File on eDOCs X Yes _____ No

Site Name Enviro-O Machine

Site No. 826011

County Livingston

Town Lima

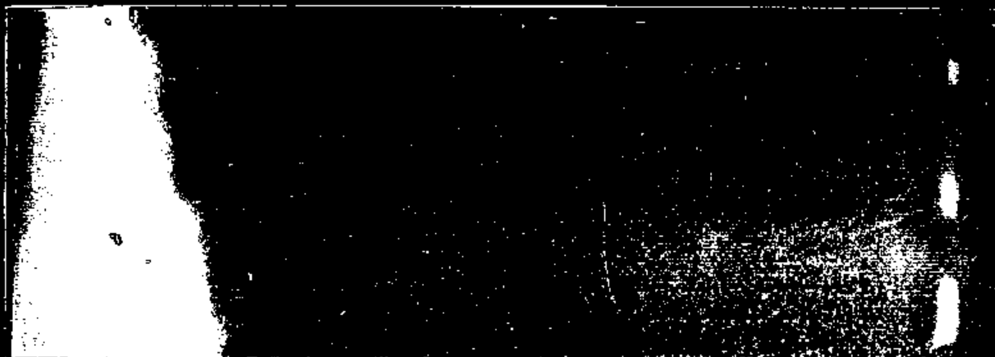
Foilable X Yes _____ No

File Name report_hw_826011_1994-09.

Scanned & eDOC RC - Progress No. 2.pdf

82604 - ENARCO RF - 8/94 Quarterly Progress

H & A OF NEW YORK



Geotechnical Engineers &

Environmental Consultants

H&A OF NEW YORK

Letter of Transmittal

Geotechnical Engineers &
Environmental Consultants

To	Kaddis Manufacturing Co.	Date	9 September 1994
	1100 Beahan Road	File Number	70372-048
	Rochester, New York 14692-9085	Subject	---
Attention	Ronald Iannucci, Sr.		---

Copies	Date	Description
1	9/9/94	Report entitled "Quarterly Progress Report No. 2"
		June to August 1994, Enarc-O Machine Products, Inc. RI/FS
		Lima, New York
		NYSDEC Order No. B8-0112-91-04

Remarks

Copy To
A. Joseph White, Div. Haz. Waste Remed., NYSDEC (4 copies, one unbound)
Director, Bur. Environ. Exposure Investigation, NYSDOH (2 copies)
Peter Bush, Region 8 Director, NYSDEC
Glen R. Bailey, Esq., NYSDEC Div. Env. Enforcement
William H. Helferich, III, Harter Secrest & Emery

Signed
Robert J. Mahoney

189 North Water Street
Rochester, NY 14604
716/232-7386

Affiliate
Cambridge, Massachusetts
Denver, Colorado
Glastonbury, Connecticut
Silver Spring, Maryland
Scarborough, Maine
Bedford, New Hampshire
Cleveland, Ohio

QUARTERLY PROGRESS REPORT NO. 2
JUNE TO AUGUST, 1994
ENARC-O MACHINE PRODUCTS, INC.
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LIMA, NEW YORK
NYSDEC CONSENT ORDER NO. B8-0112-91-04

by

H&A of New York
Rochester, New York

for

Kaddis Manufacturing Corp.
Rochester, New York

File No. 70372-048
September 1994

H & A OF NEW YORK

Geotechnical Engineers &
Environmental Consultants

9 September 1994
File No. 70372-048

Ronald Iannucci, Sr., President
Kaddis Manufacturing Corporation
P.O. Box 92985
1100 Beahan Road
Rochester, New York 14692-9085

Subject: Quarterly Progress Report No. 2
Enarc-O Machine Products, Inc. RI/FS

Dear Mr. Iannucci:

H&A has prepared the attached Quarterly Report No. 2 for the Remedial Investigation/Feasibility Study (RI/FS) at the Enarc-O Machine Products site in Lima, New York. The report was prepared in accordance with requirements set forth by the New York State Department of Environmental Conservation in Order on Consent No. B8-0112-91-04 for the project.

The Progress Report provides a summary of work performed by H&A during the last quarter. H&A's work has been performed in accordance with the Work Plan for the project, dated 30 December 1993.

Briefly, work performed to date on the project includes: 1) on-site monitoring well permeability testing and sampling; 2) residential well evaluation; 3) site survey by licensed surveyor and base map completion; 4) performance of site work for the ecological assessment; 5) laboratory analyses of groundwater samples; and 6) monitoring of water levels in on-site monitoring wells and Honeoye Creek.

Details on these tasks and preliminary results of laboratory analyses are included in the Progress Report.

If you have any questions regarding the information in this report, please do not hesitate to contact us.

Sincerely yours,
H&A OF NEW YORK

RJMahoney

Robert J. Mahoney
Senior Env. Geologist

For Vincent B. Dick
Vice President

c: A. Joseph White, Div. Haz. Waste Remed., NYSDEC (4 copies, one unbound)
Director, Bur. Environ. Exposure Investigation, NYSDOH (2 copies)
Peter Bush, Region 8 Director, NYSDEC
Glen R. Bailey, Esq., NYSDEC Div. Env. Enforcement
William H. Helferich, III, Harter Secrest & Emery

189 North Water Street
Rochester, NY 14604-1151
Tel: 716/232-7386
Fax: 716/232-6768

Offices
Cambridge, Massachusetts
Denver, Colorado
Glastonbury, Connecticut
Scarborough, Maine
Silver Spring, Maryland
Bedford, New Hampshire
Cleveland, Ohio

TABLE OF CONTENTS

Page

LIST OF FIGURES

I. INTRODUCTION

II. ACTIONS TAKEN

III. DELIVERABLES

IV. FUTURE ACTIVITIES

V. WORK SCHEDULE AND PERCENT COMPLETION

VI. WORK PLAN MODIFICATION

VII. CITIZEN PARTICIPATION PLAN ACTIVITIES

FIGURES
APPENDIX A - Analytical Data-Soils - Off-site Surface Soil Samples and Enarc-O Septic Tank Solids
APPENDIX B - Analytical Data-Groundwater - On-site Monitoring Wells
APPENDIX C - Rising Head Permeability Test Reports
APPENDIX D - Hydrographs for Honeoye Creek and On-site Monitoring Wells
APPENDIX E - Residential Well Survey Letter to NYSDEC and List of Proposed Wells For Sampling

LIST OF FIGURES

Figure No.	Title
1	Project Locus Plan
2	Source Area Soil-Vapor VOC Concentration Plan
3	Delineation Survey Soil-Vapor VOC Concentration Plan
4	Site Plan
5	Residence Well Location Plan

I. INTRODUCTION

This report has been prepared to document recent project activities for the Remedial Investigation/Feasibility Study (RI/FS) being performed at the Enarc-O Machine Products, Inc. facility. The site is located in Lima, New York, as shown on Figure 1. This report is the second quarterly progress report to be prepared in accordance with the NYSDEC Order on Consent No. B-0112-91-04 for the site.

The site is owned by Kaddis Manufacturing Corporation (Kaddis) of Rochester, New York. The RI/FS is being performed for Kaddis by H&A of New York (H&A) of Rochester, New York.

This report presents results of field and laboratory investigations during the period June through August 1994.

II. ACTIONS TAKEN

Field activities conducted during the reporting period consisted of:

- the site survey by a licensed surveyor;
- on-site monitoring well sampling and rising head permeability testing;
- off-site residential well evaluation;
- and on-site monitoring well/Honeoye Creek water level measurements.

Off-site surface soil samples and the Enarc-O septic tank were sampled during the previous quarter, but the analytical results were not available until this quarter. The laboratory results from these samples are presented in Appendix A.

In addition, source and delineation area soil vapor VOC concentration plans, based on last quarter's soil-vapor survey program, are presented in Figures 2 and 3.

Site Survey

A site resurvey was performed by licensed surveyor D.J. Parrone & Associates on 11 June 1994. A site map was prepared which includes the following (See Figure 4, Site Plan):

- buildings and driveway/parking area limits;
- property boundaries;
- roads;
- tree locations;
- sitewide ground surface elevations;
- monitoring well locations and ground surface/riser elevations;
- soil-vapor survey (delineation phase) boring locations/ground surface elevations; and
- stream staff gauge location and elevation.

On-site Monitoring Well Sampling and Permeability Testing

H&A conducted groundwater sampling of all on-site monitoring wells (except MW-201S, which was dry) on 15 July 1994. Samples were analyzed according to NYSDEC Method 91-1 Analytical Services Protocol. Results of the analyses are presented in Appendix B.

H&A conducted rising head permeability tests on all on-site monitoring wells (except MW-201 which was dry) on 7 and 16 June 1994, to determine hydraulic conductivity values at each well. The results of these tests are presented in Appendix C.

Stream and Groundwater Level Monitoring

A stream staff gauge was installed on the Honeoye Creek steambank to provide a fixed reference point from which to measure stream water levels. The staff gauge, which consists of 1-1/4-inch steel rod cemented into a one-foot deep bedrock socket, sticks up several feet above the ground surface. Water levels in the monitoring wells and Honeoye Creek were measured during times when field activities were being conducted on-site. Hydrographs depicting groundwater and stream level elevations over time are presented in Appendix D.

Off-site Residential Well Evaluation

H&A personnel evaluated residential wells to determine the feasibility of using these wells in the off-site residential well sampling program. H&A first conducted a review of existing data, including NYSDEC Water Usage Reconnaissance Survey forms, Livingston County Health Department and (LCHD) Individual Drinking Water Wells Sanitary Survey forms.

H&A, with the assistance of David Napier of the New York State Department of Health then contacted residents by telephone and arranged to visually inspect the wells on their property, if accessible. All available wells were then inspected. Several of the wells were inaccessible due to being buried. In addition, several residents did not respond to the surveys or telephone calls.

This information was used to assemble a proposed list of residential wells suitable for groundwater sampling (See Figure 5). The list of these wells, with an accompanying letter of explanation, was sent to NYSDEC and all parties on the consent order distribution list on 12 August 1994, under separate cover. A copy of the letter and well list are contained in Appendix E.

NYSDEC's response to the proposed sampling list was received by H&A on 29 August 1994. H&A is currently obtaining additional information and cost estimates to comply with NYSDEC's requests outlined in the response letter.

Environmental Risk Assessment

Field work for the environmental risk assessment portion of the RI was performed during the period 4 through 24 July 1994, by TPC Environmental Consulting of Buffalo, New York. The work consisted of an ecological survey of existing flora and fauna in accordance with recommendations of the NYSDEC document "Fish and Wildlife Impact Analysis of Inactive Hazardous Waste Sites", dated June 1991.

TPC is currently preparing its report on the ecological assessment.

III. DELIVERABLES

In accordance with the consent order requirements, Quarterly Report No. 1, for the reporting period 17 March to 3 June 1994, was delivered to NYSDEC and the consent order mailing list parties on 9 June 1994. H&A also provided on 12 August 1994 a listing of proposed wells to be used in the off-site residential well sampling program. H&A has received NYSDEC's comments and is in the process of obtaining additional information in response to those comments.

IV. FUTURE ACTIVITIES

It is anticipated that the proposed field work, with the exception of quarterly sampling, will be completed in the next quarter, including the following tasks:

- off-site residential well sampling
- hydrogeologic testing (pump test)
- additional stream gauge data collection
- survey of residential well elevations

Validation of most of the analytical data is also anticipated to be completed during the next quarter.

Upon completion of the field work and laboratory analyses, preparation of the RI report will begin. Based on the anticipated completion date of the field work and other tasks, completion of the RI report is expected to occur in the next quarter (4th quarter of calendar year 1994).

Upon completion of the laboratory analyses and data validation, the health risk assessment will be initiated during the next quarter (4th quarter calendar year 1994). We anticipate completion of these tasks will occur in the next quarter (4th quarter of calendar year 1994).

V. WORK SCHEDULE AND PERCENT COMPLETION

The following field activities have been completed:

- well installations;
- stream staff gauge installation;
- off-site residential soil sampling;
- Enarc-O septic tank sampling;
- on-site monitoring well sampling;
- on-site well permeability testing (rising head tests);
- residential well field evaluation; and
- site survey.

The residential well survey is nearly complete. A delay in responses to a residential well questionnaire sent to area residents by NYSDEC had delayed the task until the survey responses were received. H&A has since accumulated readily-available data and has presented the proposed list of residential wells for sampling to NYSDEC in a 12 August 1994 letter report. NYSDEC has responded to the list of proposed wells with comments concerning well coverage, sampling methodology and potential additional evaluation of wells.

VI. WORK PLAN MODIFICATION

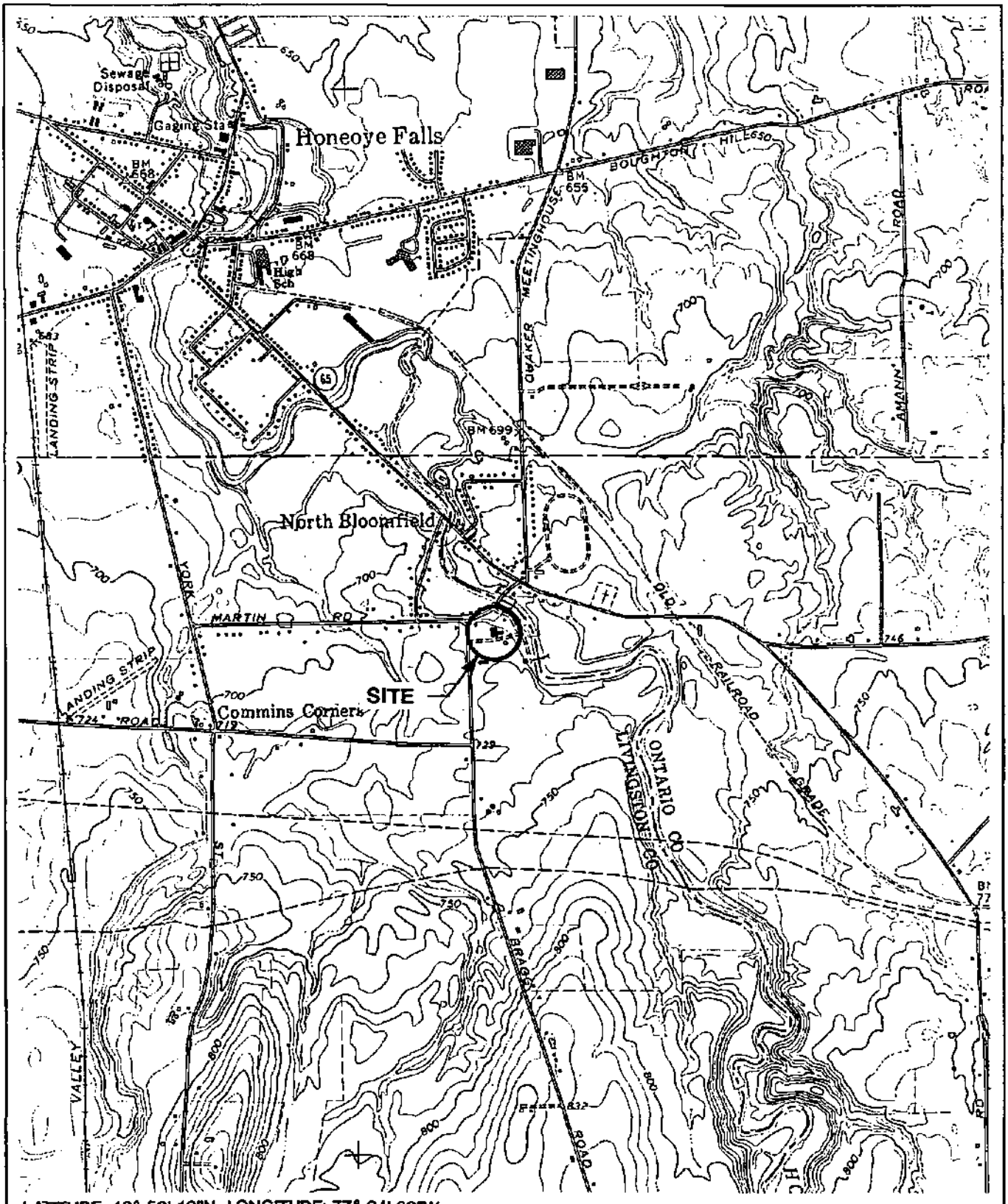
Modification to the work plan during this quarter consisted of a change in the well purging and sampling protocol for the off-site residential wells. Due to the large purge water volumes that standard sampling protocol would require for these deep, large diameter wells, H&A proposed a revised protocol utilizing a low-flow purging method. NYSDEC accepted the revised purging method in a response letter sent to H&A on 29 August 1994.

VII. CITIZEN PARTICIPATION PLAN ACTIVITIES

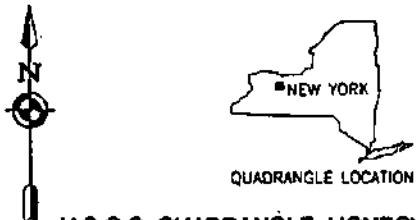
No Citizen Participation Plan activities (i.e. public meetings) were scheduled or conducted during the past quarter. None are currently scheduled for the next quarter.

RJM/slc
rjm:70372-048:RQRKadds.wp

Figures



LATITUDE: 42° 56' 13"N LONGITUDE: 77° 34' 33"W



U.S.G.S. QUADRANGLE: HONEOYE FALLS, N.Y.

H & A OF NEW YORK

Geotechnical Engineers & Environmental Consultants

ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

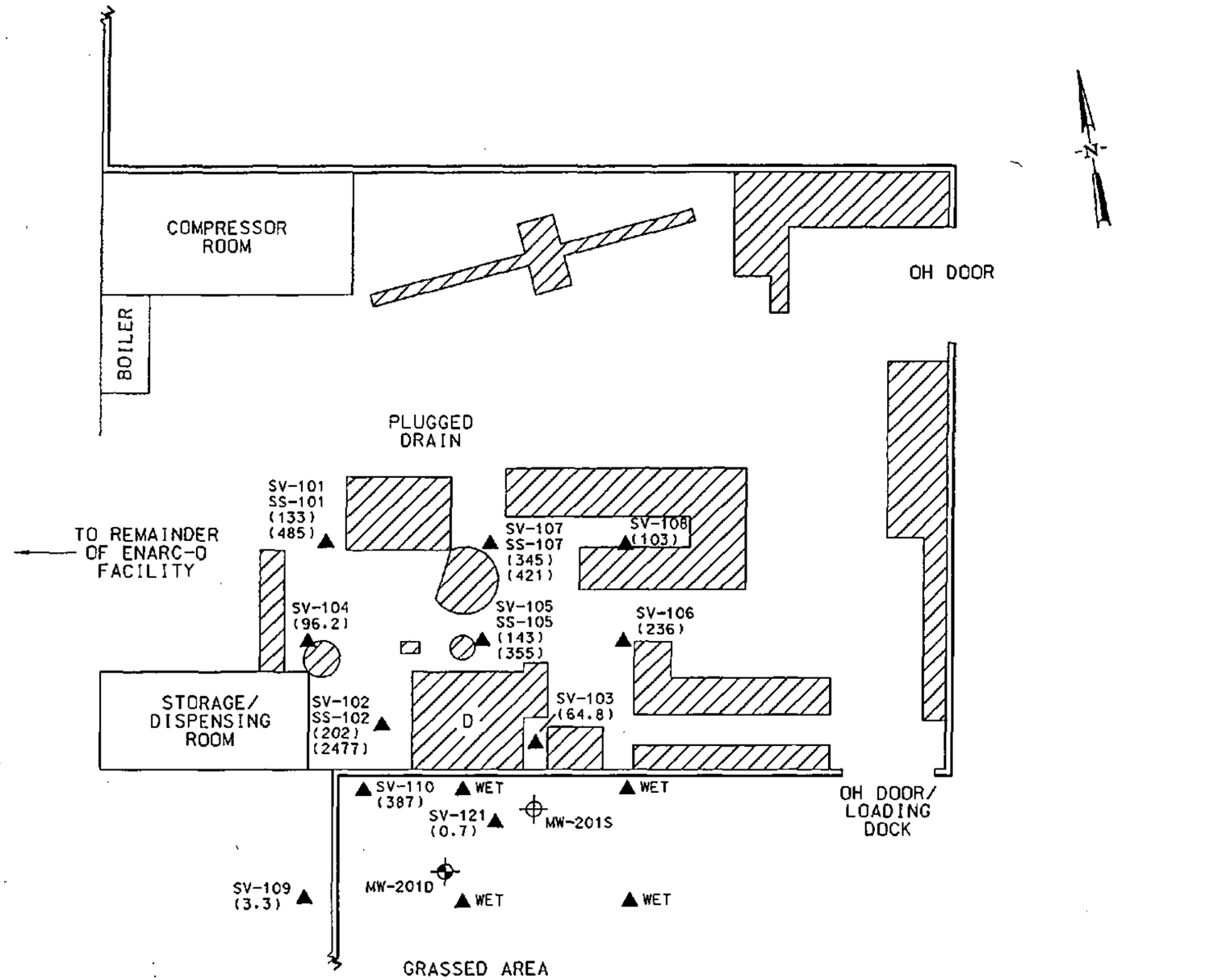
PROJECT LOCUS

SCALE: 1 IN. = 2000 FT. FEBRUARY 1993

FILE NO. 70372-40

MAKEPEACE

FIGURE 1



LEGEND:

SV-102 / SS-102 / (202) / (2477) ▲ — APPROXIMATE LOCATION OF SOIL VAPOR SAMPLE (SV) / SOIL SAMPLE (SS) / TOTAL VOCS (PPMV) IN VAPOR / TOTAL VOCS (PPB) IN SOIL

FLOOR AREA OBSTRUCTED BY EQUIPMENT, STORAGE OR OTHER, (DIMENSIONS APPROXIMATE) "D" DESIGNATES DEGREASER LOCATED IN CONCRETE PIT

MW-201S ⊕ — OVERBURDEN WELL BY H&A OF NEW YORK

MW-201D ⊕ — BEDROCK WELL BY H&A OF NEW YORK

NOTES:

1. ALL LOCATIONS AND DIMENSIONS APPROXIMATE, BASED ON TAPE PLAN OF FACILITY. WELLS AND SV-121 ARE SURVEYED.
2. SOURCE AREA SAMPLE LOCATIONS SHOWN ONLY. SAMPLE DEPTH IS 40-52 INCHES. SEE TEXT FOR ADDITIONAL INFORMATION AND SEE FIGURE 3 FOR OTHER INVESTIGATION LOCATIONS.

H & A OF NEW YORK
Geotechnical Engineers & Environmental Consultants

ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

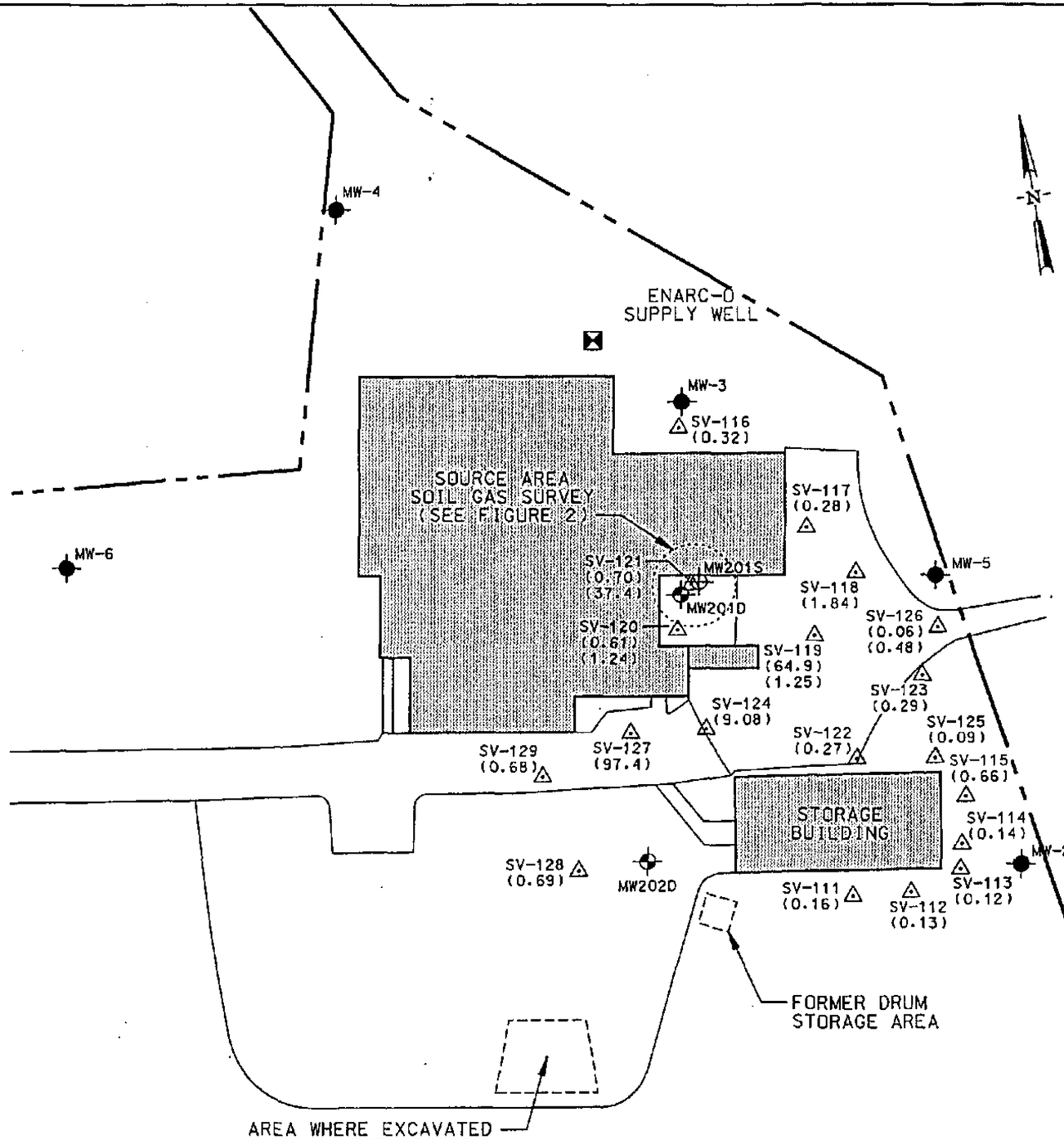
SOURCE AREA SOIL VAPOR VOC CONCENTRATION PLAN

SCALE: AS SHOWN — SEPTEMBER 1994

FILENAME: 70372-048:RIW003B.DGN

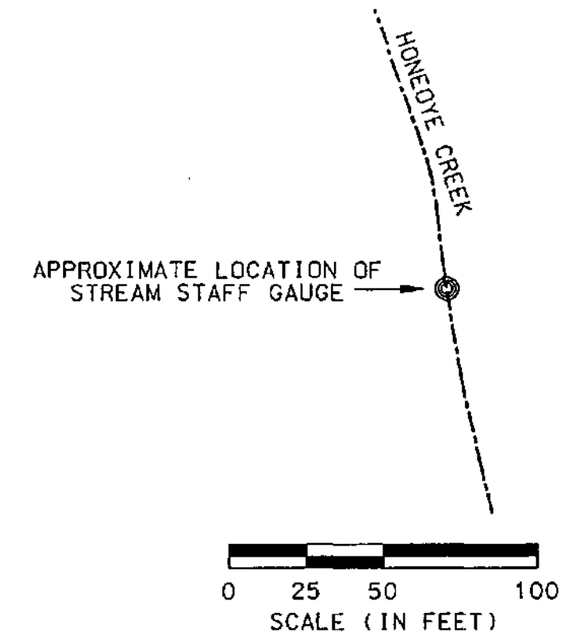
FIGURE 2

FILE No. 70372-048



LEGEND:

- MONITORING WELL INSTALLED BY OTHERS
- SUPPLY WELL
- APPROXIMATE LOCATION OF PROPERTY LINE
- CREEK
- OVERBURDEN WELL INSTALLED BY H&A OF NEW YORK
- BEDROCK WELL INSTALLED BY H&A OF NEW YORK
- SV-119 (64.9) (1.25) — LOCATION OF SOIL VAPOR SURVEY BORING; HIGHEST DETECTED VOC CONCENTRATION WITHIN BORING (PPM V); GROUNDWATER HEADSPACE READING (PPM)



NOTE:

1. VOC VALUES REPRESENT HIGHEST CONCENTRATION OF ANY SAMPLED DEPTH SPECIFIC INTERVAL WITHIN ENTIRE BORING.

H & A OF NEW YORK
Geotechnical Engineers & Environmental Consultants

ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

DELINEATION SURVEY SOIL VAPOR VOC CONCENTRATION PLAN

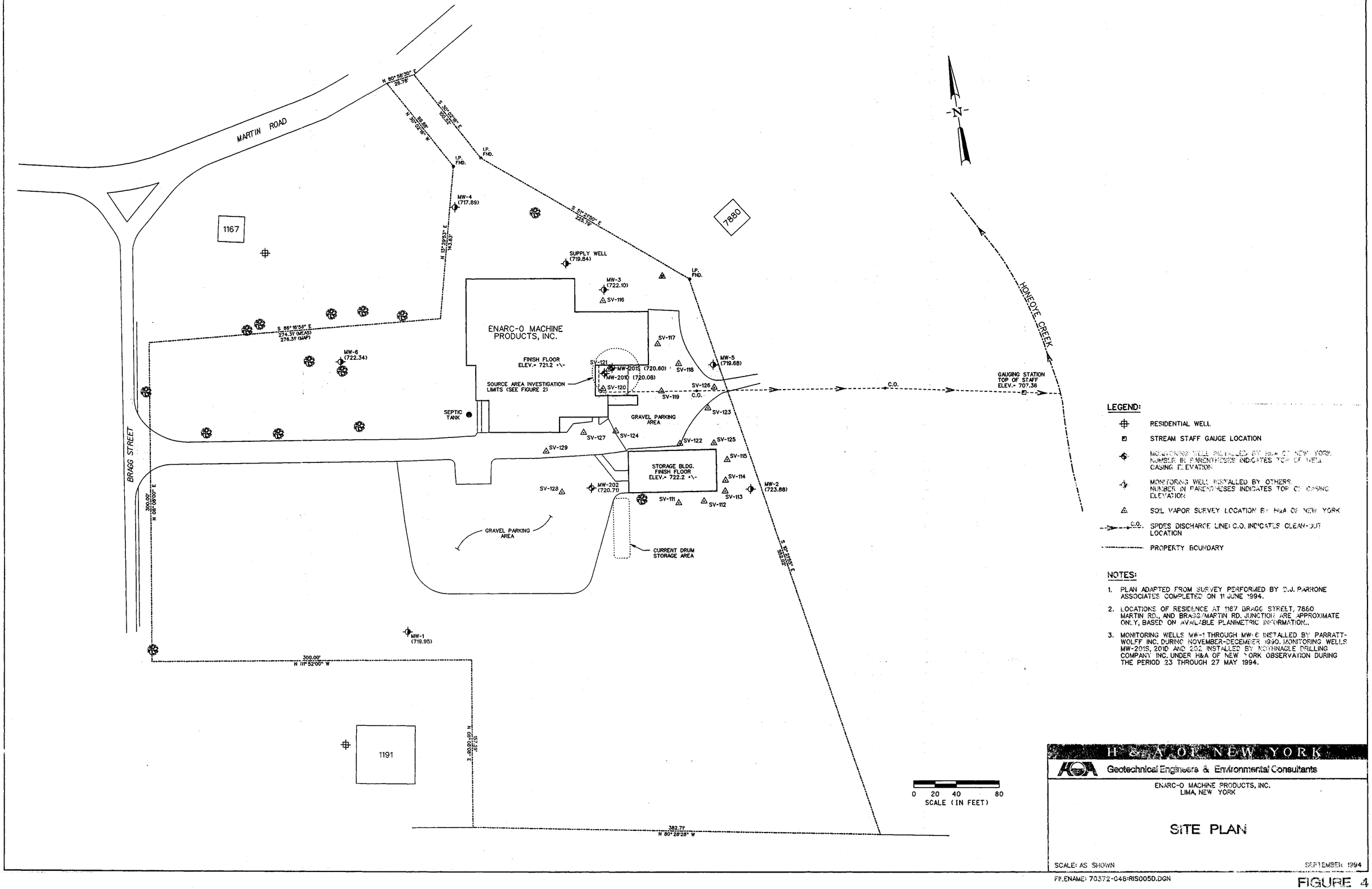
SCALE: AS SHOWN

SEPTEMBER 1994

FILENAME: 70372-048:RIW0078.DGN

FIGURE 3

FILE No. 70372-048



LEGEND:

- RESIDENTIAL WELL
- STREAM STAFF GAUGE LOCATION
- MONITORING WELL INSTALLED BY H&A OF NEW YORK NUMBER IN PARENTHESES INDICATES TOP OF WELL CASING ELEVATION
- MONITORING WELL INSTALLED BY OTHERS NUMBER IN PARENTHESES INDICATES TOP OF CASING ELEVATION
- SOIL VAPOR SURVEY LOCATION BY H&A OF NEW YORK
- C.O. SPDES DISCHARGE LINE; C.O. INDICATES CLEAN-OUT LOCATION
- PROPERTY BOUNDARY

NOTES:

1. PLAN ADAPTED FROM SURVEY PERFORMED BY D.J. PARRONE ASSOCIATES COMPLETED ON 11 JUNE 1994.
2. LOCATIONS OF RESIDENCE AT 1167 BRAGG STREET, 7880 MARTIN RD., AND BRAGG/MARTIN RD. JUNCTION ARE APPROXIMATE ONLY, BASED ON AVAILABLE PLANIMETRIC INFORMATION..
3. MONITORING WELLS MW-1 THROUGH MW-6 INSTALLED BY PARRATT-WOLFF INC. DURING NOVEMBER-DECEMBER 1990. MONITORING WELLS MW-201S, 201D AND 202 INSTALLED BY NOTHNAGLE DRILLING COMPANY INC. UNDER H&A OF NEW YORK OBSERVATION DURING THE PERIOD 23 THROUGH 27 MAY 1994.

H & A OF NEW YORK
Geotechnical Engineers & Environmental Consultants

ENARC-O MACHINE PRODUCTS, INC.
LIMA, NEW YORK

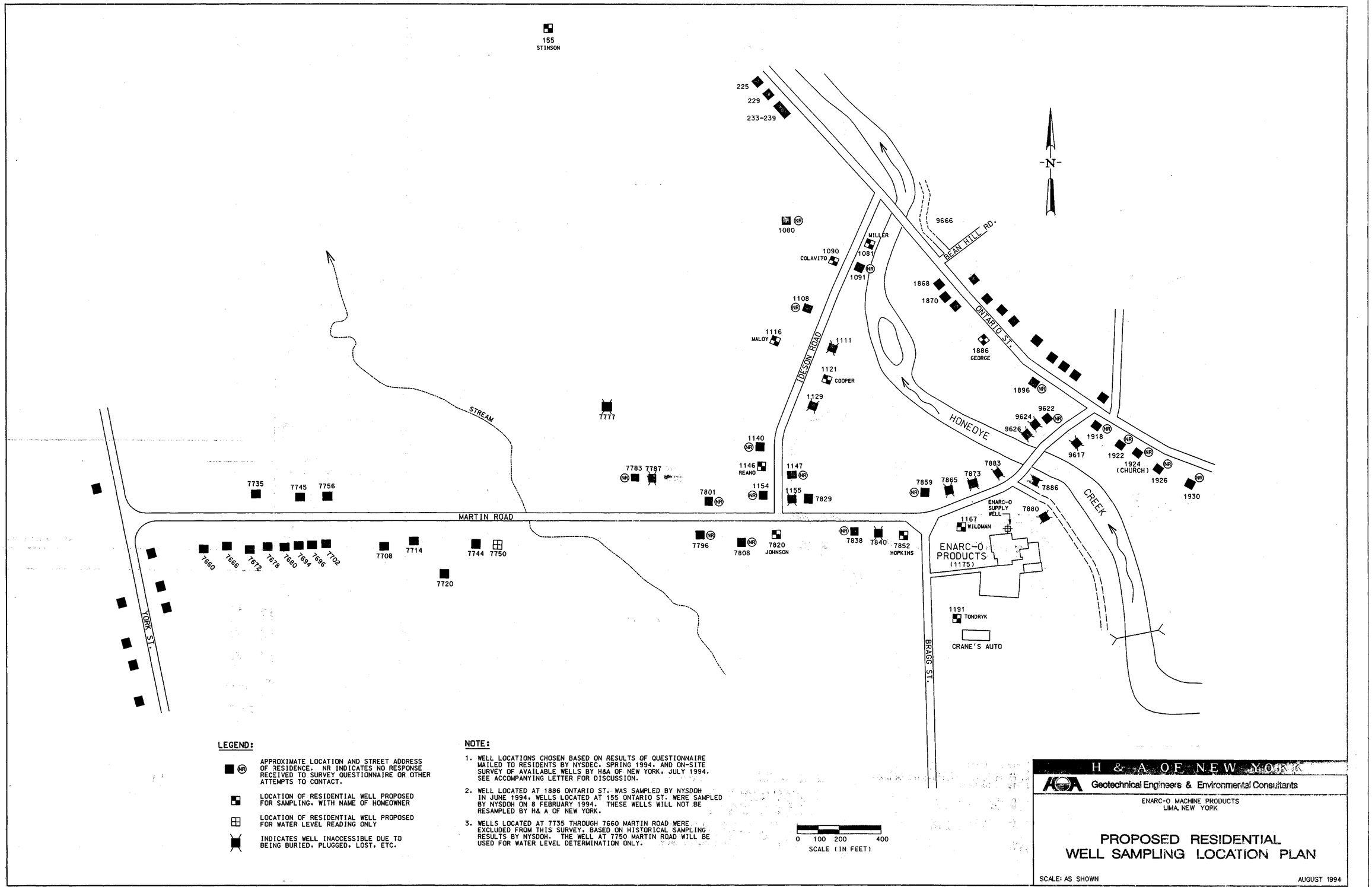
SITE PLAN

SCALE: AS SHOWN — SEPTEMBER 1994

FILENAME: 70372-048:RIS005D.DGN

FILE No. 70372-048

FIGURE 4



LEGEND:

- ■ (NR) — APPROXIMATE LOCATION AND STREET ADDRESS OF RESIDENCE. NR INDICATES NO RESPONSE RECEIVED TO SURVEY QUESTIONNAIRE OR OTHER ATTEMPTS TO CONTACT.
- ■ — LOCATION OF RESIDENTIAL WELL PROPOSED FOR SAMPLING, WITH NAME OF HOMEOWNER
- ⊞ — LOCATION OF RESIDENTIAL WELL PROPOSED FOR WATER LEVEL READING ONLY
- ■ — INDICATES WELL INACCESSIBLE DUE TO BEING BURIED, PLUGGED, LOST, ETC.

NOTE:

1. WELL LOCATIONS CHOSEN BASED ON RESULTS OF QUESTIONNAIRE MAILED TO RESIDENTS BY NYSDEC, SPRING 1994, AND ON-SITE SURVEY OF AVAILABLE WELLS BY H&A OF NEW YORK, JULY 1994. SEE ACCOMPANYING LETTER FOR DISCUSSION.
2. WELL LOCATED AT 1886 ONTARIO ST. WAS SAMPLED BY NYSDOH IN JUNE 1994, WELLS LOCATED AT 155 ONTARIO ST. WERE SAMPLED BY NYSDOH ON 8 FEBRUARY 1994. THESE WELLS WILL NOT BE RESAMPLED BY H& A OF NEW YORK.
3. WELLS LOCATED AT 7735 THROUGH 7660 MARTIN ROAD WERE EXCLUDED FROM THIS SURVEY, BASED ON HISTORICAL SAMPLING RESULTS BY NYSDOH. THE WELL AT 7750 MARTIN ROAD WILL BE USED FOR WATER LEVEL DETERMINATION ONLY.

0 100 200 400
SCALE (IN FEET)

H & A OF NEW YORK
Geotechnical Engineers & Environmental Consultants

ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

PROPOSED RESIDENTIAL WELL SAMPLING LOCATION PLAN

SCALE: AS SHOWN — AUGUST 1994

FILENAME: 70372-042:SAW001D.DGN

FILE No. 70372-042

FIGURE 5

w:\70372-42\igraph\saw001d.dgn Aug. 12, 1994 14:28:00

Appendix A

APPENDIX A

Analytical Data for Soils

Off-site Surface Soil Samples and Enarc-O Septic Tank Solids

General Testing Corporation

A Full Service Environmental Laboratory

RECEIVED
JUL 01 1994
H & A OF NEW YORK

June 28, 1993

Mr. Denis Conley
H&A of New York
189 North Water Street
Rochester, New York 14604

Re: Project #70372-40 - R94/2018, SDG# SSDUP1

Dear Mr. Conley:

Enclosed you will find a report for the above referenced site. The samples were received on 05/31/94. Six (6) soil samples and one (1) trip blank were analyzed for 91-1 (volatiles).

A detailed case narrative is enclosed identifying any difficulties encountered during analysis. Please review and submit any questions in writing to me. These will be answered promptly by our QA officer.

Thank you for your continued business.

Sincerely,

GENERAL TESTING CORPORATION

Cindy Toomey

Cindy Toomey
Customer Service Representative

Enc.

710 Exchange Street • Rochester, NY 14608 • Tele: (716) 454-3760 • (716) 454-1245
85 Trinity Place • Hackensack, NJ 07601 • Tele: (201) 488-5242 • Fax: (201) 488-6386
435 Lawrence Bell Drive • Amherst, NY 14221 • Tele: (716) 634-0454 • Fax: (716) 634-9019
1201 E. Fayette Street, Suite 42 • Syracuse, NY 13210 • Tele: (315) 471-0936 • Fax: (315) 471-0943

General Testing Corporation

Job #: R94/02018

SAMPLE DATA SUMMARY PACKAGE

SECTION A: NYSDEC Data Package Summary Forms

SECTION B: SDG Narrative

SECTION C: Sample Data

SECTION D: Surrogate Summary

SECTION E: MS/MSD Data

SECTION F: Blank Data

General Testing Corporation

Job #: R94/02018

SECTION A

NYSDEC Data Package Summary Forms

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements* NYSDEC 1991 CLP PROTOCOL					
		*VOA GC/MS	*BNA GC/MS	*VOA GC	PCB	*METALS	*OTHER
STANK	R94/2018-1	X					
SS1	R94/2018-2	X					
SS2	R94/2018-3	X					
SS3	R94/2018-4	X					
SS4	R94/2018-5	X					
SSDUP1	R94/2018-6	X					
SSTRIP	R94/2018-7	X					

*Check Appropriate Boxes

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOA
ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	LOW LEVEL MED LEVEL	DATE ANALYZED
R94/02018-1	SOIL	05/31/94	05/31/94	LOW	06/04/94
R94/02018-2	SOIL	05/31/94	05/31/94	LOW	06/06/94
R94/02018-3	SOIL	05/31/94	05/31/94	LOW	06/03/94
R94/02018-4	SOIL	05/31/94	05/31/94	LOW	06/04/94
R94/02018-5	SOIL	05/31/94	05/31/94	LOW	06/06/94
R94/02018-6	SOIL	05/31/94	05/31/94	LOW	06/03/94
R94/02018-7	WATER	05/31/94	05/31/94	LOW	06/07/94

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

ORGANIC ANALYSES

SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
R94/02018-1	SOIL	91-1			1.0
R94/02018-2	SOIL	91-1			1.0
R94/02018-3	SOIL	91-1			1.0
R94/02018-4	SOIL	91-1			1.0
R94/02018-5	SOIL	91-1			1.0
R94/02018-6	SOIL	91-1			1.0
R94/02018-7	WATER	91-1			1.0

General Testing Corporation

Job #: R94/02018

SECTION B

SDG NARRATIVE

Case Narrative

Client: H & A of New York
Enarc-O RI/FS
SDG#: SSDUP1
GTC Job#: R94/02018

Volatile Organics

Water and soil samples were analyzed for TCL volatile organics by Method 91-1 from the NYSASP 1991. The following samples are associated with SDG# SSDUP1:

EPA Sample ID	GTC Sample ID
STANK	R94/02018-01
STANKDL	-01DL
SSDUP1	-06
SSTRIP	-07
SS1	-02
SS2	-03
SS3	-04
SS4	-05
VBLK1	METHOD BLANK
VBLK2	METHOD BLANK
VBLK3	METHOD BLANK
VBLK2MS	BLANK SPIKE
SS1MS	R94/02018-02MS
SS1MSD	-02MSD

All Tuning criteria for BFB were within limits.

All Initial Calibration criteria were compliant.

All Continuing Calibration Check (CCC) criteria were compliant.

All surrogate compounds were within QC limits for recovery.
All matrix spiking compounds were within QC limits for recovery in the MS/MSD of SS1 (R94/02018-02) and the blank spike VBLK2MS. All % RPD were within limits for the MS/MSD of SS1.

Sample STANK was reanalyzed at a dilution as STANKDL in order to obtain target compound concentrations within the calibration range of the method.

All internal standard areas were within QC limits except for IS3 in sample STANK, however all internal standard areas were within limits for STANKDL.

No other analytical or QC problems were encountered during the analysis of this SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Laboratory Director

6/24/94
Date

General Testing Corporation

Job #: R94/02018

SECTION C

SAMPLE DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SSDUP1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:2018-6

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9055

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 14 Date Analyzed: 6/03/94

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SSDUP1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:2018-6

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9055

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 14 Date Analyzed: 6/03/94

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

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

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.06	110.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SSTRIP

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) WATER Lab Sample ID:2018-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: E9691

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. Date Analyzed: 6/07/94

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SSTRIP

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) WATER Lab Sample ID:2018-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: E9691

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. Date Analyzed: 6/07/94

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

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STANK

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:2018-1

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9063

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 93 Date Analyzed: 6/04/94

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	140.	U
74-83-9	Bromomethane	140.	U
75-01-4	Vinyl chloride	140.	U
75-00-3	Chloroethane	140.	U
75-09-2	Methylene chloride	140.	U
67-64-1	Acetone	4400.	E
75-15-0	Carbon Disulfide	140.	U
75-35-4	1,1-Dichloroethene	140.	U
75-34-3	1,1-Dichloroethane	140.	U
156-60-5	trans-1,2-Dichloroethene	140.	U
67-66-3	Chloroform	140.	U
107-06-2	1,2-Dichloroethane	140.	U
78-93-3	2-Butanone	3700.	E
156-59-2	cis-1,2-Dichloroethene	140.	U
71-55-6	1,1,1-Trichloroethane	140.	U
56-23-5	Carbon tetrachloride	140.	U
75-27-4	Bromodichloromethane	140.	U
78-87-5	1,2-Dichloropropane	140.	U
10061-01-5	cis-1,3-Dichloropropene	140.	U
79-01-6	Trichloroethene	140.	U
124-48-1	Dibromochloromethane	140.	U
79-00-5	1,1,2-Trichloroethane	140.	U
71-43-2	Benzene	140.	U
50061-02-6	trans-1,3-Dichloropropene	140.	U
75-25-2	Bromoform	140.	U
108-10-1	4-Methyl-2-Pentanone	140.	U
591-78-6	2-Hexanone	140.	U
127-18-4	Tetrachloroethene	140.	U
79-34-5	1,1,2,2-Tetrachloroethane	140.	U
108-88-3	Toluene	7800.	E
108-90-7	Chlorobenzene	140.	U
100-41-4	Ethylbenzene	140.	U
100-42-5	Styrene	140.	U
108-38-3	(m+p)Xylene	140.	U
95-47-6	o-Xylene	140.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

STANK

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:2018-1

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9063

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 93 Date Analyzed: 6/04/94

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

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

Number TICs Found: 12

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.14	5900.	J
2.	75-18-3	Dimethyl sulfide	6.91	280.	JN
3.		Unknown alkane	20.05	510.	J
4.		Unknown alkane	22.16	1400.	J
5.		Unknown alkane	22.51	520.	J
6.		Unknown	23.51	1100.	J
7.		Unknown alkane	24.10	660.	J
8.		Unknown Hydrocarbon	25.74	2200.	J
9.		Unknown aromatic Hydrocarbon	25.94	1500.	J
10.		Unknown alkane	26.59	5900.	J
11.		Unknown aromatic Hydrocarbon	27.02	910.	J
12.		Unknown	27.39	750.	J
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000014

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STANKDL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:2018-1DL

Sample wt/vol: 1.00 (g/ml) G Lab File ID: G9080

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 93 Date Analyzed: 6/06/94

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	710.	U
74-83-9	Bromomethane	710.	U
75-01-4	Vinyl chloride	710.	U
75-00-3	Chloroethane	710.	U
75-09-2	Methylene chloride	710.	U
67-64-1	Acetone	14000.	D
75-15-0	Carbon Disulfide	710.	U
75-35-4	1,1-Dichloroethene	710.	U
75-34-3	1,1-Dichloroethane	710.	U
156-60-5	trans-1,2-Dichloroethene	710.	U
67-66-3	Chloroform	710.	U
107-06-2	1,2-Dichloroethane	710.	U
78-93-3	2-Butanone	13000.	D
156-59-2	cis-1,2-Dichloroethene	710.	U
71-55-6	1,1,1-Trichloroethane	710.	U
56-23-5	Carbon tetrachloride	710.	U
75-27-4	Bromodichloromethane	710.	U
78-87-5	1,2-Dichloropropane	710.	U
10061-01-5	cis-1,3-Dichloropropene	710.	U
79-01-6	Trichloroethene	710.	U
124-48-1	Dibromochloromethane	710.	U
79-00-5	1,1,2-Trichloroethane	710.	U
71-43-2	Benzene	710.	U
50061-02-6	trans-1,3-Dichloropropene	710.	U
75-25-2	Bromoform	710.	U
108-10-1	4-Methyl-2-Pentanone	710.	U
591-78-6	2-Hexanone	710.	U
127-18-4	Tetrachloroethene	710.	U
79-34-5	1,1,2,2-Tetrachloroethane	710.	U
108-88-3	Toluene	14000.	D
108-90-7	Chlorobenzene	710.	U
100-41-4	Ethylbenzene	710.	U
100-42-5	Styrene	710.	U
108-38-3	(m+p)Xylene	710.	U
95-47-6	o-Xylene	710.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

STANKDL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:2018-1DL

Sample wt/vol: 1.00 (g/ml) G Lab File ID: G9080

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 93 Date Analyzed: 6/06/94

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

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

Number TICs Found: 12

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.14	21000.	DJB
2.		Unknown alkane	19.98	2200.	DJ
3.		Unknown alkane	22.13	6600.	DJ
4.		Unknown alkane	22.45	2100.	DJ
5.		Unknown alkane	24.02	2900.	DJ
6.		Unknown aromatic Hydrocarbon	25.04	1600.	DJ
7.		Unknown alkane	25.32	13000.	DJ
8.		Unknown Hydrocarbon	25.64	8400.	DJ
9.	99-87-6	Benzene, 1-methyl-4-(1-methy	25.83	5400.	DJN
10.		Unknown alkane	26.49	28000.	DJ
11.		Unknown aromatic Hydrocarbon	26.90	3500.	DJ
12.		Unknown	27.28	3300.	DJ
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000016

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:2018-2

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9056

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 13 Date Analyzed: 6/03/94

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

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

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

000017

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS1

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) SOIL Lab Sample ID:2018-2

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9056

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 13 Date Analyzed: 6/03/94

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

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.06	100.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000018

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:2018-3

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9060

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 16 Date Analyzed: 6/04/94

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS2

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) SOIL Lab Sample ID:2018-3

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9060

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 16 Date Analyzed: 6/04/94

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

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

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.12	230.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS3

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) SOIL Lab Sample ID:2018-4

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9061

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 14 Date Analyzed: 6/04/94

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

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

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

000021

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS3

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) SOIL Lab Sample ID:2018-4

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9061

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 14 Date Analyzed: 6/04/94

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

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

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.16	160.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS4

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) SOIL Lab Sample ID:2018-5

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9077

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 20 Date Analyzed: 6/06/94

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS4

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) SOIL Lab Sample ID:2018-5

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9077

Level: (low/med) LOW Date Received: 5/31/94

% Moisture: not dec. 20 Date Analyzed: 6/06/94

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

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

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.62	1100.	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Testing Corporation

Job #: R94/02018

SECTION D

SURROGATE SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	SSTRIP	108	108	98		0
02	VBLK1	108	108	96		0
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene-d8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

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

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	SS1	110	87	97		0
02	SS1MS	115	89	96		0
03	SS1MSD	106	89	97		0
04	SS2	113	86	97		0
05	SS3	108	95	96		0
06	SS4	123	78	91		0
07	SSDUP1	105	91	95		0
08	STANK	118	91	95		0
09	STANKDL	111	96	95		0
10	VBLK2	104	96	94		0
11	VBLK2MS	104	96	94		0
12	VBLK3	104	94	92		0
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene-d8	(84-138)
SMC2 (BFB) = Bromofluorobenzene	(59-113)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

General Testing Corporation

Job #: R94/02018

SECTION E

MS/MSD

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix Spike - EPA Sample No.: SS1 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	57.	0.	62.	109	59-172
Trichloroethene	57.	0.	56.	98	62-137
Benzene	57.	0.	59.	104	66-142
Toluene	57.	0.	67.	118	59-139
Chlorobenzene	57.	0.	61.	107	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	57.	67.	118	8	22	59-172
Trichloroethene	57.	57.	100	2	24	62-137
Benzene	57.	61.	107	3	21	66-142
Toluene	57.	65.	114	3	21	59-139
Chlorobenzene	57.	62.	109	2	21	60-133

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:

000029

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix Spike - EPA Sample No.: VBLK2 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.	0.	57.	114	59-172
Trichloroethene	50.	0.	51.	102	62-137
Benzene	50.	0.	53.	106	66-142
Toluene	50.	0.	55.	110	59-139
Chlorobenzene	50.	0.	54.	108	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 5 outside limits

COMMENTS:

000030

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2MS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:BLANK SPIKE

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9054

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. 0 Date Analyzed: 6/03/94

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	57.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	51.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	53.	
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	55.	
108-90-7	Chlorobenzene	54.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

General Testing Corporation

Job #: R94/02018

SECTION F

BLANK DATA

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Lab File ID:E9690 Lab Sample ID:METHOD BLANK

Date Analyzed: 6/07/94 Time Analyzed:1247

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID:MS5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SSTRIP	2018-7	E9691	1321
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: E9690

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 6/07/94

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: E9690

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 6/07/94

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

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Lab File ID:G9053 Lab Sample ID:METHOD BLANK

Date Analyzed: 6/03/94 Time Analyzed:1907

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID:MS#3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SS1	2018-2	G9056	2105
02	SS1MS	2018-2MS	G9058	2230
03	SS1MSD	2018-2MSD	G9059	2332
04	SS2	2018-3	G9060	0014
05	SS3	2018-4	G9061	0049
06	SSDUP1	2018-6	G9055	2029
07	STANK	2018-1	G9063	0157
08	VBLK2MS	BLANK SPIKE	G9054	1950
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

000036

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9053

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. 0 Date Analyzed: 6/03/94

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9053

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. 0 Date Analyzed: 6/03/94

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

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

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK3

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Lab File ID:G9076 Lab Sample ID:METHOD BLANK

Date Analyzed: 6/06/94 Time Analyzed:0952

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID:MS#3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SS4	2018-5	G9077	1039
02	STANKDL	2018-1DL	G9080	1444
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

000039

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK3

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) SOIL Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9076

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. 0 Date Analyzed: 6/06/94

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

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

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

000040

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK3

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Matrix: (soil/water) SOIL Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G9076

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. 0 Date Analyzed: 6/06/94

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

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.54	10.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Lab File ID (Standard):E9686 Date Analyzed: 6/07/94

Instrument ID:MS5 Time Analyzed:0953

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	57567	10.20	241011	11.94	204817	18.52
	UPPER LIMIT	115134	10.70	482022	12.44	409634	19.02
	LOWER LIMIT	28784	9.70	120506	11.44	102409	18.02
	EPA SAMPLE NO.						
01	VBLK1	58313	10.20	246489	11.91	188649	18.39
02	SSTRIP	54513	10.14	226779	11.91	176465	18.45
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = 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 used to flag values outside of QC limits with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Lab File ID (Standard):G9052 Date Analyzed: 6/03/94

Instrument ID:MS#3 Time Analyzed:1815

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

	EPA SAMPLE NO.	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	102302	10.93	522799	13.01	403789	20.09
	UPPER LIMIT	204604	11.43	1045598	13.51	807578	20.59
	LOWER LIMIT	51151	10.43	261400	12.51	201895	19.59
01	VBLK2	97329	10.79	532596	12.87	396036	20.07
02	VBLK2MS	97040	10.80	528929	12.89	391631	20.07
03	SSDUP1	84540	10.83	457649	12.92	325678	20.06
04	SS1	80053	10.99	435840	13.10	301915	20.16
05	SS1MS	79419	10.88	416910	12.99	275059	20.17
06	SS1MSD	78042	11.01	440826	13.11	313240	20.18
07	SS2	74045	10.99	381589	13.07	240020	20.19
08	SS3	74489	11.04	398559	13.11	276609	20.22
09	STANK	62349	11.00	339860	13.09	201383*	20.23
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = 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 used to flag values outside of QC limits with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSDUP1

Lab File ID (Standard):G9075 Date Analyzed: 6/06/94

Instrument ID:MS#3 Time Analyzed:0847

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	123727	10.95	625594	13.04	502262	20.15
	UPPER LIMIT	247454	11.45	1251188	13.54	1004524	20.65
	LOWER LIMIT	61864	10.45	312797	12.54	251131	19.65
	EPA SAMPLE NO.						
01	VBLK3	141759	11.05	826594	13.03	633667	20.05
02	SS4	78076	11.05	487380	13.04	292444	20.05
03	STANKDL	112131	10.93	599469	13.01	414793	20.14
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = 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 used to flag values outside of QC limits with an asterisk.
* Values outside of QC limits.

Appendix B

APPENDIX B

Analytical Data for Groundwater

On-site Monitoring Wells

General Testing Corporation

A Full Service Environmental Laboratory

August 15, 1994

Mr. Denis Conley
H&A of New York
189 North Water Street
Rochester, New York 14604

Re: Project #70372-42 - R94/2648, SDG# D1MW

Dear Mr. Conley:

Enclosed you will find a report for the above referenced site. The samples were received on 07/15/94. Ten (10) water samples were analyzed for 91-1 (volatiles).

A detailed case narrative is enclosed identifying any difficulties encountered during analysis. Please review and submit any questions in writing to me. These will be answered promptly by our QA officer.

Thank you for your continued business.

Sincerely,

GENERAL TESTING CORPORATION

Cindy Toomey

Cindy Toomey
Customer Service Representative

Enc.

710 Exchange Street • Rochester, NY 14608 • Tele: (716) 454-3760 • (716) 454-1245
65 Trinity Place • Hackensack, NJ 07601 • Tele: (201) 488-5242 • Fax: (201) 488-6386
435 Lawrence Bell Drive • Amherst, NY 14221 • Tele: (716) 634-0454 • Fax: (716) 634-9019
1201 E. Fayette Street, Suite 42 • Syracuse, NY 13210 • Tele: (315) 471-0936 • Fax: (315) 471-0943

General Testing Corporation

Job #: R94/02648

SAMPLE DATA SUMMARY PACKAGE

SECTION A: NYSDEC Data Package Summary Forms

SECTION B: SDG Narrative

SECTION C: Sample Data

SECTION D: Surrogate Summary

SECTION E: MS/MSD Data

SECTION F: Blank Data

00000

General Testing Corporation

Job #: R94/02648

SECTION A

NYSDEC Data Package Summary Forms

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements* NYSDEC 1991 CLP PROTOCOL					
		*VOA GC/MS	*BNA GC/MS	*VOA GC	*PEST PCB	*METALS	*OTHER
MW1	R94/02648-001	X					
MW2	R94/02648-002	X					
MW3	R94/02648-003	X					
MW4	R94/02648-004	X					
MW5	R94/02648-005	X					
MW6	R94/02648-006	X					
MW201	R94/02648-007	X					
MW202	R94/02648-008	X					
DIMW	R94/02648-009	X					
MWTB	R94/02648-010	X					

*Check Appropriate Boxes

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOA
ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	LOW LEVEL MED LEVEL	DATE ANALYZED
R94/02648-001	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-002	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-003	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-004	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-005	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-006	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-007	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-008	WATER	07/14/94	07/15/94	LOW	07/21/94
R94/02648-009	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-010	WATER	07/14/94	07/15/94	LOW	07/22/94
					00003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

ORGANIC ANALYSES

SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
R94/02648-1	WATER	91-1			1.0
R94/02648-2	WATER	91-1			10.0
R94/02648-3	WATER	91-1			10.0
R94/02648-4	WATER	91-1			1.0
R94/02648-5	WATER	91-1			5.0
R94/02648-6	WATER	91-1			1.0
R94/02648-7	WATER	91-1			50.0
R94/02648-8	WATER	91-1			1.0
R94/02648-9	WATER	91-1			5.0
R94/02648-10	WATER	91-1			1.0

General Testing Corporation

Job #: R94/02648

SECTION B

SDG NARRATIVE

CASE NARRATIVE

COMPANY: H & A of New York
Enarc-O Machine Products
JOB #: R94/02648
SDG #: D1MW

VOLATILE ORGANICS

H & A water samples were analyzed for Target Compound List volatile organics by Method 91-1 from the NYSDEC 1991 ASP. The following samples are associated with SDG # D1MW:

EPA Sample ID	GTC Sample ID
D1MW (DUP 1)	R94/02648-10
MW-1	-01
MW-2	-02
MW-3	-03
MW-4	-04
MW-5	-05
MW-6	-06
MW-201	-07
MW-202	-08
MW-202MS	-08MS
MW-202MSD	-08MSD
MWTB (Trip Blank)	-010
VBLK1	METHOD BLANK
VBLK1MS	BLANK SPIKE
VBLK2	METHOD BLANK

All Tuning criteria for BFB were QC within limits.

All Initial Calibration criteria were compliant.

All Continuing Calibration Check (CCC) criteria were compliant.

All internal standard areas were within QC limits.

All samples were screened prior to analysis and determined to be high in volatile organic content. Samples MW-2, MW-3, MW-5, MW-201, and D1MW were analyzed at dilutions to obtain target compounds within the calibration range of the method.

All surrogate compounds were within QC limits for recovery.

All recoveries for the Matrix Spike and Matrix Spike Duplicate were within QC limits for sample MW-201. All %RPD were within precision limits on the MS/MSD of MW-201. All Blank Spike recoveries were within QC limits.

No other analytical or QC problems were encountered during the analysis of this SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Laboratory Director

8/15/94
Date

General Testing Corporation

Job #:R94/02648

SECTION C

SAMPLE DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D1MW

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-9

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0403

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene chloride	50.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	50.	U
75-35-4	1,1-Dichloroethene	50.	U
75-34-3	1,1-Dichloroethane	50.	U
156-60-5	trans-1,2-Dichloroethene	50.	U
67-66-3	Chloroform	50.	U
107-06-2	1,2-Dichloroethane	50.	U
78-93-3	2-Butanone	50.	U
156-59-2	cis-1,2-Dichloroethene	51.	
71-55-6	1,1,1-Trichloroethane	21.	J
56-23-5	Carbon tetrachloride	50.	U
75-27-4	Bromodichloromethane	50.	U
78-87-5	1,2-Dichloropropane	50.	U
10061-01-5	cis-1,3-Dichloropropene	50.	U
79-01-6	Trichloroethene	500.	
124-48-1	Dibromochloromethane	50.	U
79-00-5	1,1,2-Trichloroethane	50.	U
71-43-2	Benzene	50.	U
50061-02-6	trans-1,3-Dichloropropene	50.	U
75-25-2	Bromoform	50.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	50.	U
108-88-3	Toluene	50.	U
108-90-7	Chlorobenzene	50.	U
100-41-4	Ethylbenzene	50.	U
100-42-5	Styrene	50.	U
108-38-3	(m+p)Xylene	50.	U
95-47-6	o-Xylene	50.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D1MW

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-9

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0403

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

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

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.78	29.	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-1

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0392

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

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

00011

IE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-1

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0392

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-2

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0393

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100.	U
74-83-9	Bromomethane	100.	U
75-01-4	Vinyl chloride	100.	U
75-00-3	Chloroethane	100.	U
75-09-2	Methylene chloride	100.	U
67-64-1	Acetone	25.	J
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	100.	U
75-34-3	1,1-Dichloroethane	100.	U
156-60-5	trans-1,2-Dichloroethene	100.	U
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	100.	U
156-59-2	cis-1,2-Dichloroethene	23.	J
71-55-6	1,1,1-Trichloroethane	100.	U
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	1400.	
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	100.	U
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-2

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0393

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.66	120.	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW201

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0402

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 50.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	500.	U
74-83-9	Bromomethane	500.	U
75-01-4	Vinyl chloride	500.	U
75-00-3	Chloroethane	500.	U
75-09-2	Methylene chloride	500.	U
67-64-1	Acetone	500.	U
75-15-0	Carbon Disulfide	500.	U
75-35-4	1,1-Dichloroethene	500.	U
75-34-3	1,1-Dichloroethane	500.	U
156-60-5	trans-1,2-Dichloroethene	500.	U
67-66-3	Chloroform	500.	U
107-06-2	1,2-Dichloroethane	500.	U
78-93-3	2-Butanone	500.	U
156-59-2	cis-1,2-Dichloroethene	1100.	
71-55-6	1,1,1-Trichloroethane	390.	J
56-23-5	Carbon tetrachloride	500.	U
75-27-4	Bromodichloromethane	500.	U
78-87-5	1,2-Dichloropropane	500.	U
10061-01-5	cis-1,3-Dichloropropene	500.	U
79-01-6	Trichloroethene	7400.	
124-48-1	Dibromochloromethane	500.	U
79-00-5	1,1,2-Trichloroethane	500.	U
71-43-2	Benzene	500.	U
50061-02-6	trans-1,3-Dichloropropene	500.	U
75-25-2	Bromoform	500.	U
108-10-1	4-Methyl-2-Pentanone	500.	U
591-78-6	2-Hexanone	500.	U
127-18-4	Tetrachloroethene	160.	J
79-34-5	1,1,2,2-Tetrachloroethane	500.	U
108-88-3	Toluene	500.	U
108-90-7	Chlorobenzene	500.	U
100-41-4	Ethylbenzene	500.	U
100-42-5	Styrene	500.	U
108-38-3	(m+p)Xylene	500.	U
95-47-6	o-Xylene	500.	U

00015

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW201

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0402

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 50.0

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

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW202

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-8

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0389

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/21/94

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

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

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

TE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: MW202

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-8

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0389

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/21/94

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

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.78	5.	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-3

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0394

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100.	U
74-83-9	Bromomethane	100.	U
75-01-4	Vinyl chloride	100.	U
75-00-3	Chloroethane	100.	U
75-09-2	Methylene chloride	100.	U
67-64-1	Acetone	100.	U
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	14.	J
75-34-3	1,1-Dichloroethane	100.	U
156-60-5	trans-1,2-Dichloroethene	100.	U
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	100.	U
156-59-2	cis-1,2-Dichloroethene	30.	J
71-55-6	1,1,1-Trichloroethane	130.	
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	1100.	
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	17.	J
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

IE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW3

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-3

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0394

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.75	82.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

IA

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW4

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0395

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	28.	
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00021

IE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW4

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0395

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-5

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0396

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene chloride	50.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	50.	U
75-35-4	1,1-Dichloroethene	50.	U
75-34-3	1,1-Dichloroethane	50.	U
156-60-5	trans-1,2-Dichloroethene	50.	U
67-66-3	Chloroform	50.	U
107-06-2	1,2-Dichloroethane	50.	U
78-93-3	2-Butanone	50.	U
156-59-2	cis-1,2-Dichloroethene	58.	
71-55-6	1,1,1-Trichloroethane	23.	J
56-23-5	Carbon tetrachloride	50.	U
75-27-4	Bromodichloromethane	50.	U
78-87-5	1,2-Dichloropropane	50.	U
10061-01-5	cis-1,3-Dichloropropene	50.	U
79-01-6	Trichloroethene	510.	
124-48-1	Dibromochloromethane	50.	U
79-00-5	1,1,2-Trichloroethane	50.	U
71-43-2	Benzene	50.	U
50061-02-6	trans-1,3-Dichloropropene	50.	U
75-25-2	Bromoform	50.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	50.	U
108-88-3	Toluene	50.	U
108-90-7	Chlorobenzene	50.	U
100-41-4	Ethylbenzene	50.	U
100-42-5	Styrene	50.	U
108-38-3	(m+p)Xylene	50.	U
95-47-6	o-Xylene	50.	U

00023

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW5

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-5

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0396

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

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

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW6

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-6

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0401

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

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

00025

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW6

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-6

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0401

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

00026

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWTB

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-10

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0404

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWTB

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-10

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0404

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.98	6.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Testing Corporation

Job #: R94/02648

SECTION D

SURROGATE SUMMARY

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	D1MW	100	100	88		0
02	MW1	100	100	96		0
03	MW2	102	100	112		0
04	MW201	100	102	88		0
05	MW202	100	102	94		0
06	MW202MS	98	100	102		0
07	MW202MSD	104	106	96		0
08	MW3	104	104	100		0
09	MW4	100	100	96		0
10	MW5	102	102	102		0
11	MW6	100	98	102		0
12	MWTB	98	102	86		0
13	VBLK1	100	102	102		0
14	VBLK1MS	98	102	94		0
15	VBLK2	100	100	86		0
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene-d8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

General Testing Corporation

Job #: R94/02648

SECTION E

MS/MSD

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix Spike - EPA Sample No.: MW202

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.	0.	54.	108	61-145
Trichloroethene	50.	15.	63.	96	71-120
Benzene	50.	0.	50.	100	76-127
Toluene	50.	0.	49.	98	76-125
Chlorobenzene	50.	0.	51.	102	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	50.	100	8	14	61-145
Trichloroethene	50.	64.	98	2	14	71-120
Benzene	50.	49.	98	2	11	76-127
Toluene	50.	52.	104	6	13	76-125
Chlorobenzene	50.	52.	104	2	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:

00032

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW202MS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-8MS

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0390

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	54.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	12.	
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	63.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	50.	
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	49.	
108-90-7	Chlorobenzene	51.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00033

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW202MSD

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-8MSD

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0391

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	50.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	11.	
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	64.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	49.	
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	52.	
108-90-7	Chlorobenzene	52.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00034

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix Spike - EPA Sample No.: VBLK1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.	0.	44.	88	61-145
Trichloroethene	50.	0.	51.	102	71-120
Benzene	50.	0.	52.	104	76-127
Toluene	50.	0.	52.	104	76-125
Chlorobenzene	50.	0.	54.	108	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 5 outside limits

COMMENTS:

00035

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1MS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:BLANK SPIKE

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0386

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/21/94

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	44.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	51.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	52.	
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	52.	
108-90-7	Chlorobenzene	54.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

General Testing Corporation

Job #: R94/02648

SECTION F

BLANK DATA

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID:Q0385 Lab Sample ID:METHOD BLANK

Date Analyzed: 7/21/94 Time Analyzed:2054

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID:MS5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW1	2648-1	Q0392	0122
02	MW2	2648-2	Q0393	0155
03	MW202	2648-8	Q0389	2342
04	MW202MS	2648-8MS	Q0390	1215
05	MW202MSD	2648-8MSD	Q0391	1249
06	MW3	2648-3	Q0394	0228
07	MW4	2648-4	Q0395	0301
08	MW5	2648-5	Q0396	0333
09	VBLK1MS	BLANK SPIKE	Q0386	2142
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

00038

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0385

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/21/94

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0385

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/21/94

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

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

Number TICs Found: 2

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.04	7.	J
2.		Unknown	22.00	6.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

00040

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID:Q0400 Lab Sample ID:METHOD BLANK

Date Analyzed: 7/22/94 Time Analyzed:1114

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID:MS5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	D1MW	2648-9	Q0403	1325
02	MW201	2648-7	Q0402	1252
03	MW6	2648-6	Q0401	1219
04	MWTB	2648-10	Q0404	1359
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0400

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0400

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/22/94

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

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID (Standard):Q0384 Date Analyzed: 7/21/94

Instrument ID:MS5 Time Analyzed:2011

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	99669	10.17	455176	11.95	392084	18.52
	UPPER LIMIT	199338	10.67	910352	12.45	784168	19.02
	LOWER LIMIT	49835	9.67	227588	11.45	196042	18.02
	EPA SAMPLE NO.						
01	VBLK1	93153	10.20	458217	11.98	391445	18.52
02	VBLK1MS	100866	10.17	450890	11.94	385925	18.49
03	MW202	105810	10.17	469096	11.94	393569	18.49
04	MW1	104956	10.20	486465	11.97	390675	18.52
05	MW2	89787	10.20	460499	11.97	352130	18.52
06	MW3	105735	10.20	499328	11.97	384162	18.55
07	MW4	109635	10.17	501556	11.97	408818	18.52
08	MW5	104617	10.23	500442	12.01	392442	18.55
09	MW202MS	97364	10.20	473984	11.97	400332	18.52
10	MW202MSD	106247	10.20	486370	11.94	372383	18.49
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = 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 used to flag values outside of QC limits with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID (Standard):Q0399 Date Analyzed: 7/22/94

Instrument ID:MS5 Time Analyzed:1019

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	93947	10.24	496543	12.01	403758	18.55
	UPPER LIMIT	187894	10.74	993086	12.51	807516	19.05
	LOWER LIMIT	46974	9.74	248272	11.51	201879	18.05
	EPA SAMPLE NO.						
01	VBLK2	97585	10.20	440825	11.97	355405	18.52
02	MW6	75808	10.27	406580	12.04	324015	18.58
03	MW201	83261	10.23	378229	12.01	304482	18.55
04	D1MW	99306	10.27	447222	12.04	370173	18.58
05	MWTB	93916	10.23	413548	12.01	344938	18.55
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = 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 used to flag values outside of QC limits with an asterisk.
* Values outside of QC limits.

Appendix C

APPENDIX C

Rising Head Permeability Test Reports

On-site Monitoring Wells

RISING HEAD TEST SUMMARY

WELL NAME: MW-1

DATE OF TEST: 7-JUN-94

Rising Head Permeability Calculation

Hvorslev Method

Kh=[((d*d)ln((2*m*L)/D))ln(H1/H2)] / 8L(t2-t1)

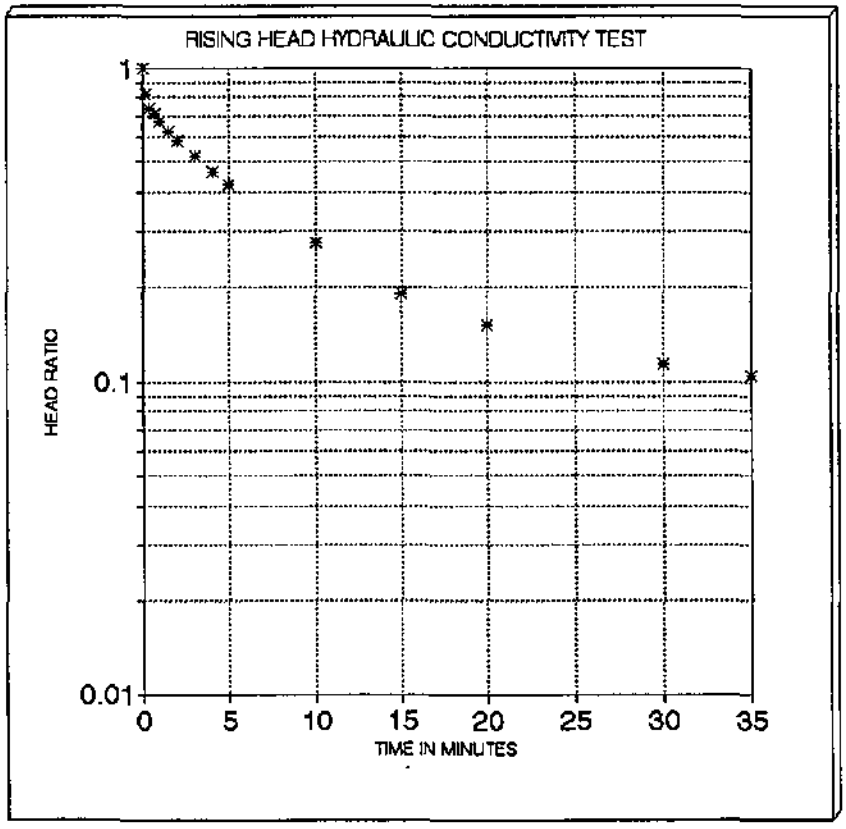
Test Section Diameter (D), in ft.:	0.25
Casing Diameter (d), in ft.:	0.25
Test Length Section (L),in ft.:	13.0
m = (Kh/Kv)**0.5:	3.16
t1 in min.:	10
t2 in min.:	20
H1:	0.27
H2:	0.15
Kh (cm/sec) =	1.0E-04
Kh (ft/min) =	2.1E-04
Kh (ft/day) =	3.0E-01

NOTES

1. m is the square root of the ratio of horizontal to vertical permeability.
2. Test Section Diameter (D) is equal to the borehole diameter.
3. Method taken from Hvorslev, 1951.

Rising Head Test Field Data Static Water 24.04

Depth Water (ft)	Elapsed Time (min)	Head Ratio	Residual Head (ft)
25.10	0.0	1.00	1.06
24.91	0.17	0.82	0.87
24.82	0.42	0.74	0.78
24.79	0.67	0.71	0.75
24.75	1	0.67	0.71
24.70	1.5	0.62	0.66
24.66	2	0.58	0.62
24.59	3	0.52	0.55
24.53	4	0.46	0.49
24.49	5	0.42	0.45
24.33	10	0.27	0.29
24.24	15	0.19	0.20
24.20	20	0.15	0.16
24.16	30	0.11	0.12
24.15	35	0.10	0.11



RISING HEAD TEST SUMMARY

WELL NAME: MW-2

DATE OF TEST: 7-JUN-94

Rising Head Permeability Calculation

Hvorslev Method

Kh=[((d*d)ln((2*m*L)/D))ln(H1/H2)] / 8L(t2-t1)

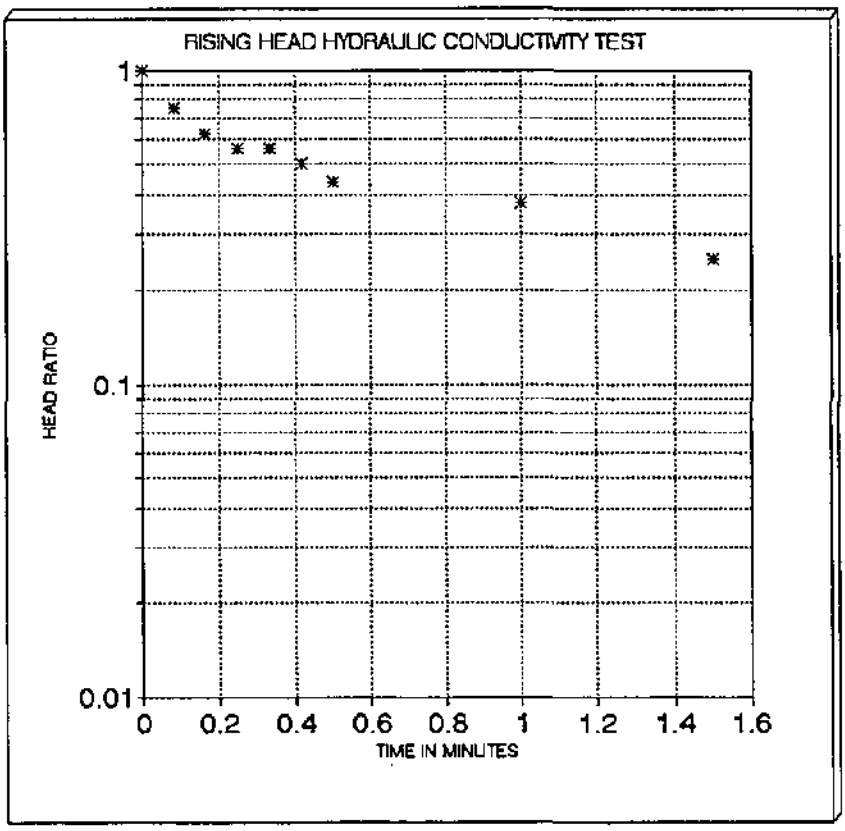
Test Section Diameter (D), in ft.:	0.25
Casing Diameter (d), in ft.:	0.25
Test Length Section (L),in ft.:	11.5
m = (Kh/Kv)**0.5:	3.16
t1 in min.:	1
t2 in min.:	1.5
H1:	0.37
H2:	0.25
Kh (cm/sec) =	1.5E-03
Kh (ft/min) =	3.0E-03
Kh (ft/day) =	4.3E+00

Rising Head Test Field Data Static Water 27.46

Depth Water (ft)	Elapsed Time (min)	Head Ratio	Residual Head (ft)
27.62	0.0	1.00	0.16
27.58	0.08	0.75	0.12
27.56	0.17	0.62	0.10
27.55	0.25	0.56	0.09
27.55	0.33	0.56	0.09
27.54	0.42	0.50	0.08
27.53	0.5	0.44	0.07
27.52	1	0.37	0.06
27.50	1.5	0.25	0.04

NOTES

1. m is the square root of the ratio of horizontal to vertical permeability.
2. Test Section Diameter (D) is equal to the borehole diameter.
3. Method taken from Hvorslev, 1951.



mgb-m:\qpro5\70372\MW-2

RISING HEAD TEST SUMMARY

WELL NAME: MW-3

DATE OF TEST: 7-JUN-94

Rising Head Permeability Calculation

Hvorslev Method

Kh=[((d*d)ln((2*m*L)/D))ln(H1/H2)] / 8L(t2-t1)

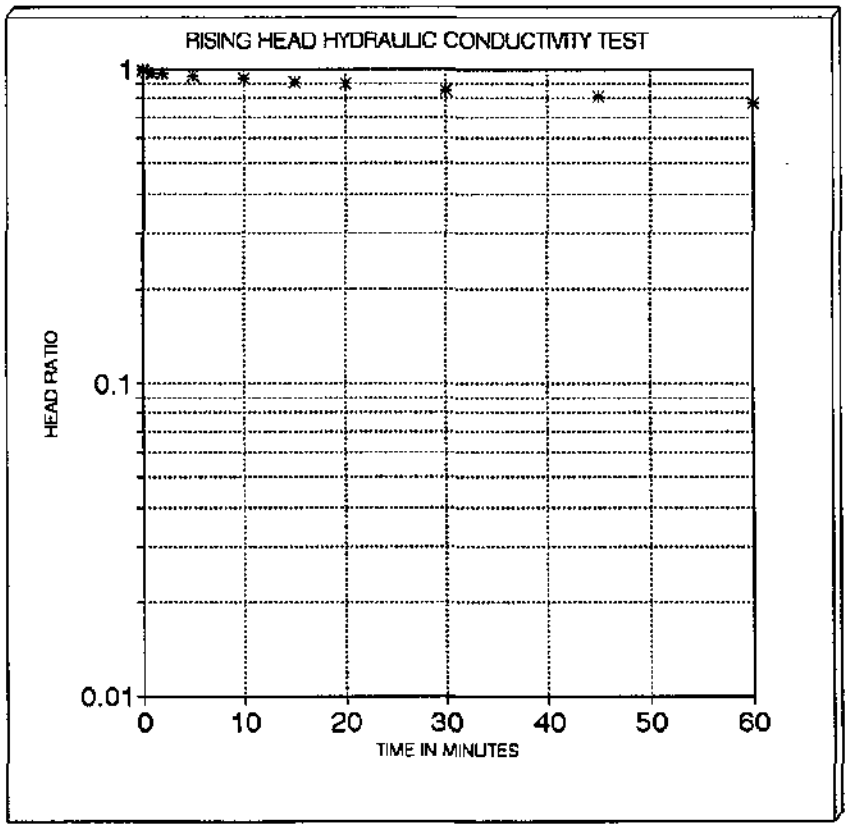
Test Section Diameter (D), in ft.:	0.25
Casing Diameter (d), in ft.:	0.25
Test Length Section (L),in ft.:	11.7
m = (Kh/Kv)**0.5:	3.16
t1 in min.:	45
t2 in min.:	60
H1:	0.82
H2:	0.77
Kh (cm/sec) =	8.1E-06
Kh (ft/min) =	1.6E-05
Kh (ft/day) =	2.3E-02

Rising Head Test Field Data Static Water 24.41

Depth Water (ft)	Elapsed Time (min)	Head Ratio	Residual Head (ft)
25.60	0.0	1.00	1.19
25.58	0.08	0.98	1.17
25.57	0.42	0.97	1.16
25.56	1.00	0.97	1.15
25.56	2.00	0.97	1.15
25.54	5.00	0.95	1.13
25.51	10	0.92	1.10
25.49	15	0.91	1.08
25.47	20	0.89	1.06
25.43	30	0.86	1.02
25.38	45	0.82	0.97
25.33	60	0.77	0.92

NOTES

1. m is the square root of the ratio of horizontal to vertical permeability.
2. Test Section Diameter (D) is equal to the borehole diameter.
3. Method taken from Hvorslev, 1951.



mgb-m:\qpro5\70372\MW-3

RISING HEAD TEST SUMMARY

WELL NAME: MW-4

DATE OF TEST: 7-JUN-94

Rising Head Permeability Calculation

Hvorslev Method

Kh=[((d*d)ln((2*m*L)/D))ln(H1/H2)] / 8L(t2-t1)

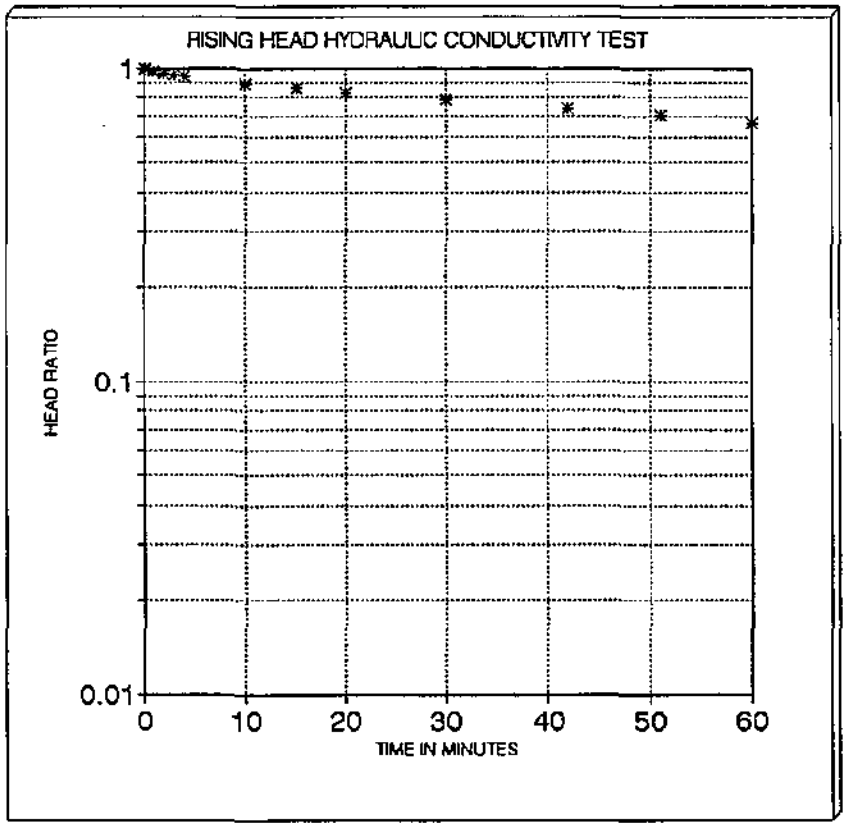
Test Section Diameter (D), in ft.:	0.25
Casing Diameter (d), in ft.:	0.25
Test Length Section (L),in ft.:	15.4
m = (Kh/Kv)**0.5:	3.16
t1 in min.:	51
t2 in min.:	60
H1:	0.70
H2:	0.66
Kh (cm/sec) =	1.0E-05
Kh (ft/min) =	2.0E-05
Kh (ft/day) =	2.8E-02

NOTES

1. m is the square root of the ratio of horizontal to vertical permeability.
2. Test Section Diameter (D) is equal to the borehole diameter.
3. Method taken from Hvorslev, 1951.

Rising Head Test Field Data Static Water 20.20

Depth Water (ft)	Elapsed Time (min)	Head Ratio	Residual Head (ft)
21.54	0.0	1.00	1.34
21.52	0.08	0.99	1.32
21.52	0.17	0.99	1.32
21.51	0.25	0.98	1.31
21.50	1.00	0.97	1.30
21.48	2.00	0.96	1.28
21.46	3	0.94	1.26
21.45	4	0.93	1.25
21.38	10	0.88	1.18
21.35	15	0.86	1.15
21.31	20	0.83	1.11
21.26	30	0.79	1.06
21.19	42	0.74	0.99
21.14	51	0.70	0.94
21.09	60	0.66	0.89



mpb-m:\gpro\270372\MW-4

RISING HEAD TEST SUMMARY

WELL NAME: MW-5

DATE OF TEST: 7-JUN-94

Rising Head Permeability Calculation

Hvorslev Method

Kh=[((d*d)ln((2*m*L)/D))ln(H1/H2)] / 8L(t2-t1)

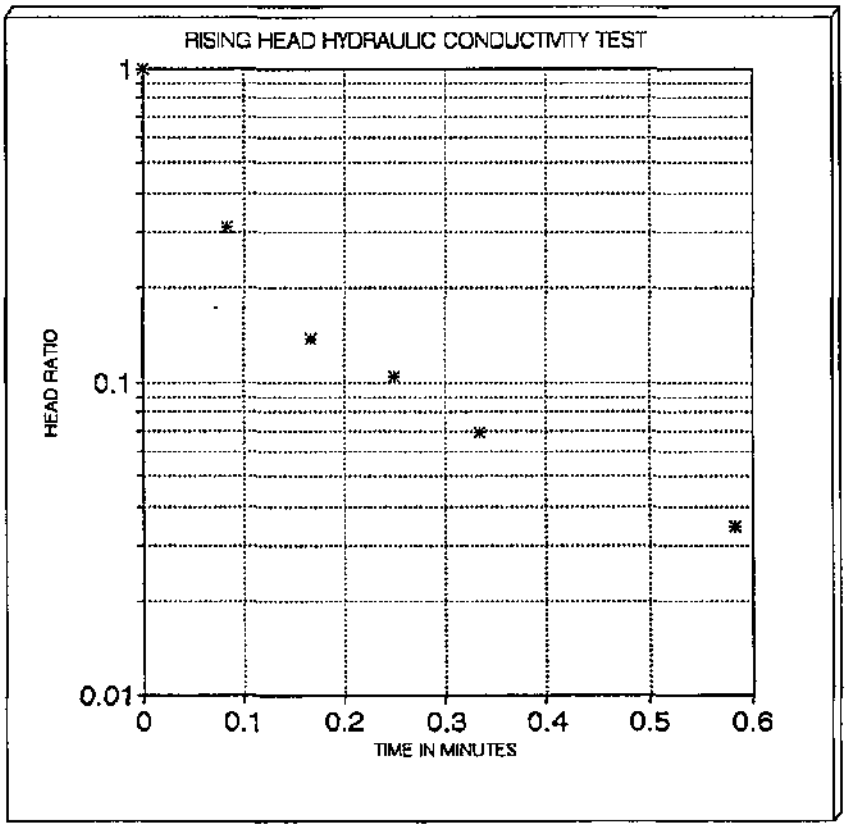
Test Section Diameter (D), in ft.:	0.25
Casing Diameter (d), in ft.:	0.25
Test Length Section (L),in ft.:	10.5
m = (Kh/Kv)**0.5:	3.16
t1 in min.:	0.08
t2 in min.:	0.25
H1:	0.31
H2:	0.10
Kh (cm/sec) =	1.4E-02
Kh (ft/min) =	2.8E-02
Kh (ft/day) =	4.0E+01

Rising Head Test Field Data Static Water 23.33

Depth Water (ft)	Elapsed Time (min)	Head Ratio	Residual Head (ft)
23.62	0.0	1.00	0.29
23.42	0.08	0.31	0.09
23.37	0.17	0.14	0.04
23.36	0.25	0.10	0.03
23.35	0.33	0.07	0.02
23.34	0.58	0.03	0.01

NOTES

1. m is the square root of the ratio of horizontal to vertical permeability.
2. Test Section Diameter (D) is equal to the borehole diameter.
3. Method taken from Hvorslev, 1951.



mgb-m:\qpro5\70372\MW-5

RISING HEAD TEST SUMMARY

WELL NAME: MW-6

DATE OF TEST: 7-JUN-94

Rising Head Permeability Calculation

Hvorslev Method

Kh=[((d*d)ln((2*m*L)/D))ln(H1/H2)] / 8L(t2-t1)

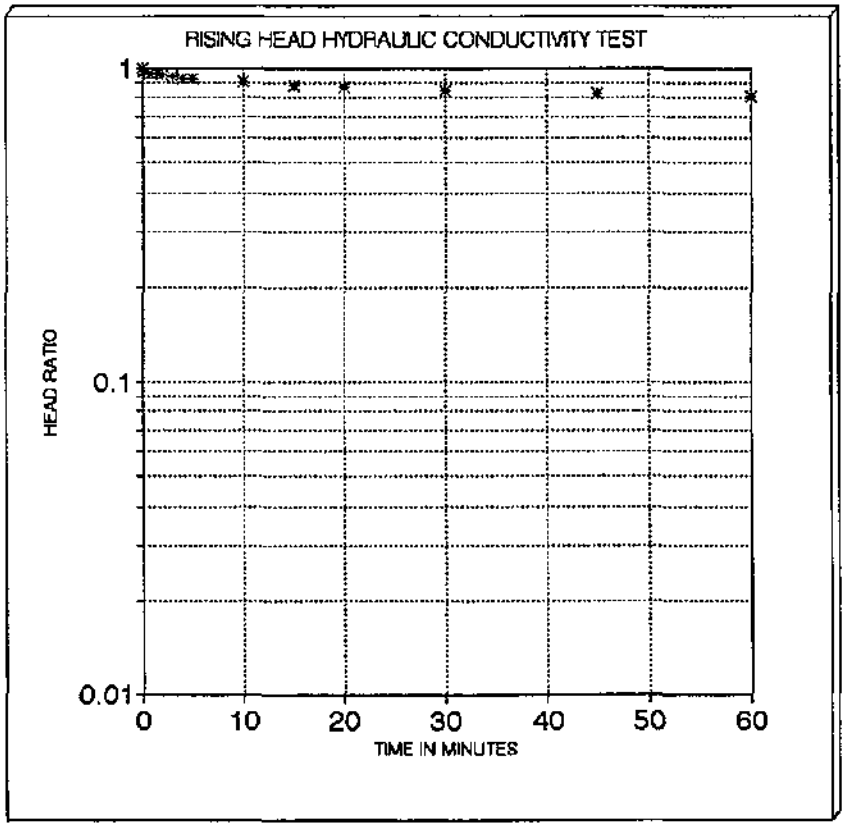
Test Section Diameter (D), in ft.:	0.25
Casing Diameter (d), in ft.:	0.25
Test Length Section (L),in ft.:	12.0
m = (Kh/Kv)**0.5:	3.16
t1 in min.:	45
t2 in min.:	60
H1:	0.82
H2:	0.81
Kh (cm/sec) =	1.6E-06
Kh (ft/min) =	3.1E-06
Kh (ft/day) =	4.4E-03

NOTES

1. m is the square root of the ratio of horizontal to vertical permeability.
2. Test Section Diameter (D) is equal to the borehole diameter.
3. Method taken from Hvorslev, 1951.

Rising Head Test Field Data Static Water 27.74

Depth Water (ft)	Elapsed Time (min)	Head Ratio	Residual Head (ft)
28.48	0.0	1.00	0.74
28.46	0.25	0.97	0.72
28.45	0.67	0.96	0.71
28.45	1.00	0.96	0.71
28.45	1.50	0.96	0.71
28.44	2.00	0.95	0.70
28.43	3	0.93	0.69
28.42	4	0.92	0.68
28.42	5	0.92	0.68
28.41	10	0.91	0.67
28.39	15	0.88	0.65
28.38	20	0.86	0.64
28.36	30	0.84	0.62
28.35	45	0.82	0.61
28.34	60	0.81	0.60



mgb-m:\qpro5\70372\MW-6

RISING HEAD TEST SUMMARY

WELL NAME: MW-201D

DATE OF TEST: 16-JUN-94

Rising Head Permeability Calculation

Hvorslev Method

Kh=[((d*d)ln((2*m*L)/D))ln(H1/H2)] / 8L(t2-t1)

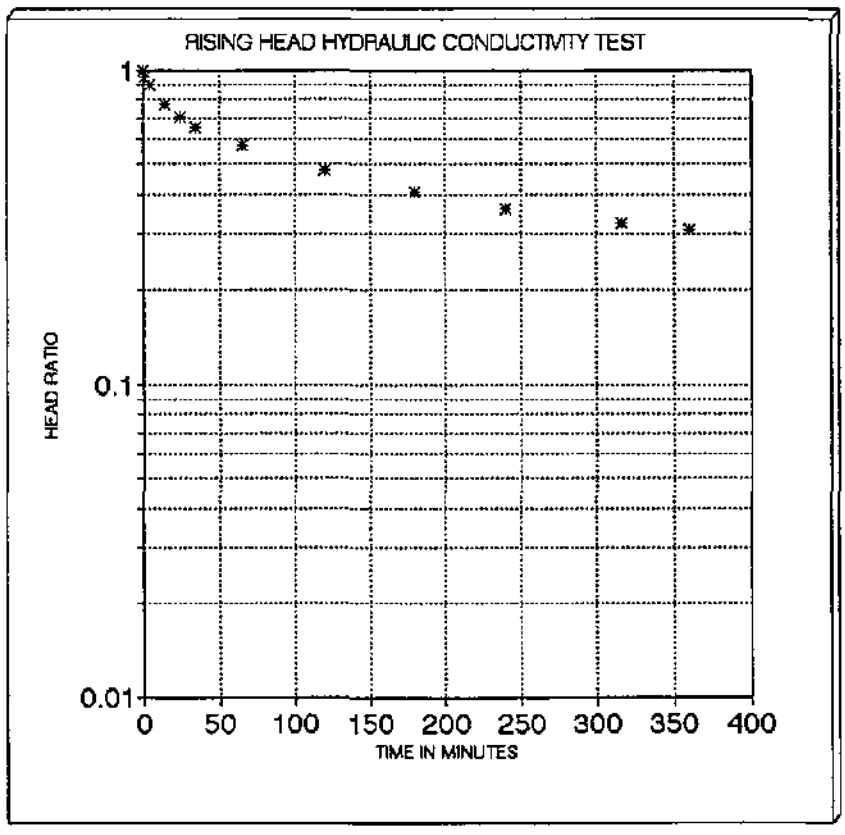
Test Section Diameter (D), in ft.:	0.25
Casing Diameter (d), in ft.:	0.25
Test Length Section (L),in ft.:	6.3
m = (Kh/Kv)**0.5:	3.16
t1 in min.:	240
t2 in min.:	360
H1:	0.36
H2:	0.31
Kh (cm/sec) =	4.0E-06
Kh (ft/min) =	7.8E-06
Kh (ft/day) =	1.1E-02

Rising Head Test Field Data Static Water 25.32

Depth Water (ft)	Elapsed Time (min)	Head Ratio	Residual Head (ft)
26.16	0.0	1.00	0.84
26.12	1	0.95	0.80
26.07	5	0.89	0.75
25.97	15	0.77	0.65
25.91	25	0.70	0.59
25.87	35	0.65	0.55
25.80	65	0.57	0.48
25.72	120	0.48	0.40
25.66	180	0.40	0.34
25.62	240	0.36	0.30
25.59	316	0.32	0.27
25.58	360	0.31	0.26

NOTES

1. m is the square root of the ratio of horizontal to vertical permeability.
2. Test Section Diameter (D) is equal to the borehole diameter.
3. Method taken from Hvorslev, 1951.



RISING HEAD TEST SUMMARY

WELL NAME: MW-202

DATE OF TEST: 16-JUN-94

Rising Head Permeability Calculation

Hvorslev Method

Kh=[((d*d)ln((2*m*L)/D))ln(H1/H2)] / 8L(t2-t1)

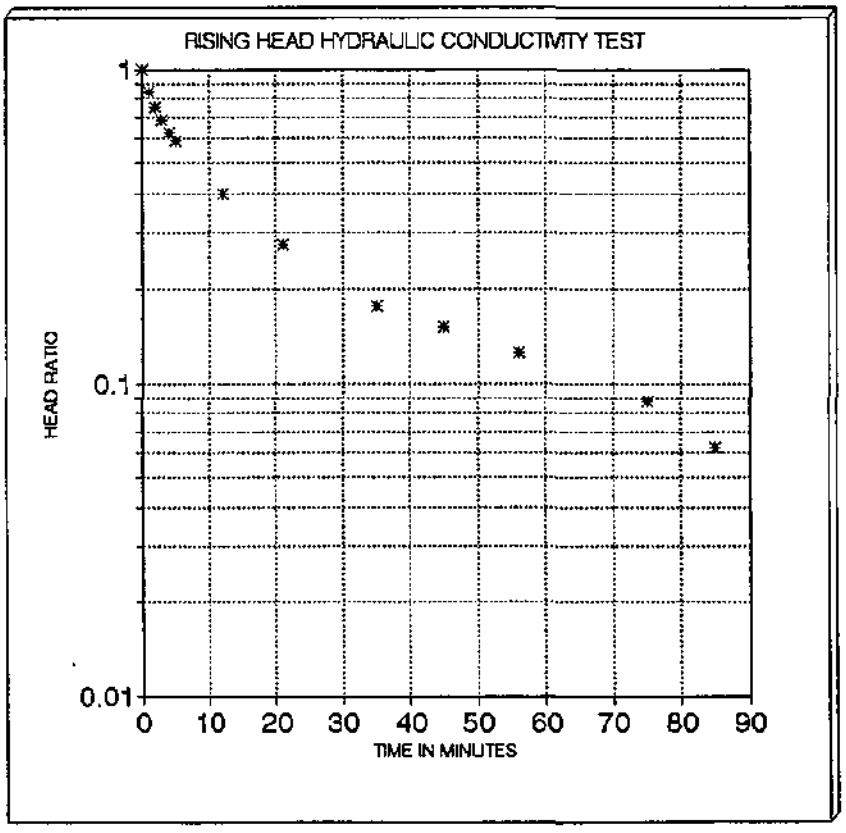
Test Section Diameter (D), in ft.:	0.25
Casing Diameter (d), in ft.:	0.25
Test Length Section (L),in ft.:	11.3
m = (Kh/Kv)**0.5:	3.16
t1 in min.:	35
t2 in min.:	56
H1:	0.18
H2:	0.12
Kh (cm/sec) =	3.8E-05
Kh (ft/min) =	7.5E-05
Kh (ft/day) =	1.1E-01

Rising Head Test Field Data Static Water 25.21

Depth Water (ft)	Elapsed Time (min)	Head Ratio	Residual Head (ft)
26.01	0.0	1.00	0.80
25.89	1	0.85	0.68
25.81	2	0.75	0.60
25.76	3	0.69	0.55
25.71	4	0.62	0.50
25.68	5	0.59	0.47
25.53	12	0.40	0.32
25.43	21	0.27	0.22
25.35	35	0.18	0.14
25.33	45	0.15	0.12
25.31	56	0.12	0.10
25.28	75	0.09	0.07
25.26	85	0.06	0.05

NOTES

1. m is the square root of the ratio of horizontal to vertical permeability.
2. Test Section Diameter (D) is equal to the borehole diameter.
3. Method taken from Hvorslev, 1951.

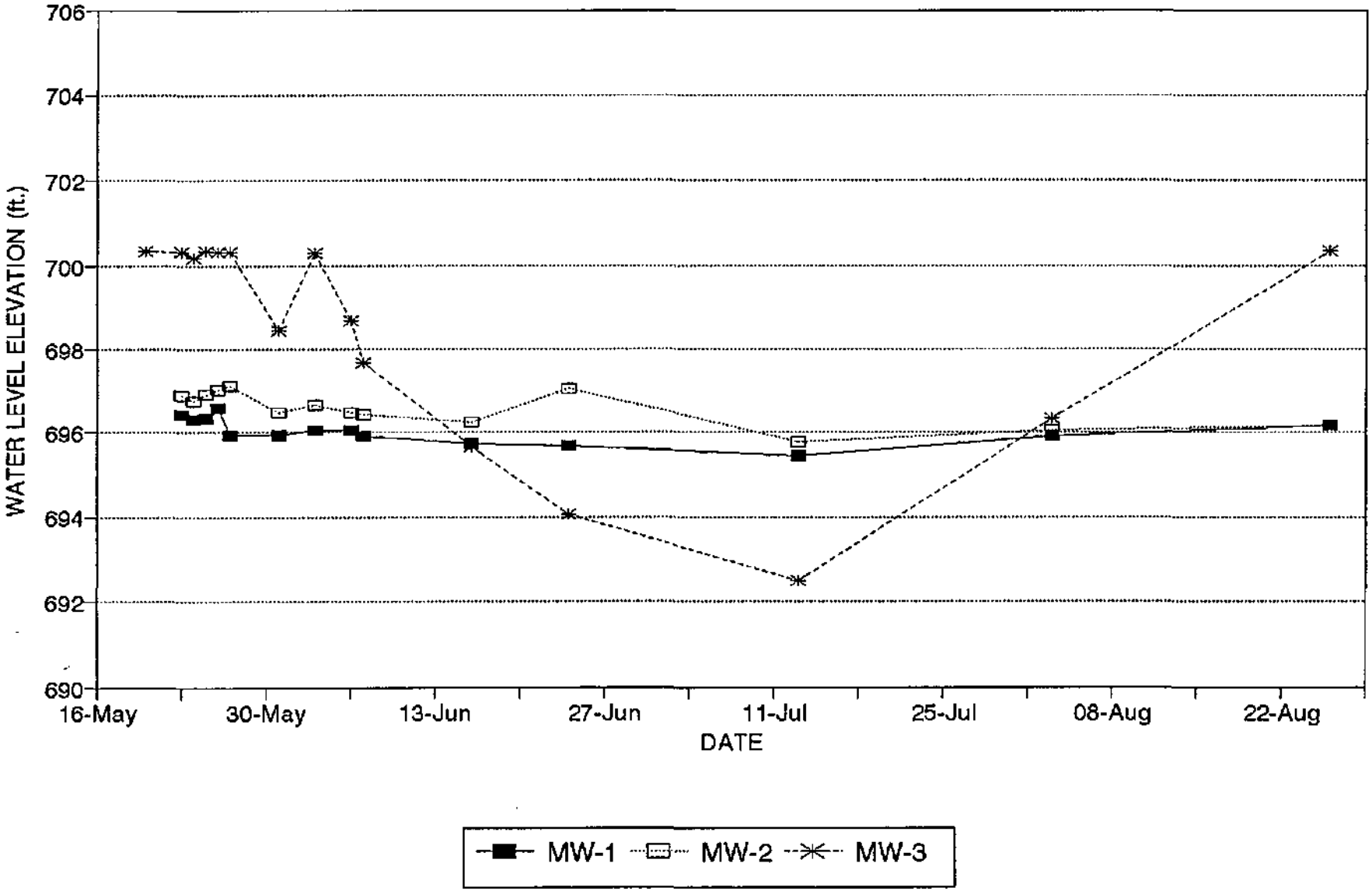


Appendix D

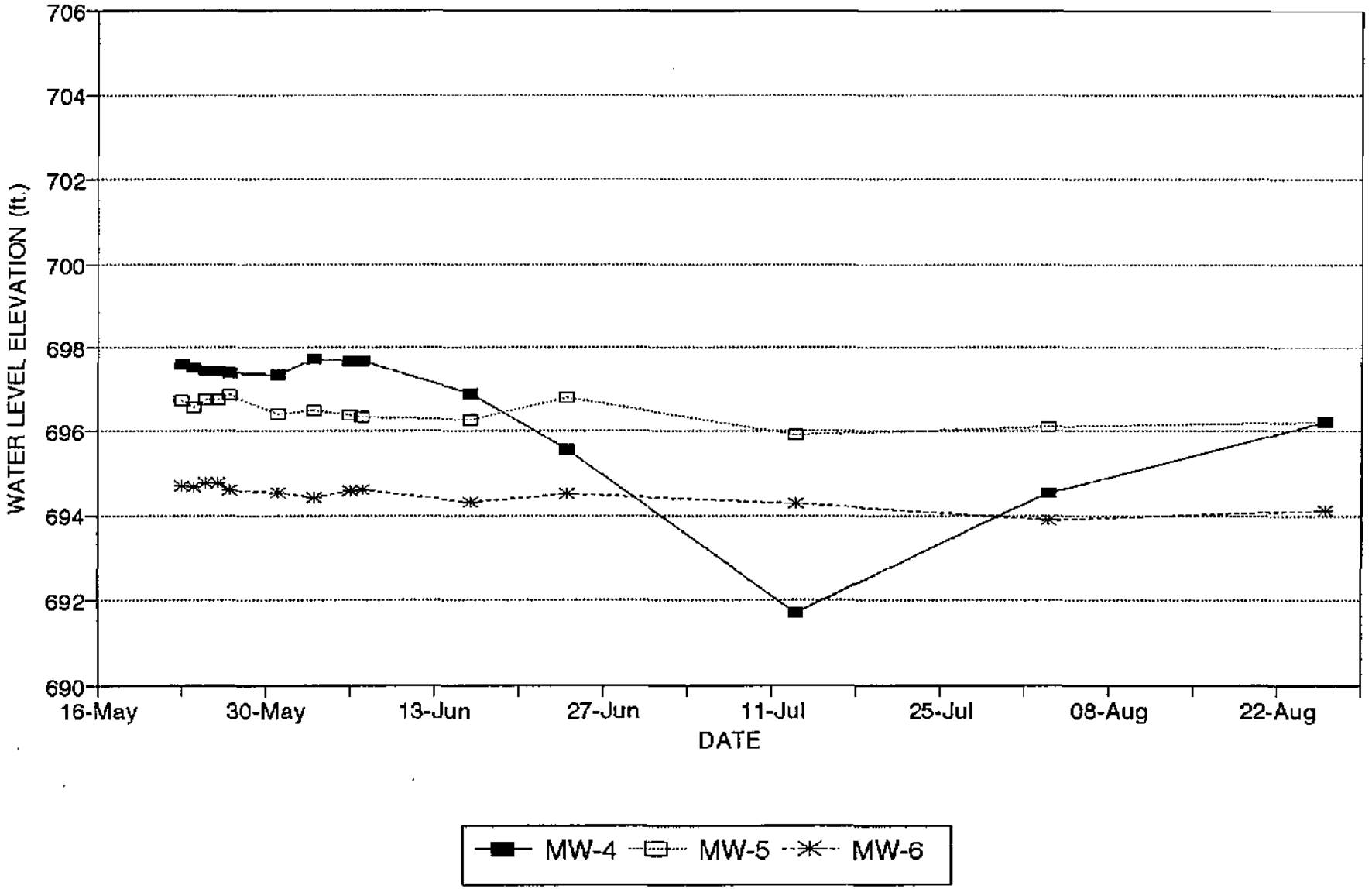
APPENDIX D

Hydrographs for Honeoye Creek and On-site Monitoring Wells

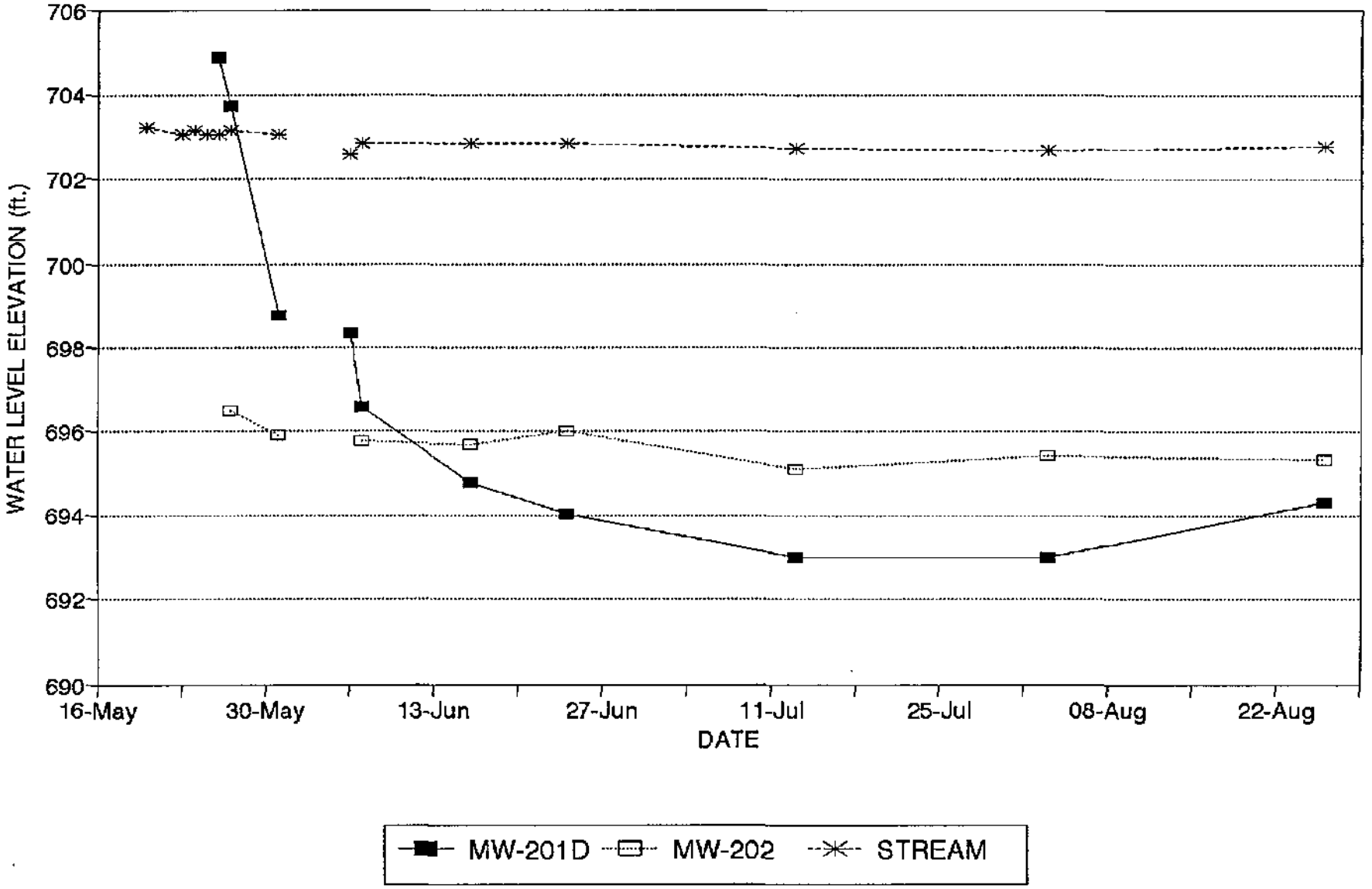
WELL HYDROGRAPHS
ENARC-O MACHINE PRODUCTS



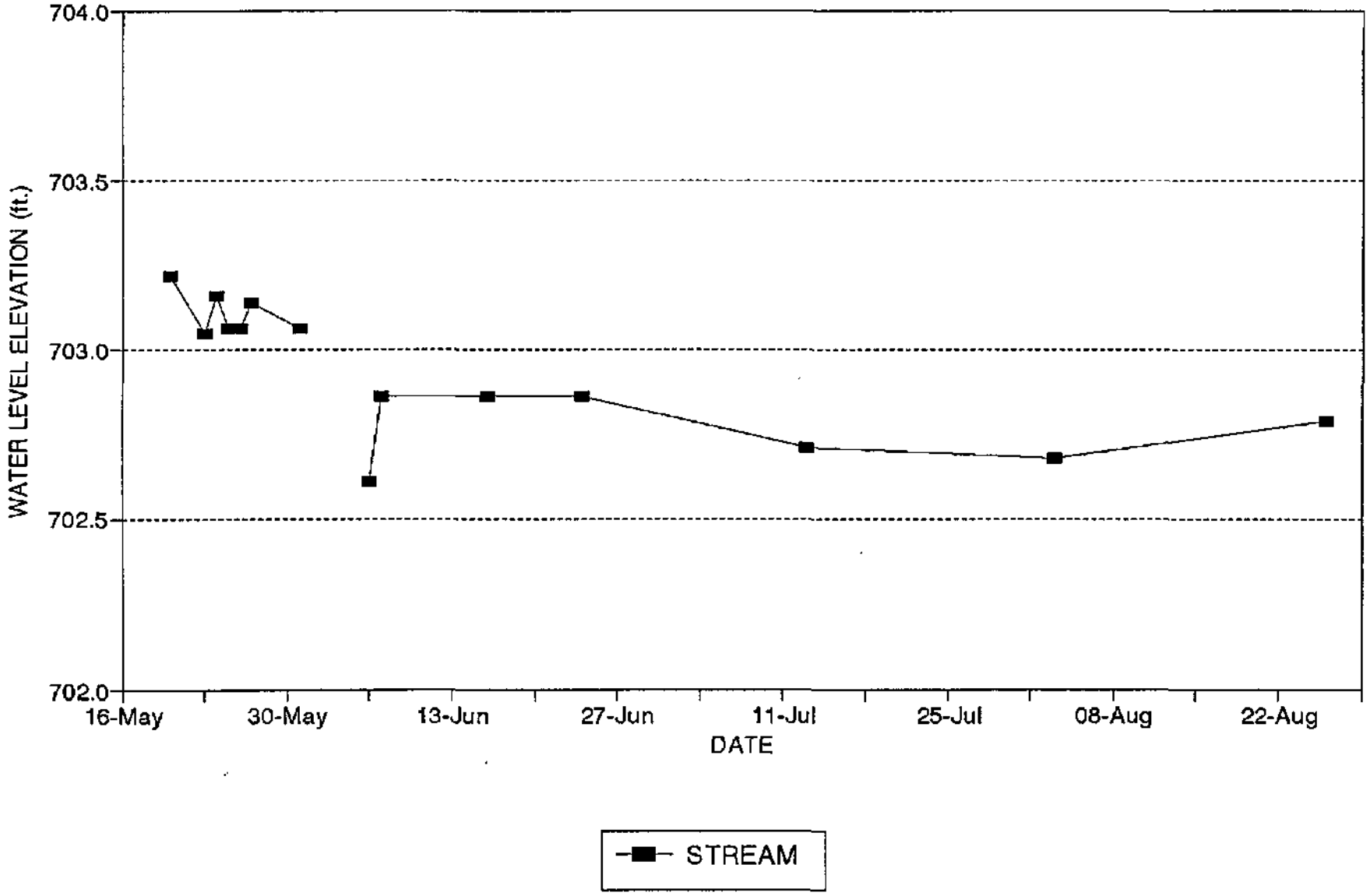
WELL HYDROGRAPHS
ENARC-O MACHINE PRODUCTS



WELL HYDROGRAPHS
ENARC-O MACHINE PRODUCTS



WELL HYDROGRAPHS
ENARC-O MACHINE PRODUCTS



Appendix E

APPENDIX E

Residential Well Survey Letter to NYSDEC and
List of Proposed Wells For Sampling

H & A OF NEW YORK

Geotechnical Engineers &
Environmental Consultants

12 August 1994
File No. 70372-041

Bureau of Western Remedial Action
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, NY. 12233-7010

Attention: Mr. Gardiner Cross

Subject: Residential Well Survey
Enarc-O Machine Products RI/FS
Lima, New York

Dear Mr. Cross:

In accordance with our project work plan, H&A of New York (H&A) has performed an on-site survey of residential water supply wells associated with the above-referenced project. This letter, with the attached tables and figure, summarizes our findings to date, and presents a list of wells proposed for sampling.

Residential Well Foundation

Task 4.2 in the work plan indicates that up to 12 residential wells would be identified for groundwater flow and quality monitoring. The choice of wells was to be based on such factors as accessibility, spatial distribution, previous sampling results, and general well condition, among others.

In order to evaluate the wells, H&A of New York, and the New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH) teamed up to contact residents and obtain pertinent information with regard to each well's accessibility and condition. NYSDEC provided a questionnaire by mail to 74 residents in the study area during late 1994. Over 40 residents responded, with varying amounts of detail regarding wells on their property. NYSDEC provided a second mailing of the questionnaire to those residents who had not responded to the first mailing. This generated approximately 3 additional responses.

Upon receipt of copies of the responses, H&A compiled the information as shown on Table 1. NYSDOH then assisted H&A in contacting those residents whose responses indicated confirmed or potential existence of a water well on their property. Several people still had not responded to the survey or were not available by telephone. H&A attempted to contact those residents via a letter

189 North Water Street
Rochester, NY 14604-1151
Tel: 716/232-7386
Fax: 716/232-6768

Offices
Cambridge, Massachusetts
Denver, Colorado

Glastonbury, Connecticut
Scarborough, Maine
Silver Spring, Maryland

Bedford, New Hampshire
Cleveland, Ohio

placed in their mailbox, requesting they contact H&A. This generated approximately three additional verbal responses.

H&A then visually evaluated each available or potential well location. A Residential Well Evaluation form was completed for each well observed during this task.

As a result of the resident responses and the well evaluation program, H&A has identified ten wells (including the Enarc-O supply well) that are currently accessible and available for use in the study. These wells are summarized on Table 2 and shown on Figure 1. The survey indicated that numerous wells have been buried and/or lost. Recent changes in ownership of some homes has resulted in loss of records that might indicate well locations. It should be noted the homes located at 7735 through 7660 Martin Road were not included in H&A's on-site survey. This is because the historical water quality data from NYSDOH indicates contaminants have never been detected that far west of the Enarc-O site.

Few survey responses were received from residences on the east side of Honeoye Creek (Martin Road and Ontario Street). The four homes on Martin Road east of the creek (9617, 9622-9626) do not appear to have wells. Only five residents on Ontario Street responded. Of these five, three did not have wells, or had wells that were plugged. The resident of 1886 Ontario St. (Mrs. George) has a well currently in use. This well was recently sampled and analyzed by NYSDOH, and no contaminant compounds were detected. Since this well is in a cross-gradient/down-gradient location from the Enarc-O site, the water quality data indicate contamination has not moved beyond the creek in this vicinity.

The other respondent from Ontario Street was located at number 155 (Stinson). Mr. Stinson has two wells currently in use. Both have been sampled and analyzed by NYSDOH and have not shown the presence of contaminant compounds. These wells represent the downgradient sampling locations furthest from the source area (approximately 3,000 ft.) and indicate the contaminant plume does not extend that far. These two recently sampled wells, along with the wells proposed for sampling, represent 12 water quality and flow data points across the study area. H&A feels the spatial distribution of the wells proposed for sampling will provide adequate coverage to asses the current overall distribution of contaminants in groundwater: 1) the Enarc-O well will provide near-source data; 2) the well at 1191 Bragg Street (Tondryk) will provide an upgradient or background location: 3) the wells at 7820 (Johnson) and 7852 (Hopkins) Martin Road provide cross-gradient locations, based on an assumed northwest groundwater flow direction; and 4) the remaining wells provide downgradient coverage.

An additional accessible well, not included in the proposed well list, was identified at 7829 Martin Road (Anderson). This well was not included in the list because two other wells were located in the same vicinity. H&A feels the two proposed wells give sufficient coverage in this portion of the study area. However, if one of these two wells is unable to be sampled, the well at 7829 Martin would be used as a replacement.

H&A also reviewed the historic water quality data for the proposed sampling wells. VOC levels detected in the most recent sampling event (generally performed in 1985) ranged from non-detect (Miller, 1081 Ideson) to 116 ppb (Wildman, 1167 Bragg St.).

The survey responses indicate that in all cases where the well driller was known, each well had been drilled by Barney Moravec of Penn Yan, New York. H&A contacted Mr. Moravec on two occasions in an attempt to obtain driller's logs for the residential wells. However, Mr. Moravec no longer has records for wells drilled prior to approximately 1978, which include the wells in our study area. In addition, the Livingston County Health Department was contacted but did not have well records. Therefore the casing depths, open intervals, and other well construction data for the wells are not available.

A reference elevation will be determined on each well by a licensed surveyor. This will allow accurate determination of groundwater levels for the purpose of groundwater contouring across the study area.

Sampling Methodology

The depths of the wells proposed for sampling range up to approx. 140 ft. Water levels in the wells during H&A's evaluation program ranged from 25 to 84 ft. in depth below ground surface. Using these water levels and total depths, the volume of water stored in the proposed wells ranges from approximately 50 to 170 gallons. Conventional monitoring well sampling protocol requires purging three well volumes of water prior to obtaining a sample. This equates to purge water volumes ranging from approximately 150 to 500 gallons.

It is H&A's opinion that purging such large volumes of water would not be practicable and would represent an unreasonable cost burden. In addition, it would require handling, storage and transport of significant amounts of potentially contaminated groundwater on private property and public thoroughfares.

As such, H&A proposes to use a low-flow purging method for these large diameter wells. The method involves pumping water from the well at a low flow rate (approx. 1 liter per minute), and passing the water through a "flow-through cell". The flow-through cell consists of a plexiglass chamber containing several sensors that continuously measure specific chemical parameters of the water electronically. The unit that H&A would employ is manufactured by YSI, and is designed to measure pH, conductivity, and temperature simultaneously. The values for these parameters are monitored on a digital readout unit. When the values stabilize, this indicates water is being obtained from the formation and not the well bore. At that point, a sample is obtained using an in-line sample port.

Conventional purging methods also disturb formation water by creating turbulence and aeration of the water as it enters the well. Several recent studies have demonstrated that conventional purging methods increase turbidity and detract from representativeness of samples. (Robin and Gillham, 1987; Kearl, et al, 1992; Barcelona, et al, 1994). A low-flow purging method obtains a more representative sample by minimizing turbulence in the well. Aeration and degreasing of VOCs is minimized or eliminated since the purging is accomplished in a closed system.

The inlet of the purging/sampling pump would be placed near the bottom of the well. This is based on the assumption that drilling of these wells was typically terminated at a depth where a significant inflow of water was encountered. This should optimize the connection with formation water during the purge process.

Upon your approval, H&A will attempt to initiate sampling within one to two weeks. Each of the residents will be contacted to inform them of our proposed schedule and the need for additional access to their property.

As a final note, several of the wells proposed for sampling will also be utilized as observation wells during the pump test of the Enarc-O supply well. Preliminary arrangements for the pump test are currently underway. The scheduling of the pump test will be reliant upon such factors as obtaining the emergency discharge authorization from NYSDEC Region 8, and obtaining permission from residents to regain access to their property. As you know, the pump test will be performed on a 24-hr. basis, requiring water level measurements in the residential wells during overnight hours.

Please contact us after reviewing this information to finalize plans for the sampling event.

Sincerely yours,
H&A OF NEW YORK

Robert J. Mahoney
Senior Env. Geologist

Vincent B. Dick
Vice President

RJM:VBD:cad
rjm:70372-41:Lcross

c: Ronald Iannucci Sr., Kaddis Mfg. Corp.
William Helferich III, Harter Secrest
David Napier, New York State DOH
Ralph Van Houten, Livingston County DOH

TABL

ENARC-O MACHINE PRODUCTS, INC.

LIMA, NEW YORK

RESIDENTIAL WELL SURVEY SUMMARY

ADDRESS	QUESTIONNAIRE RESPONSE											FIELD EVALUATION		
	OWNER (TENANT)	PHONE	MUNIC. WATER	WELL PRES.	IN USE	PUMP PRESENT	DEPTH (FT.)	OPEN INTERVAL	DIAM. (IN.)	DATE DRILLED	SUMP	ACCESS.	DEPTH TO WATER	REMARKS
MARTIN RD.														
7660	WARREN HASKINS		N	Y	Y	Y				1962	REG. BASIS	NA		NOT INCLUDED IN H & A SURVEY
7668	DAN LYNCH		N	Y	Y	Y				1968	REG. BASIS	NA		NOT INCLUDED IN H & A SURVEY
7672			N	Y	Y		100			1968	SPRING	NA		NOT INCLUDED IN H & A SURVEY
7694	CAROL SHAFER		N	Y	Y	Y	108			1973	SPR., FALL	NA		NOT INCLUDED IN H & A SURVEY
7696	WM. PAYNE	6244513	N	Y	Y	Y	101			1958	SPRING	NA		NOT INCLUDED IN H & A SURVEY
7702	F.E. WOODMAN	6242715	N	Y	Y	Y	180			1960	SPR., FALL	NA		NOT INCLUDED IN H & A SURVEY
7708	CHRIS GARDNER	6245670	N	Y	Y	SUBMERS.				1960s	WINT., SPR.	NA		NOT INCLUDED IN H & A SURVEY
7720	RON BURDICK	6244155	N	Y	Y	Y	150			1968	REG. BASIS	N		NOT INCLUDED IN H & A SURVEY
7744	BEV WHITBORNE	6243531		Y			357			1973		Y		NOT INCLUDED IN H & A SURVEY
7745	DAVID LONEBILE	6244267	N	Y	Y	Y	104	14-104		1974	RAIN ONLY	Y		NOT INCLUDED IN H & A SURVEY
7750	CHAS. SWANGER	6243083	Y	Y	Y	Y	89		6	1975	SPRING	Y		PUMP IN USE
7756	DESMANN	6241092	N	Y	Y	Y	100		8		SPR., FALL	Y		WELL IN USE; NATURAL GAS?
7777	N. SCHUECKLER	6245031	Y	N							WINT., SPR.	N		NO WELL
7787	HARRY BUSH	6241946	Y	Y	N	Y	66			1960	REG. BASIS	N		NOT ACCESSIBLE
7820	LEO JOHNSON	6241317	Y	Y	N	N	125		6			Y	72	
7829	ANDERSON	6240372	Y	Y	N	N						Y		TO BE USED AS A BACKUP WELL IF NEEDED
7840	(STEVEN HERBERT)	6247452	Y	N							NONE	N		NO WELL
7852	ALLEN HOPKINS	6253256	Y	Y	N	SUBMERS.	140		6	1969	SPRING	Y	25	PUMP IN WELL
7859	DOYLE	6249023		Y			95-90					N		CANNOT CONTACT
7865	ED J. TONDRYK	6245409	Y	Y			28			1951	NONE	N		PLUGGED
7873	YEARS	6241658		Y			120		5	1969		N		BURIED
7880	CATHY VILLARD	6245535	Y	Y	N	PIPES ONLY					NONE	N		BURIED, LOCATION UNKNOWN
7883	JANICE GARVEY	6242924	Y	N										BURIED, LOCATION UNKNOWN
7886	HARRY VELLEKOOP	6243164	Y	Y	N	Y	90			1954	SPRING	N		NOT ACCESSIBLE
9617	WM. LUSK	6242545	Y	Y			120			1960	NONE	N		WELL BURIED
9622	LAURA DUSTIN	6241142	Y	Y							NONE	N		CANNOT CONTACT
9624	SMITH	6249546	Y	N							INTERMITTENT	N		NO WELL
9626	DAVID YOUNG	6243539	Y	N							NONE	N		NO WELL
BRAGG ST.														
1167	WILDMAN/HICKLING	6242147	Y	Y	N	N	130		6		NONE	Y	84	WELL PROTECTED IN SHED
1175	ENARC-O PROD.		Y	Y	N	Y	130			1960	NONE	Y	73	
1191	ED M. TONDRYK	6242826	Y	Y	N	N (OPEN)	77		6	1960	REG. BASIS	Y	25	
1301	KENT FELLOWS	6242351	Y	Y			25-30				NONE	N		WELL FILLED WITH STONE
IDESON RD.														
1081	MARY MILLER	6241267	Y	Y	N	N	82		6	1960s	NONE	Y	46	
1090	MICHAEL COLAVITO	6242465	Y		N	SUBMERS.	122	20-122	6	1972	NONE	Y	60	RUSTY WATER, WIRES IN WELL
1091	ELEANOR CHAMBERS	6241089	Y	Y	N		125				NONE	N		CANNOT CONTACT
1096				Y			122	25-122	5	1972				
1111	TIM/CHERY HART	6244616	Y	Y	N	Y	50			1954	SPRING ONLY	N		PLUGGED WITH CEMENT
1116	WM. MALOY	6242806	Y	Y	N	N	125			1957	SPRING ONLY	Y		
1121	PETER COOPER	6242096	Y	Y	Y	Y	125		6	1969	DRY	Y	54	PUMP IN USE, 90' OF 3/4" PIPE
1129	WILLARD JOHNSON	6243244	Y	Y	N	PIPES ONLY	120		6	1965	DRY	N		PLUGGED (381 0504-HUSBAND)
1140	LOUISE SACKETT	UNLIST					160		6	1960		N		CANNOT CONTACT
1148	ROWLAND REANO	6241656	Y				130			1960s	CISTERN	Y		
1155	TOMPKINS	6244763	Y	Y	N	N	507				NONE	N		BURIED
ONTARIO ST.														
155	WM. STINSON	6242336	N	Y	Y	Y	60		6	1965	NONE	Y		DRINK. WELL IN USE; ALREADY SAMPLED BY DOH
155	WM. STINSON	6242336	N	Y	Y	Y	100		6			Y		HEAT PUMP WELL IN USE; ALREADY SAMPLED BY DOH
1886	JOANN GEORGE	6242740	N	Y	Y	Y	1007		6	1962		Y		WELL IN USE; ALREADY SAMPLED BY DOH
1926	LEWIS BUCKMAN	6243016	Y	Y	N	PLUGGED					SEASON.,INTER.	N		PLUGGED WITH STONES
1044	CARL WAGNER	6242256	Y	N							REG. BASIS	N		NO WELL
1950	JOAN CLOSE	UNLIST	Y	N							REG. BASIS	N		NO WELL

TABLE 2
ENARC-O MACHINE PRODUCTS, INC.
LIMA, NEW YORK

PROPOSED RESIDENTIAL WELLS FOR SAMPLING

ADDRESS	OWNER	WELL IN USE	PUMP PRESENT	TOTAL DEPTH(FT.)	DEPTH TO WATER(FT.)	REMARKS	TOTAL VOCs(1)
MARTIN RD.							
7750	CHAS. SWANGER	Y	Y	89	?	WATER LEVEL MONITORING ONLY	ND
7820	LEO JOHNSON	N	N	125	72		35
7852	ALLEN HOPKINS	N	SUBMERS.	140	25	PUMP IN WELL	85
BRAGG ST.							
1167	WILDMAN/HICKLING	N	N	130	84	WELL LOCATED IN SHED	116
1175	ENARC-O PROD.	N	Y	130	73		34
1191	ED M. TONDRYK	N	N (OPEN)	77	25		4
IDESON RD.							
1081	MARY MILLER	N	N	62	46		ND
1090	MICHAEL COLAVITO	N	SUBMERS.	122	60	RUSTY WATER, WIRES IN WELL	2
1116	WM. MALOY	N	N	125	?		9
1146	ROWLAND REANO	N	N	130	?		54
ONTARIO ST.							
155	WM. STINSON	Y	Y	50	?	WELL IN USE; ALREADY SAMPLED BY DOH	ND
155	WM. STINSON	Y	Y	100	?	WELL IN USE; ALREADY SAMPLED BY DOH	ND
1886	JOANN GEORGE	Y	Y	100?	?	WELL IN USE; ALREADY SAMPLED BY DOH	ND

NOTES:

1. Total Volatile Organic Compound concentration during most recent sampling event(1985), expressed in parts per million.

RJM - GPRO5\70372\WELLTBL2

REV. 8/10/94