO: 3-3

U:\6E06191\GWMAPS\415SHALW

Woodward-Clyde

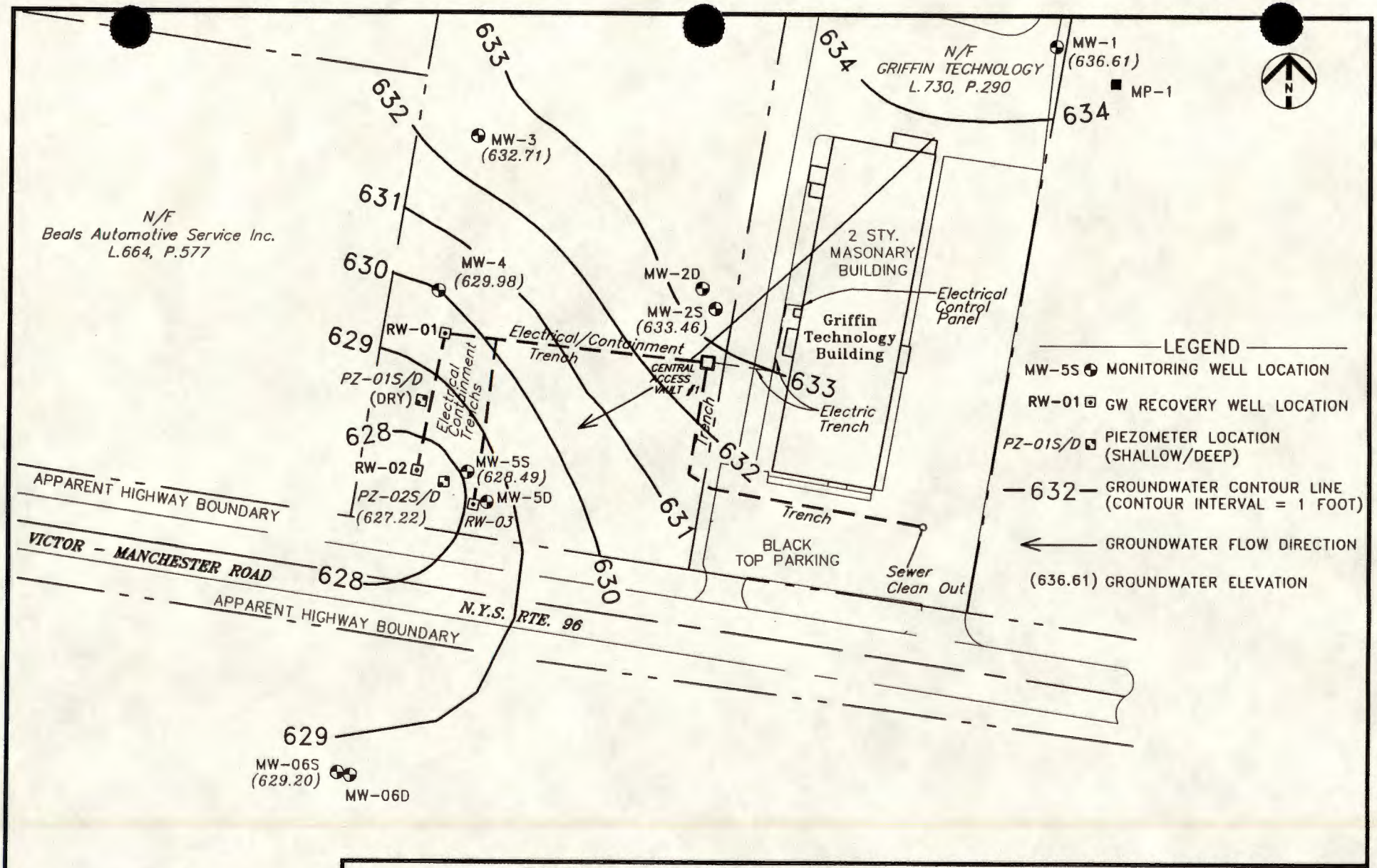


OVERBURDEN GROUNDWATER CONTOUR MAP
MAY 15, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-4

U:\6E06191\GWMAPS\515SHALW.DWG

Woodward-Clyde

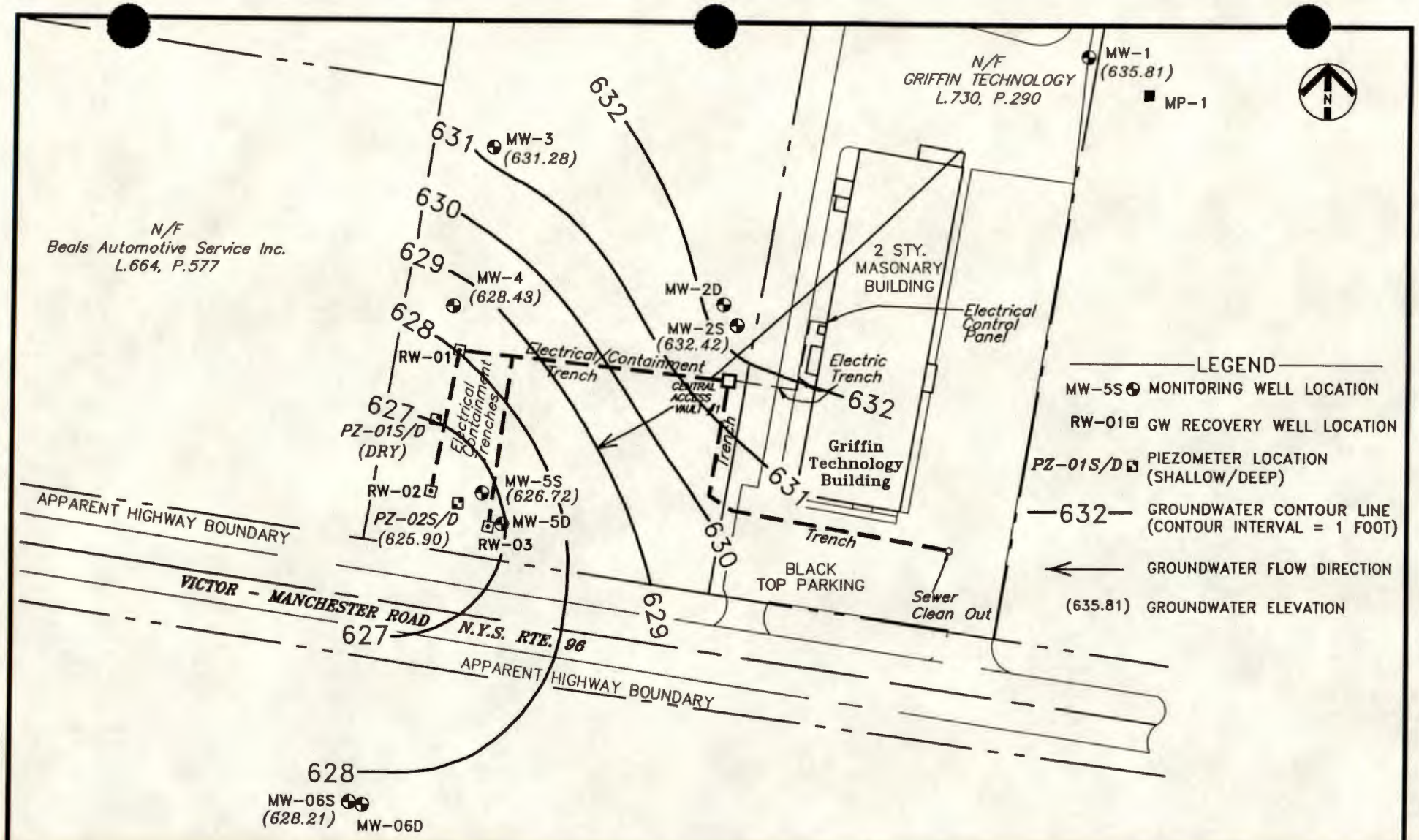


OVERBURDEN GROUNDWATER CONTOUR MAP
JUNE 3, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-5

U:\6E06191\GWMAPS\60397SH.DWG

Woodward-Clyde

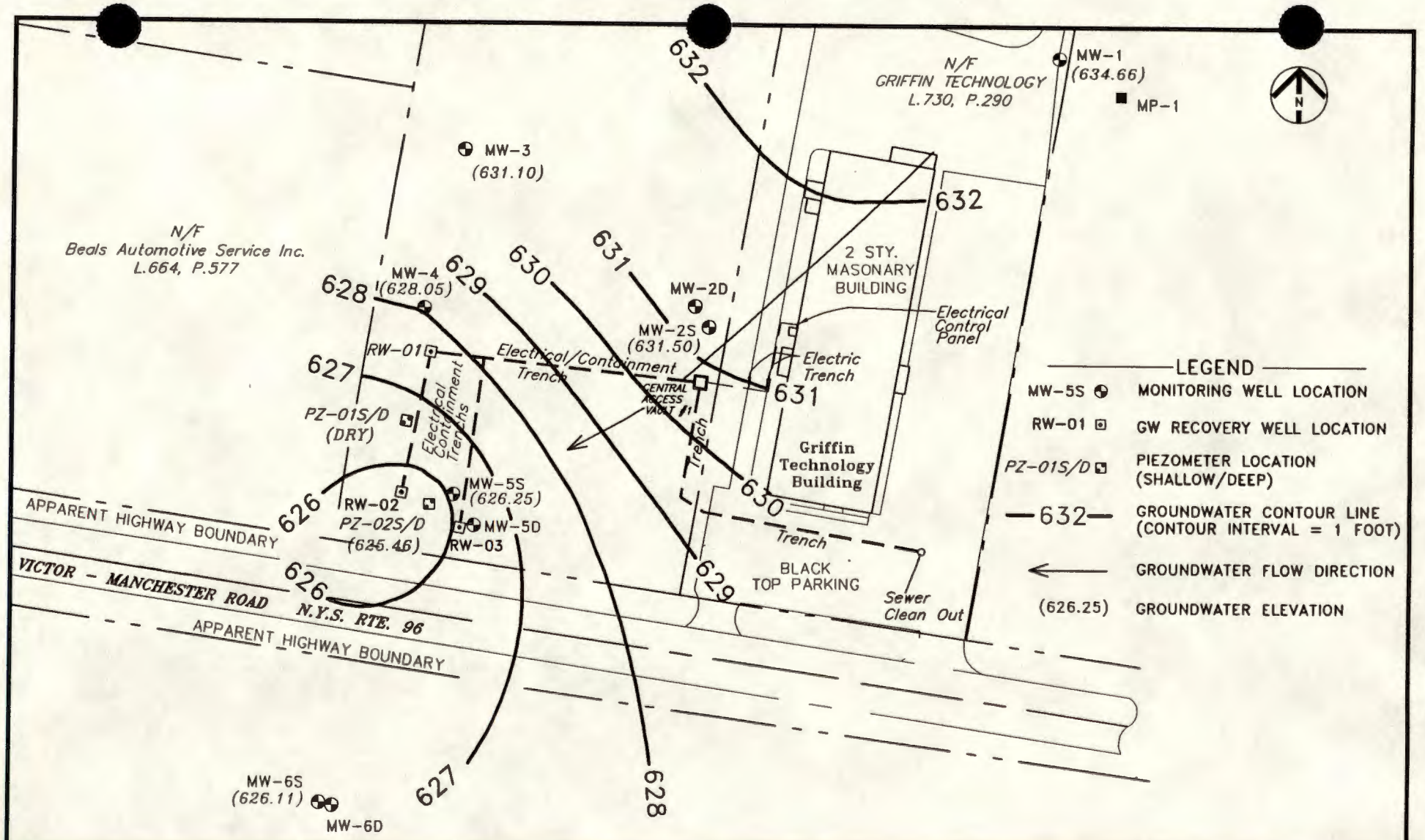


OVERBURDEN GROUNDWATER CONTOUR MAP
JUNE 13, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-6

U:\6E06191\GWMAPS\61397SH.DWG

Woodward-Clyde

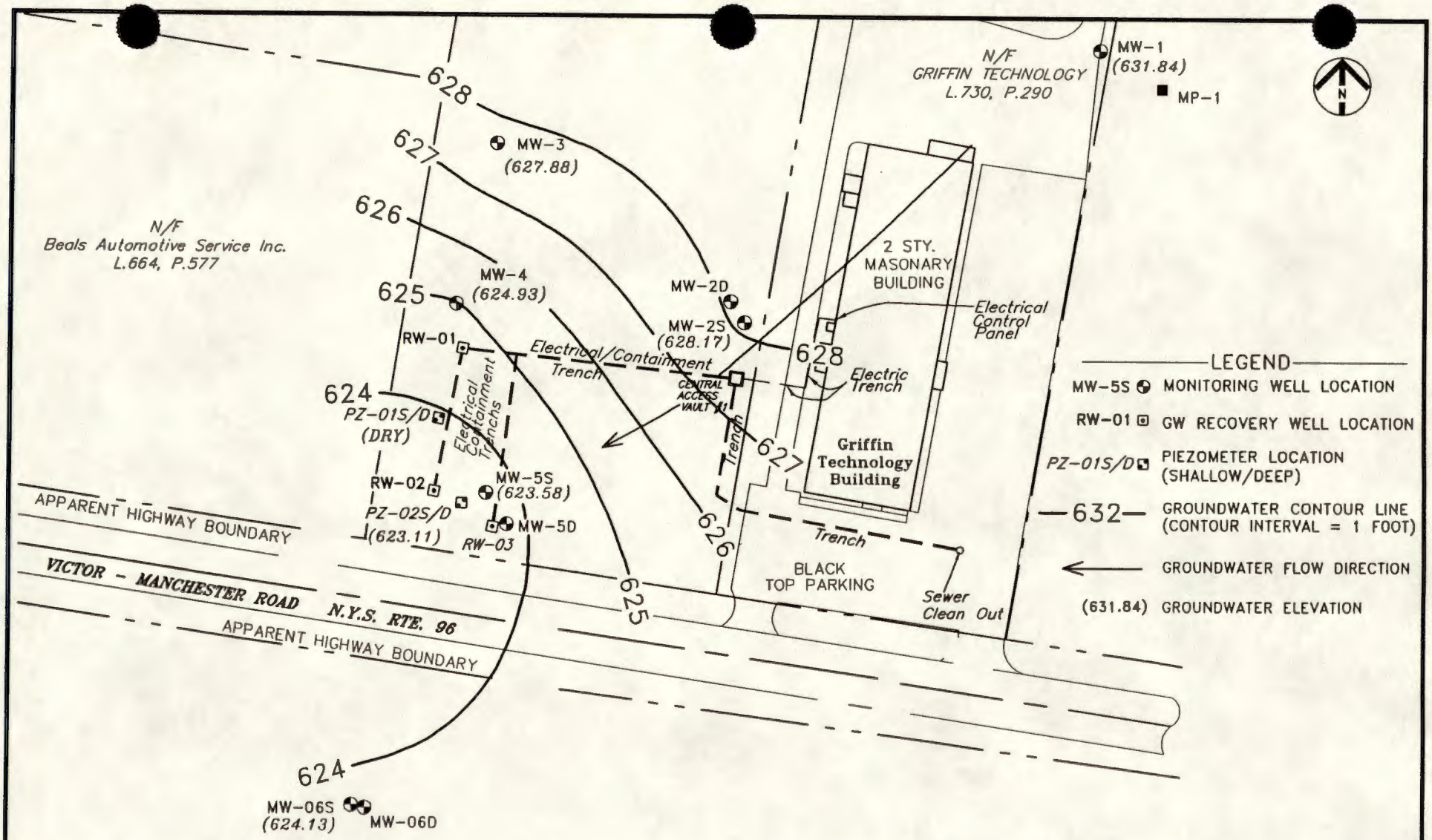


OVERBURDEN GROUNDWATER CONTOUR MAP
JULY 01, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-7

U:\6E06191\GWMAPS\70197SH.DWG

Woodward-Clyde



0 40 80 160

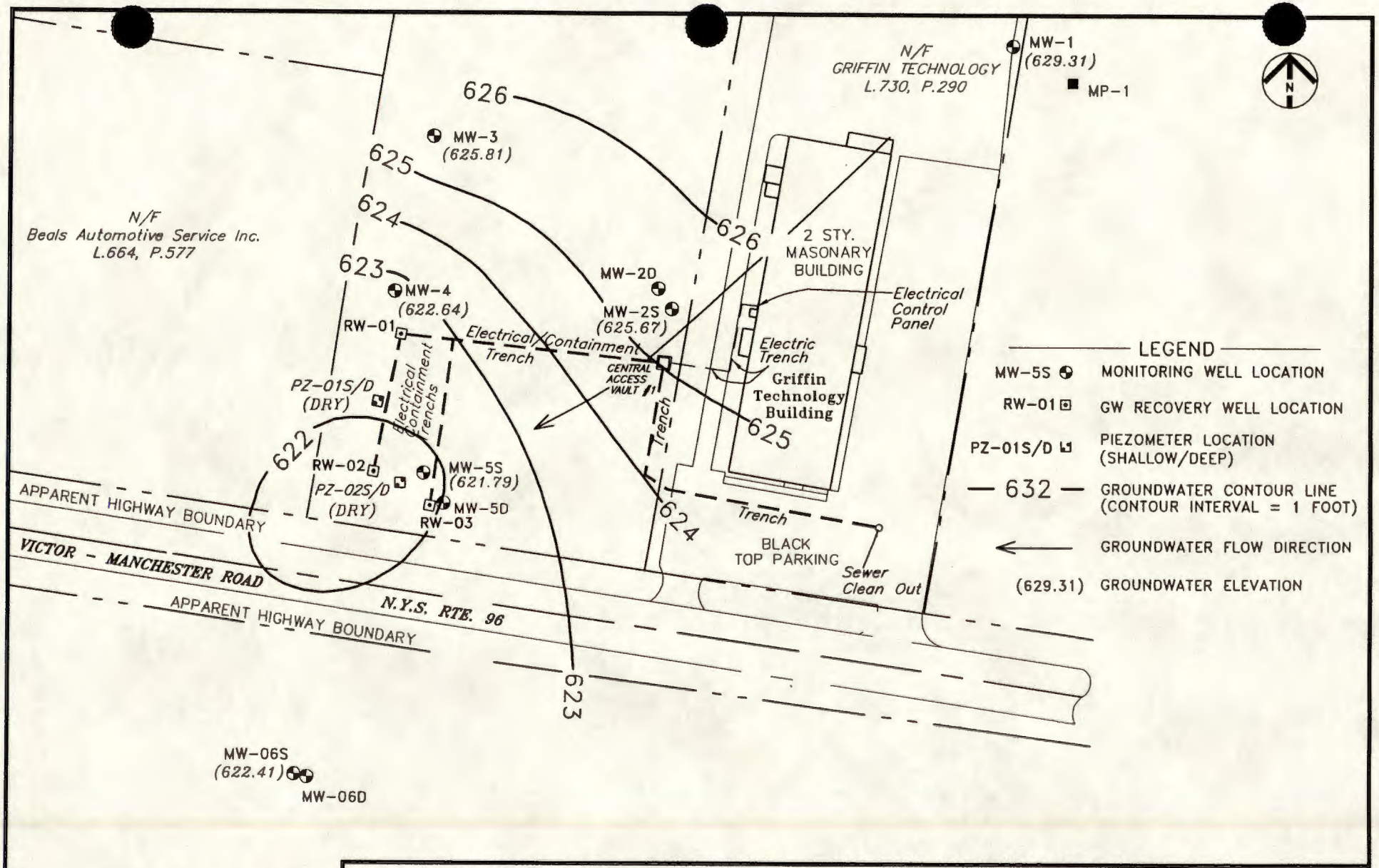
APPROXIMATE SCALE IN FEET

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

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-8

U:\6E06191\GWMAPS\71597SH1.DWG

Woodward-Clyde

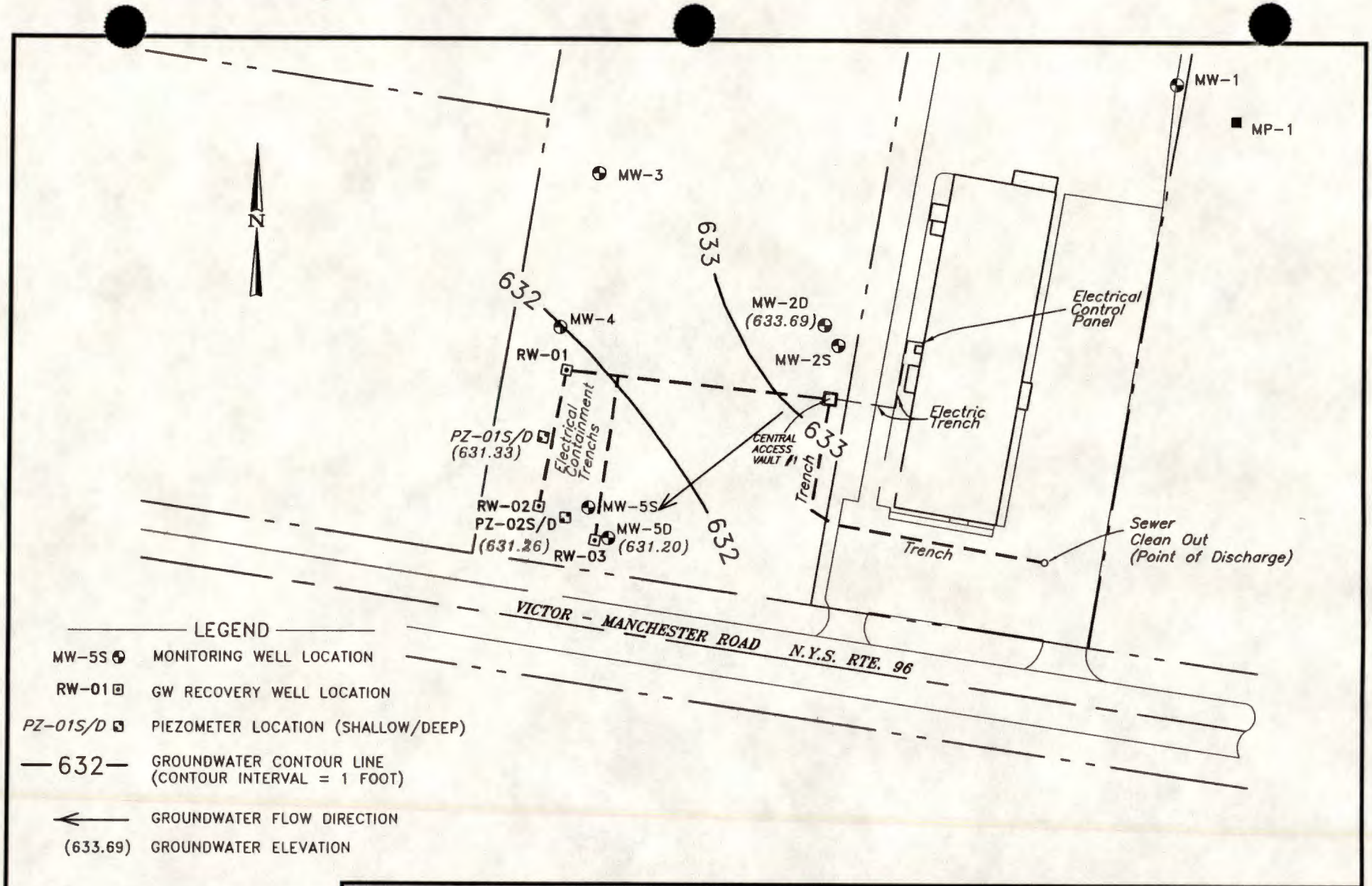


OVERBURDEN GROUNDWATER CONTOUR MAP
AUGUST 1, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-9

U:\6E06191\GWMAPS\80197SH1.DWG

Woodward-Clyde

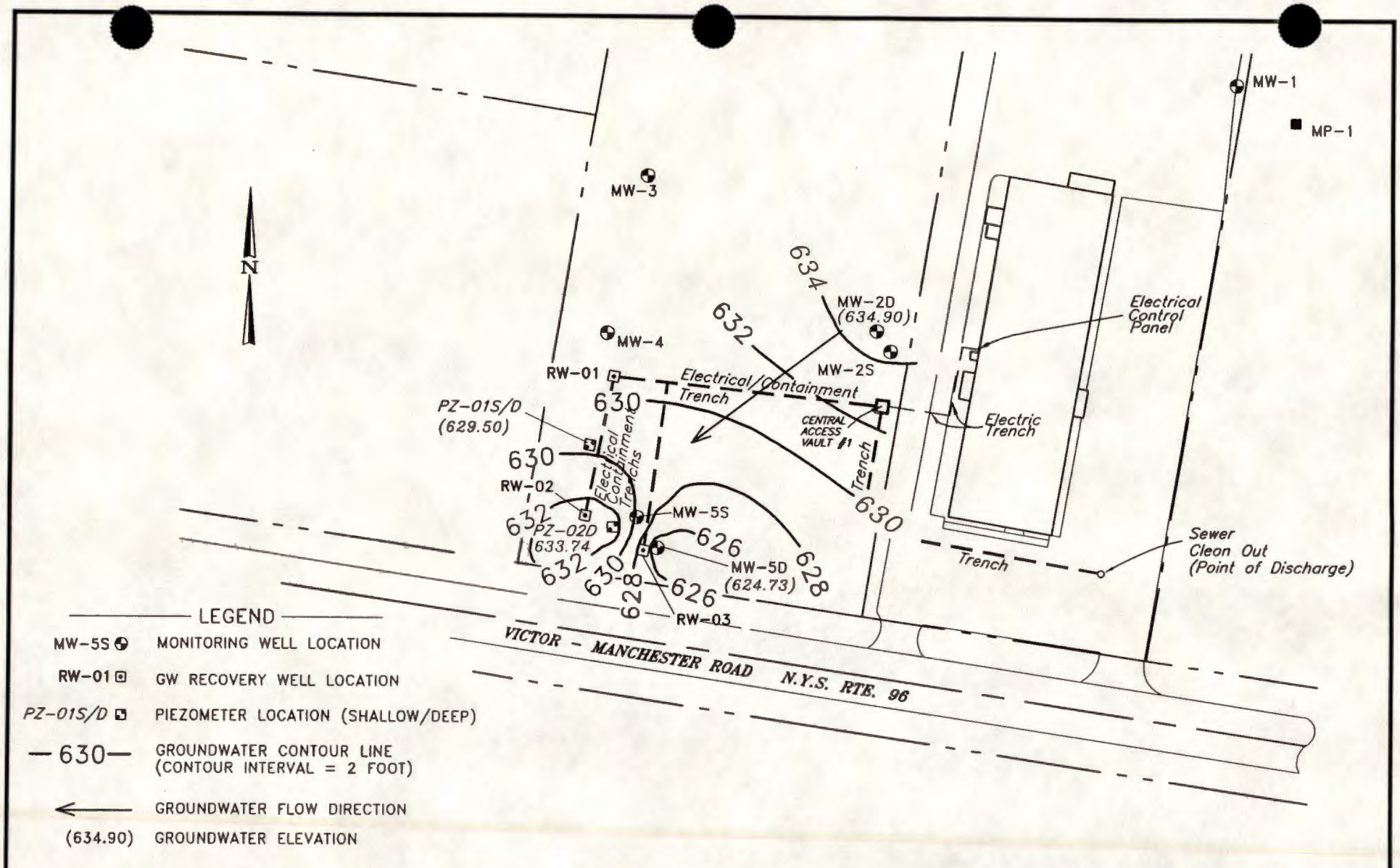


BEDROCK GROUNDWATER CONTOUR MAP
FEBRUARY 14, 1997 (PRIOR TO IRM START-UP)
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-11

U:\6E06191\GWMAPS\214970P.DWG

Woodward-Clyde

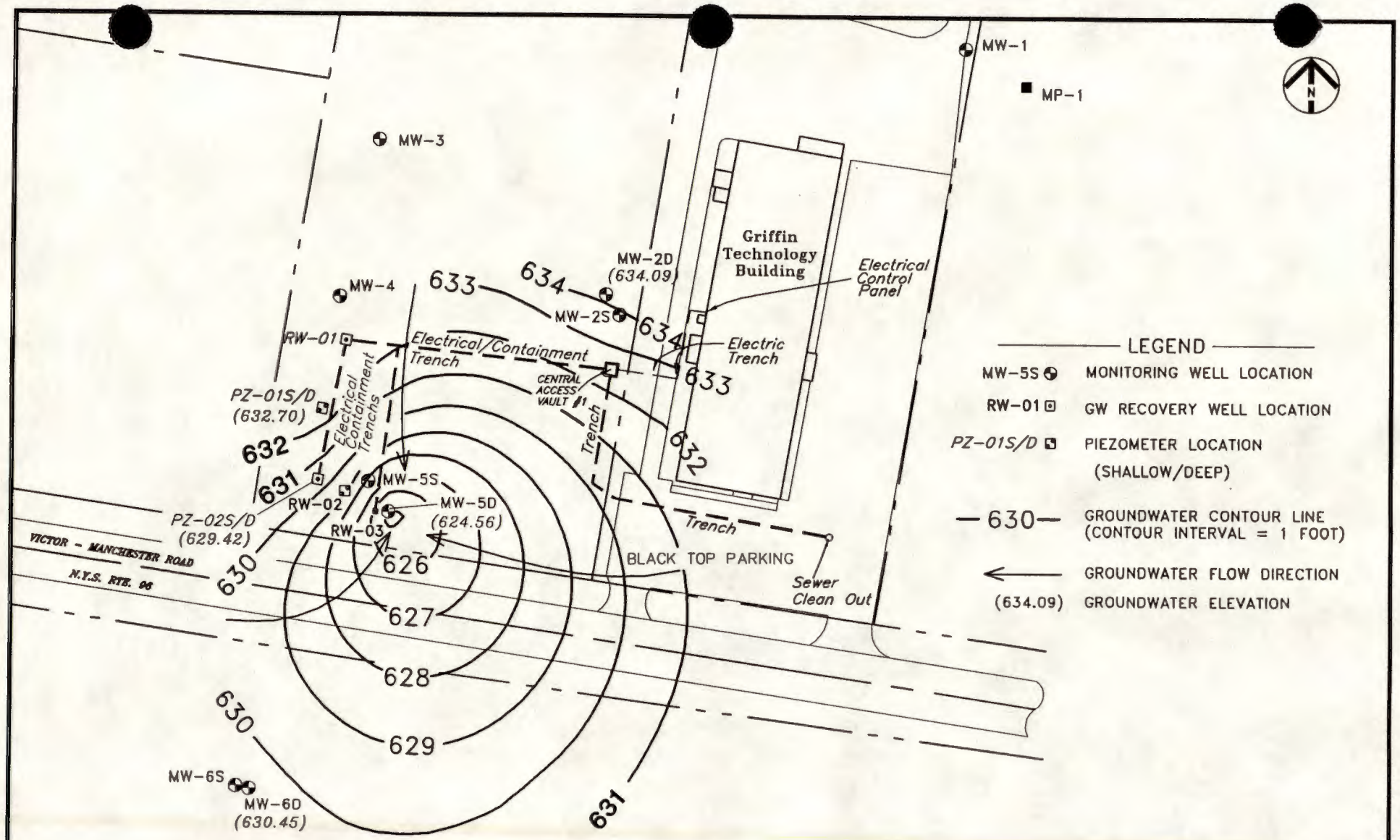


BEDROCK GROUNDWATER CONTOUR MAP
MARCH 14, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-12

U:\6E06191\GWMAPS\31497DP.DWG

Woodward-Clyde

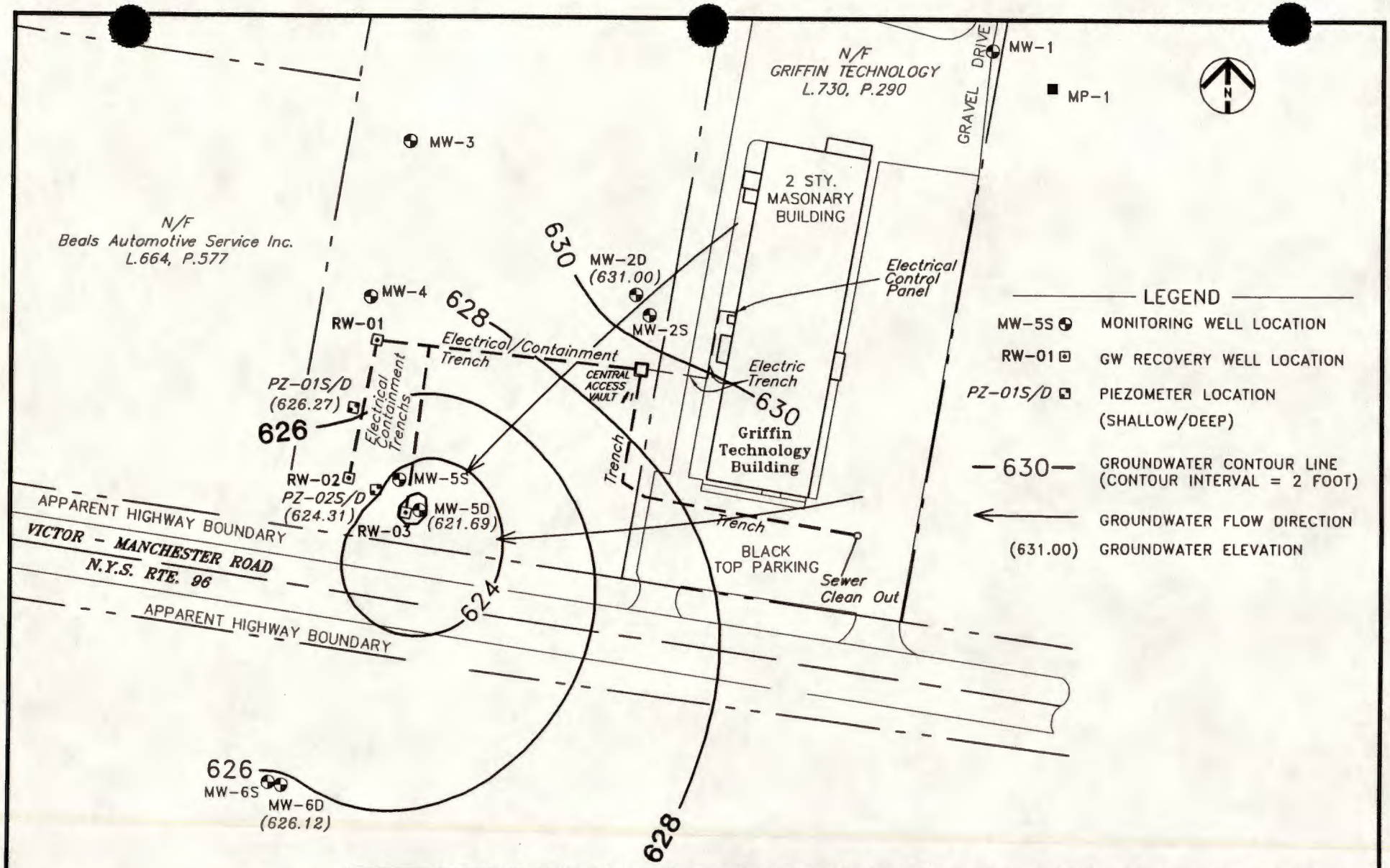


BEDROCK GROUNDWATER CONTOUR MAP
APRIL 15, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: PVC	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-13

U:\6E06191\GWMAPS\41597DP.DWG

Woodward-Clyde

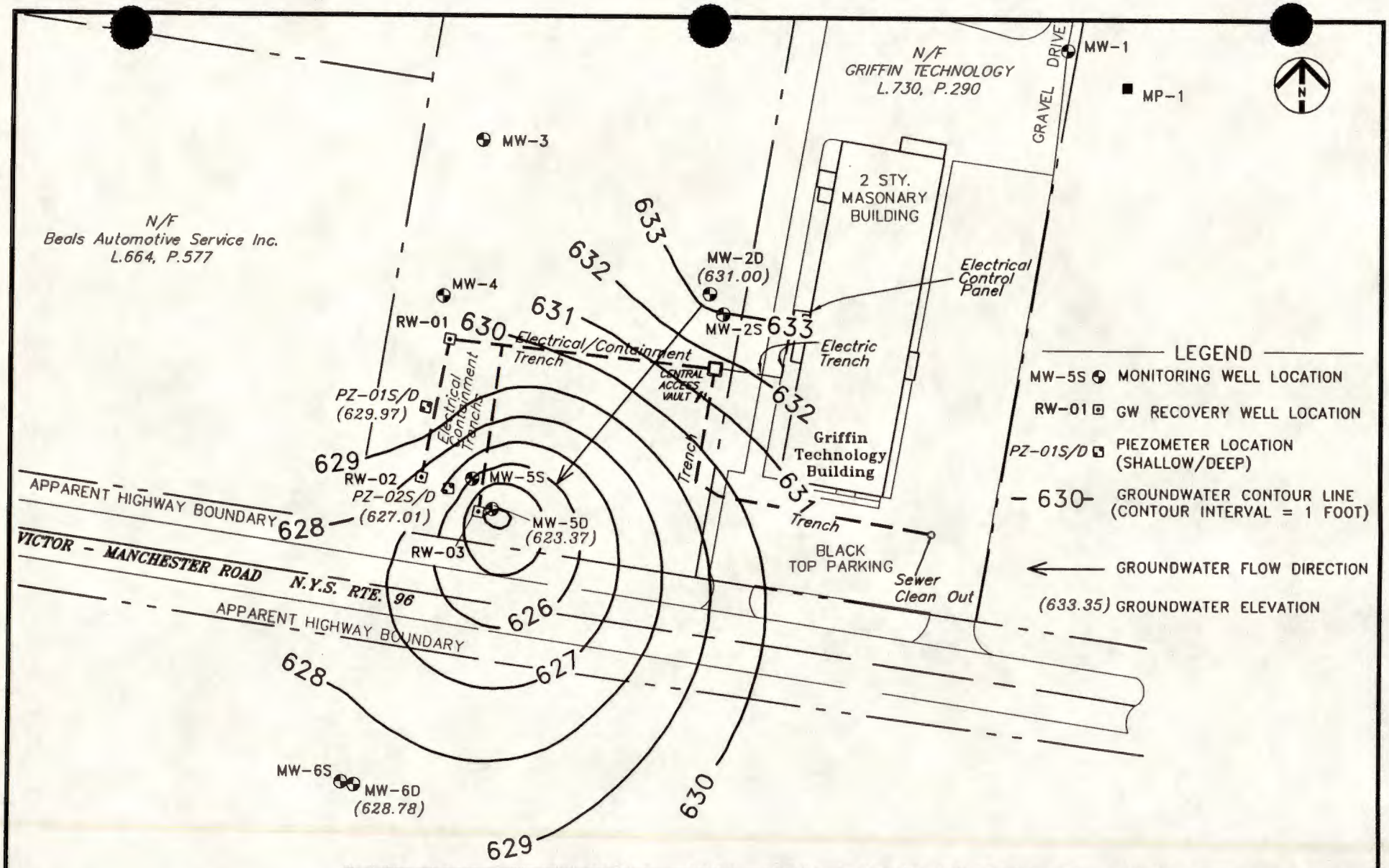


BEDROCK GROUNDWATER CONTOUR MAP
MAY 15, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-14

U:\6E06191\GWMAPS\515970P.DWG

Woodward-Clyde

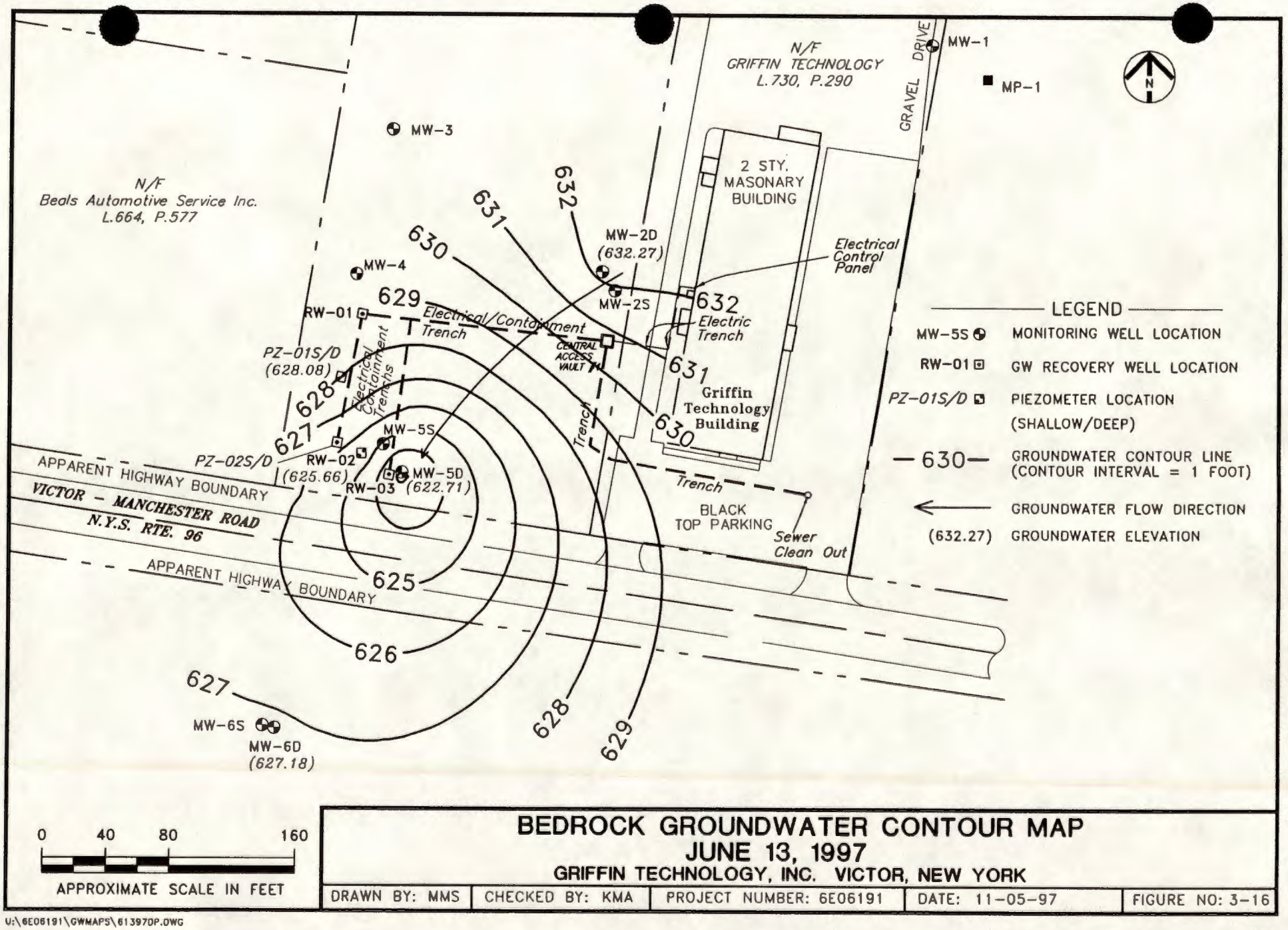


BEDROCK GROUNDWATER CONTOUR MAP
JUNE 3, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-15

U:\6E06191\GWMAPS\603970P.DWG

Woodward-Clyde

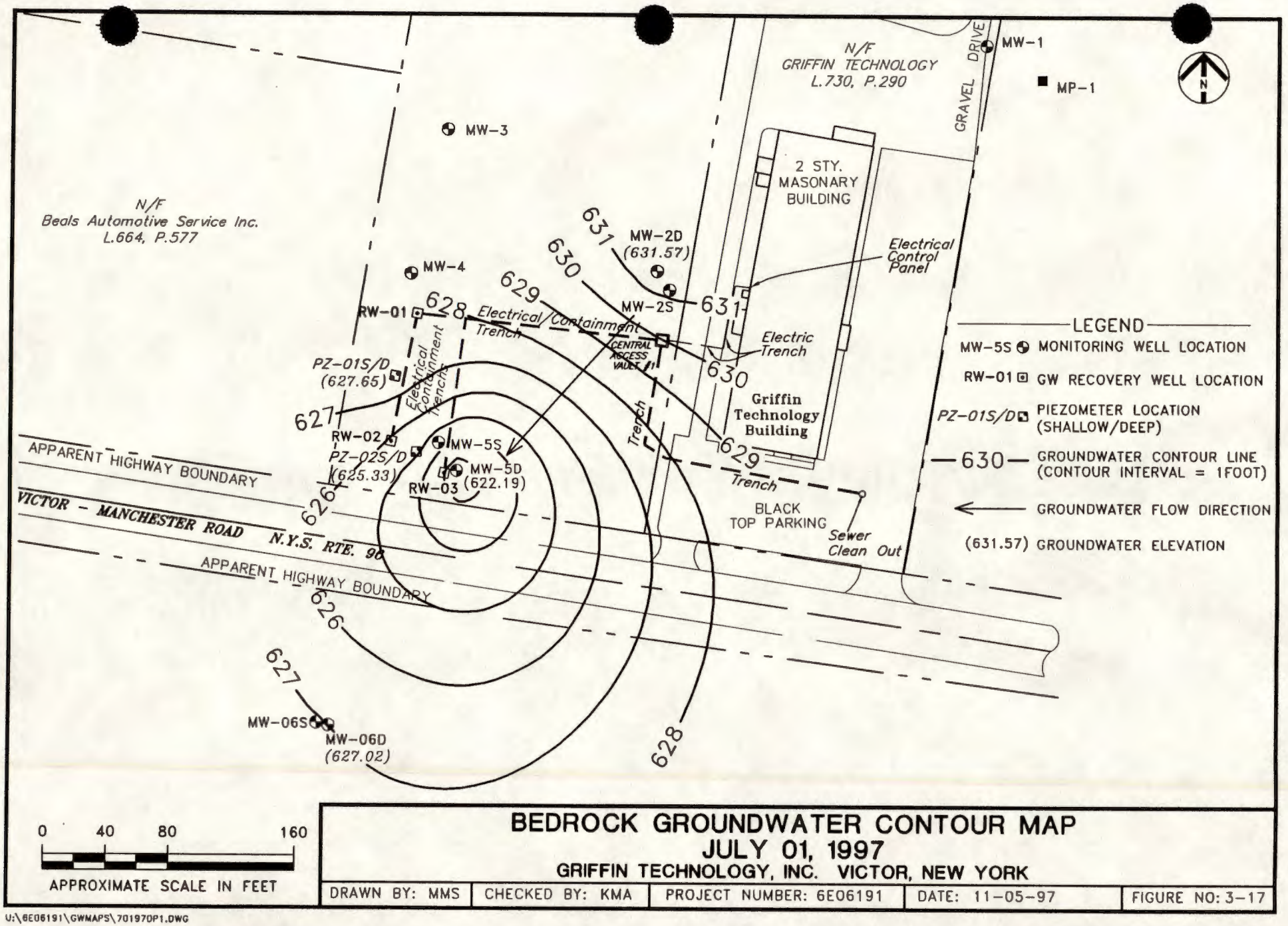


BEDROCK GROUNDWATER CONTOUR MAP
JUNE 13, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-16

U:\6E06191\GWMAPS\613970P.DWG

Woodward-Clyde

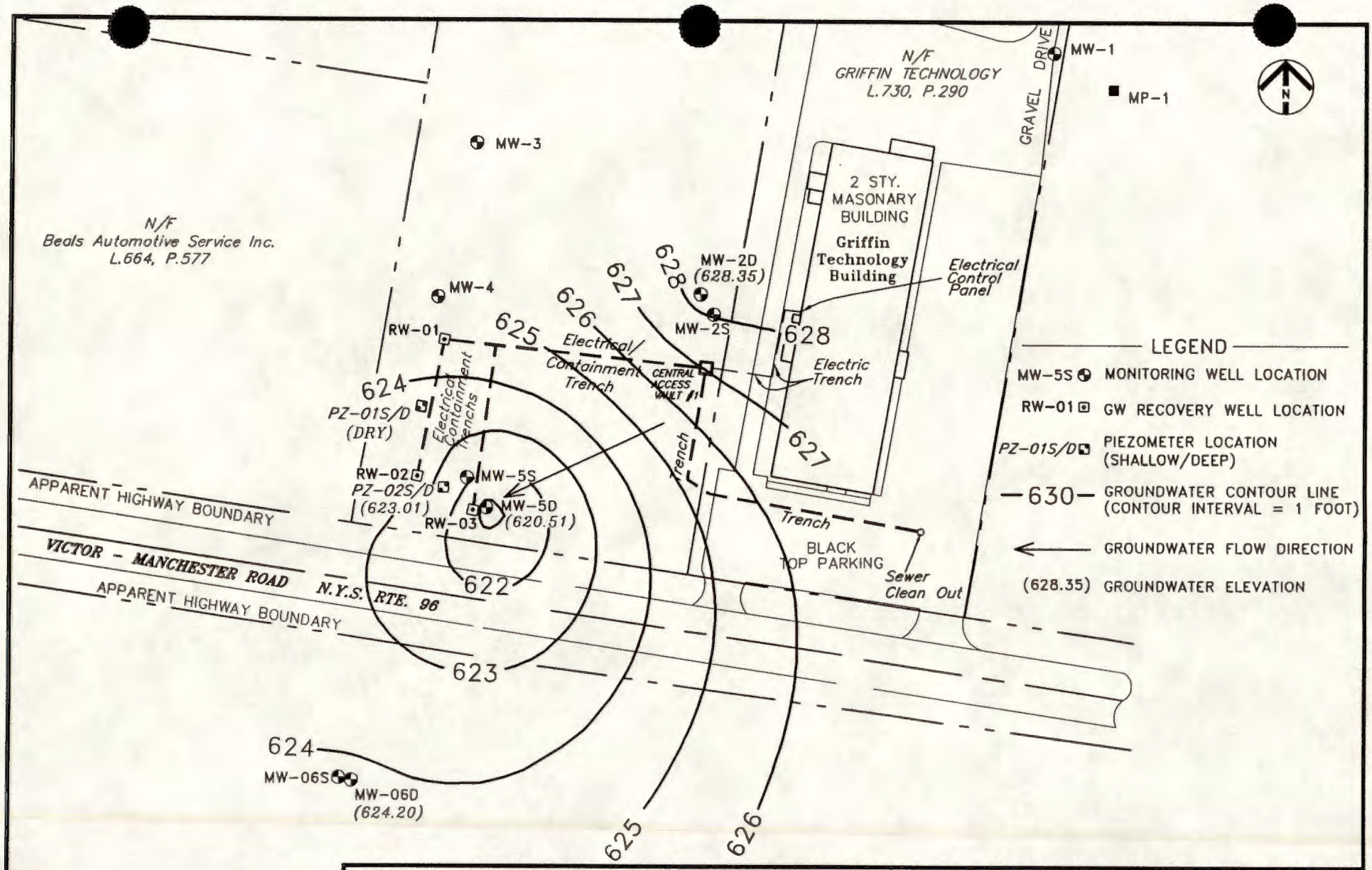


BEDROCK GROUNDWATER CONTOUR MAP
JULY 01, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-17

U:\6E06191\GWMAPS\701970P1.DWG

Woodward-Clyde

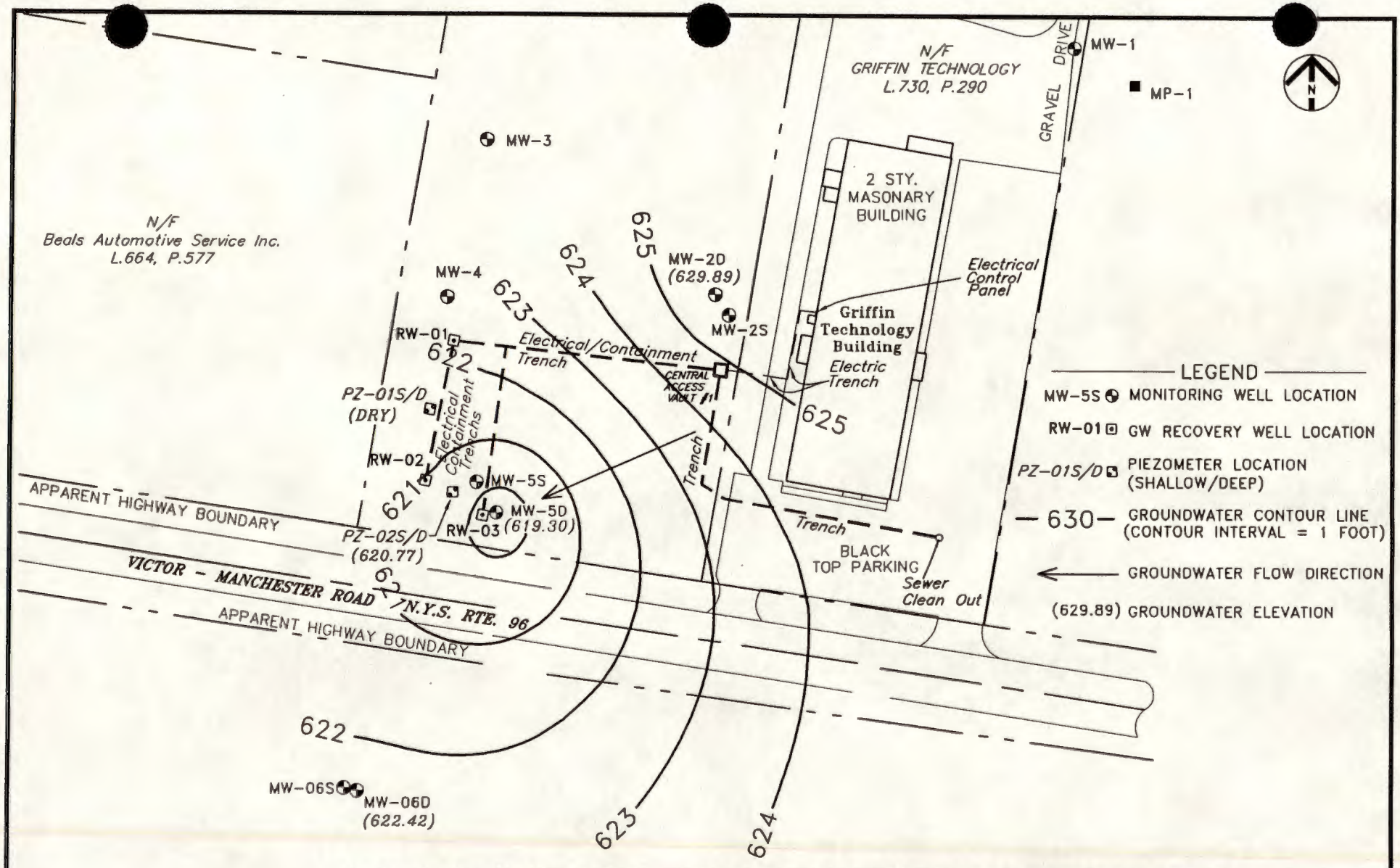


BEDROCK GROUNDWATER CONTOUR MAP
JULY 15, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-18

U:\6E06191\GWMAPS\715970P1.DWG

Woodward-Clyde

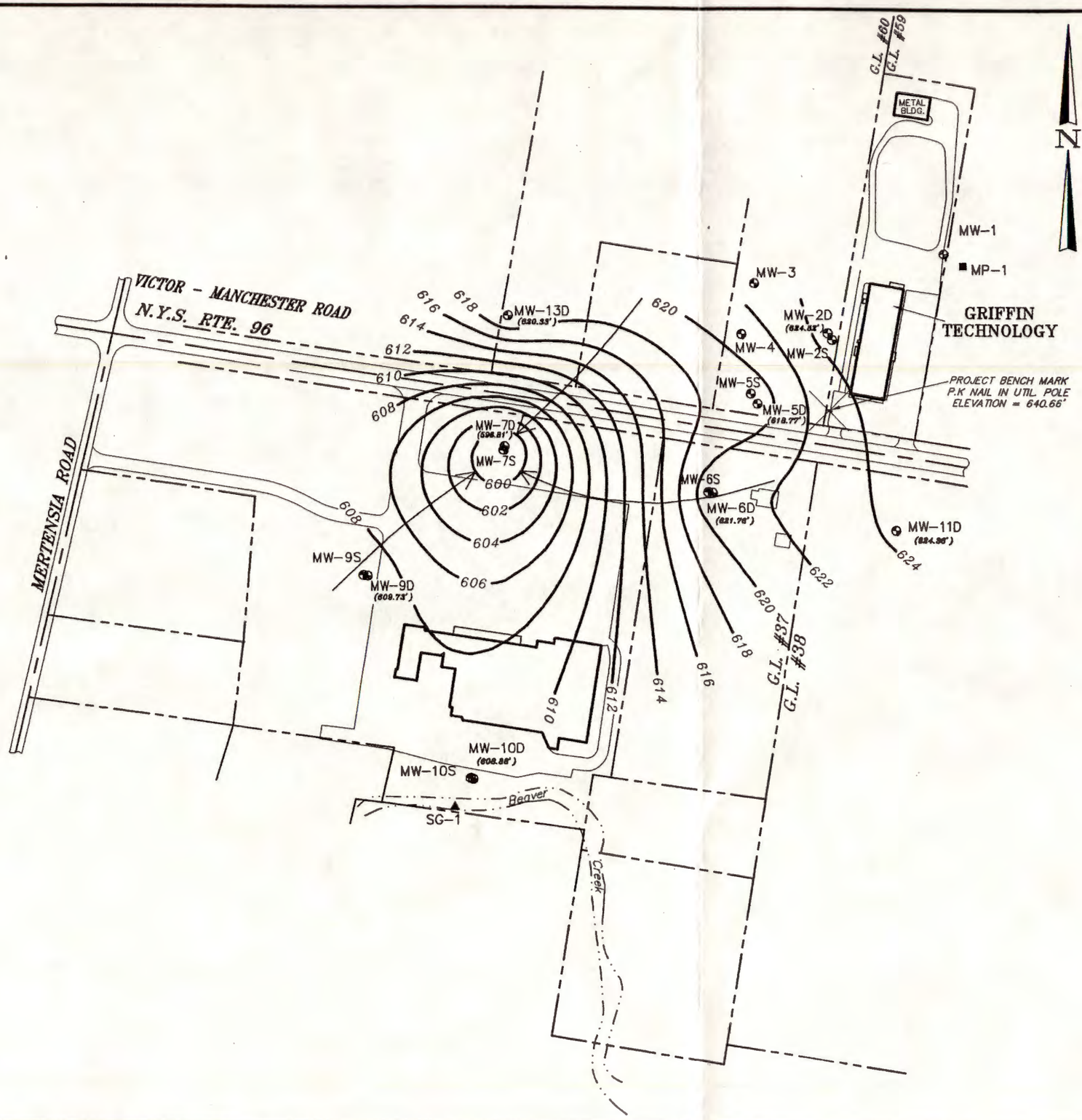


BEDROCK GROUNDWATER CONTOUR MAP
AUGUST 1, 1997
GRIFFIN TECHNOLOGY, INC. VICTOR, NEW YORK

DRAWN BY: MMS	CHECKED BY: KMA	PROJECT NUMBER: 6E06191	DATE: 11-05-97	FIGURE NO: 3-19

U:\6E06191\GWMAPS\801970P1.DWG

Woodward-Clyde



LEGEND

- MONITORING WELL
- STAFF GAUGE
- —632— GROUNDWATER CONTOUR (INTERVAL = 2 FEET)
- (636.02') GROUNDWATER ELEVATION 08-29-97
- ← 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.

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: DIEBOLD, INC.

LOCATION: FARMINGTON, ONTARIO COUNTY, NEW YORK

BEDROCK GROUNDWATER CONTOUR MAP AUGUST 29, 1997

DRAWN BY:	CHECKED BY:	PROJECT NO:	DATE:	FIGURE NO:
MMS	KMA	6E06191	11-14-97	3-20

U:\6E06191\GWMAPS\FIG3-20.DWG

Tables

TABLE 3-1
SUMMARY OF SOIL ANALYTICAL RESULTS
MONITORING WELL 2D
GRIFFIN TECHNOLOGY INC. - VICTOR, NEW YORK

INTERVAL (ft.)	TCE
0-2	ND
2-4	ND
4-6	ND
6-8	11
8-10	4
10-12	1

Notes:

1. Samples obtained during installation in 2 foot intervals.
2. No other compounds detected at method detection limits.
3. "ND" indicates not detected at method detection limit.
4. All results expressed in micrograms per kilogram (µg/kg).

TABLE 3-2
SUMMARY OF ANALYTICAL RESULTS
RECOVERY WELLS AND MW-2D (PRESTART-UP)
GRIFFIN TECHNOLOGY, INC. - VICTOR, NEW YORK

	Well Designation		
Parameter	**RW-01**	**RW-02**	**RW-03**
1,2-Dichloroethene	23	3	2
1,1,1-Trichloroethane	8	15	17
Trichloroethene	300	540	490
Xylenes	ND	ND	3

Notes

1. Water samples collected on January 8, 1997.
2. Samples analyzed by Columbia Analytical Services, Inc.
3. Samples analyzed using NYSDEC method ASP 91-1.
4. All results expressed in micrograms per liter (µg/l).
5. No other compounds detected at method detection limit.

TABLE 3-3
SUMMARY OF EFFLUENT DISCHARGES IN POTW
GRIFFIN TECHNOLOGY INC. - VICTOR, NEW YORK

MONTH	DISCHARGE (GAL.)	TCE	1,1,1-TCA	1,2-DCE	2-BUTANONE
February[2]	94,840	--	--	--	--
March	320,150	610	14.0	7.0	ND
April	362,132	240	5.8	6.0	ND
May	235,601	360	9.8	ND	ND
June	213,976	380	12.0	10.0	ND
July	135,320	570	16.0	15.0	ND
August	68,270	700	21.0	13.0	26

Notes:

1. February discharges occured for only 10 days.
2. Analytical results for March 1997 were used for February 1997 reporting.
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).

TABLE 3-4
SUMMARY OF MONITORING WELL 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
	8/13/97	ND	ND	ND	ND	ND
MW-02	12/19/94	850	ND	ND	50	ND
	5/21/96	30	ND	1	3	4
	8/13/97	NS	NS	NS	NS	NS
MW-2D	8/13/97	450	23	42	ND	ND
MW-03	12/19/94	190	ND	ND	ND	ND
	5/21/96	120	ND	2	ND	ND
	8/13/97	150	ND	2	ND	ND
MW-04	12/19/94	710	6.7	23	ND	ND
	5/21/96	16	ND	2	ND	ND
	8/13/97	NS	NS	NS	NS	NS
MW-05S	12/19/94	580	15	ND	ND	ND
	5/21/96	350	16	ND	ND	ND
	8/13/97	760	31	4	ND	ND
MW-05D	12/19/94	820	23	ND	ND	ND
	5/21/96	1000	48	8	8	ND
	8/13/97	250	7	2	ND	ND
MW-06S	12/19/94	270	7.8	ND	170	ND
	5/21/96	ND	2	ND	ND	9
	8/13/97	140	9	3	ND	ND
MW-06D	12/19/94	190	7.5	ND	ND	ND
	5/21/96	240	10	ND	ND	15
	8/13/97	150	10	2	ND	ND
MW-07S	12/19/94	250	6.6	8	ND	ND
	5/21/96	310	7	6	ND	13
	8/13/97	250	6	6	ND	ND

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. "NS" indicates no sample collected due to insufficient recovery of well.

TABLE 3-4
SUMMARY OF MONITORING WELL 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-07D	12/19/94	260	ND	7	14	ND
	5/21/96	290	4	12	ND	17
	8/13/97	180	2	13	ND	ND
MW-08D	12/19/94	55	ND	ND	ND	42
	5/21/96	NA	NA	NA	NA	NA
	8/13/97	NA	NA	NA	NA	NA
MW-08S	12/19/94	29	ND	ND	ND	ND
	5/21/96	NA	NA	NA	NA	NA
	8/13/97	NA	NA	NA	NA	NA
MW-09S	12/19/94	ND	ND	ND	ND	ND
	5/21/96	ND	ND	ND	6	3
	8/13/97	2	ND	ND	ND	ND
MW-09D	12/19/94	ND	ND	ND	ND	ND
	5/21/96	ND	ND	ND	ND	15
	8/13/97	ND	ND	ND	ND	ND
MW-10S	12/19/94	7.8	ND	ND	370	ND
	5/29/96	30	1	ND	3	ND
	8/13/97	15	ND	ND	ND	ND
MW-10D	12/19/94	8.2	ND	ND	ND	ND
	5/29/96	8	ND	ND	ND	ND
	8/13/97	15	ND	ND	ND	ND
MW-11D	4/11/96	ND	ND	ND	ND	ND
	5/21/96	ND	ND	ND	ND	6
	8/13/97	ND	ND	ND	ND	ND
MW-13D	4/11/96	610	5	4	ND	ND
	5/21/96	190	5	4	ND	8
	8/13/97	160	4	4	ND	ND

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. "NS" indicates no sample collected due to insufficient recovery of well.

TABLE 3-5
SUMMARY OF GROUNDWATER ELEVATIONS FEBRUARY-AUGUST 1997
GRIFFIN TECHNOLOGY FACILITY
VICTOR, NEW YORK

Well Designation	Baseline Water Elevation (ft) 2/14/97	Water Elevation (ft) 3/14/97	Water Elevation (ft) 4/15/97	Water Elevation (ft) 5/15/97	Water Elevation (ft) 6/3/97
MW-01	NM	NM	637.53	635.25	636.61
MW-2S	632.46	634.86	634.01	630.92	633.46
MW-2D	633.69	634.90	634.09	631.00	633.35
MW-03	632.60	636.28	635.28	629.56	632.71
MW-04	631.76	633.63	632.83	626.72	629.98
MW-5S	631.23	631.73	631.03	625.17	628.49
MW-5D	631.20	624.73	624.56	621.69	623.37
MW-06S	NM	NM	629.97	626.11	629.20
MW-06D	NM	NM	630.45	626.12	628.78
MW-11D	NM	NM	633.99	630.09	633.47
PZ-1S	630.99	630.18	632.68	DRY	DRY
PZ-1D	631.33	629.50	632.70	626.27	629.97
PZ-2S	631.31	633.68	629.59	624.49	627.22
PZ-2D	631.26	633.74	629.42	624.31	627.01

NOTES:
1. Water levels collected on dates shown.
2. "NM" indicates water elevation not measured on date shown.
3. "DRY" indicates no water present in well at time of measurement.

TABLE 3-5
SUMMARY OF GROUNDWATER ELEVATIONS FEBRUARY-AUGUST 1997
GRIFFIN TECHNOLOGY FACILITY
VICTOR, NEW YORK

Well Designation	Water Elevation (ft) 6/13/97	Water Elevation (ft) 7/01/97	Water Elevation (ft) 7/15/97	Water Elevation (ft) 8/01/97	Water Elevation (ft) 08/29/97
MW-01	635.81	634.66	631.84	629.31	628.18
MW-2S	632.42	631.50	628.17	625.67	625.36
MW-2D	632.27	631.57	628.35	625.89	624.82
MW-03	631.28	631.10	627.88	625.81	624.85
MW-04	628.43	628.05	624.93	622.64	622.25
MW-5S	626.72	626.25	623.58	621.79	620.99
MW-5D	622.71	622.19	620.51	619.30	618.77
MW-06S	628.21	626.89	624.13	622.41	621.74
MW-06D	627.18	627.02	624.20	622.42	621.76
MW-11D	631.76	630.28	627.58	625.36	624.36
PZ-1S	DRY	DRY	DRY	DRY	DRY
PZ-1D	628.08	627.65	DRY	DRY	DRY
PZ-2S	625.90	625.46	623.11	DRY	DRY
PZ-2D	625.66	625.33	623.01	620.77	619.99

NOTES:
1. Water levels collected on dates shown.
2. "NM" indicates water elevation not measured on date shown.
3. "DRY" indicates no water present in well at time of measurement.

TABLE 3-6
SUMMARY OF GROUNDWATER ELEVATION DATA
GRIFFIN TECHNOLOGY, INC. - VICTOR, NEW YORK

Well Number	Top of Casing (ft)	Date[1]	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
		8/13/97	13.61	628.18
MW-02S	641.28	12/19/94	7.50	633.78
		5/24/96	3.60	637.68
		5/29/96	4.47	636.81
		8/13/97	15.92	625.36
MW-02D	642.37	8/13/97	17.55	624.82
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
		8/13/97	17.32	624.85
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
		8/13/97	19.50	622.25
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
		8/13/97	19.86	620.99
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
		8/13/97	22.24	618.77

NOTES
"1" - 12/19/94 measurements collected by Blasland, Bouck & Lee.
NA - Data not available. Wells were abandoned or not installed at time of measurement.

TABLE 3-6
SUMMARY OF GROUNDWATER ELEVATION DATA
GRIFFIN TECHNOLOGY, INC. - VICTOR, NEW YORK

Well Number	Top of Casing (ft)	Date[1]	Depth to Groundwater (ft)	Groundwater Elevation (ft)
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
		8/13/97	14.87	621.74
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
		8/13/97	15.07	621.76
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
		8/13/97	14.70	619.59
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
		8/13/97	37.35	596.81
MW-08S	633.64	12/19/94	11.39	622.25
		5/24/96	NA	NA
		5/29/96	NA	NA
		8/13/97	NA	NA
MW-08D	633.91	12/19/94	13.16	620.75
		5/24/96	NA	NA
		5/29/96	NA	NA
		8/13/97	NA	NA

NOTES
"1" - 12/19/94 measurements collected by Blasland, Bouck & Lee.
NA - Data not available. Wells were abandoned or not installed at time of measurement.

TABLE 3-6
SUMMARY OF GROUNDWATER ELEVATION DATA
GRIFFIN TECHNOLOGY, INC. - VICTOR, NEW YORK

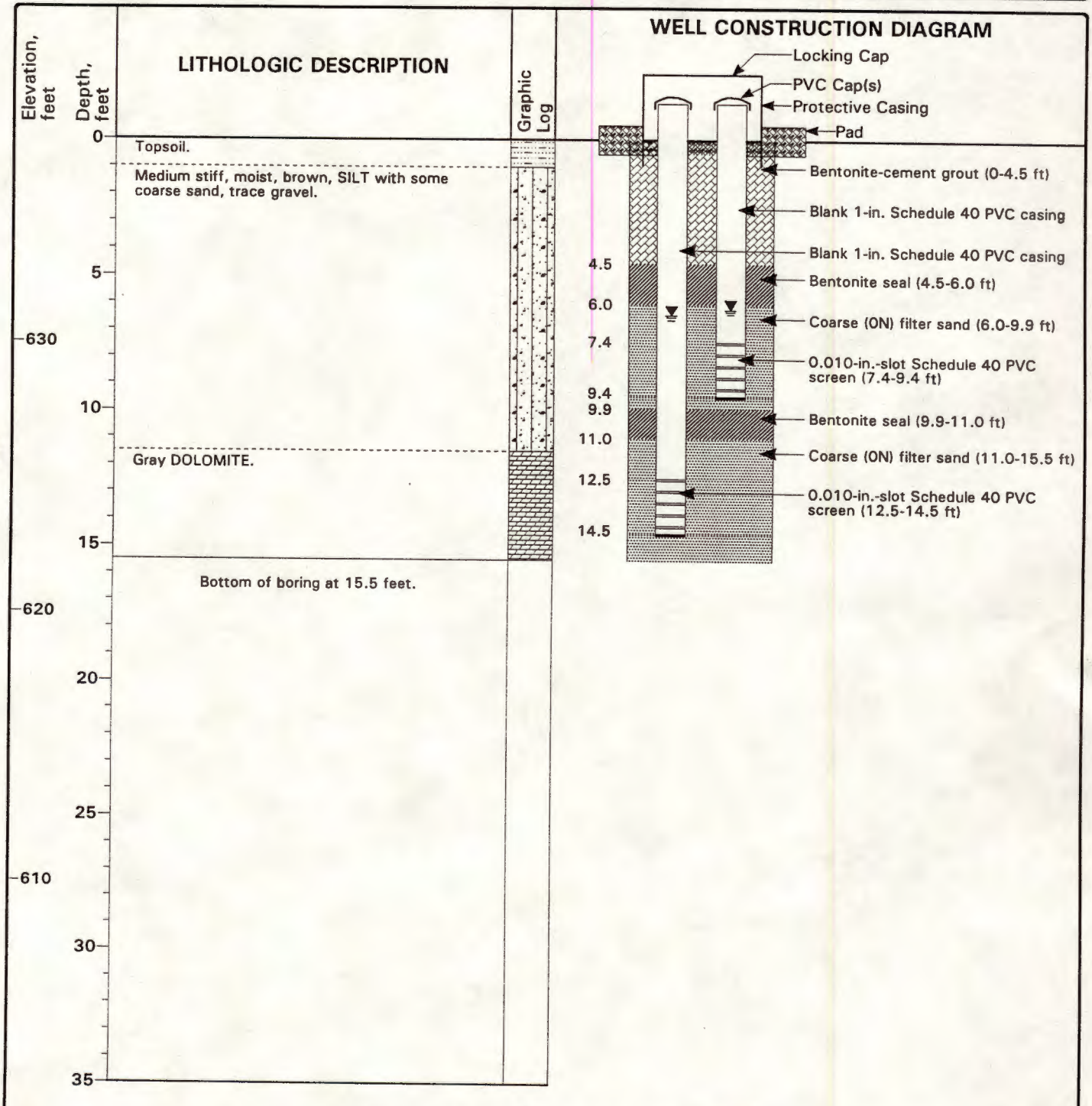
Well Number	Top of Casing (ft)	Date[1]	Depth to Groundwater (ft)	Groundwater Elevation (ft)
MW-09S	630.16	12/19/94	11.56	618.60
		5/24/96	9.17	620.99
		5/29/96	10.24	619.92
		8/13/97	14.69	615.47
MW-09D	630.29	12/19/94	12.71	617.58
		5/24/96	17.02	613.27
		5/29/96	14.78	615.51
		8/13/97	20.56	609.73
MW-10S	629.00	12/19/94	14.87	614.13
		5/24/96	NA	NA
		5/29/96	15.26	613.74
		8/13/97	16.62	612.38
MW-10D	626.80	12/19/94	16.82	609.98
		5/24/96	NA	NA
		5/29/96	4.78	622.02
		8/13/97	17.92	608.88
MW-11D	641.89	12/19/94	NA	
		5/24/96	7.10	634.79
		5/29/96	8.71	633.18
		8/13/97	17.53	624.36
MW-13D	636.58	12/19/94	NA	
		5/24/96	3.45	633.13
		5/29/96	4.78	631.80
		8/13/97	16.25	620.33

NOTES
"1" - 12/19/94 measurements collected by Blasland, Bouck & Lee.
NA - Data not available. Wells were abandoned or not installed at time of measurement.

Appendix A

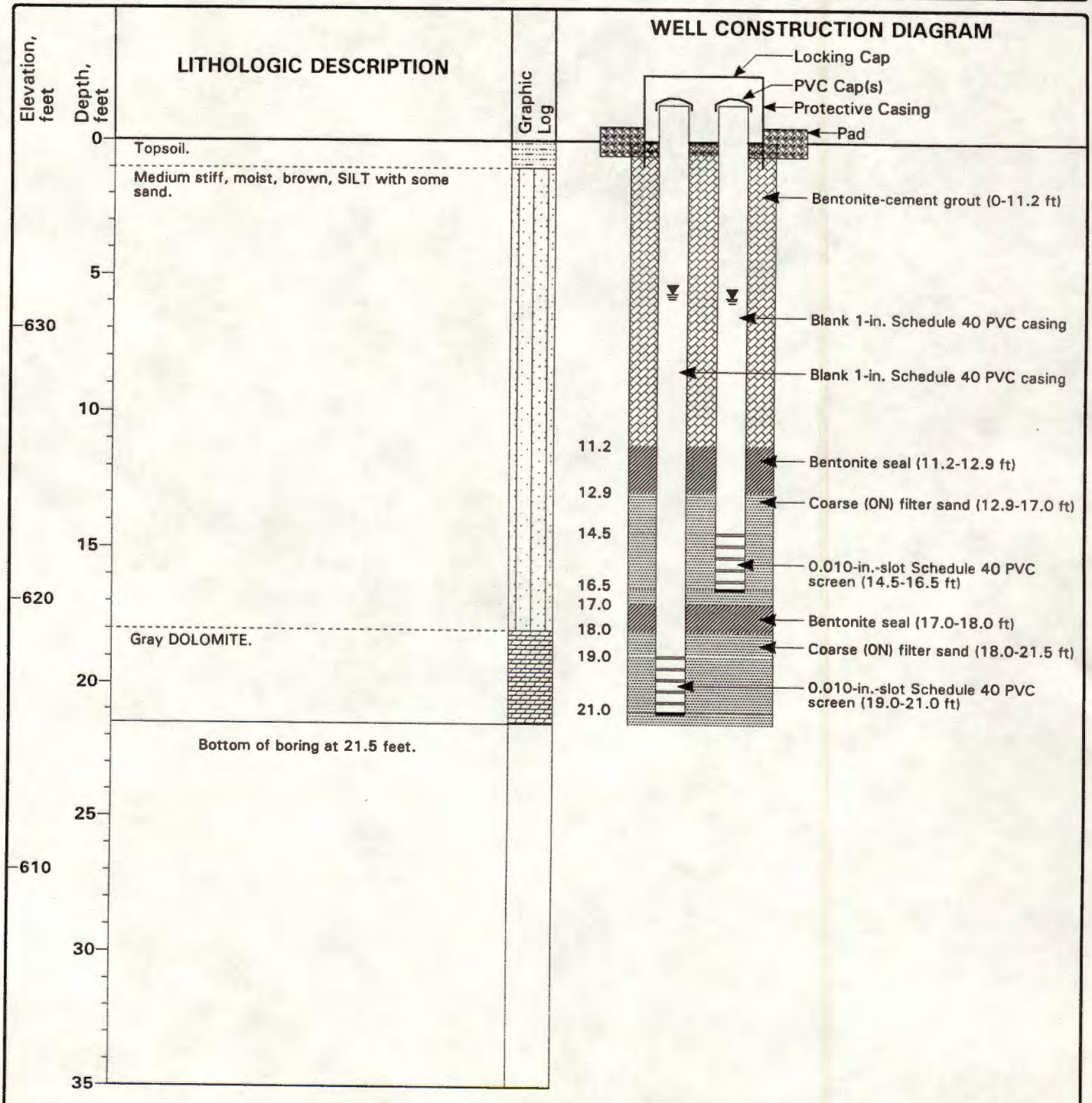
Project: Griffin IRM Project Location: Town of Farmington, New York Project Number: 6E06191	PIEZOMETER CONSTRUCTION DATA FOR PZ-01S/D Sheet 1 of 1

Date(s) Drilled	12/30/96	Date Well Completed	12/30/96	Total Depth Drilled (ft BGL)	15.5
Drilling Method	Hollow-Stem Auger/Air Rotary	Drilling Contractor	Nothnagle (K. Busch)	Approx. Surface Elevation (ft MSL)	637.5
Drill Rig	BK-81	Drill Bit Size/Type	4-1/4-inch-ID HSA; 7-7/8-inch roller bit	Top of Casing Elevation (ft MSL)	640.50 (S), 640.67 (D)
Water Level and Date Measured	9.19 (S), 9.41 (D) feet BTOC on 2/14/97			Sample Type(s)	No sampling performed
Location	See site plan	Logged By	R. Fabian	Checked By	K. Armstrong



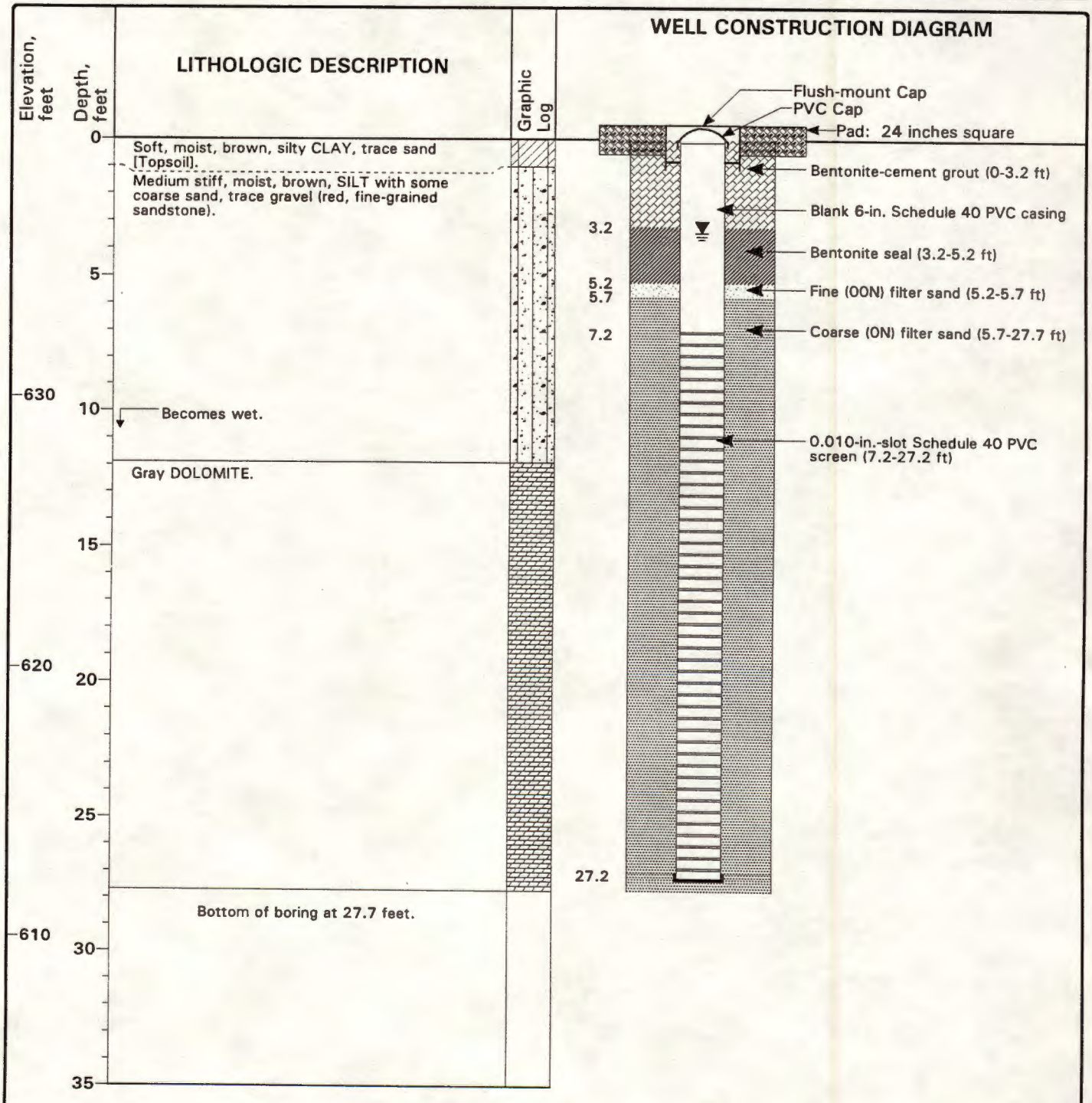
Project: Griffin IRM Project Location: Town of Farmington, New York Project Number: 6E06191	PIEZOMETER CONSTRUCTION DATA FOR PZ-02S/D Sheet 1 of 1

Date(s) Drilled 12/30/96	Date Well Completed 12/30/96	Total Depth Drilled (ft BGL) 21.5
Drilling Method Hollow-Stem Auger/Air Rotary	Drilling Contractor Nothnagle (K. Busch)	Approx. Surface Elevation (ft MSL) 637.0
Drill Rig BK-81	Drill Bit Size/Type 4-1/4-inch-ID HSA; 7-7/8-inch roller bit	Top of Casing Elevation (ft MSL) 639.81 (S), 640.01 (D)
Water Level and Date Measured 8.82 (S), 8.68 (D) feet BTOC on 2/14/97		Sample Type(s) No sampling performed
Location See site plan	Logged By R. Fabian	Checked By K. Armstrong



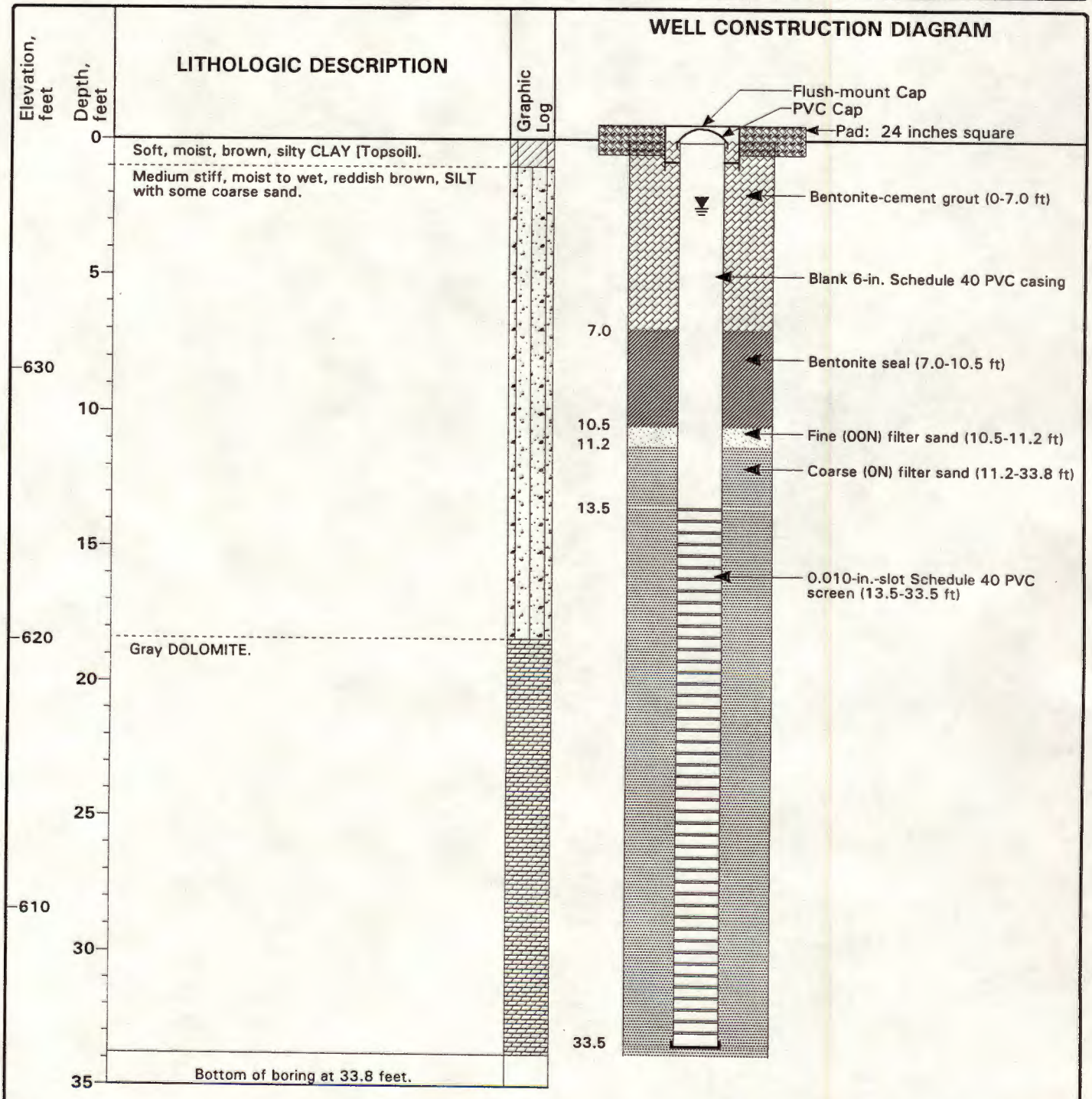
Project: Griffin IRM Project Location: Town of Farmington, New York Project Number: 6E06191	MONITOR WELL CONSTRUCTION DATA FOR RW-01 Sheet 1 of 1

Date(s) Drilled	12/20/96	Date Well Completed	12/23/96	Total Depth Drilled (ft BGL)	27.7
Drilling Method	Hollow-Stem Auger/Air Rotary	Drilling Contractor	Nothnagle (K. Busch)	Approx. Surface Elevation (ft MSL)	639.5
Drill Rig	BK-81	Drill Bit Size/Type	4-1/4-inch-ID HSA; 7-7/8-inch roller bit	Top of Casing Elevation (ft MSL)	638.90
Water Level and Date Measured	2.8 feet BTOC on 1/8/97			Sample Type(s)	No sampling performed
Location	See site plan	Logged By	K. Schreckengost	Checked By	K. Armstrong



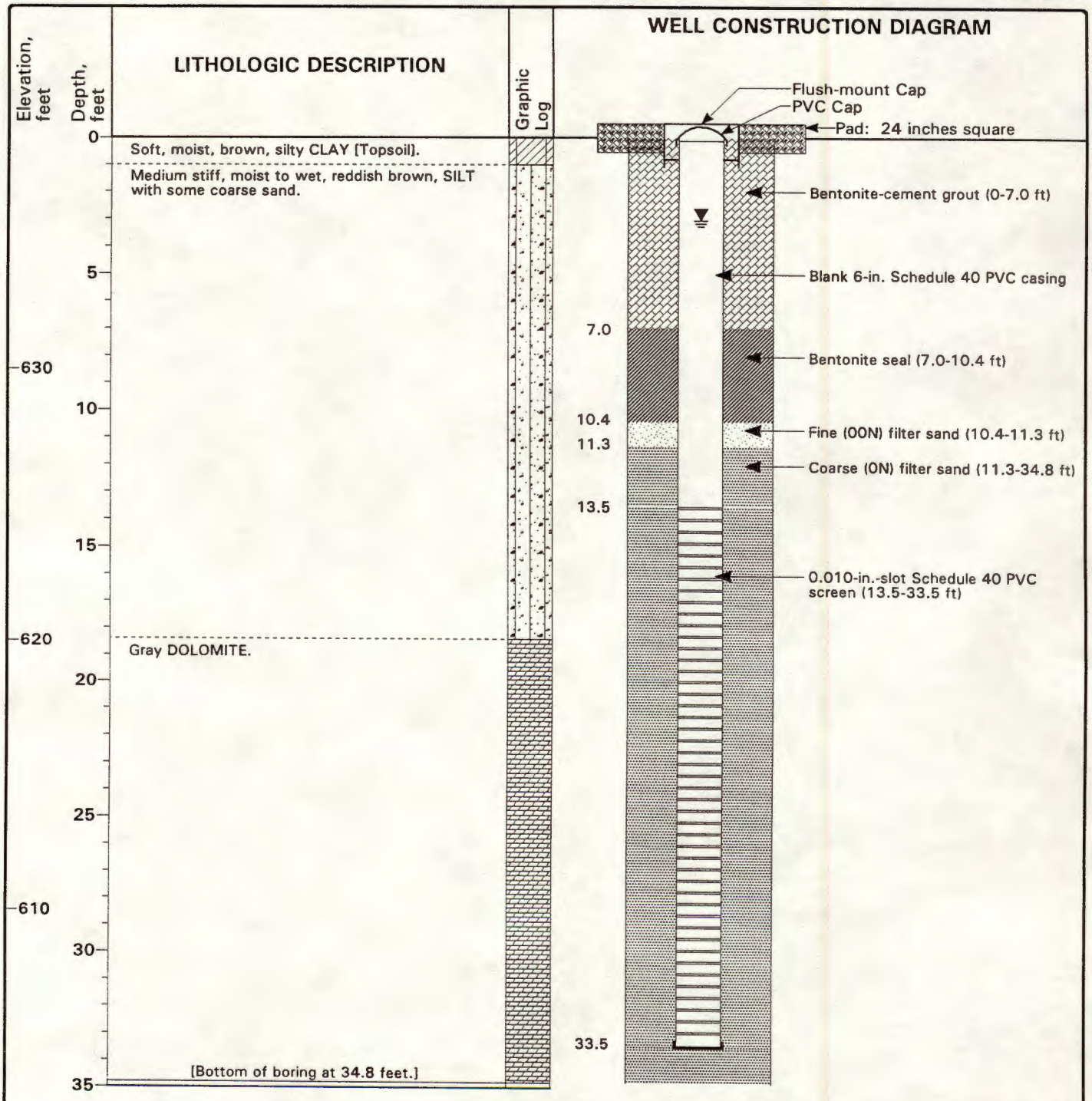
Project: Griffin IRM Project Location: Town of Farmington, New York Project Number: 6E06191	MONITOR WELL CONSTRUCTION DATA FOR RW-02 Sheet 1 of 1

Date(s) Drilled	12/18/96	Date Well Completed	12/18/96	Total Depth Drilled (ft BGL)	33.8
Drilling Method	Hollow-Stem Auger/Air Rotary	Drilling Contractor	Nothnagle (K. Busch)	Approx. Surface Elevation (ft MSL)	638.5
Drill Rig	BK-81	Drill Bit Size/Type	4-1/4-inch-ID HSA; 7-7/8-inch roller bit	Top of Casing Elevation (ft MSL)	637.85
Water Level and Date Measured	1.85 feet BTOC on 1/8/97			Sample Type(s)	No sampling performed
Location	See site plan	Logged By	K. Schreckengost	Checked By	K. Armstrong



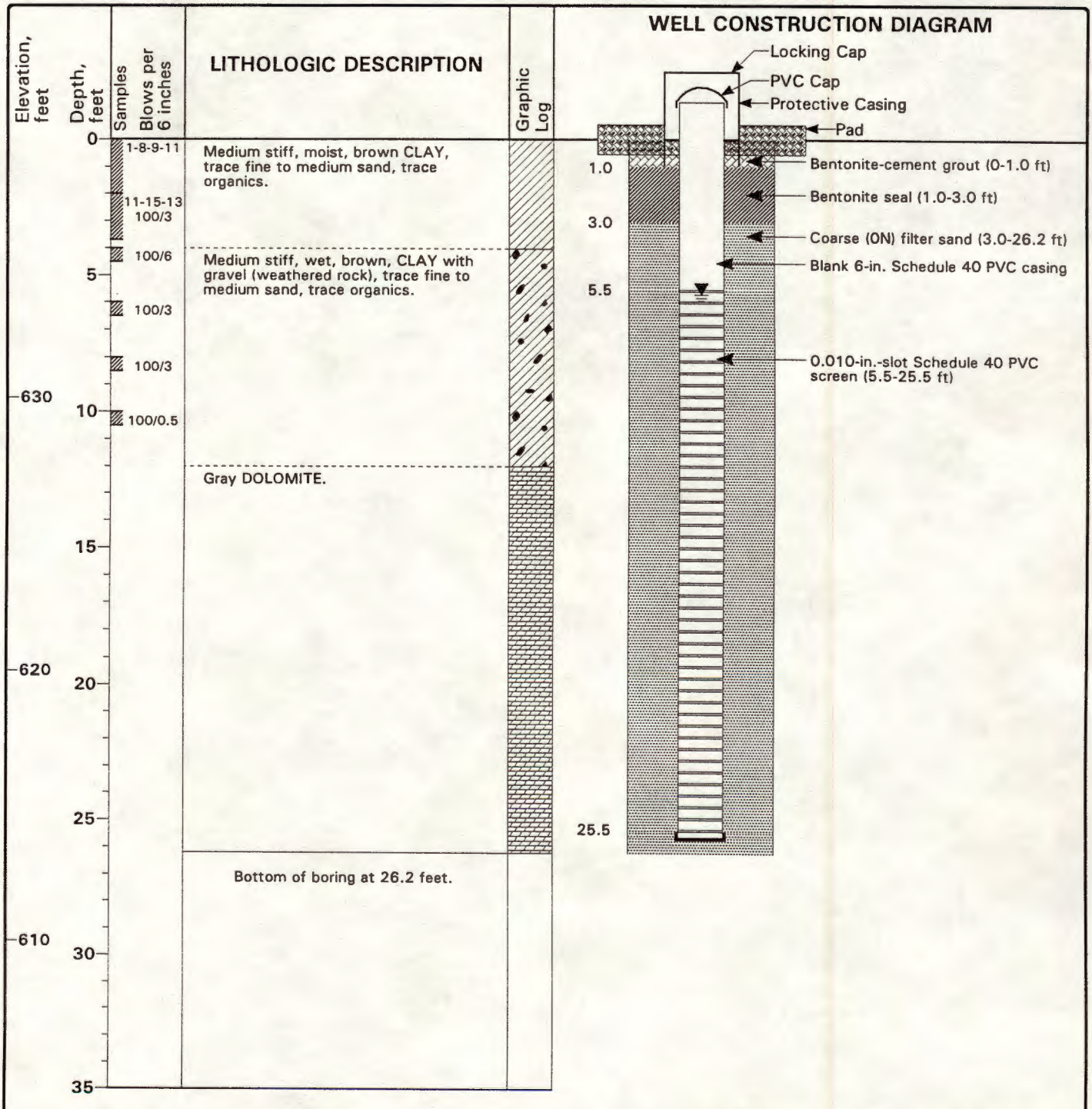
Project: Griffin IRM Project Location: Town of Farmington, New York Project Number: 6E06191	MONITOR WELL CONSTRUCTION DATA FOR RW-03 Sheet 1 of 1

Date(s) Drilled	12/16/96	Date Well Completed	12/17/96	Total Depth Drilled (ft BGL)	34.8
Drilling Method	Hollow-Stem Auger/Air Rotary	Drilling Contractor	Nothnagle (K. Busch)	Approx. Surface Elevation (ft MSL)	638.5
Drill Rig	BK-81	Drill Bit Size/Type	4-1/4-inch-ID HSA; 7-7/8-inch roller bit	Top of Casing Elevation (ft MSL)	637.90
Water Level and Date Measured	2.45 feet BTOC on 1/8/97			Sample Type(s)	No sampling performed
Location	See site plan	Logged By	K. Schreckengost	Checked By	K. Armstrong



Project: Griffin IRM Project Location: Town of Farmington, New York Project Number: 6E06191	MONITOR WELL CONSTRUCTION DATA FOR MW-2D Sheet 1 of 1

Date(s) Drilled	12/27/96	Date Well Completed	12/27/96	Total Depth Drilled (ft BGL)	26.2
Drilling Method	Hollow-Stem Auger/Air Rotary	Drilling Contractor	Nothnagle (K. Busch)	Approx. Surface Elevation (ft MSL)	639.5
Drill Rig	BK-81	Drill Bit Size/Type	4-1/4-inch-ID HSA; 7-7/8-inch roller bit	Top of Casing Elevation (ft MSL)	642.37
Water Level and Date Measured	8.68 feet BTOC on 2/14/97			Sample Type(s)	2-inch-ID split spoon
Location	See site plan	Logged By	R. Fabian	Checked By	K. Armstrong



Appendix B

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(800) 695-7222

DATE 12-27-96 PAGE 1 OF 1

PROJECT NAME Griffin

PROJECT MANAGER/CONTACT Ken Hunsberger

COMPANY/ADDRESS 30775 Euclid N. #200
Solon, Ohio 44139

TEL (216) 349-2103 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)	TPH 8015 Mod.							PRESERVATION pH < 2.0	pH > 12	Other
MW-2D (0-2')	12-27-96	01:00		Soil	1											X									
MW-2D (2-4')		01:05			1											X									
MW-2D (4-6')		01:22			1											X									
MW-2D (6-8')		01:40			1											X									
MW-2D (8-10')		01:55			1											X									
MW-2D (10-12')		10:15			1											X									
Trip-1				Water	2											X									
FB-1		12:50			2											X									

RELINQUISHED BY:
Signature: Robert T. Fabian
Printed Name: Robert T. Fabian
Firm: Woodward-Clyde
Date/Time: 12-27-96 16:25

RECEIVED BY:
Signature: Tom Hadenyi
Printed Name: Tom Hadenyi
Firm: CAS
Date/Time: 12/27/96 16:25

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
X 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:
Shipping #:
Temperature:
Submission No:

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

435 LAWRENCE BELL DR.
AMHERST, NY 14221
716-634-0454
FAX 716-634-9019

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW202

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: GRIFFIN SAS No.: SDG No.: MW202

Matrix: (soil/water) SOIL Lab Sample ID: 123252 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: AQ076.D

Level: (low/med) LOW Date Received: 12/27/96

% Moisture: not dec. 20.9 Date Analyzed: 01/03/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
75-01-4	Vinyl chloride	13	U
75-00-3	Chloroethane	13	U
74-83-9	Bromomethane	13	U
67-64-1	Acetone	13	U
75-35-4	1,1-Dichloroethene	13	U
75-09-2	Methylene chloride	13	U
75-15-0	Carbon disulfide	13	U
75-34-3	1,1-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon tetrachloride	13	U
71-43-2	Benzene	13	U
79-01-6	Trichloroethene	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
124-48-1	Dibromochloromethane	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
1330-20-7	Xylenes (total)	13	U
100-42-5	Styrene	13	U
108-88-3	1,1,2,2-Tetrachloroethane	13	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2D24

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: GRIFFIN SAS No.: SDG No.: MW202

Matrix: (soil/water) SOIL Lab Sample ID: 123253 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: AQ077.D

Level: (low/med) LOW Date Received: 12/27/96

% Moisture: not dec. 18.2 Date Analyzed: 01/03/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	12	U
75-35-4	1,1-Dichloroethene	12	U
75-09-2	Methylene chloride	12	U
75-15-0	Carbon disulfide	12	U
75-34-3	1,1-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	12	U
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylenes (total)	12	U
100-42-5	Styrene	12	U
108-88-3	1,1,2,2-Tetrachloroethane	12	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2D46

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: GRIFFIN SAS No.: SDG No.: MW202

Matrix: (soil/water) SOIL Lab Sample ID: 123254 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: AQ078.D

Level: (low/med) LOW Date Received: 12/27/96

% Moisture: not dec. 20.9 Date Analyzed: 01/03/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	13	U
75-01-4	Vinyl chloride	13	U
75-00-3	Chloroethane	13	U
74-83-9	Bromomethane	13	U
67-64-1	Acetone	13	U
75-35-4	1,1-Dichloroethene	13	U
75-09-2	Methylene chloride	13	U
75-15-0	Carbon disulfide	13	U
75-34-3	1,1-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon tetrachloride	13	U
71-43-2	Benzene	13	U
79-01-6	Trichloroethene	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
124-48-1	Dibromochloromethane	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
1330-20-7	Xylenes (total)	13	U
100-42-5	Styrene	13	U
108-88-3	1,1,2,2-Tetrachloroethane	13	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWDD68

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: GRIFFIN SAS No.: SDG No.: MW202

Matrix: (soil/water) SOIL Lab Sample ID: 123255 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: AQ079.D

Level: (low/med) LOW Date Received: 12/27/96

% Moisture: not dec. 15.6 Date Analyzed: 01/03/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	12	U
75-35-4	1,1-Dichloroethene	12	U
75-09-2	Methylene chloride	12	U
75-15-0	Carbon disulfide	12	U
75-34-3	1,1-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	11	J
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylenes (total)	12	U
100-42-5	Styrene	12	U
108-88-3	1,1,2,2-Tetrachloroethane	12	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2810

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: GRIFFIN SAS No.: SDG No.: MW202

Matrix: (soil/water) SOIL Lab Sample ID: 123256 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: AQ080.D

Level: (low/med) LOW Date Received: 12/27/96

% Moisture: not dec. 12.6 Date Analyzed: 01/03/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
75-01-4	Vinyl chloride	11	U
75-00-3	Chloroethane	11	U
74-83-9	Bromomethane	11	U
67-64-1	Acetone	11	U
75-35-4	1,1-Dichloroethene	11	U
75-09-2	Methylene chloride	11	U
75-15-0	Carbon disulfide	11	U
75-34-3	1,1-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon tetrachloride	11	U
71-43-2	Benzene	11	U
79-01-6	Trichloroethene	4	J
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
124-48-1	Dibromochloromethane	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-pentanone	11	U
108-88-3	Toluene	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylenes (total)	11	U
100-42-5	Styrene	11	U
108-88-3	1,1,2,2-Tetrachloroethane	11	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW1012

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: GRIFFIN SAS No.: SDG No.: MW202

Matrix: (soil/water) SOIL Lab Sample ID: 123257 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: AQ081.D

Level: (low/med) LOW Date Received: 12/27/96

% Moisture: not dec. 9.3 Date Analyzed: 01/03/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
75-01-4	Vinyl chloride	11	U
75-00-3	Chloroethane	11	U
74-83-9	Bromomethane	11	U
67-64-1	Acetone	11	U
75-35-4	1,1-Dichloroethene	11	U
75-09-2	Methylene chloride	11	U
75-15-0	Carbon disulfide	11	U
75-34-3	1,1-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon tetrachloride	11	U
71-43-2	Benzene	11	U
79-01-6	Trichloroethene	1	J
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
124-48-1	Dibromochloromethane	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-pentanone	11	U
108-88-3	Toluene	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylenes (total)	11	U
100-42-5	Styrene	11	U
108-88-3	1,1,2,2-Tetrachloroethane	11	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP1

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: GRIFFIN SAS No.: SDG No.: MW202

Matrix: (soil/water) WATER Lab Sample ID: 123258 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: R2191.D

Level: (low/med) LOW Date Received: 12/27/96

% Moisture: not dec. Date Analyzed: 01/02/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP1

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: GRIFFIN SAS No.: SDG No.: MW202

Matrix: (soil/water) WATER Lab Sample ID: 123258 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: R2191.D

Level: (low/med) LOW Date Received: 12/27/96

% Moisture: not dec. Date Analyzed: 01/02/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB1

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: GRIFFIN SAS No.: SDG No.: MW202

Matrix: (soil/water) WATER Lab Sample ID: 123259 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: R2192.D

Level: (low/med) LOW Date Received: 12/27/96

% Moisture: not dec. Date Analyzed: 01/02/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	1	J
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

Appendix C

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

CHAIN [redacted] CUSTODY/LABORATORY ANALYSIS REQU[redacted]T FORM

(800) 695-7222

DATE 3-1-97 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-3-1-97	3-1-97	10:17	T3694 132866 BB 3/3	WATER	3											X									

RELINQUISHED BY:
Signature Bob Fabian
Printed Name Bob Fabian
Firm Woodward-Clyde
Date/Time 3-1-97

RECEIVED BY:
Signature V Gardner / B Bowe
Printed Name V Gardner
Firm AS
Date/Time 3-1-97 @ 1100

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: NA
Submission No: 97-3-6

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
435 LAWRENCE BELL DR., AMHERST, NY 14221 — 716-634-0454, FAX 716-634-9019

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 S' 'ICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 03/19/97

Woodward Clyde Consultants
Project Reference: GRIFFIN IRM
Client Sample ID : EFF-3-1-97

Date Sampled : 03/01/97 **Order #:** 132866 **Sample Matrix:** WATER
Date Received: 03/01/97 **Submission #:** 9703000006 **Analytical Run** 15657

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/11/97			
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
,2-DICHLOROETHANE	5.0	5.0 U	UG/L
,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	6.5	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	14	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	610	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 %)	109	%
TOLUENE-D8	(88 - 110 %)	101	%
BROMOFLUOROMETHANE	(86 - 118 %)	98	%

COLUMBIA ANALYTICAL S VICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 03/19/97

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 135501 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 15657

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/11/97			
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-DICHLOROETHENE	5.0	5.0 U	UG/L
IS-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 %)	101	%
TOLUENE-D8	(88 - 110 %)	100	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	98	%

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(8[redacted]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

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-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

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	%
BROMOFLUOROMETHANE	(86 - 118 %)	101	%

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.
[redacted]xchange Street, Rochester, New York 14608
(716) 454-6810 • FAX (716) 454-6825

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(800) [redacted]95-7222

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

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

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

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: 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

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 04/28/97			
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	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

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 04/28/97			
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 %)	91	%
TOLUENE-D8	(88 - 110 %)	94	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	99	%

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(800) 695-7222

DATE 5-15-97 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

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-5-15-97	5-15-97	1145	148240	WATER	2											X									

RELINQUISHED BY:
Signature: Bob Fabian
Printed Name: Bob Fabian
Firm: WOODWARD-CLYDE
Date/Time: 5-15-97 13:22

RECEIVED BY:
Signature: Tom Hastings
Printed Name: Tom Hastings
Firm: CAS
Date/Time: 5/15/97 13:22

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: NA
Submission No: 97-5-215

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: 06/05/97

Woodward Clyde Consultants
Project Reference: GRIFFIN IRM
Client Sample ID : EFF-5-15-97

Date Sampled : 05/15/97 **Order #:** 148240 **Sample Matrix:** WATER
Date Received: 05/15/97 **Submission #:** 9705000215 **Analytical Run** 17655

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/28/97			
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
,2-DICHLOROETHANE	5.0	5.0 U	UG/L
,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	9.8	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	360	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 %)	97	%
TOLUENE-D8	(88 - 110 %)	93	%
BROMOFLUOROMETHANE	(86 - 118 %)	87	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 06/05/97

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 151554 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 17655

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/28/97			
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 %)	103	%
TOLUENE-D8	(88 - 110 %)	109	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	108	%

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(80[redacted] 695-7222

DATE _____ PAGE _____ OF _____

PROJECT NAME Griffin IRM (WCC)
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

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 (2297)							PRESERVATION pH < 2.0	PRESERVATION pH > 12	PRESERVATION Other
EFF-6-13-97	6-13-97	12:46	153127	WATER	2											X									
Comp-6-13-97	6-13-97	13:50	153128	SOIL	2																				

RELINQUISHED BY:
Signature Bob Fabian
Printed Name Bob Fabian
Firm Woodward-Clyde
Date/Time 6-13-97 @ 1500

RECEIVED BY:
Signature V Gardnee
Printed Name V Gardnee
Firm CAS
Date/Time 6-13-97 @ 1500

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: 5.0°c
Submission No: 6-221

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 SER' :ES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 06/30/97

Woodward Clyde Consultants
Project Reference: GRIFFIN IRM
Client Sample ID : EFF-6-13-97

Date Sampled : 06/13/97 **Order #:** 153127 **Sample Matrix:** WATER
Date Received: 06/13/97 **Submission #:** 9706000221 **Analytical Run** 18112

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/20/97			
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
2-DICHLOROETHANE	5.0	5.0 U	UG/L
,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	10	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	12	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	380	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 %)	111	%
TOLUENE-D8	(88 - 110 %)	100	%
BROMOFLUOROMETHANE	(86 - 118 %)	99	%

COLUMBIA ANALYTICAL SER ES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 06/30/97

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 154677 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 18112

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/20/97			
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 %)	110	%
TOLUENE-D8	(88 - 110 %)	93	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	107	%

COLUMBIA ANALYTICAL SERVICES, INC.
1 Mustang Drive, Suite 250, P.O. Box 90859, Rochester, NY 14609-0859
(716) 288-5380 • FAX (716) 288-8475
(800) 695-7222

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

DATE 7-15-97 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-7-15-97	7-15-97	13:12	157581	WATER	2											X									

RELINQUISHED BY:
Signature Bob Fabian
Printed Name Bob Fabian
Firm WCC
Date/Time 7-15-97 / 2:00

RECEIVED BY:
Signature Sara J. O'Brien
Printed Name Sara O'Brien
Firm CAS
Date/Time 7/15/97 2:00pm

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: 4°C
Submission No: 97.7-223

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

309 WEST RIDLEY AVE.
RIDLEY PARK, PA 19078
610-521-3083
FAX 610-521-4589

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 07/29/97

Woodward Clyde Consultants
Project Reference: GRIFFIN IRM
Client Sample ID : EFF-7-15-97

Date Sampled : 07/15/97 **Order #:** 157581 **Sample Matrix:** WATER
Date Received: 07/15/97 **Submission #:** 9707000223 **Analytical Run** 18771

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/25/97			
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
,2-DICHLOROETHANE	5.0	13 U	UG/L
1,1-DICHLOROETHENE	5.0	13 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	15	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	16	UG/L
1,1,2-TRICHLOROETHANE	5.0	13 U	UG/L
TRICHLOROETHENE	5.0	570	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 %)	106	%
OLUENE-D8	(88 - 110 %)	105	%
BROMOFLUOROMETHANE	(86 - 118 %)	93	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 07/29/97

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 159308 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 18771

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/25/97			
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 %)	102	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	97	%

COLUMBIA ANALYTICAL SERVICES, INC.
1 Mustard [redacted] Suite 250, P.O. Box 90859, Rochester, NY 14609-0859
(716) 288-5380 • FAX (716) 288-8475

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(800) [redacted]95-7222

DATE 8-29-97 PAGE [redacted] OF 1

PROJECT NAME Griffin IRM
PROJECT MANAGER/CONTACT Ken Armstrong
COMPANY/ADDRESS 30775 Bainbridge Rd., Ste 200
Solon, Ohio 44139
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)								PRESERVATION pH < 2.0	PRESERVATION pH > 12	PRESERVATION Other
EFF-8-29-97	8-29-97	12:20	165171	WATER	2	X																		

RELINQUISHED BY:
Signature Bob Fabian
Printed Name BOB FABIAN
Firm WCC
Date/Time 8-29-97 1:15

RECEIVED BY:
Signature L Brown
Printed Name Cindy Toomey
Firm EAS
Date/Time 8-29-97 1315

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:
Shipping #:
Temperature:
Submission No. 97-9-3

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

309 WEST RIDLEY AVE.
RIDLEY PARK, PA 19078
610-521-3083
FAX 610-521-4589

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 09/15/97

Project Reference: GRIFFIN IRM
Client Sample ID : EFF-8-29-97

Date Sampled : 08/29/97 **Order #:** 165171 **Sample Matrix:** WATER
Date Received: 08/29/97 **Submission #:** 9709000003 **Analytical Run** 19996

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/08/97			
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	26	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	13	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	21	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	700	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 %)	96	%
TOLUENE-D8	(88 - 110 %)	96	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	91	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 09/15/97

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 166978 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 19996

DATE ANALYZED : 09/08/97
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 %)	98	%
TOLUENE-D8	(88 - 110 %)	99	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	92	%

Appendix D

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 1-8-97 PAGE 1 OF 1

PROJECT NAME Griffin ERM
PROJECT MANAGER/CONTACT Ken Armstrong
COMPANY/ADDRESS 30775 Bainbridge Rd, Ste 206
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)	ASP 91-1							PRESERVATION pH < 2.0	PRESERVATION pH > 12	PRESERVATION Other
RW-03	1-8-97	14:30		WATER	2											X									
RW-02	↓	14:40		↓	2											X									
RW-01	↓	15:05		↓	2											X									
Trip-2	↓			↓	2											X									

RELINQUISHED BY:
Signature: Bob Fabian
Printed Name: Bob Fabian
Firm: Woodward-Clyde
Date/Time: 1-8-97 16:35

RECEIVED BY:
Signature: Tom Hastings
Printed Name: Tom Hastings
Firm: S
Date/Time: 1/8/97 16:35

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:
Shipping #:
Temperature:
Submission No:

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
435 LAWRENCE BELL DR., AMHERST, NY 14221 — 716-634-0454, FAX 716-634-9019

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW01

Lab Name: CAS-ROC Contract: WCC

Lab Code: 14045 Case No.: GRIFFIN SAS No.: SDG No.: RW03

Matrix: (soil/water) WATER Lab Sample ID: 125276 2.5

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: R2274.D

Level: (low/med) LOW Date Received: 01/08/97

% Moisture: not dec. Date Analyzed: 01/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 2.5

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	25	U
75-01-4	Vinyl chloride	25	U
75-00-3	Chloroethane	25	U
74-83-9	Bromomethane	25	U
67-64-1	Acetone	25	U
75-35-4	1,1-Dichloroethene	25	U
75-09-2	Methylene chloride	25	U
75-15-0	Carbon disulfide	25	U
75-34-3	1,1-Dichloroethane	25	U
78-93-3	2-Butanone	25	U
540-59-0	1,2-Dichloroethene (total)	23	JD
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
71-55-6	1,1,1-Trichloroethane	8	JD
56-23-5	Carbon tetrachloride	25	U
71-43-2	Benzene	25	U
79-01-6	Trichloroethene	300	D
78-87-5	1,2-Dichloropropane	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
124-48-1	Dibromochloromethane	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-pentanone	25	U
108-88-3	Toluene	25	U
591-78-6	2-Hexanone	25	U
127-18-4	Tetrachloroethene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
1330-20-7	Xylenes (total)	25	U
100-42-5	Styrene	25	U
108-88-3	1,1,2,2-Tetrachloroethane	25	U

1/23

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW02

Lab Name: CAS-ROC Contract: WCC

Lab Code: 14045 Case No.: GRIFFIN SAS No.: _____ SDG No.: RW03

Matrix: (soil/water) WATER Lab Sample ID: 125275 2.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: R2273.D

Level: (low/med) LOW Date Received: 01/08/97

% Moisture: not dec. _____ Date Analyzed: 01/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 2.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
75-00-3	Chloroethane	20	U
74-83-9	Bromomethane	20	U
67-64-1	Acetone	20	U
75-35-4	1,1-Dichloroethene	20	U
75-09-2	Methylene chloride	20	U
75-15-0	Carbon disulfide	20	U
75-34-3	1,1-Dichloroethane	20	U
78-93-3	2-Butanone	20	U
540-59-0	1,2-Dichloroethene (total)	3	JD
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
71-55-6	1,1,1-Trichloroethane	15	JD
56-23-5	Carbon tetrachloride	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	550	ED
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
124-48-1	Dibromochloromethane	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
1330-20-7	Xylenes (total)	20	U
100-42-5	Styrene	20	U
108-88-3	1,1,2,2-Tetrachloroethane	20	U

1/23

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW02DL

Lab Name: CAS-ROC Contract: WCC

Lab Code: 14045 Case No.: GRIFFIN SAS No.: _____ SDG No.: RW03

Matrix: (soil/water) WATER Lab Sample ID: 125275 5.0DL

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: R2275.D

Level: (low/med) LOW Date Received: 01/08/97

% Moisture: not dec. _____ Date Analyzed: 01/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 5.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
75-00-3	Chloroethane	50	U
74-83-9	Bromomethane	50	U
67-64-1	Acetone	50	U
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	50	U
75-15-0	Carbon disulfide	50	U
75-34-3	1,1-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
540-59-0	1,2-Dichloroethene (total)	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
71-55-6	1,1,1-Trichloroethane	12	JD
56-23-5	Carbon tetrachloride	50	U
71-43-2	Benzene	50	U
79-01-6	Trichloroethene	540	D
78-87-5	1,2-Dichloropropane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
124-48-1	Dibromochloromethane	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-pentanone	50	U
108-88-3	Toluene	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
1330-20-7	Xylenes (total)	50	U
100-42-5	Styrene	50	U
108-88-3	1,1,2,2-Tetrachloroethane	50	U

R 1/23

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW03

Lab Name: CAS-ROC Contract: WCC

Lab Code: 14045 Case No.: GRIFFIN SAS No.: _____ SDG No.: RW03

Matrix: (soil/water) WATER Lab Sample ID: 125273 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: R2269.D

Level: (low/med) LOW Date Received: 01/08/97

% Moisture: not dec. _____ Date Analyzed: 01/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	2	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	16	
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	440	E
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	3	J
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

2/1/23

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW03DL

Lab Name: CAS-ROC Contract: WCC

Lab Code: 14045 Case No.: GRIFFIN SAS No.: _____ SDG No.: RW03

Matrix: (soil/water) WATER Lab Sample ID: 125273 5.0DL

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: R2272.D

Level: (low/med) LOW Date Received: 01/08/97

% Moisture: not dec. _____ Date Analyzed: 01/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 5.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
75-00-3	Chloroethane	50	U
74-83-9	Bromomethane	50	U
67-64-1	Acetone	50	U
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	50	U
75-15-0	Carbon disulfide	50	U
75-34-3	1,1-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
71-55-6	1,1,1-Trichloroethane	17	JD
56-23-5	Carbon tetrachloride	50	U
71-43-2	Benzene	50	U
79-01-6	Trichloroethene	490	D
78-87-5	1,2-Dichloropropane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
124-48-1	Dibromochloromethane	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-pentanone	50	U
108-88-3	Toluene	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
1330-20-7	Xylenes (total)	50	U
100-42-5	Styrene	50	U
108-88-3	1,1,2,2-Tetrachloroethane	50	U

R 1/23

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP2

Lab Name: CAS-ROC Contract: WCC

Lab Code: 14045 Case No.: GRIFFIN SAS No.: _____ SDG No.: RW03

Matrix: (soil/water) WATER Lab Sample ID: 125278 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: R2276.D

Level: (low/med) LOW Date Received: 01/08/97

% Moisture: not dec. _____ Date Analyzed: 01/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

Appendix E

COLUMBIA ANALYTICAL SERVICES, INC.
1 Mustard St., Suite 250, P.O. Box 90859, Rochester, NY 14609-0859
(716) 288-5380 • FAX (716) 288-8475

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(800) 695-7222

DATE 8-13-97 PAGE 1 OF 1

PROJECT NAME Griffin, Dizbold.
PROJECT MANAGER/CONTACT Ken Armstrong
COMPANY/ADDRESS Woodward-Clyde
30775 Bainbridge Rd Solon OH
TEL (216) 349-2708 FAX (216) 349-1514
SAMPLER'S SIGNATURE

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)	91-1							PRESERVATION pH < 2.0	pH > 12	Other HCL
GTI-MW-1-8-13-97	8/13	1407	162396	water	2											✓									
GTI-MW-2D-8-13-97		1315	162398																						
GTI-MW-3-8-13-97		1332	162400																						
GTI-MW-5S-8-13-97		1340	162402																						
GTI-MW-5D-8-13-97		1349	162404																						
GTI-MW-6S-8-13-97		1150	162405																						
GTI-MW-6D-8-13-97		1148	162406																						
GTI-MW-7S-8-13-97		1205	162407																						
GTI-MW-7D-8-13-97		1207	162408																						
GTI-MW9S-8-13-97		1223	162409																						
GTI-MW-4-8-13-97		1000	162410																						

RELINQUISHED BY:
Signature
Printed Name Ken Schreckengast
Firm Woodward-Clyde
Date/Time 8-13-97 1700

RECEIVED BY:
Signature
Printed Name Cindy Toomey
Firm CAS
Date/Time 8-13-97 1700

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
X 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: 3.7°C
Submission No: 97-8-182

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
309 WEST RIDLEY AVE., RIDLEY PARK, PA 19078 610-521-3083 FAX 610-521-4589

C[illegible]IBIA ANALYTICAL SERVICES, INC.
1 Mus[illegible]t., Suite 250, P.O. Box 90859, Rochester, NY 14609-0859
(716) 288-5380 • FAX (716) 288-8475

CHAIN[illegible]CUSTODY/LABORATORY ANALYSIS REQ[illegible]T FORM

(800) 695-7222

DATE 8-13-97 PAGE 2 OF 2

PROJECT NAME Griffin, Pickbold
PROJECT MANAGER/CONTACT KEN Armstrong
COMPANY/ADDRESS Woodward-Clyde
30775 Bainbridge Rd Solon OH
TEL (216) 349-2008 FAX (216) 349-1514
SAMPLER'S SIGNATURE

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)	4/-1							PRESERVATION pH < 2.0	pH > 12	Other HCl
GTI-MW-10D-8-13-97	8-13-97	1225	162411	water	2											✓									✓
GTI-MW-10S 8-13-97		1240	162412																						
GTI-MW-100 8-13-97		1242	162413																						
GTI-MW-110-8-13-97		1303	162414																						
GTI-MW-130-8-13-97		1353	162415																						
GTI-MW-130D 8-13-97		1355	162416																						
GTI-EFF-1-8-13-97		1738	162417																						
GTI-EFF-2-8-13-97		1490	162418																						
GTI-EFF-3-8-13-97		1436	162419																						
TRIP BLANK		—	162420																						

Monitor well

RELINQUISHED BY:
Signature
Printed Name Keith Schrecengost
Firm Woodward-Clyde
Date/Time 8-13-97 1700

RECEIVED BY:
Signature
Printed Name Cindy Tormey
Firm CAS
Date/Time 8-13-97 1700

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: 3.7°C
Submission No: 97-8-182

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
309 WEST RIDLEY AVE., RIDLEY PARK, PA 19078 610-521-3083 FAX 610-521-4589

0003

CASE NARRATIVE

COMPANY: Woodward Clyde Consultants
Diebold Griffin
SUBMISSION #: 9708000182

WCC water samples were collected on 08/13/97 and received at CAS on 08/13/97 in good condition at a temperature of 3.7 C. See the CAS Batching form to cross reference between Client ID and CAS sample numbers.

VOLATILE ORGANICS

Twenty water samples and a trip blankwere analyzed for Target Compound List (TCL) of volatile organics by method 91-1 from the NYSASP 1991.

Several samples were analyzed at dilutions to obtain target compounds within the linear range of the method.

Sample MW1 was analyzed for site specific QC. All matrix spike recoveries and %RPD were within QC Limits.

All tuning criteria for BFB were met.

The initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits.

All internal standard areas were within QC Limits.

All samples were analyzed within the holding time as specified in the method.

No other analytical or QC problems were encountered.

Mustard Street, Suite 250 ▪ P.O. Box 90859 ▪ Rochester, NY 14609-0859 ▪ Telephone 716/288-5380 ▪ Fax 716/288-8475

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW1

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162396

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC725.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

00002

DL

09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW1

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162396

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC725.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00003

09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162398

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC704.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	5	J
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	42	
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	23	
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	470	E
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW2D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162398

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC704.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00005

DL
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2DDL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162398

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC729.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 4.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	40	U
75-01-4	Vinyl chloride	40	U
75-00-3	Chloroethane	40	U
74-83-9	Bromomethane	40	U
67-64-1	Acetone	40	U
75-35-4	1,1-Dichloroethene	40	U
75-09-2	Methylene chloride	40	U
75-15-0	Carbon disulfide	40	U
75-34-3	1,1-Dichloroethane	40	U
78-93-3	2-Butanone	40	U
540-59-0	1,2-Dichloroethene (total)	40	D
67-66-3	Chloroform	40	U
107-06-2	1,2-Dichloroethane	40	U
71-55-6	1,1,1-Trichloroethane	21	JD
56-23-5	Carbon tetrachloride	40	U
71-43-2	Benzene	40	U
79-01-6	Trichloroethene	450	D
78-87-5	1,2-Dichloropropane	40	U
75-27-4	Bromodichloromethane	40	U
10061-01-5	cis-1,3-Dichloropropene	40	U
10061-02-6	trans-1,3-Dichloropropene	40	U
79-00-5	1,1,2-Trichloroethane	40	U
124-48-1	Dibromochloromethane	40	U
75-25-2	Bromoform	40	U
108-10-1	4-Methyl-2-pentanone	40	U
108-88-3	Toluene	40	U
591-78-6	2-Hexanone	40	U
127-18-4	Tetrachloroethene	40	U
108-90-7	Chlorobenzene	40	U
100-41-4	Ethylbenzene	40	U
1330-20-7	Xylenes (total)	40	U
100-42-5	Styrene	40	U
108-88-3	1,1,2,2-Tetrachloroethane	40	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW2DDL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162398

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC729.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 4.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00007
>L
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162400

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC705.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	2	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	150	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

DL 09/

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW3

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162400

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC705.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	12.45	5	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162402

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC706.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	4	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	31	
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	680	E
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW5S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162402

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC706.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5SDL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162402

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC742.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 5.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
75-00-3	Chloroethane	50	U
74-83-9	Bromomethane	50	U
67-64-1	Acetone	50	U
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	50	U
75-15-0	Carbon disulfide	50	U
75-34-3	1,1-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
540-59-0	1,2-Dichloroethene (total)	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
71-55-6	1,1,1-Trichloroethane	30	JD
56-23-5	Carbon tetrachloride	50	U
71-43-2	Benzene	50	U
79-01-6	Trichloroethene	760	D
78-87-5	1,2-Dichloropropane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
124-48-1	Dibromochloromethane	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-pentanone	50	U
108-88-3	Toluene	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
1330-20-7	Xylenes (total)	50	U
100-42-5	Styrene	50	U
108-88-3	1,1,2,2-Tetrachloroethane	50	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW5SDL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162402

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC742.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 5.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00813

09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162404

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC707.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RT 502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	2	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	7	J
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	220	E
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

00014

PL

09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW5D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162404

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC707.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00015
SL
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5DDL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162404

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC743.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 2.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
75-00-3	Chloroethane	20	U
74-83-9	Bromomethane	20	U
67-64-1	Acetone	20	U
75-35-4	1,1-Dichloroethene	20	U
75-09-2	Methylene chloride	20	U
75-15-0	Carbon disulfide	20	U
75-34-3	1,1-Dichloroethane	20	U
78-93-3	2-Butanone	20	U
540-59-0	1,2-Dichloroethene (total)	2	JD
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
71-55-6	1,1,1-Trichloroethane	8	JD
56-23-5	Carbon tetrachloride	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	250	D
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
124-48-1	Dibromochloromethane	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
1330-20-7	Xylenes (total)	20	U
100-42-5	Styrene	20	U
108-88-3	1,1,2,2-Tetrachloroethane	20	U

DL 09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW5DDL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162404

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC743.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 2.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00017
DL
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW6S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162405

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC708.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	3	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	9	J
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	140	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

00018

(JL)

09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW6S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162405

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC708.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00019

DL
09/03/97

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW6D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162406

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC709.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	2	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	J
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	150	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW6D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162406

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC709.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

DL 09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW7S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162407

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC710.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	6	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	6	J
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	230	E
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

00022

DL

09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW7S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162407

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC710.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00023
SL
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW7SDL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162407

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC744.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 2.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
75-00-3	Chloroethane	20	U
74-83-9	Bromomethane	20	U
67-64-1	Acetone	20	U
75-35-4	1,1-Dichloroethene	20	U
75-09-2	Methylene chloride	20	U
75-15-0	Carbon disulfide	20	U
75-34-3	1,1-Dichloroethane	20	U
78-93-3	2-Butanone	20	U
540-59-0	1,2-Dichloroethene (total)	6	JD
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
71-55-6	1,1,1-Trichloroethane	6	JD
56-23-5	Carbon tetrachloride	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	250	D
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
124-48-1	Dibromochloromethane	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
1330-20-7	Xylenes (total)	20	U
100-42-5	Styrene	20	U
108-88-3	1,1,2,2-Tetrachloroethane	20	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW7SDL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162407

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC744.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 2.0

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

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

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	12.43	49	JD

00025
SL
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW7D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162408

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC711.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	13	
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	2	J
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	180	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

00026

DL 09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW7D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162408

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC711.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW9S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162409

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC712.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	2	J
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW9S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162409

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC712.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 3

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	7.44	7	J
2.	UNKNOWN	11.84	19	J
3.	UNKNOWN	12.39	23	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW14

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162410

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC713.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	6	J
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	6	J
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

00030

DL

09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW14

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162410

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC713.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	11.86	17	J

00031
DL
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW9D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162411

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC714.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW9D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162411

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC714.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 3

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	11.87	5	J
2.	UNKNOWN	12.44	7	J
3.	UNKNOWN	26.40	9	J

00033

DL 09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162412

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC715.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	15	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW10S

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162412

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC715.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	11.88	7	J
2.	UNKNOWN	12.43	9	J

00035
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162413

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC716.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	2	J
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	15	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW10D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162413

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC716.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

0003
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162414

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC745.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

DL 09/03/97 00038

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW11D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162414

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC745.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	11.90	6	J
2.	UNKNOWN	12.44	7	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW13D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162415

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC746.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	4	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	4	J
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	160	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW13D

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162415

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC746.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

09/03/97
00041

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW13DD

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162416

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC747.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	3	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	150	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW13DD

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162416

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC747.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	11.84	8	J
2.	UNKNOWN	12.38	15	J

00043
DL
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF1

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162417

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC730.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	19	
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	18	
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	650	E
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EFF1

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162417

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC730.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	12.46	5	J

00045
09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF1DL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162417

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC748.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 5.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
75-00-3	Chloroethane	50	U
74-83-9	Bromomethane	50	U
67-64-1	Acetone	50	U
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	50	U
75-15-0	Carbon disulfide	50	U
75-34-3	1,1-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
540-59-0	1,2-Dichloroethene (total)	22	JD
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
71-55-6	1,1,1-Trichloroethane	20	JD
56-23-5	Carbon tetrachloride	50	U
71-43-2	Benzene	50	U
79-01-6	Trichloroethene	840	D
78-87-5	1,2-Dichloropropane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
124-48-1	Dibromochloromethane	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-pentanone	50	U
108-88-3	Toluene	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
1330-20-7	Xylenes (total)	50	U
100-42-5	Styrene	50	U
108-88-3	1,1,2,2-Tetrachloroethane	50	U

(DL)
09/08/97 00046

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EFF1DL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162417

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC748.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 5.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF2

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162418

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC749.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: ~~1.0~~ 4.0 9/4/97

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	40	U
75-01-4	Vinyl chloride	40	U
75-00-3	Chloroethane	40	U
74-83-9	Bromomethane	40	U
67-64-1	Acetone	40	U
75-35-4	1,1-Dichloroethene	40	U
75-09-2	Methylene chloride	40	U
75-15-0	Carbon disulfide	40	U
75-34-3	1,1-Dichloroethane	40	U
78-93-3	2-Butanone	40	U
540-59-0	1,2-Dichloroethene (total)	6	J
67-66-3	Chloroform	40	U
107-06-2	1,2-Dichloroethane	40	U
71-55-6	1,1,1-Trichloroethane	15	J
56-23-5	Carbon tetrachloride	40	U
71-43-2	Benzene	40	U
79-01-6	Trichloroethene	590	
78-87-5	1,2-Dichloropropane	40	U
75-27-4	Bromodichloromethane	40	U
10061-01-5	cis-1,3-Dichloropropene	40	U
10061-02-6	trans-1,3-Dichloropropene	40	U
79-00-5	1,1,2-Trichloroethane	40	U
124-48-1	Dibromochloromethane	40	U
75-25-2	Bromoform	40	U
108-10-1	4-Methyl-2-pentanone	40	U
108-88-3	Toluene	40	U
591-78-6	2-Hexanone	40	U
127-18-4	Tetrachloroethene	40	U
108-90-7	Chlorobenzene	40	U
100-41-4	Ethylbenzene	40	U
1330-20-7	Xylenes (total)	40	U
100-42-5	Styrene	40	U
108-88-3	1,1,2,2-Tetrachloroethane	40	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EFF2

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162418

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC749.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

PL 08/03/97

00049

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF3

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162419

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC750.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: ~~1.0~~ 2.0 9/4/97

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
75-00-3	Chloroethane	20	U
74-83-9	Bromomethane	20	U
67-64-1	Acetone	20	U
75-35-4	1,1-Dichloroethene	20	U
75-09-2	Methylene chloride	20	U
75-15-0	Carbon disulfide	20	U
75-34-3	1,1-Dichloroethane	20	U
78-93-3	2-Butanone	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
71-55-6	1,1,1-Trichloroethane	11	J
56-23-5	Carbon tetrachloride	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	430	E
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
124-48-1	Dibromochloromethane	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
100-42-5	Styrene	20	U
108-88-3	1,1,2,2-Tetrachloroethane	20	U

00075

DL

09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EFF3

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162419

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC750.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	11.84	16	J
2.	UNKNOWN	12.40	16	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF3DL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162419

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC758.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/18/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 2.5

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	25	U
75-01-4	Vinyl chloride	25	U
75-00-3	Chloroethane	25	U
74-83-9	Bromomethane	25	U
67-64-1	Acetone	25	U
75-35-4	1,1-Dichloroethene	25	U
75-09-2	Methylene chloride	25	U
75-15-0	Carbon disulfide	25	U
75-34-3	1,1-Dichloroethane	25	U
78-93-3	2-Butanone	25	U
540-59-0	1,2-Dichloroethene (total)	3	JD
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
71-55-6	1,1,1-Trichloroethane	10	JD
56-23-5	Carbon tetrachloride	25	U
71-43-2	Benzene	25	U
79-01-6	Trichloroethene	340	D
78-87-5	1,2-Dichloropropane	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
124-48-1	Dibromochloromethane	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-pentanone	25	U
108-88-3	Toluene	25	U
591-78-6	2-Hexanone	25	U
127-18-4	Tetrachloroethene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
1330-20-7	Xylenes (total)	25	U
100-42-5	Styrene	25	U
108-88-3	1,1,2,2-Tetrachloroethane	25	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EFF3DL

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162419

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC758.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/18/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 2.5

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00053
9/3/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB1

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162420

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC751.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

PL00054

09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB1

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162420

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC751.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	UNKNOWN	11.85	14	J
2.	UNKNOWN	12.41	10	J

00055

DL
09/03/97

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	TOT OUT
01	VBLK01	91	100	98	0
02	MW2D	97	99	102	0
03	MW3	96	99	101	0
04	MW5S	96	100	99	0
05	MW5D	101	100	102	0
06	MW6S	98	100	102	0
07	MW6D	99	101	100	0
08	MW7S	101	100	100	0
09	MW7D	98	100	100	0
10	MW9S	103	100	101	0
11	MW14	101	99	100	0
12	MW9D	102	100	99	0
13	MW10S	101	99	102	0
14	MW10D	106	99	101	0
15	VBLK02	107	99	99	0
16	VBLK02MS	107	98	100	0
17	MW1	110	99	101	0
18	MW1MS	109	99	101	0
19	MW1MSD	111	99	99	0
20	MW2DDL	112	98	99	0
21	EFF1	111	99	101	0
22	VBLK03	108	100	101	0
23	MW5SDL	104	97	104	0
24	MW5DDL	109	99	102	0
25	MW7SDL	114	101	102	0
26	MW11D	109	100	102	0
27	MW13D	111	101	102	0
28	MW13DD	111	99	100	0
29	EFF1DL	111	100	103	0
30	EFF2	111	95	100	0
31	EFF3	112	101	102	0
32	TB1	111	98	103	0
33	VBLK04	97	101	98	0

			QC LIMITS
SMC1	=	1,2-Dichloroethane-d4	(76-114)
SMC2	=	Toluene-d8	(88-110)
SMC3	=	Bromofluorobenzene	(86-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	TOT OUT
34	EFF3DL	112	101	102	0

DL 09/03/97

			QC LIMITS
SMC1	=	1,2-Dichloroethane-d4	(76-114)
SMC2	=	Toluene-d8	(88-110)
SMC3	=	Bromofluorobenzene	(86-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM II VOA-1

DL 3/90

09/03/97

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix Spike - EPA Sample No.: MW1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0.0	48	96	61 - 145
Benzene	50	0.0	45	90	71 - 120
Trichloroethene	50	0.0	44	88	76 - 127
Toluene	50	0.0	44	88	76 - 125
Chlorobenzene	50	0.0	44	88	75 - 130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	49	98	2	14	61 - 145
Benzene	50	45	90	0	14	71 - 120
Trichloroethene	50	44	88	0	11	76 - 127
Toluene	50	44	88	0	13	76 - 125
Chlorobenzene	50	44	88	0	13	75 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

PL 09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW1MS

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162396

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC727.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	48	
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	45	
79-01-6	Trichloroethene	44	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	44	
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	44	
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

00059

DL

09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW1MSD

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: 162396

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC728.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	49	
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	45	
79-01-6	Trichloroethene	44	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	44	
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	44	
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix Spike - EPA Sample No.: VBLK02

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0.0	46	92	61 - 145
Benzene	50	0.0	47	94	71 - 120
Trichloroethene	50	0.0	45	90	76 - 127
Toluene	50	0.0	44	88	76 - 125
Chlorobenzene	50	0.0	44	88	75 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02MS

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: BLK SPK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC723.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	46	
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	47	
79-01-6	Trichloroethene	45	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	44	
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	44	
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

DL 09/03/97

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Lab File ID: ZC703.D Lab Sample ID: MET BLK

Date Analyzed: 08/15/97 Time Analyzed: 19:03

GC Column: RTX502. ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS#1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW2D	162398	ZC704.D	19:40
02	MW3	162400	ZC705.D	20:17
03	MW5S	162402	ZC706.D	20:54
04	MW5D	162404	ZC707.D	21:31
05	MW6S	162405	ZC708.D	22:07
06	MW6D	162406	ZC709.D	22:44
07	MW7S	162407	ZC710.D	23:21
08	MW7D	162408	ZC711.D	23:59
09	MW9S	162409	ZC712.D	00:36
10	MW14	162410	ZC713.D	01:14
11	MW9D	162411	ZC714.D	01:51
12	MW10S	162412	ZC715.D	02:29
13	MW10D	162413	ZC716.D	03:06

COMMENTS

00063

DL 09/03/97

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK01

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: MET BLK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC703.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

DL 09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK01

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: MET BLK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC703.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/15/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Lab File ID: ZC722.D Lab Sample ID: MET BLK

Date Analyzed: 08/16/97 Time Analyzed: 15:59

GC Column: RTX502. ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS#1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK02MS	BLK SPK	ZC723.D	16:49
02	MW1	162396	ZC725.D	18:03
03	MW1MS	162396	ZC727.D	19:18
04	MW1MSD	162396	ZC728.D	19:56
05	MW2DDL	162398	ZC729.D	20:33
06	EFF1	162417	ZC730.D	21:11

COMMENTS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: MET BLK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC722.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

00067

DL 09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK02

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: MET BLK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC722.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/16/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

PL 00068
09/03/97

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK03

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Lab File ID: ZC741.D Lab Sample ID: MET BLK

Date Analyzed: 08/17/97 Time Analyzed: 14:42

GC Column: RTX502. ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS#1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW5SDL	162402	ZC742.D	15:19
02	MW5DDL	162404	ZC743.D	15:56
03	MW7SDL	162407	ZC744.D	16:34
04	MW11D	162414	ZC745.D	17:11
05	MW13D	162415	ZC746.D	17:49
06	MW13DD	162416	ZC747.D	18:26
07	EFF1DL	162417	ZC748.D	19:04
08	EFF2	162418	ZC749.D	19:41
09	EFF3	162419	ZC750.D	20:19
10	TB1	162420	ZC751.D	20:56

COMMENTS

DL 09/03/97

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: MET BLK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC741.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

DL 00070

09/03/97

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK03

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: MET BLK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC741.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/17/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

DL 09/03/97

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK04

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Lab File ID: ZC756.D Lab Sample ID: MET BLK

Date Analyzed: 08/18/97 Time Analyzed: 10:24

GC Column: RTX502. ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS#1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EFF3DL	162419	ZC758.D	11:57

COMMENTS

DL 09/03/97 00072

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK04

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: MET BLK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC756.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. Date Analyzed: 08/18/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylenes (total)	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK04

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: MET BLK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: ZC756.D

Level: (low/med) LOW Date Received: 08/13/97

% Moisture: not dec. _____ Date Analyzed: 08/18/97

GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

00074
PL
09/03/97

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Lab File ID (Standard): ZC701.D Date Analyzed: 08/15/97

Instrument ID: GCMS#1 Time Analyzed: 17:24

GC Column: RTX502.2 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR ST	778788	16.06	2860717	18.03	2114270	25.17
	LOWER LIMIT	389394	15.56	1430359	17.53	1057135	24.67
	UPPER LIMIT	1557576	16.56	5721434	18.53	4228540	25.67
	EPA SAMPLE NO.						
01	VBLK01	656716	16.15	2334843	18.14	1797708	25.30
02	MW2D	640332	16.10	2434816	18.09	1906363	25.31
03	MW3	623900	16.12	2383717	18.10	1828695	25.29
04	MW5S	616744	16.15	2332983	18.15	1799268	25.31
05	MW5D	613752	16.13	2384531	18.13	1822536	25.31
06	MW6S	590796	16.13	2228396	18.12	1703459	25.31
07	MW6D	578474	16.15	2193452	18.14	1694212	25.28
08	MW7S	572102	16.12	2181333	18.12	1685287	25.27
09	MW7D	617551	16.12	2305730	18.10	1784705	25.28
10	MW9S	551360	16.10	2138670	18.08	1656186	25.26
11	MW14	571561	16.10	2175850	18.09	1697880	25.28
12	MW9D	531768	16.13	2021683	18.13	1562129	25.31
13	MW10S	562755	16.12	2148181	18.12	1647004	25.28
14	MW10D	518321	16.10	2060494	18.07	1602708	25.20

IS1 = Bromochloromethane
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

PL 09/03/97

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Lab File ID (Standard): ZC721.D Date Analyzed: 08/16/97

Instrument ID: GCMS#1 Time Analyzed: 15:03

GC Column: RTX502.2 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR ST	626847	16.17	2318457	18.12	1821781	25.27
	LOWER LIMIT	313424	15.67	1159229	17.62	910891	24.77
	UPPER LIMIT	1253694	16.67	4636914	18.62	3643562	25.77
	EPA SAMPLE NO.						
01	VBLK02	637780	16.15	2438430	18.12	1871730	25.24
02	VBLK02MS	624682	16.13	2316807	18.14	1828092	25.31
03	MW1	606492	16.11	2349990	18.13	1808333	25.34
04	MW1MS	578356	16.15	2285476	18.14	1715489	25.31
05	MW1MSD	561862	16.16	2245098	18.17	1724414	25.31
06	MW2DDL	547350	16.12	2066527	18.12	1619298	25.31
07	EFF1	579315	16.13	2244206	18.12	1702454	25.31

IS1 = Bromochloromethane

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

DL 09/03/97

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Lab File ID (Standard): ZC739.D Date Analyzed: 08/17/97

Instrument ID: GCMS#1 Time Analyzed: 13:08

GC Column: RTX502.2 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR ST	660087	16.08	2416591	18.05	1895855	25.20
	LOWER LIMIT	330044	15.58	1208296	17.55	947928	24.70
	UPPER LIMIT	1320174	16.58	4833182	18.55	3791710	25.70
	EPA SAMPLE NO.						
01	VBLK03	588540	16.08	2207507	18.10	1719631	25.27
02	MW5SDL	541534	16.04	2054707	18.07	1629790	25.25
03	MW5DDL	524712	16.08	2034662	18.07	1548389	25.27
04	MW7SDL	521812	16.10	2033665	18.10	1543734	25.29
05	MW11D	529830	16.13	2038594	18.12	1544072	25.29
06	MW13D	533206	16.16	2038620	18.15	1537345	25.29
07	MW13DD	538514	16.08	2079435	18.08	1606890	25.27
08	EFF1DL	570242	16.10	2188039	18.10	1662994	25.28
09	EFF2	552139	16.10	2057411	18.10	1588063	25.28
10	EFF3	503443	16.08	1920599	18.09	1459338	25.28
11	TB1	534561	16.10	2052417	18.07	1569852	25.20

IS1 = Bromochloromethane

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

DL 09/03/9

00077

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS Contract: WCC

Lab Code: 10145 Case No.: 97-8-182 SAS No.: _____ SDG No.: MW1

Lab File ID (Standard): ZC755.D Date Analyzed: 08/18/97

Instrument ID: GCMS#1 Time Analyzed: 09:20

GC Column: RTX502.2 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR ST	674619	16.10	2495645	18.08	1937344	25.24
	LOWER LIMIT	337310	15.60	1247823	17.58	968672	24.74
	UPPER LIMIT	1349238	16.60	4991290	18.58	3874688	25.74
	EPA SAMPLE NO.						
01	VBLK04	676322	16.08	2519872	18.05	1953166	25.19
02	EFF3DL	636270	16.13	2467837	18.12	1901433	25.24

IS1 = Bromochloromethane

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

PL 09/03/97