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.fin~826011.1994-06;
Scanned & eDOC ____
RC - Progress No. 1. pdf

H & A OF NEW YORK

Geotechnical
Engineers &

Environmental
Consultants

92011 - ENARGO QUARTERLY REPORT #1 6/94

QUARTERLY PROGRESS REPORT NO. 1
APRIL TO JUNE, 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
June 1994

9 June 1994
File No. 70372-048

Geotechnical Engineers &
Environmental Consultants

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

Subject: Quarterly Progress Report No. 1
Enarc-O Machine Products, Inc. RI/FS

Dear Mr. Iannucci:

H&A has prepared the attached Quarterly Progress Report No. 1 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 to date. H&A's work has been performed in accordance with the Work Plan for the project, dated 30 December 1993.

Briefly, field work performed to date on the site includes: 1) soil vapor and subsurface soil sampling 2) shield point installation; 3) test boring and monitoring well installation; 4) surface soil and septic tank sampling; and 5) monitoring of water levels in existing onsite monitoring wells and Honeoye Creek. Soil samples have been submitted for laboratory analysis.

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

Robert J. Mahoney
Senior Env. Geologist

Vincent B. Dick
Vice President

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

TABLE OF CONTENTS

LIST OF FIGURES

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 first in a series of planned quarterly progress reports 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 17 March to 3 June 1994.

II. ACTIONS TAKEN

Field activities conducted during the reporting period consisted of the soil vapor survey (source area and delineation phases), monitoring well installations, stream staff gauge installation, off-site residential soil sampling and Enarc-O septic tank sampling.

Soil Vapor Survey

The source area soil vapor survey was conducted on 6 and 7 May 1994 and consisted of taking soil vapor samples at 10 locations (SV-101 through SV-110) in the vicinity of the former TCA storage tank (see Figure 2). Nine locations were sampled inside the Enarc-O building and only one sample was taken outside due to saturated soil conditions in the courtyard area. Soil samples were taken at four inside soil vapor locations and submitted to General Testing Corporation of Rochester, New York for analysis. Permanent soil vapor monitoring points were also installed at four inside locations.

The delineation soil vapor work was conducted on 10 and 11 May 1994 and consisted of taking soil vapor samples at 19 boring locations (SV-111 through SV-129) using Geoprobe equipment. See Figure 3. Each boring was taken to bedrock or the furthest depth possible. The probe holes were sampled for soil vapor at approximately 3-foot intervals.

The outdoor source area soil vapor samples were not obtained due to saturated soil conditions from perched groundwater in the shallow overburden. This condition was also observed at several of the delineation survey locations. As a result, H&A obtained several water samples during the survey. The samples were screened using headspace methods, on a Hewlett-Packard gas chromatograph at H&A's facility in Rochester, New York.

Volatile organic compound (VOC) concentrations were highest in soil vapor samples from the source area. TCE and 1,1,1-TCA were generally detected at levels higher than other VOCs. Concentrations in the delineation survey sample locations were generally "non-detect" or in the very low part per billion range. Review of the chromatograms is still in progress. Upon completion of the data review, a tabulation of the results will be forwarded to all parties receiving this report.

Monitoring Well Installations

Monitoring well installations consisted of installing one overburden well and one shallow bedrock well in the courtyard area near the former TCA storage tank and installing one shallow bedrock well just west of the storage building in the parking lot (Figure 2). Appendices B and C contain the test boring logs and well completion reports, respectively, for the three wells.

Stream and Groundwater Level Monitoring

The 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 bedrock socket, sticks up several feet above the ground surface. Stream water levels were measured daily during the well installations. Water levels in monitoring well MW-3 and the Enarc-O supply well were also measured during this time using data-

logger/transducer system. See Appendix D. Since the site re-survey has not been completed, the water levels provide a relative measure only, and cannot yet be used to determine actual surface water or groundwater elevations. Actual elevations will be calculated once the survey has been performed.

Offsite Surface Soil Sampling

Off-site residential soil sampling was conducted on 31 May 1994 and consisted of taking soil samples from shallow depths (approximately 0.5 ft.) at four off-site locations. The locations are shown in Figure 4. A sludge sample was also obtained from the Enarc-O septic tank located on-site. All samples were submitted to General Testing Corporation (GTC) for analysis.

Preliminary analytical results from the source area soil samples analyzed by GTC are contained in Appendix A. GTC had not completed the formal data report at the time of preparation of this progress report, thus data validation has not been performed.

III. DELIVERABLES

No deliverables were required or submitted during this quarter.

IV. FUTURE ACTIVITIES

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

- residential well survey
- completion of soil gas survey
- re-survey and base map preparation
- well sampling (on and off-site)
- hydrogeologic testing
- stream gauge data collection

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. However based on the anticipated completion date of the field work and other tasks, completion of the RI report is expected to occur in the following quarter (4th quarter of calendar year 1994).

Upon completion of the laboratory analyses and data validation, the health and environmental risk assessments will be initiated, presumably during the next quarter (4th quarter calendar year 1994). However, we anticipate completion of these tasks will fall in the following 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 and the Enarc-O septic tank sampling. The source area soil vapor survey was not completed due to saturated soil conditions in the courtyard near the former TCA storage tank. All inside soil vapor locations were sampled and completed. H&A will complete the outside soil vapor work when dryer subsurface conditions permit.

Based on the work plan the first task of work to be completed was a residential well survey. A delay in responses to a residential well survey sent to area residents by NYSDEC has put this task off until the survey responses are received. However, H&A plans to send NYSDOH a preliminary list of well owners that have responded to date. This will allow NYSDOH to begin contacting the residents which will allow H&A to begin the well survey within 1 to 2 weeks. Future delays may include H&A's gaining access to these residential wells. Current data does not indicate whether a contractor may be required to remove well pumps, prepare the wells for sampling, clear access to the wells, etc. The possible extent of delays associated with this task cannot be estimated, until the wells are observed first-hand.

VI. WORK PLAN MODIFICATION

Modifications to the work plan consisted of a change in the installation of the stream staff gauge. H&A proposed that the staff gauge be installed on the bank of Honeoye Creek rather than in the stream bed, due to high water levels at the time field work commenced. This proposed change was described in a letter from H&A to NYSDEC dated 28 April 1994.

NYSDEC (Gardiner Cross) conditionally approved the installation change, but reserved the right to change the measurement technique if it was not satisfied with the results of the revised staff gauge configuration.

VII. CITIZEN PARTICIPATION PLAN ACTIVITIES

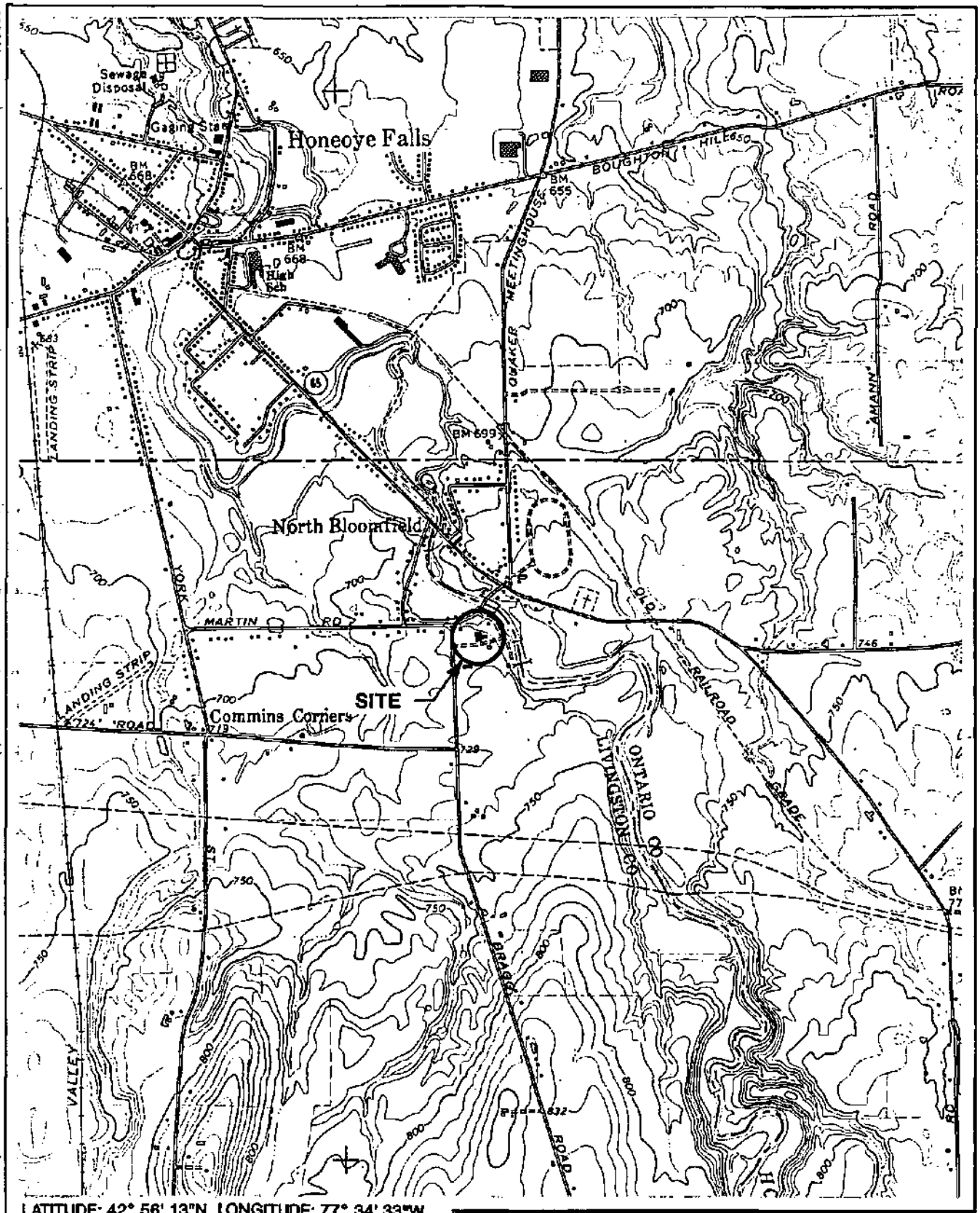
H&A attended a public meeting organized by NYSDEC to inform interested members of the public of the intended scope of the Enarc-O RI/FS project. The meeting was held at the Lima Town Hall on 17 March 1994. NYSDEC representatives presented information on the background of the project, as well as specific information on the tasks to be performed by H&A.

Vincent Dick and Robert Mahoney of H&A were present to assist in answering questions asked by members of the public.

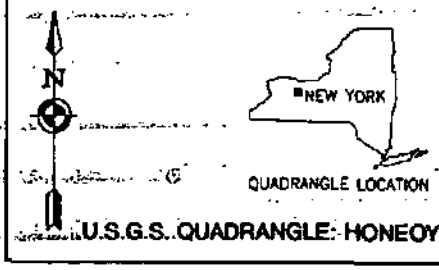
No Citizen Participation Plan activities (i.e. public meetings) are anticipated or scheduled for the next quarter.

RJM/slc
rjm:70372-48:RKaddis

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

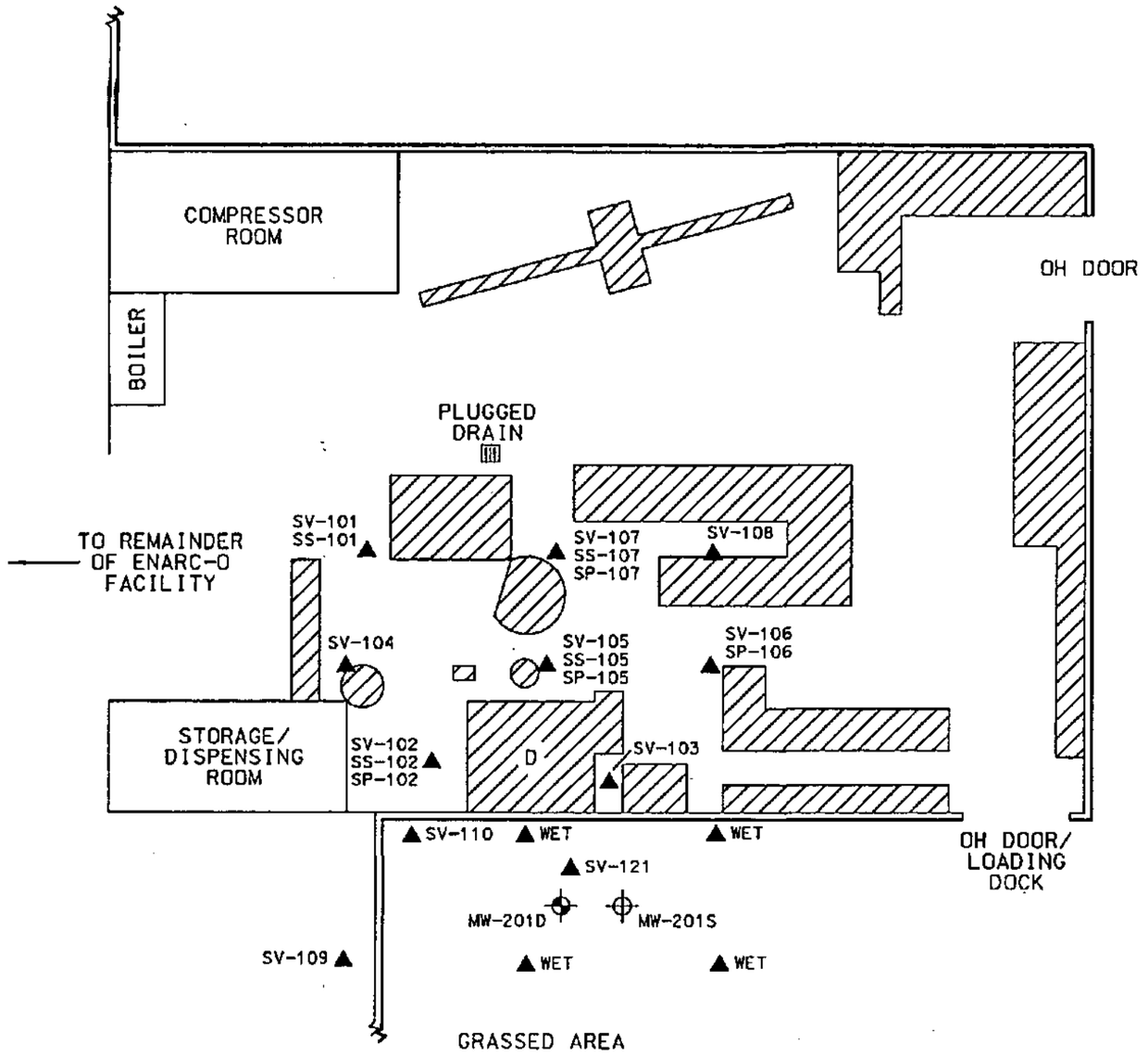
PROJECT LOCUS

SCALE: 1 IN. = 2000 FT. FEBRUARY 1993

FILE NO. 70372-40

MAKEPEACE

FIGURE 1



LEGEND:

SV-102
SS-102 ▲ APPROXIMATE LOCATION OF SOIL VAPOR SAMPLE (SV), SOIL SAMPLE (SS), OR SOIL VAPOR POINT (SP)
SP-102

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

MW-201S ⊕ OVERBURDEN WELL

MW-201D ⊕ BEDROCK WELL

DRAFT

NOTES:

1. ALL LOCATIONS AND DIMENSIONS APPROXIMATE. BASED ON TAPE PLAN OF FACILITY.
2. SOURCE AREA SAMPLE LOCATIONS SHOWN ONLY. SEE TEXT FOR ADDITIONAL INFORMATION AND SEE FIGURE 3 FOR OTHER PROPOSED INVESTIGATION LOCATIONS.

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Geotechnical Engineers & Environmental Consultants

ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

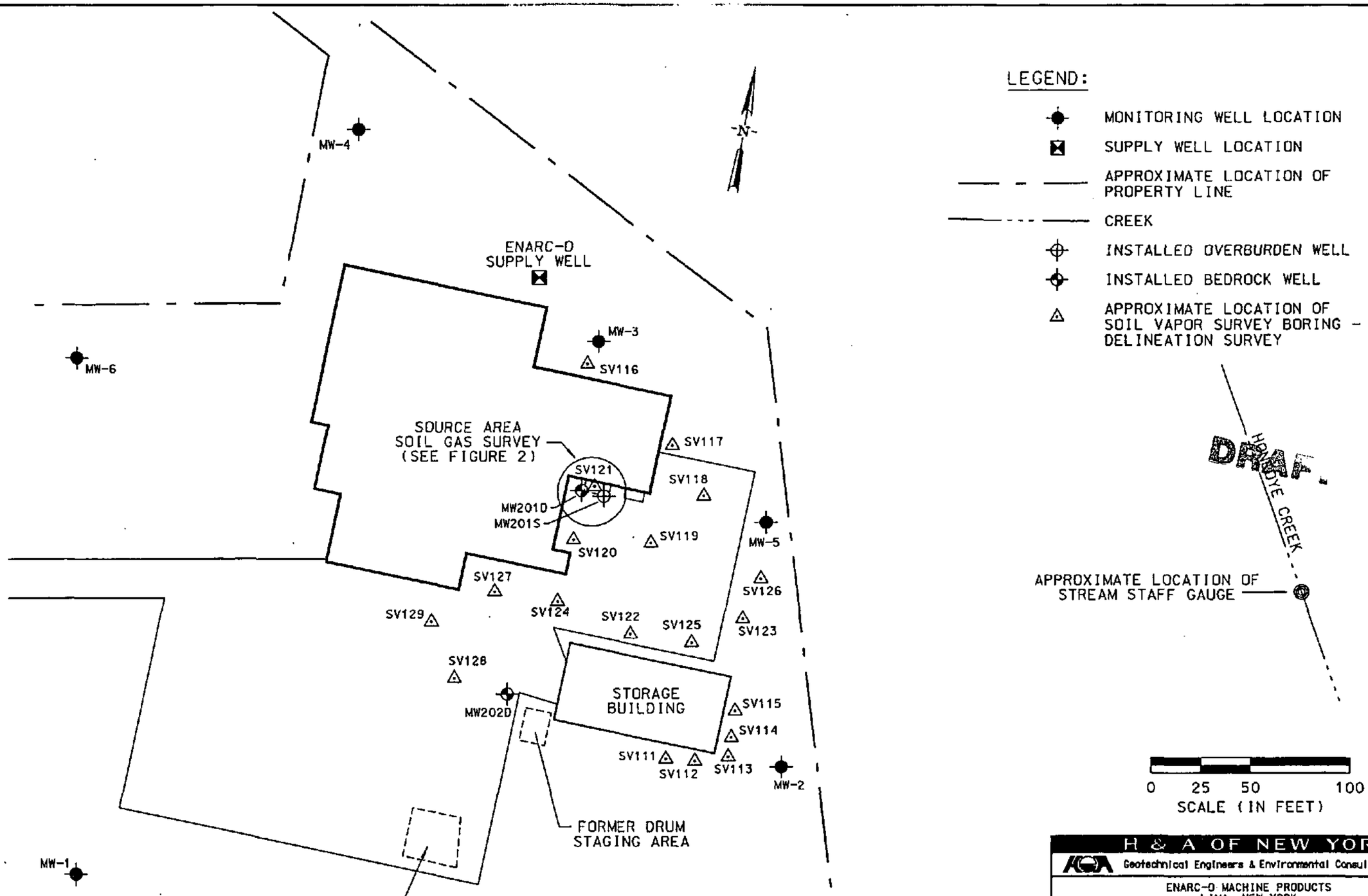
SOURCE AREA EXPLORATION PLAN

SCALE: 1" = 10' JUNE 1994

FILENAME: 70372-048:RIW003B.DGN

FIGURE 2

FILE No. 70372-048



NOTE:

1. LOCATIONS HAVE NOT BEEN SURVEYED YET AND ARE APPROXIMATE ONLY.

DRAFT

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ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

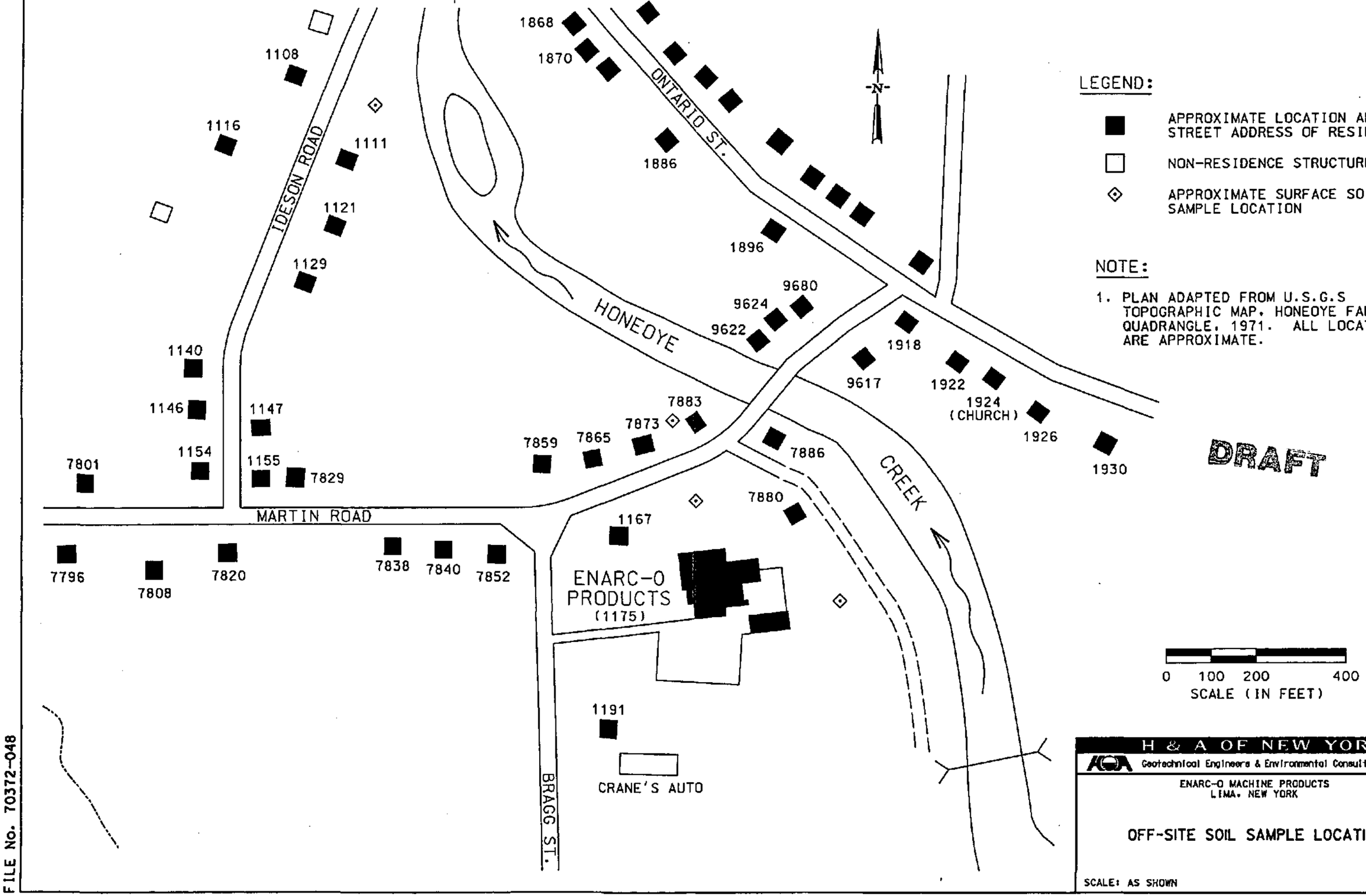
DELINEATION SURVEY
EXPLORATION PLAN

SCALE: AS SHOWN JUNE 1994

FILENAME: 70372-042:RIW001B.DGN

FIGURE 3

FILE No. 70372-048



FILE No. 70372-048

H & A OF NEW YORK

Geotechnical Engineers & Environmental Consultants

ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

OFF-SITE SOIL SAMPLE LOCATIONS

SCALE: AS SHOWN

JUNE 1994

FILENAME: 70372-048:RIW0048.DGN

FIGURE 4

Appendix A

APPENDIX A

Analytical Data - Soil Samples

70372-43

General Testing Corporation

A Full Service Environmental Laboratory

Source Area Soil Samples

Date: 6-1-94

Job Number: _____

TO: Bob Mahoney

ATTENTION: _____

FAX NUMBER: _____ PAGES TO FOLLOW: 14

FROM: Cindy Sooney

INSTRUCTION/MESSAGE: _____

710 Exchange Street • Rochester, New York 14606 • (716) 454-3760 • Fax (716) 454-1245
85 Trinity Place • Hackensack, NJ 07601 • (201) 488-5242 • Fax (201) 488-6366
435 Lawrence Bell Drive • Amherst, NY 14221 • (716) 634-0454 • Fax (716) 634-9019

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SSTB1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) WATER Lab Sample ID:1652-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: E9319

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. Date Analyzed: 5/16/94

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.

SSTB1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) WATER Lab Sample ID:1652-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: E9319

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. Date Analyzed: 5/16/94

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	7.39	5.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
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28.					
29.					
30.					

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SS101

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-5

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G8761

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 17 Date Analyzed: 5/14/94

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	4.	J
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	4.	J
71-55-6	1,1,1-Trichloroethane	45.	
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	190.	
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	2.	J
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.

SS101

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-5

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G8761

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 17 Date Analyzed: 5/14/94

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	3.07	240.	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
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16.					
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27.					
28.					
29.					
30.					

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SS102

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-3

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G8760

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 14 Date Analyzed: 5/14/94

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	130.	
75-34-3	1,1-Dichloroethane	83.	
156-60-5	trans-1,2-Dichloroethene	12.	U
67-66-3	Chloroform	12.	U
107-06-2	1,2-Dichloroethane	27.	
78-93-3	2-Butanone	12.	U
156-59-2	cis-1,2-Dichloroethene	8.	J
71-55-6	1,1,1-Trichloroethane	1100.	E
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	1300.	E
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	59.	
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.

SS102

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-3

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G8760

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 14 Date Analyzed: 5/14/94

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.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS102DL

Lab Name: GENERAL TESTING   Contract: H & A

Lab Code: 10145   Case No.:   SAS No.:   SDG No.: SSTB1

Matrix: (soil/water) SOIL   Lab Sample ID: 1652-3DL

Sample wt/vol: 4.00 (g/ml) G   Lab File ID: E9320

Level: (low/med) MED   Date Received: 5/09/94

% Moisture: not dec. 14   Date Analyzed: 5/16/94

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

Soil Extract Volume: 10000.00 (uL)   Soil Aliquot Volume: 100.0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500.	U
74-83-9	Bromomethane	1500.	U
75-01-4	Vinyl chloride	1500.	U
75-00-3	Chloroethane	1500.	U
75-09-2	Methylene chloride	1500.	U
67-64-1	Acetone	1500.	U
75-15-0	Carbon Disulfide	1500.	U
75-35-4	1,1-Dichloroethene	1500.	U
75-34-3	1,1-Dichloroethane	1500.	U
156-60-5	trans-1,2-Dichloroethene	1500.	U
67-66-3	Chloroform	1500.	U
107-06-2	1,2-Dichloroethane	1500.	U
78-93-3	2-Butanone	1500.	U
156-59-2	cis-1,2-Dichloroethene	1500.	U
71-55-6	1,1,1-Trichloroethane	670.	DJ
56-23-5	Carbon tetrachloride	1500.	U
75-27-4	Bromodichloromethane	1500.	U
78-87-5	1,2-Dichloropropane	1500.	U
10061-01-5	cis-1,3-Dichloropropene	1500.	U
79-01-6	Trichloroethene	1500.	D
124-48-1	Dibromochloromethane	1500.	U
79-00-5	1,1,2-Trichloroethane	1500.	U
71-43-2	Benzene	1500.	U
10061-02-6	trans-1,3-Dichloropropene	1500.	U
75-25-2	Bromoform	1500.	U
108-10-1	4-Methyl-2-Pentanone	1500.	U
591-78-6	2-Hexanone	1500.	U
127-18-4	Tetrachloroethene	1500.	U
79-34-5	1,1,2,2-Tetrachloroethane	1500.	U
108-88-3	Toluene	1500.	U
108-90-7	Chlorobenzene	1500.	U
100-41-4	Ethylbenzene	1500.	U
100-42-5	Styrene	1500.	U
108-38-3	(m+p)Xylene	1500.	U
95-47-6	o-Xylene	1500.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS102DL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-3DL

Sample wt/vol: 4.00 (g/ml) G Lab File ID: E9320

Level: (low/med) MED Date Received: 5/09/94

% Moisture: not dec. 14 Date Analyzed: 5/16/94

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

Soil Extract Volume:10000.00 (uL) Soil Aliquot Volume: 100.0 (uL)

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

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

EPA SAMPLE NO.

SS105

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-2

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G8757

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 13 Date Analyzed: 5/14/94

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	5.	J
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	71.	
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	300.	E
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
108-38-3	(m+p)Xylene	11.	U
95-47-6	o-Xylene	11.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS105

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-2

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G8757

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 13 Date Analyzed: 5/14/94

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	3.09	79.	JB
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS10SDL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-2DL

Sample wt/vol: 2.50 (g/ml) G Lab File ID: G8763

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 13 Date Analyzed: 5/14/94

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	23.	U
74-83-9	Bromomethane	23.	U
75-01-4	Vinyl chloride	23.	U
75-00-3	Chloroethane	23.	U
75-09-2	Methylene chloride	23.	U
67-64-1	Acetone	23.	U
75-15-0	Carbon Disulfide	23.	U
75-35-4	1,1-Dichloroethene	23.	U
75-34-3	1,1-Dichloroethane	23.	U
156-60-5	trans-1,2-Dichloroethene	23.	U
67-66-3	Chloroform	23.	U
107-06-2	1,2-Dichloroethane	23.	U
78-93-3	2-Butanone	23.	U
156-59-2	cis-1,2-Dichloroethene	23.	U
71-55-6	1,1,1-Trichloroethane	36.	D
56-23-5	Carbon tetrachloride	23.	U
75-27-4	Bromodichloromethane	23.	U
78-87-5	1,2-Dichloropropane	23.	U
10061-01-5	cis-1,3-Dichloropropene	23.	U
79-01-6	Trichloroethene	200.	D
124-48-1	Dibromochloromethane	23.	U
79-00-5	1,1,2-Trichloroethane	23.	U
71-43-2	Benzene	23.	U
50061-02-6	trans-1,3-Dichloropropene	23.	U
75-25-2	Bromoform	23.	U
108-10-1	4-Methyl-2-Pentanone	23.	U
591-78-6	2-Hexanone	23.	U
127-18-4	Tetrachloroethene	23.	U
79-34-5	1,1,2,2-Tetrachloroethane	23.	U
108-88-3	Toluene	23.	U
108-90-7	Chlorobenzene	23.	U
100-41-4	Ethylbenzene	23.	U
100-42-5	Styrene	23.	U
108-38-3	(m+p)Xylene	23.	U
95-47-6	o-Xylene	23.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS105DL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-2DL

Sample wt/vol: 2.50 (g/ml) G Lab File ID: G8763

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 13 Date Analyzed: 5/14/94

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	63.	DJB
2.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS107

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-1

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G8762

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 15 Date Analyzed: 5/14/94

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	52.	
71-55-6	1,1,1-Trichloroethane	29.	
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	160.	
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.

SS107

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:SSTB1

Matrix: (soil/water) SOIL Lab Sample ID:1652-1

Sample wt/vol: 5.00 (g/ml) G Lab File ID: G8762

Level: (low/med) LOW Date Received: 5/09/94

% Moisture: not dec. 15 Date Analyzed: 5/14/94

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	3.09	180.	JB
2.					
3.					
4.					
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Appendix B

APPENDIX B

Test Boring Reports

H&A OF NEW YORK, ROCHESTER, NEW YORK Consulting Geotechnical Engineers, Geologists and Hydrogeologists	TEST BORING REPORT	BORING NO. B201-S

PROJECT: ENARC-O MACHINE PRODUCTS RI/FS
CLIENT: KADDIS MANUFACTURING CORP.
CONTRACTOR: NOTHNAGLE DRILLING CO.

FILE NO. 70372-44
SHEET NO. 1 OF 1
LOCATION:

ELEVATION:
DATUM:
START: 26 May 1994
FINISH: 27 May 1994
DRILLER: S. Loranty
H&A REP: M. Corrigan

ITEM	CASING	DRIVE SAMPLER	CORE BARREL
TYPE	Auger	---	---
INSIDE DIAMETER (IN)	4-1/4	---	---
HAMMER WEIGHT (LB)	---	---	---
HAMMER FALL (IN)	---	---	---

DRILLING EQUIPMENT & PROCEDURES

RIG TYPE: CME-75, Truck-Mounted
BIT TYPE: ---
DRILL MUD: ---
OTHER: Advanced 6-1/4 in. I.D. hollow stem augers to 12.5 ft., without split spoon sampling.

DEPTH (FT)	CASING BLOWS PER FT	SAMPLER BLOWS PER 6 IN	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	STRATA CHANGE (FT)	VISUAL CLASSIFICATION AND REMARKS
5						Advanced 6-1/4 in. I.D. hollow stem augers to 12.5 ft. without split spoon sampling.
10						
15						Bottom of Boring at 12.5 ft. Apparent Top of Rock at 12.5 ft.
20						Notes: 1. See Test Boring report for B201-D for description of soil. 2. Installed 4.0 in. Schedule 40 PVC well in completed borehole. See Groundwater Monitoring Well Installation Report.
25						DRAFT

WATER LEVEL DATA					
DATE	TIME	ELAPSED TIME (HR)	DEPTH (FT) TO: BOTTOM OF CASING	DEPTH (FT) TO: BOTTOM OF HOLE	DEPTH (FT) TO: WATER

SAMPLE IDENTIFICATION

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon

SUMMARY

OVERBURDEN (LIN FT):	12.0
ROCK CORED (LIN FT):	---
SAMPLES:	---
BORING NO.	B201-S

H&A OF NEW YORK, ROCHESTER, NEW YORK
Consulting Geotechnical Engineers,
Geologists and Hydrogeologists

TEST BORING REPORT

BORING NO. B201-D

PROJECT: ENARC-O MACHINE PRODUCTS RI/FS
CLIENT: KADDIS MANUFACTURING CORP.
CONTRACTOR: NOTHNAGLE DRILLING CO.

FILE NO. 70372-44
SHEET NO. 1 OF 2
LOCATION:

ELEVATION:
DATUM:
START: 23 May 1994
FINISH: 27 May 1994
DRILLER: S. Loranty
H&A REP: M. Corrigan

ITEM	CASING	DRIVE SAMPLER	CORE BARREL
TYPE	Auger	S	NX
INSIDE DIAMETER (IN)	4-1/4	1-3/8	2-7/8
HAMMER WEIGHT (LB)	---	140	---
HAMMER FALL (IN)	---	30	---

DRILLING EQUIPMENT & PROCEDURES

RIG TYPE: CME-75, Truck Mounted
BIT TYPE: 5-7/8 in. tri-cone roller bit
DRILL MUD: ---
OTHER: Advanced 4-1/4 in. I.D. hollow stem augers to 10.5 ft., while continuous split spoon sampling.

DEPTH (FT)	CASING BLOWS PER FT	SAMPLER BLOWS PER 6 IN	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	STRATA CHANGE (FT)	VISUAL CLASSIFICATION AND REMARKS
		1 1 1	S1 6"/24"	0.0 2.0	0.2	Very loose brown clayey fine SAND, some roots, little silt, wet. -TOPSOIL-
		1 1 1	S2 1"/24"	2.0 4.0		Very loose brown silty fine SAND, wet. -FILL-
5		2 2 2	S3 15"/24"	4.0 6.0		Very loose brown silty fine SAND, wet. Very loose brown silty fine SAND, trace clay, wet.
		3 5 16	S4 24"/24"	6.0 8.0	7.0	Same, except loose. -FILL-
		9 16 20	S5 24"/24"	8.0 10.0		Hard red-brown silty CLAY, trace gravel and medium sand, damp. -GLACIOLACUSTRINE- Hard red-brown silty CLAY, trace gravel and medium sand, moist.
10		39 100/.5	S6 6"/6"	10.0 10.5	10.0	Very dense gray-brown fine sandy GRAVEL, little coarse to medium sand, moist. -GLACIAL TILL-
						Apparent Top of Rock at 10.5 ft.
15						Notes: 1. Reamed with 5-7/8 in. tri-cone rollerbit to 12.5 ft., lost approximately 250 gallons of water. 2. Grouted 4.0 in. Schedule 80 PVC casing to 12.5 ft. 3. See Core Boring Report, Page 2.
20						DRAFT
25						

WATER LEVEL DATA

DATE	TIME	ELAPSED TIME (HR)	DEPTH (FT) TO: BOTTOM OF CASING	BOTTOM OF HOLE	WATER

SAMPLE IDENTIFICATION

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon

SUMMARY

OVERBURDEN (LIN FT):	10.5
ROCK CORED (LIN FT):	16.3
SAMPLES:	6S
BORING NO.	B201-D

H & A OF NEW YORK, ROCHESTER, NEW YORK Consulting Geotechnical Engineers, Geologists and Hydrogeologists	CORE BORING REPORT	BORING NO. B201-D FILE NO. 70372-44 SHEET NO. 2 OF 2

DEPTH (FT)	DRILLING RATE (MIN./FT.)	CORE NO. / DEPTH(FT)	RECOVERY/RQD IN.	RECOVERY/RQD %	WEATHERING	STRATA CHANGE (FT)	VISUAL CLASSIFICATION AND REMARKS
							Began Coring at 12.7 ft.
		12.7 R1 14.2	14 0	78 0	MOD		Moderately hard, gray-brown, fine-grained LIMESTONE, with fossils, mudboils and chert throughout. -ONONDAGA LIMESTONE-
15		15.0 R2 17.7	33 33	100 100	SL		
		17.7 R3 22.5	58 51	100 88	SL		Rough, horizontal partings at 16.3 ft., 19.3 ft., 19.4 ft., 19.6 ft. 20.8 ft., 28.2 and 28.4 ft. Smooth horizontal partings at 22.8 ft. Smooth vertical joint from 20.8 ft. to 20.9 ft. Pit at 20.4 ft. Stylolites at 17.4 ft. and 19.4 ft.
20							
25		22.5 R4 23.5	12 12	100 100	SL		
		24.0 R5 24.5	6 6	100 100	SL		
		24.5 R6 29.0	53 50	102 94*	FR		*RQD based on rock core recovered.
30							Bottom of Boring at 29.0 ft.
							Notes: 1. Lost 2300 gallons of water during all core runs.
35							
40							
45							

H&A OF NEW YORK, ROCHESTER, NEW YORK Consulting Geotechnical Engineers, Geologists and Hydrogeologists	TEST BORING REPORT	BORING NO. B202

PROJECT: ENARC-O MACHINE PRODUCTS RI/FS
CLIENT: KADDIS MANUFACTURING CORP.
CONTRACTOR: NOTHNAGLE DRILLING CO.

FILE NO. 70372-44
SHEET NO. 1 OF 2
LOCATION:

ITEM	CASING	DRIVE SAMPLER	CORE BARREL
TYPE	Auger	S	NX
INSIDE DIAMETER (IN)	4-1/4	1-3/8	2-7/8
HAMMER WEIGHT (LB)	---	140	---
HAMMER FALL (IN)	---	30	---

DRILLING EQUIPMENT & PROCEDURES

RIG TYPE: CME-75, Truck Mounted
BIT TYPE: 5-7/8 in. tri-cone roller
DRILL MUD: --- bit
OTHER: Advanced 4-1/4 in. I.D. hollow stem augers to 14.7 ft., while continuous split spoon sampling.

ELEVATION:
DATUM:
START: 23 May 1994
FINISH: 26 May 1994
DRILLER: S. Loranty
H&A REP: M. Corrigan

DEPTH (FT)	CASING BLOWS PER FT	SAMPLER BLOWS PER 6 IN	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	STRATA CHANGE (FT)	VISUAL CLASSIFICATION AND REMARKS
		13 7 5 6	S1 18"/24"	0.0 2.0	0.5	Medium dense gray-brown silty GRAVEL, little coarse to fine sand, dry.
		5 6 20 13	S2 24"/24"	2.0 4.0	2.0	Medium dense brown silty fine sand, trace clay, damp. -FILL-
5		7 12 16 25	S3 24"/24"	4.0 6.0		Very stiff red-brown silty CLAY, little medium sand, damp to moist. -GLACIOLACUSTRINE- Same, except damp.
		8 14 18 25	S4 10"/24"	6.0 8.0		Same, except damp.
		5 20 32 50	S5 10"/24"	8.0 10.0		Hard red-brown silty CLAY, some gravel, little coarse to fine sand, damp.
10		7 21 33 19	S6 24"/24"	10.0 12.0		Same, except fine sand seam from 10.5 ft. to 11.0 ft., damp. -GLACIOLACUSTRINE-
		5 77 36 55	S7 18"/24"	12.0 14.0	12.0	Very dense gray fine sandy GRAVEL, some silt, trace coarse to medium sand, damp to dry. -GLACIAL TILL-
15		12 100/0.2	S8 7"/7"	14.0 14.7		Same. Top of Rock at 14.7 ft.
20						Notes: 1. Reamed with 5-7/8 in. tri-cone rollerbit to 16.5 ft. Lost approximately 70 gallons of water. 2. Grouted 4.0 in. Schedule 80 PVC casing to 16.5 ft. 3. See Core Boring Report, Page 2.
25						DRAFT

WATER LEVEL DATA						SAMPLE IDENTIFICATION	SUMMARY	
DATE	TIME	ELAPSED TIME (HR)	DEPTH (FT) TO: BOTTOM OF CASING	DEPTH (FT) TO: BOTTOM OF HOLE	DEPTH (FT) TO: WATER	O Open End Rod T Thin Wall Tube U Undisturbed Sample S Split Spoon	OVERBURDEN (LIN FT):	14.7
							ROCK CORED (LIN FT):	20.0
							SAMPLES:	8S
							BORING NO.	B202

H & A OF NEW YORK, ROCHESTER, NEW YORK Consulting Geotechnical Engineers, Geologists and Hydrogeologists	CORE BORING REPORT	BORING NO. B202 FILE NO. 70372-44 SHEET NO. 2 OF 2

DEPTH (FT)	DRILLING RATE (MIN./FT.)	CORE NO. / DEPTH (FT)	RECOVERY/RQD IN.	RECOVERY/RQD %	WEATHERING	STRATA CHANGE (FT)	VISUAL CLASSIFICATION AND REMARKS
15							Began Coring at 16.8 ft.
		16.8			MOD		Moderately hard, gray-brown, fine-grained LIMESTONE with fossils, mudboils and chert throughout. -ONONDAGA LIMESTONE-
	5						
	5						
	5						Lost all wash water return at approximately 20.8 ft. Came back at 21.5 ft.
20	5	R1	81/67	94/83	SL		
	5						
	5						
	5						
	5	24.0					Core block at 24.0 ft.
	5	24.0					
25	5	R2	39/35	87/90	SL		Lost all wash water return at approximately 23.8 ft. Came back at 23.9 ft.
	6	26.8					Lost wash water return at 24.0 ft.
	6	26.8					
	6						Rough horizontal partings 18.8 ft., 19.6 ft., 20.6 ft., 21.2 ft., 21.9 ft., 22.0 ft., 22.8 ft., 23.2 ft., 24.3 ft., 27.4 ft., 29.7 ft., 32.6 ft., 36.5 ft.
	6						
30	6						
	6						
	6	R3	119/110	99/92	SL-FR		Stylolites at 31.0 ft., 35.1 ft.
	6						Pits at 24.6 ft. and 27.0 ft.
	6						Smooth, low angled, stepped joint at 27.7 ft.
	6						
35	6						
	6	36.8					
							Bottom of Boring at 36.8 ft.
40							Notes: 1. Lost approximately 1200 gallons total of water during all coring runs.
45							

Appendix C

APPENDIX C

Monitoring Well Report Forms

H&A OF NEW YORK CONSULTING GEOTECHNICAL ENGINEERS GEOLOGISTS AND HYDROGEOLOGISTS	OVERBURDEN GROUNDWATER MONITORING WELL REPORT

PROJECT:	ENARC-O MACHINE PRODUCTS RI/FS	FILE NO.:	70372-44
LOCATION:	HONEOYE FALLS, NEW YORK	WELL NO.:	MW201-S
CLIENT:	KADDIS MANUFACTURING CORP.	LOCATION:	
CONTRACTOR:	NOTHNAGLE DRILLING CO.		
DRILLER:	S. Loranty RIG TYPE: CME-75, Truck-Mounted	SHEET:	1 OF 1
INSTALLATION DATE:	26 May 1994	INSPECTOR:	M. Corrigan

Survey Datum ________

Ground Elevation:

SUMMARIZED SOIL CONDITIONS (Not to scale)

Soil	Depth	Backfill	Depth
-GLACIO-LACUSTRINE-	10.0 ft.	-CEMENT GROUT-	1.5 ft.
		-BENTONITE PELLETS-	2.5 ft.
-GLACIAL TILL-	12.5 ft.	-QUARTZ SAND-	12.5 ft.

Stickup above ground surface of protective casing.	2.5 ft.
Stickup above ground surface of riser pipe.	2.0 ft.
Thickness of Surface Seal	2.5 ft.
Type of Surface Seal [indicated all seals showing depth, thickness and type]	Cement Grout
Type of Protective Casing	Anodized Zinc
Inside Diameter of Protective Casing	6.0 in.
Depth of Bottom of Protective Casing	1.0 ft.
Inside Diameter of Riser Pipe	4.0 in.
Type of Backfill Around Riser	Bentonite Pellets
Diameter of Borehole	10.0 in. +/-
Type of coupling (threaded, welded, etc.)	Threaded
Depth of Bottom of Riser	3.9 ft.
Type of Wellscreen	Slotted PVC
Screen Slot Size	0.010 in.
Diameter of Wellscreen	4.0 in.
Type of Backfill Around Wellscreen	Quartz Sand
Depth of Bottom of Wellscreen	11.9 ft.
Depth of Bottom of Borehole	12.5 ft.

DRAFT

Remarks:

Well No. MW201-S

H&A OF NEW YORK CONSULTING GEOTECHNICAL ENGINEERS GEOLOGISTS AND HYDROGEOLOGISTS	BEDROCK MONITORING WELL REPORT

PROJECT:	ENARC-O MACHINE PRODUCTS RI/FS	FILE NO.:	70372-44
LOCATION:	HONEOYE FALLS, NEW YORK	WELL NO.:	MW201-D
CLIENT:	KADDIS MANUFACTURING CORP.	LOCATION:	
CONTRACTOR:	NOTHNAGLE DRILLING CO.		
DRILLER:	S. Loranty RIG TYPE: CME-75, Truck-Mounted	SHEET:	1 OF 1
INSTALLATION DATE:	26 May 1994	INSPECTOR:	M. Corrigan

Survey Datum _____

Ground Elevation:

SUMMARIZED STRATIGRAPHY / COLUMN DESCRIPTIONS

-TOPSOIL- 0.2 ft.

-FILL- 3.0 ft.

-GLACIO-LACUSTRINE- 7.0 ft.

-GLACIAL TILL- 10.0 ft.

-ONONDAGA LIMESTONE- 10.5 ft.

29.0 ft.

-CEMENT GROUT-

-CEMENT/ BENTONITE GROUT-

12.5 ft.

Stickup above ground surface of protective casing.	3.0 ft.
Depth below ground surface of well casing.	2.65 ft.
Thickness of Surface Seal	3.0 ft.
Type of Surface Seal [indicated all seals showing depth, thickness and type]	Cement Grout
Type of Protective Casing	Anodized Zinc
Inside Diameter of Protective Casing	6.0 in.
Depth of Bottom of Protective Casing	2.0 ft.
Inside Diameter of Well Casing	4.0 in.
Type of Backfill Around Casing	Cement/Bentonite Grout
Diameter of Borehole	10.0 in.
Depth of Top of Bedrock	10.5 ft.
Elevation/Depth of Bottom of Casing	12.5 ft.
Diameter of Open Rock Hole	3.0 in. +/-
Depth of Bottom of Open Rock Hole	29.0 ft.

Method and Materials used to grout casings:

Remarks:

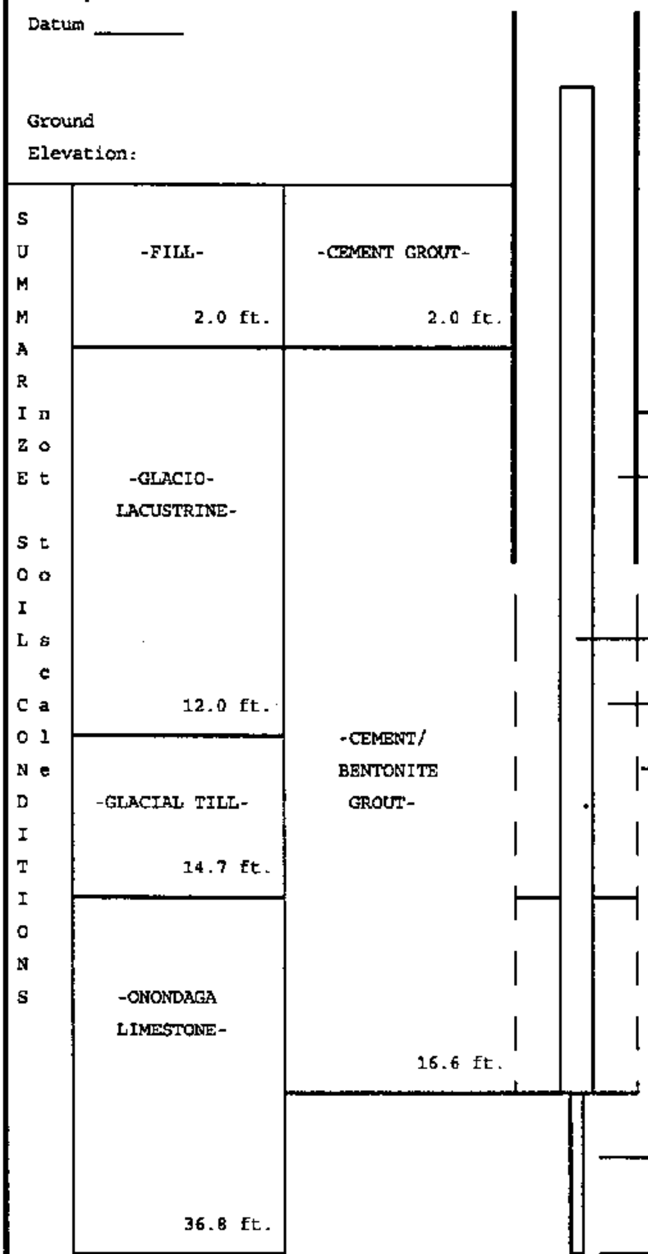
Well No. MW201-D

H&A OF NEW YORK CONSULTING GEOTECHNICAL ENGINEERS GEOLOGISTS AND HYDROGEOLOGISTS	BEDROCK MONITORING WELL REPORT

PROJECT:	ENARC-O MACHINE PRODUCTS RI/FS	FILE NO.:	70372-44
LOCATION:	HONEOYE FALLS, NEW YORK	WELL NO.:	MW-202
CLIENT:	KADDIS MANUFACTURING CORP.	LOCATION:	
CONTRACTOR:	NOTHNAGLE DRILLING CO.		
DRILLER:	S. Loranty RIG TYPE: CME-75, Truck-Mounted	SHEET:	1 OF 1
INSTALLATION DATE:	26 May 1994	INSPECTOR:	M. Corrigan

Survey Datum ________

Ground Elevation:



Stickup above ground surface of protective casing.	0.0 ft.
Depth below ground surface of well casing.	0.26 ft.
Thickness of Surface Seal	2.0 ft.
Type of Surface Seal [indicated all seals showing depth, thickness and type]	Cement Grout
Type of Protective Casing	Roadway Box
Inside Diameter of Protective Casing	10.0 in.
Depth of Bottom of Protective Casing	1.0 ft.
Inside Diameter of Well Casing	4.0 in.
Type of Backfill Around Casing	Cement/Bentonite Grout
Diameter of Borehole	10.0 in +/-
Depth of Top of Bedrock	14.7 ft.
Elevation/Depth of Bottom of Casing	16.6 ft.
Diameter of Open Rock Hole	3.0 in. +/-
Depth of Bottom of Open Rock Hole	36.8 ft.

DRAFT

Method and Materials used to grout casings:

Remarks:

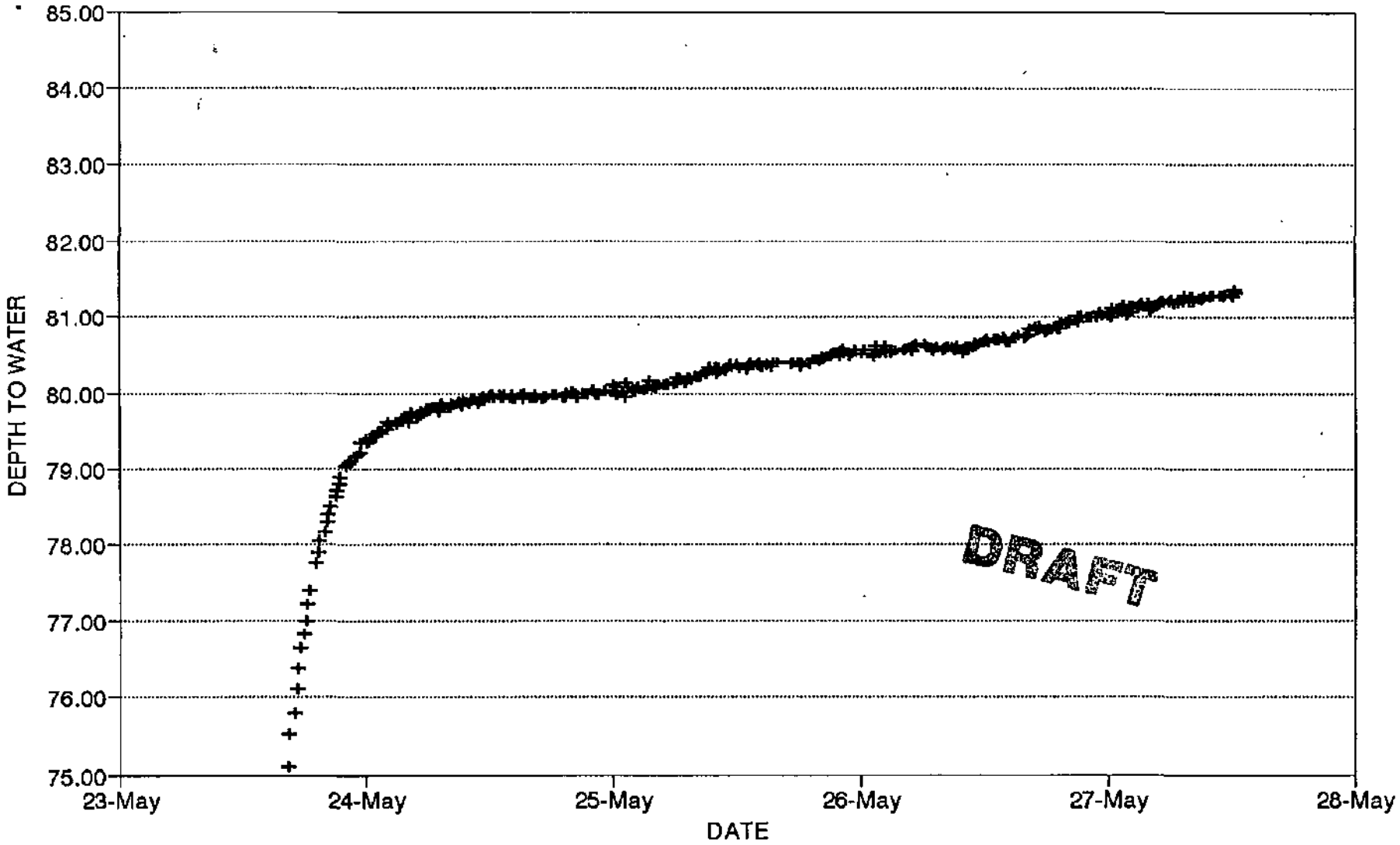
Well No. MW-202

Appendix D

APPENDIX D

Groundwater and Stream Level Measurement Data

ENARC-O MACHINE PRODUCTS
SUPPLY WELL HYDROGRAPH



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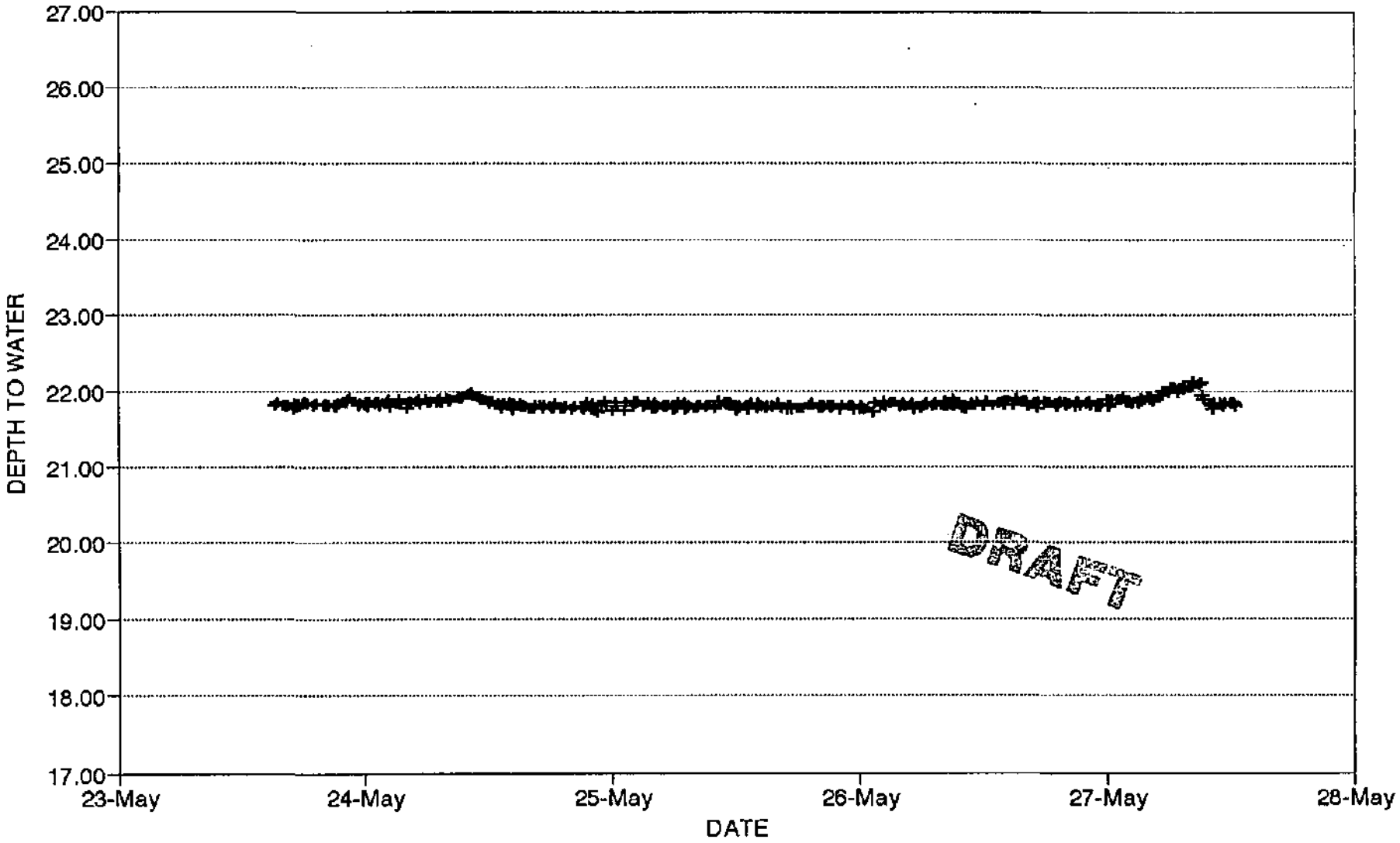
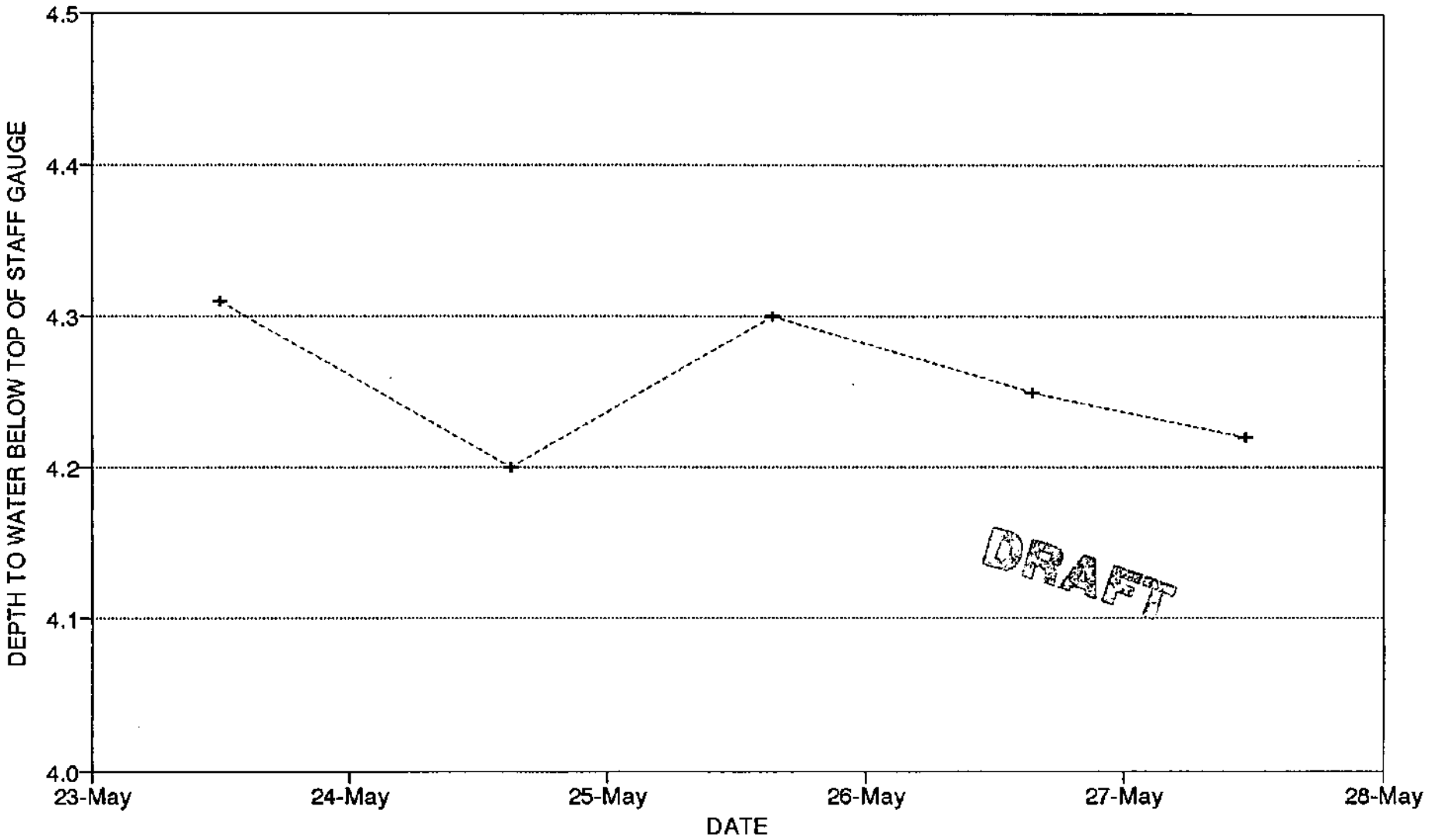
ENARC-O MACHINE PRODUCTS
MW-3 HYDROGRAPH



MGS-QPRO5 M:\QPRO5\70372\MW-3_WQ2:HYDRGRF

ENARC-O MACHINE PRODUCTS
STREAM WATER LEVEL



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