File on eDOCs X Yes ____ No
Site Name Enarco
Site No. 826011
County Livingston
Town Lima
Foilable X Yes ____ No
File Name report.hw826011.1994-11.
Scanned & eDOC ____
Final-Site_Inspection-Vol#4.pdf

CA*WR

Report No.: 8003-355

FINAL
SITE INSPECTION REPORT
NORTH BLOOMFIELD
LIMA, LIVINGSTON COUNTY, NEW YORK

PREPARED UNDER

WORK ASSIGNMENT NO. 038-2JZZ
CONTRACT NO. 68-W9-0051
REV. NO. 2

November 30, 1994
Updated: April 10, 1995
Volume: 4 of 4

8106

REFERENCE NO. 30
(Continued)

APPENDIX L

NYSDEC Citizen's Participation Plan

Department of Environmental Conservation

Division of Hazardous Waste Remediation

Citizen Participation Plan

Enarc-O Machine Products
North Bloomfield
Site Number 8-26-011
Livingston County, New York

March 1993

New York State Department of Environmental Conservation
MARIO M. CUOMO, *Governor* THOMAS C. JORLING, *Commissioner*

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LIST OF FIGURES

NOTE: Words that have been *italicized* when first encountered in this plan are defined in Section 8, Glossary of Key Terms and Major Program Elements

1.0 Introduction to the Plan

The New York State Department of Environmental Conservation (NYSDEC), in partnership with the New York State Department of Health (NYSDOH), is responsible for ensuring that hazardous waste sites across the state are investigated and, if necessary, remediated. Under the State's Hazardous Waste Site Remedial Program, the process follows a path of investigation, enforcement, remedial action selection, *design* and *construction*. Throughout this process, NYSDEC conducts a *citizen participation program*.

In many instances, NYSDEC is able to identify and enter into legal agreements with companies who owned or operated, or currently own or operate the facility identified as a hazardous waste site. These companies are called Potentially *Responsible Parties (PRPs)*.

NYSDEC is working with Enarc-O Machine Products, Inc. (Enarc-O), the PRP for the Enarc-O site. Enarc-O has agreed to perform a detailed investigation, called a *Remedial Investigation/Feasibility Study (RI/FS)* of the site. NYSDEC, NYSDOH, Livingston County Department of Health (LCHD) and Enarc-O are committed to a citizen participation program as part of their responsibilities for the remedial program at the Enarc-O Machine Products site.

The citizen participation program encourages two-way communication with the *public* providing: 1) an opportunity for NYSDEC, NYSDOH, LCHD, and Enarc-O to exchange site information with you that will enable them to develop a remedial program which is protective of human health and the environment and 2) a mechanism for them to learn about your concerns and address your questions about the site and the remedial process.

This *citizen participation plan* is based on New York State regulations which set forth requirements for citizen participation during hazardous waste site programs and the NYSDEC policy document New York State Inactive Hazardous Waste Site Citizen Participation Plan, August 30, 1988.

2.0 Basic Site Information

The Enarc-O site is listed in the NYSDEC's *Registry of Inactive Hazardous Waste Disposal Sites in New York State.* The site has been assigned a *site classification of 2*, which indicates that the site poses a significant threat to the environment or the public health. An environmental assessment completed in February 1991 by Enarc-O for the USEPA detected the presence of hazardous waste at the site.

2.1 Site Location and History:

Enarc-O Machine Products, Inc. is a metal machining facility located on six acres of land at 1175 Bragg Street in the Livingston County, Town of Lima.

In 1984, the LCHD found high levels of *chlorinated solvents* commonly used as industrial degreasers *(1,1,1-Trichloroethane, Trichloroethylene)* in the Enarc-O water supply well. No other industrial/commercial facility is located within a close proximity of the site except for a small body shop adjacent to Enarc-O.

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In 1985, the New York State Departments of Environmental Conservation (NYSDEC), Health (NYSDOH), and LCHD sampled thirty-eight (38) private residential wells and found twenty-one (21) to be contaminated with varying concentrations of chlorinated solvents. As a result, NYSDEC, NYSDOH, and LCHD formally requested the United States Environmental Protection Agency (USEPA) to expend federal *superfund* money to provide an alternate drinking water supply to the affected residents. In 1985, Enarc-O site was originally listed in the "Registry of Inactive Hazardous Waste Disposal Sites in New York State," and classified as a Class 2 site. This *classification* was due to contamination of the groundwater and private drinking water supplies by industrial degreasers (trichloroethylene, 1,1,1-trichloroethane, *1,2-dichloroethylene, tetrachloroethylene, and tetrachloromethane*). In November 1985, the USEPA authorized the provision of bottled water to residents under the Federal Superfund Program (CERCLA). Beginning in December 1985, over 30 residents were provided with regular delivery of bottled water. In July 1986, USEPA authorized the installation of a water main to service the affected residences.

The contract for installation of a water main was awarded to the City of Rochester in July of 1987. Work began in August 1987 on the installation of the water main and was completed in June 1988.

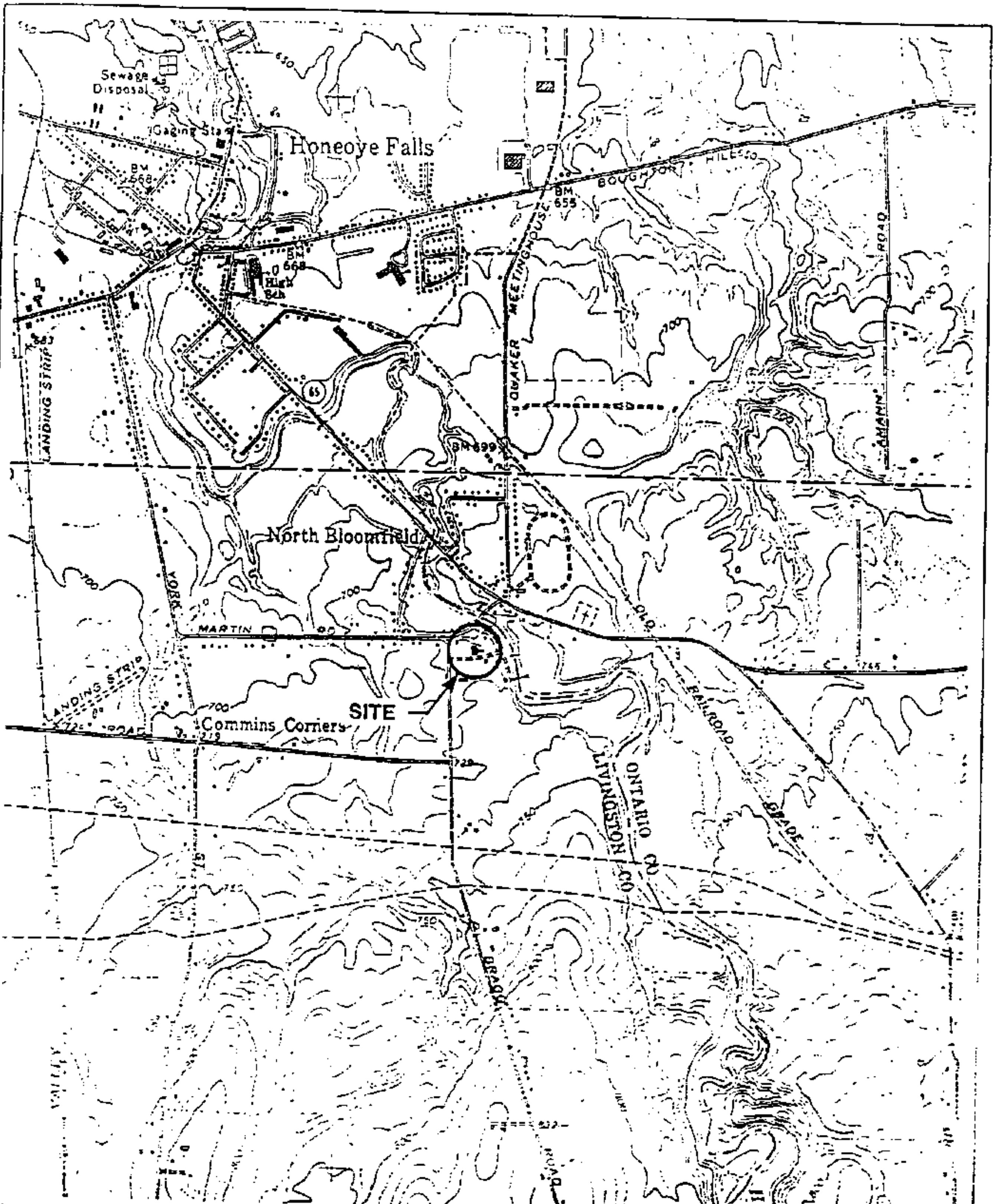
At this same time, USEPA requested that Enarc-O develop a site assessment workplan to determine if the source of contamination is located on the Enarc-O property. The final draft of this workplan was prepared and submitted by Enarc-O to USEPA in October, 1990. The field investigation, consisting of soil sampling and installation/sampling of six monitoring wells, began in November 1990, and was completed in February 1991. Results of this investigation are outlined in a document entitled, "Site Assessment Report," dated May 1991, written by O'Brien and Gere Engineers, Inc. Analytical results indicate that the groundwater and soil at the Enarc-O property have been contaminated with concentrations of industrial degreasers that exceed NYS standards.

The NYSDEC assumed the project lead responsibility from the USEPA in July 1991 for the purpose of assuring that the necessary Remedial Study (RI/FS) is completed at the site.

A technically approved RI/FS workplan scoping document was prepared and submitted to the NYSDEC and NYSDOH in November 1992 by H&A of New York (Geotechnical Engineers and Environmental Consultants). A subsequent full RI/FS workplan was submitted to the NYSDEC and NYSDOH for review and approval in February 1993.

2.2 Problems Identified at the Site:

Residential homes adjacent to the site are now supplied with public water, and no longer use their private wells as their primary source of water. However, to address possible groundwater seepage into basements, the NYSDOH and LCHD conducted a basement survey of homes adjacent to the site. In one home, water from a basement sump (formerly a dug well) was found to contain elevated levels of *volatile organic compounds*. As a result, this particular home was tested for the presence of organic vapors. Results of the test came back negative, except for the presence of organic compounds associated with the use of a kerosene heater being operated during the time of the sampling event.



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

NEW YORK

QUADRANGLE LOCATION

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

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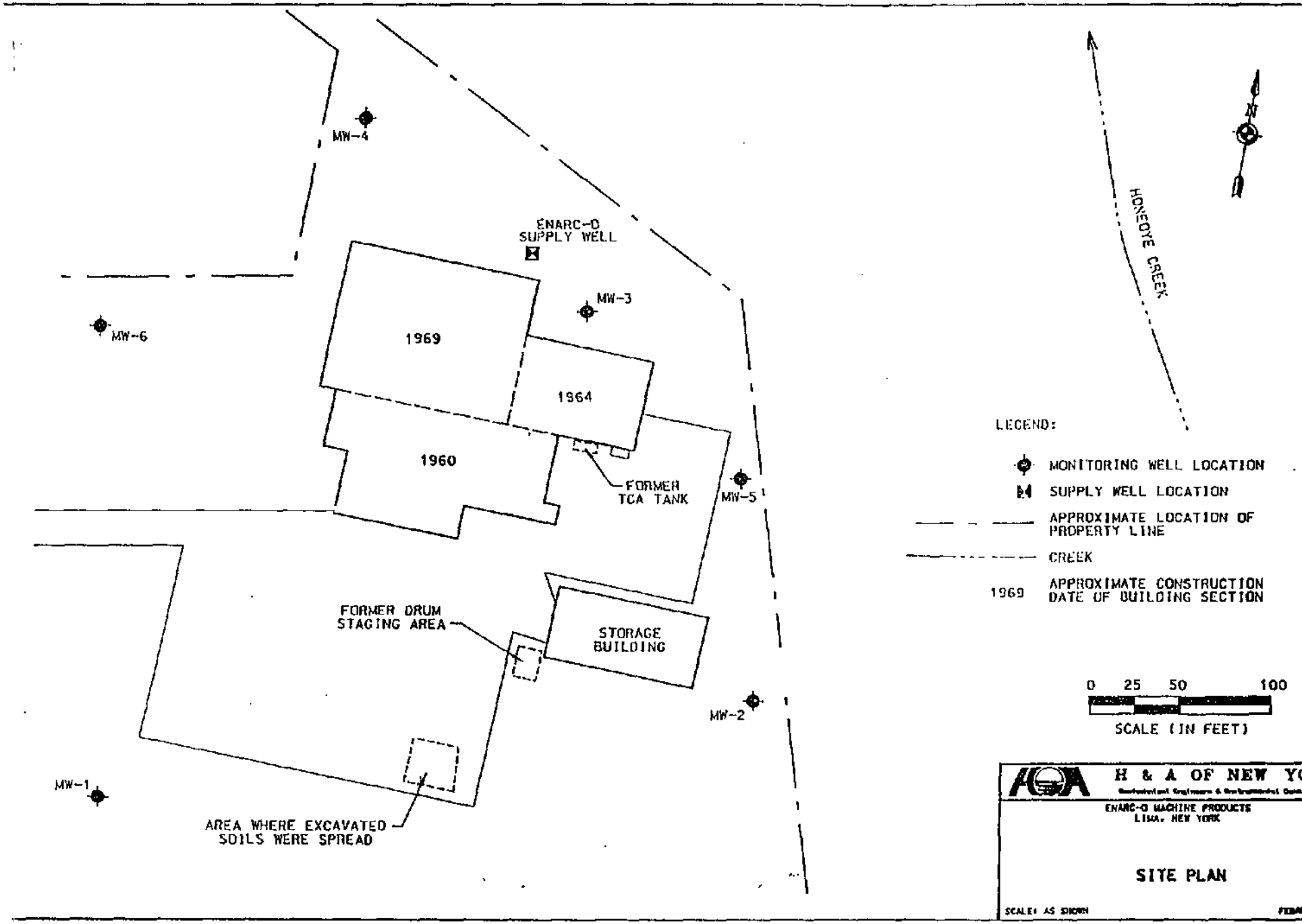
FIGURE 1



H & A OF NEW YORK
Environmental Engineers & Environmental Consultants

ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

SITE PLAN

SCALE: AS SHOWN FEBRUARY 1993

FILENAME: SITE.DGN

FIGURE 2

3.0 Project Description

3.1 Overview of the Project:

The 1990 USEPA Assessment investigation previously described was aimed at trying to identify the basic nature and source of site contamination.

A Remedial Investigation/Feasibility Study (RI/FS) is conducted at a site once hazardous waste contamination has been confirmed. Enarc-O has agreed to carry out this detailed study under an enforceable ***Consent Order*** currently being negotiated with NYSDEC

The Remedial Investigation (RI) determines the nature and extent of contamination through sampling activities which may include sampling of soils, air, sediments, surface water and groundwater. Sampling and monitoring wells may be installed to identify the contaminants, determine how far they have spread, and in what quantities.

The information gathered during the RI is used in the Feasibility Study (FS) to develop a list of potential alternatives to clean up the site and eliminate threats to health and the environment.

From the list of potential cleanup options, a remedial action is selected based upon review of NYSDEC, NYSDOH and public review and comment. The RI/FS results in a ***Record of Decision (ROD)***. The ROD describes the cleanup that will be carried out and how the selected alternative was chosen.

The selected alternative is implemented through remedial design and construction activities, and the site is ***monitored*** as necessary to ensure effectiveness of the cleanup.

3.2 Overall Objectives of the RI/FS:

Objectives of the RI/FS at the Enarc-O site include:

- Define the nature and extent of the contamination at the site
- Identify potential migration of the contamination into groundwater, surface water
- Identify possible routes of exposure (ways in which people can be exposed to the contaminants)
- Identify the kinds of people who could be exposed, if any, including Enarc-O employees, nearby residents, surface water users, people using groundwater or people entering the Enarc-O property.
- Identify fish and wildlife, if any, near the site that could be exposed.

3.3 Description of the RI/FS Planned for the Site:

The RI plan is designed to provide sufficient field data to prepare a baseline *health risk assessment* and to conduct a feasibility study that will meet the remedial response objectives.

The remedial investigation is broken down into the following tasks:

- Task 1 - Preparation of *Quality Assurance Project Plan, Health and Safety Plan*, and Citizen Participation Plan
- Task 2 - Groundwater Quality Sampling - Residential and Existing on-site *monitoring wells*
- Task 3 - Collection of Well Construction Data
- Task 4 - Resurvey and Preparation of *Base Map*
- Task 5 - *Soil Gas Survey*
- Task 6 - Installation of Additional Monitoring Wells
- Task 7 - *Hydrogeologic Testing*
- Task 8 - *Fish and Wildlife Impact Analysis*
- Task 9 - Human Health Risk Assessment
- Task 10 - Remedial Investigation Report

Specific details of these tasks can be found in the Enarc-O RI/FS workplan, dated 2/93, written by H&A and located in the *document repository* established for the site. (Refer to Section 6, Page 9)

At the completion of these tasks, a draft remedial investigation report will be prepared and submitted to the NYSDEC for review and comment. A proposed project schedule for completion of these tasks and other facets of the RI/FS program is shown on Figure 11.

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

REMEDIAL INVESTIGATION WORK PLAN
PROJECT SCHEDULE

TASK	MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5	MONTH 6	MONTH 7	MONTH 8
1. WELL DATA SURVEY								
2. RE-SURVEY, BASE MAP PREPARATION								
3. WELL SAMPLING/ANALYSIS (ON*/OFFSITE)								
4. SOIL GAS SURVEY								
5. MONITORING WELL INSTALLATION								
6. NEW WELLS SAMPLE / ANALYSIS								
7. HYDROGEOLOGIC TESTING								
8. STREAM GAUGE INSTALL./MEASUREMENT								
9. ENVIRON. & HEALTH RISK ASSESSMENTS								
10. IRM / FS EVALUATION								
11. DATA REDUCTION / RI REPORT PREP.								
12. QUARTERLY SAMPLING / ANALYSIS*(1)								

NYSDEC NOTICE-
TO-PROCEED

NOTES:
1. QUARTERLY SAMPLING WILL CONTINUE THROUGH ONE YEAR (MONTH 14) AT WHICH TIME FUTURE SAMPLING WILL BE REEVALUATED.
2. "*" DENOTES ITEMS ON WHICH ENARC-O & NYSDEC INPUT WILL BE REQUIRED TO CONFIRM LOCATIONS AND PARAMETERS PRIOR TO SAMPLING EFFORT.

FIGURE 11

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4.0 Identification of Affected and/or Interested Public

PROPERTY/OWNERS/INTERESTED PUBLIC

-Country Lane Associates, 1175 Bragg St., Lima, NY 14485
-Robert and Jane H. Jobe, 1167 Bragg St., Honeoye Falls, NY 14472
-Edward M. Tondryk, 1191 Bragg St., Honeoye Falls, NY 14472
-Mendon Grain Corp. Inc., P.O. Box 100, Pittsford, NY 14534
-Dale G. and Nancy Spencer, 7880 Martin Road, Honeoye Falls, NY 14472
-Harry and Virginia Vellekoop, 7886 Martin Road, Honeoye Falls, NY 14472
-Kent K. and Linda H. Fellows, 1301 Bragg St., Lima, NY 14472
-Robert J. Garvey, 7883 Martin Road, Honeoye Falls, NY 14472
-Ronald A. and Cathie Years, 7873 Martin Road, Honeoye Falls, NY 14472
-Edward J. Tondryk Jr. and Karen Y. Hasler, 7865 Martin Road, Honeoye Falls, NY 14472
-Peter M. and Linda Doyle, 7859 Martin Road, Honeoye Falls, NY 14472
-Scotod Developers Inc., c/o John Wood, 135 Oakbriar Drive, Rochester, NY 14616
-Walford E. and Linda Anderson, 7829 Martin Road, Honeoye Falls, NY 14472
-Leonard E. and Mary A. Tompkins, 1155 Ideson Road, Honeoye Falls, NY 14472
-Robert J. Saunders, 7838 Martin Road, Lima, NY 14485
-Allen H. Hopkins Jr., 7852 Martin Road, Honeoye Falls, NY 14472
-Wilma S. Lawrence, 38 Spring Road, Dansville, NY 14437
-Williard L. and Barbara C. Johnson, 1129 Ideson Road, Honeoye Falls, NY 14472
-Peter W.D. Cooper, 1121 Ideson Road, Honeoye Falls, NY 14472
-Timothy E. and Cheryl R. Hart, 1111 Ideson Road, Honeoye Falls, NY 14472
-Elinor Chambers, 1091 Ideson Road, Honeoye Falls, NY 14472
-Mary D. Miller, 1081 Ideson Road, Honeoye Falls, NY 14472
-Thomas E. McGory, et al., 1080 Ideson Road, Honeoye Falls, NY 14472
-Michael A. and Nancy P. Colavito, 1070 Ideson Road, Honeoye Falls, NY 14472
-Jeffery W. and Jane K. Endicott, 1108 Ideson Road, Honeoye Falls, NY 14472
-Sue G. O'Grade, et al., c/o William Maloy, 1116 Ideson Road, Honeoye Falls, NY 14472
-Mr. Doug Conway, 2028 Clay Street, Lima, NY 14485
-Resident/Occupant, 7840 Martin Road, Lima, NY 14485
-Vernie and Claire Sabourin, 7714 Martin Road, Lima, NY 14485
-Mr. Bill Stinson, 155 Ontario Street, Honeoye Falls, NY 14472
-Ms. Carol Shafer, 7694 Martin Road, Lima, NY 14485
-Warren and Delores Haskins, 7660 Martin Road, Lima, NY 14485
-William and Helen Payne, 7696 Martin Road, Lima, NY 14485
-James and Mary Lee, 7666 Martin Road, Lima, NY 14485
-Fulton Woodman, 7702 Martin Road, Lima, NY 14485
-Joseph and Dorothy Contino, 7735 Martin Road, Lima, NY 14485
-Norman and Susan Schueckler, 7777 Martin Road, Lima, NY 14485
-Mrs. Helen Warren, 19 S. Church Street, Honeoye Falls, NY 14472
-Ronald and Maryann Burdick, 7720 Martin Road, Lima, NY 14485
-Resident/Occupant, 7672 Martin Road, Lima, NY 14485
-Beverly J. Whitbourne, 7744 Martin Road, Lima, NY 14485
-Charles and Marian Swanger, 7750 Martin Road, Lima, NY 14485
-Gary and Elizabeth Mandak, 7678 Martin Road, Lima, NY 14485
-David and Barbara Lonobile, 7745 Martin Road, Lima, NY 14485
-Resident/Occupant, 7780 Martin Road, Lima, NY 14485
-Kent K. and Linda H. Fellows, 1301 Bragg Street, Lima, NY 14485
-Alan & Frances Ramsey, 7680 Martin Road, Lima, NY 14485
-Debbie Galloway, Mendon Public Library, 15 Monroe Street, Honeoye Falls, NY 14472
-Mr. Robert Topping, Topping Engineers, 306 Norstar Bldg., 5 E. Market Street, Corning, NY 14830
-Mr. & Mrs. Gardiner, 7708 Martin Road, Lima, NY 14485
-Leslie and Elizabeth Desmann, 7756 Martin Road, Lima, NY 14485

-S-W Associates of Mendon Inc., 350 Monroe Street, Honeoye Falls, NY 14472
-Phyllis J. Reano, 1146 Ideson Road, Honeoye Falls, NY 14472
-Patricia J. Moran, 1154 Ideson Road, Honeoye Falls, NY 14472
-Edward and Leona O'Brien, 7801 Martin Road, Lima, NY 14485
-Harry J. Bush, 7787 Martin Road, Honeoye Falls, NY 14472
-Edward M. and Virginia Tondryk, 7783 Martin Road, Lima, NY 14485
-James D. and Scott Shuffield, 119 W. Filbert St., East Rochester, NY 14445
-Richard and Verna Slade, 7796 Martin Road, Lima, NY 14485
-Robert H. and Dorothy A. Ghostlaw, 7808 Martin Road, Lima, NY 14485
-Leo R. Johnson, 7820 Martin Road, Lima, NY 14485
-Victor George, 1886 Ontario Street, Honeoye Falls, NY 14472
-David W. Wagner, 1897 Ontario Street, Honeoye Falls, NY 14472
-Seltzer Residence, 9644 Bean Hill Road, Honeoye Falls, NY 14472
-Alan J. Knauf Esq., Alan J. Knauf & Associates P.C., 20 N. Main Street, Pittsford, NY 14534
-Mr. Vince Dick, H&A of New York, 189 North Water Street, Rochester, NY 14604
-Mr. Michael Hill, Paralegal Gallagher and Gallagher Attorney's at Law, P.C., 1 Construction Plaza, Boston, MA 02129

TOWN OF LIMA

-A. Ronald Yorks, Supervisor, Town of Lima, P.O. Box 143, Lima, NY 14885
-Amanda M. Hayes, Clerk, Town of Lima, P.O. Box 143, Lima, NY 14885
-Alen Lacey, Councilman, Town of Lima, P.O. Box 143, Lima, NY 14885
-Carol Renere, Councilwoman, Town of Lima, P.O. Box 143, Lima, NY 14885
-Dennis McGurer, Councilman, Town of Lima, P.O. Box 143, Lima, NY 14885
-John Decker, Councilman, Town of Lima, P.O. Box 143, Lima, NY 14885
-Keith Arner, Superintendent of Highways, Town of Lima, P.O. Box, Lima, NY 14885

LIVINGSTON COUNTY

-James Steele, Chairman, Livingston County Board of Supervisors, Livingston Co. Gov't Center, Rm 302, 6 Court Street, Geneseo, NY 14454-1043
-Dominic F. Mazza, County Administrator, Livingston County Gov't Center, Room 302, 6 Court Street, Geneseo, NY 14454-1043
-Margaret McCaughey, County Clerk, Livingston County Gov't Center, Room 302, 6 Court Street, Geneseo, NY 14454-1043
-David Harter, Director, Livingston County Civil Defense, 4 Court Street, Geneseo, NY 14454
-Patrick Rountree, Economic Development Department, Livingston County Gov't Center, Room 306, 6 Court Street, Geneseo, NY 14454-1043
-Austin Morris, Chairman, Livingston County Industrial Development Agency, P.O. Box 96, Geneseo, NY 14450
-David Woods, Director, Livingston County Planning Department, Livingston County, Gov't Center, Room 305, 6 Court Street, Geneseo, NY 14454-1043
-Joan Ellison, Public Health Director, Livingston County Campus, Mt. Morris, NY 14510
-Rodney Carpenter, Superintendent of Highways, Livingston County, Conesus, NY 14435
-John M. York, Sheriff, Livingston County, 4 Court Street, Geneseo, NY 14454

NEW YORK STATE

-Sen. Dale M. Volker, 131 Main Street, Geneseo, NY 14454
-Assemblyman John W. Hasper, P.O. Box 190, Geneseo, NY 14454

UNITED STATES

-Rep. Louise M. Slaughter, 311 Federal Building, Rochester, NY 14614
-Sen. Daniel Patrick Moynihan, Guranty Building, 28 Church St., Suite 203, Buffalo, NY 14202
-Sen. Alfonse D'Amato, Federal Office Building, 100 State Stree, Room 304, Rochester, NY 14614

ECONOMIC ORGANIZATIONS

-Ronald Iannucci, President, Kaddis Manufacturing Corp., 1100 Beahan Road, Rochester, NY 14624
-Enarc-O Machine Products, 1175 Bragg Street, Honeoye Falls, NY 14485
-Livingston County Chamber of Commerce, 53 Main Street, Mt. Morris, NY 14510
-Genesee Valley Board of Realtors, 53 Blackwell Lane, Henrietta, NY 14467
-Greater Rochester Association of Realtors, 103 White Spruce Blvd., Rochester, NY 14623

ENVIRONMENTAL ORGANIZATIONS

-David Woods, Livingston County Environmental Management Council, Building #2, Livingston County Campus, Mt. Morris, NY 14614
-Greenpeace Action, 274 N. Goodman Street, Rochester, NY 14607
-Ray Nelson, Chairperson, Sierra Club of Rochester, 42 Tyringham Road, Rochester, NY 14617
-Barbara Johnston, Livingston County Environmental Council, Livingston County Gov't Center, Planning Department, Room 305, 6 Court Street, Geneseo, NY 14454-1043
-League of Woman Voters, 1344 University Place, Rochester, NY 14607
-Rochester Committee for Scientific Information, 47 Sunset Trail, Fairport, NY 14450
-Elizabeth Thorndike, Center for Environmental Information, 46 Prince Street, Rochester, NY 14607
-Scott Sherwood, Center for Govt'l Research, 37 S. Washington Street, Rochester, NY 14608
-Ms. Diane Heminway, Citizens' Environmental Coalition, 11149 Dunlop Road, Medina, NY 14103
-James MacKenzie, Xerox Corporation, Joseph Wilson Center for Technology, Rochester, NY 14644

MEDIA

-Regional Editor, Democrat and Chronicle, 55 Exchange Street, Rochester, NY 14614
-Janice Bullard, Democrat and Chronicle, 61 Main Street, Rochester, NY 14454
-Regional Editor, Times-Union, 55 Exchange Street, Rochester, NY 14614
-Stephen Lowe, Times-Union, 55 Exchange Street, Rochester, NY 14614
-Eve Holberg, Rochester, Business Journal Inc., 1 Mt. Hope Avenue, Rochester, NY 14620
-News Editor, Livingston County News, 122 Main Street, Geneseo, NY 14454
-News Editor, Livingston County Leader, 3 Center Street, Geneseo, NY 14454

-News Editor, Wolfe Publications Inc., 666 Phillps Road, Victor, NY 14564
-News Editor, Sentinel Publishing, 201 N. Main Street, Honeoye Falls, NY 14472
-News Editor, Clarion Newspaper, 5620 S. Lima Road, Livonia, NY 14487
-News Director, WGRC-Cable Channel 5, 71 Mt. Hope Avenue, Rochester, NY 14620-1090
-News Director, WROC-TV 8, 201 Humboldt Street, Rochester, NY 14604
-News Director, WHEC-TV 10, 191 East Avenue, Rochester, NY 14604
-News Director, WOKR-TV 13, 4225 W. Henrietta Road, Rochester
-News Director, WXXI-TV 21, 280 State Street, Rochester, NY 14614
-News Director, WHAM Radio, 350 East Avenue, Rochester, NY 14605
-News Director, WYSL Radio, 5620 S. Lima Road, Livonia, NY 14487

5.0 Identification of Department Contacts

New York State Department of Environmental Conservation

Toll Free Information Line for New York State's Inactive Hazardous Waste Remediation Program: 1-800-342-9296

Project Manager:

David J. Chiusano
Environmental Engineer
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation
Dept. of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010
(518) 457-3373 (8 a.m. - 4 p.m.)

Region 8 Contact:

Jim Craft, Senior Engineering Geologist
Division of Hazardous Waste Remediation
NYSDEC Region 8
6274 East Avon-Lima Road
Avon, NY 14414
(716) 226-2466 (8:30 a.m. - 4:00 p.m.)

Citizen Participation Specialist:

Linda Vera
Citizen Participation Specialist
Division of Hazardous Waste Remediation
NYSDEC - Region 8
6274 East Avon-Lima Road
Avon, NY 14414
(716) 226-2466 (8:30 a.m. - 4:00 p.m.)

New York State Department of Health

Toll Free Telephone Number of the NYSDOH Health Liaison Program (HELP) Program: 1-800-458-1158

Contact Persons:

David Napier
Regional Toxics Coordinator
Bureau of Environmental Exposure Investigation
NYSDOH - Rochester
Bevier Building
42 S. Washington Street
Rochester, NY 14608
(716) 423-8071 (8:30 a.m. - 4:30 p.m.)

Emmy Thomee
Program Research Specialist
Bureau of Toxic Substance Assessment
NYSDOH - Albany
2 University Place
Albany, NY 12203
1-800-458-1158, Ext. 402

Livingston County Health Department

Ralph VanHouten
Director of Environmental Health
Livingston County Health Department
2 County Campus
Mount Morris, NY 14510-1691
(716) 243-7280

H&A of New York

Project Manager:

Vince Dick
Senior Hydrogeologist
H&A of New York
189 North Water Street
Rochester, NY 14604
(716) 232-6768

6.0 Identification of Document Repository

Document repositories are established at the following locations, to make site documents easily accessible for the public to read and review. We encourage you to use the document repositories and review site documents before attending *public meetings* whenever possible.

1. NYSDEC Region 8 Office (BY APPOINTMENT ONLY)
   6274 East Avon-Lima Road
   Avon, NY 14414
   (716) 226-2466

   Contact: Linda Vera
   Hours of Operation: 8:30 a.m. - 4:30 p.m. M-F

2. Mendon Public Library
15 Monroe Street
Honeoye Falls, NY 14472
(716) 624-6067
Contact: Ms. Debbie Galloway, Library Director
Hours of Operation: Monday thru Friday 2 p.m. - 9 p.m.
Thursdays 10 a.m. - noon, 2 p.m. - 9 p.m.
Saturdays 1 p.m. - 4 p.m.

The repository contains documents pertinent to NYSDEC's activities at the site. These documents are freely available to the public during the library's regular hours, which are listed above. To date, the following documents have been placed in the repository:

- 1 copy of the Administrative Order on Consent between the United States Environmental Protection Agency (USEPA) and the Kaddis Manufacturing Corporation (owner of Enarc-O).
- 1 copy of the Interim Technical Memorandum, dated October 1990, outlining the work currently taking place at the Enarc-O facility by the USEPA.
- 1 copy of the two (2) previously released Enarc-O Fact Sheets, written by NYSDEC.
- 1 copy of the 1992 NYSDEC Division of Hazardous Waste Remediation, Inactive Hazardous Waste Disposal Site Report for the Enarc-O Machine Facility.
- 1 copy of the Administrative Order on Consent between the NYSDEC and the Kaddis Manufacturing Corporation.
- 1 copy of the RI/FS work plan, dated February 1993, outlining the investigatory work planned for the RI/FS at the Enarc-O facility.

Additional project documents will be added as they are generated.

7.0 Description of Citizen Participation Activities for Each Major Element of the Remedial Program

This section describes the specific citizen participation activities that have been, or will be, carried out during the Enarc-O site Remedial Program. They are based on New York State regulation Party 375-1.5 (May 1992) which sets forth requirements for citizen participation during hazardous waste site programs, and the NYSDEC policy document New York State Inactive Hazardous Waste Site Citizen Participation Plan (August 1988).

These citizen participation activities may be modified, and additional activities may be conducted as NYSDEC, NYSDOH, LCHD and Enarc-O gain additional insight into local interest in citizen participation and the remedial program, or as the technical program and information about the site changes.

NOTE: At the completion of the RI/FS process, NYSDEC will prepare a Record of Decision for the Enarc-O site, detailing the remedial action chosen and the decision process used. At that time, this CP Plan will be reviewed and updated to address the specific CP activities to be conducted during Design and Construction of the remedial program. NYSDEC policy requirements and

options for these activities are detailed in its Statewide CP Plan referenced above.

Below are listed completed/ongoing CP activities and future CP activities. Future CP activities are listed under several major elements of the site remedial program.

COMPLETED/ONGOING CP ACTIVITIES

1. The NYSDEC has mailed two *fact sheets* to the *contact list* that

   - specified local document repositories, important documents available for review and project contacts
   - briefly outlined 1990 USEPA investigation, and the NYSDEC-NYSDOH involvement

2. NYSDEC has developed, and NYSDOH, LCHD, Enarc-O, and H&A have reviewed and approved, a site-specific CP Plan for Enarc-O site. This Plan fulfills the requirements of Part 375-1.5(b)(1). Periodically, and at the Record of Decision (ROD) stage, it will be reviewed and revised as appropriate. The finalized, approved CP Plan has been distributed to the NYSDEC project manager and citizen participation specialist, the NYSDOH site contact, the LCHD site contact, the document repositories, and has been retained by Enarc-O and its consultant (H&A).

3. The NYSDEC has established a local document repository at the Mendon Public Library (see Section 6.0). This fulfills the requirements of Part 375-1.5(b)(3).

4. The NYSDEC has established a preliminary contact list. This list will be reviewed periodically and updated as required. It also will be updated by the NYSDEC after each public meeting, and as additional interested citizens are located by NYSDEC, NYSDOH, LCHD, and Enarc-O. This fulfills the requirement of Part 375-1.5(b)(2).

5. Enarc-O will provide copies of all necessary documents (see Section 6.0) to the local repositories, NYSDEC central and regional offices, NYSDOH and LCHD. NYSDEC will approve the list of documents to be placed in the repositories. This fulfills the requirement of Part 375-1.5(d).

FUTURE CITIZEN PARTICIPATION ACTIVITIES

1. NYSDEC will draft a fact sheet to be mailed to the contact list that:

   - announces availability of the final draft RI/FS workplan
   - briefly outlines the proposed investigation
   - announces date, time and place of a "kickoff" public meeting or availability session to discuss the upcoming RI fieldwork
   - specifies local document repositories, important documents available for review and project contacts

   This fact sheet will be reviewed/approved by NYSDOH, LCHD, Enarc-O, and H&A. It will be mailed by the NYSDEC to the contact list. Completion/mailing of the fact sheet fulfills the requirement of Party 375-1.5(b)(4).

2. The NYSDEC will make necessary room arrangements for the RI "kickoff' meeting or availability session referenced in the mailing above. It will be at a date, time and location convenient to the interested/affected community.

3. NYSDEC, in conjunction with NYSDOH and LCHD, will conduct the RI "kickoff" meeting or availability session. Enarc-O and H&A staff will be present to offer additional information/field questions as appropriate.

4. If necessary, NYSDEC, in conjunction with NYSDOH and LCHD, Enarc-O and H&A will prepare a Responsiveness Summary of the meeting/availability session and conduct the mailing.

5. Additional informational meetings and/or mailings may be necessary based upon results of RI/FS work and/or public interest.

UPON COMPLETION OF THE FEASIBILITY STUDY AND THE PROPOSED REMEDIAL ACTION PLAN (PRAP)

1. The NYSDEC will draft a fact sheet to be mailed to the contact list that:

   - briefly discusses the results of the RI/FS, and outlines the *proposed remedial action plan (PRAP)*
   - announces the public meeting to discuss the PRAP (including meeting date, time and place)
   - details the start and end dates of the 30-day PRAP public comment period
   - discusses where the process goes from here
   - lists project contacts
   - lists document repository locations and important documents available for public review

   This fact sheet will be reviewed/approved by NYSDOH, LCHD, Enarc-O, and H&A. It will be mailed by the NYSDEC to the contact list. This fulfills the requirements of Part 375-1.5(c)(1).

2. The NYSDEC will make necessary room arrangements for the meeting referenced in the mailing above. The meeting will take place within a 30-day PRAP public comment period, and at a date, time and location convenient to the interested/affected community.

3. NYSDEC, in conjunction with NYSDOH and LCHD, will conduct the PRAP public meeting. Enarc-O and H&A will supplement the presentation as appropriate, present appropriate additional information, and also field questions and comments. NYSDEC staff, with appropriate NYSDOH, LCHD and Enarc-O assistance, will keep notes of public comments for preparation of the PRAP *responsiveness summary*. This fulfills the requirements of Party 375-1.5(c)(2).

4. NYSDEC, with assistance of NYSDOH, LCHD, Enarc-O and H&A, will prepare a responsiveness summary to comments received at the public meeting. NYSDEC will conduct the mailing. The responsiveness summary will discuss the remedy selected for implementation, any significant changes from the PRAP and comments received, with the Department's response. This fulfills the requirement of Part 375-1.5(c)(3).

UPON SIGNING OF THE RECORD OF DECISION (ROD)

1. NYSDEC press office in the central office will prepare and distribute a press release about the signing of the ROD.

8.0 Glossary of Key Terms and Major Program Elements

8.1 Key Terms:

Aquifer - A saturated water-bearing formation of permeable rock, sand, or gravel.

Base Map - A detailed map that is usually produced from aerial photography and supplemented by a ground survey. All relevant features of the site and adjacent areas (residents, Honeoye Creek facility, etc.) are plotted on the map. The base map will be used during data analysis and to accurately plot all sampling locations.

Chlorinated Solvents - A group of solvents which contain chlorine as a part of their molecular structure. Chlorinated solvents are commonly found in degreasers and are widely used for cleaning metal parts. Common chlorinated solvents are: Trichloroethylene (TCE), Tetrachloroethlyene (PCE), 1,1,1-Trichloroethane (TCA).

Citizen Participation - A process to inform and involve the interested/affected public in the decision-making process during identification, assessment and remediation of inactive hazardous waste sites. This process helps to assure that the best decisions are made from environmental, human health, economic, social and political perspectives.

Citizen Participation Plan - A document that describes the site-specific citizen participation activities that will take place to complement the "technical" (remedial) activities. It also provides site background and rationale for the selected citizen participation program for the site. A plan may be updated or altered as public interest or the technical aspects of the program change.

Citizen Participation Specialist - A Department staff member within the Division of Hazardous Waste Remediation or the Office of Public Affairs who provides guidance, evaluation and assistance to help the Project Manager carry out his/her site-specific Citizen Participation program.

Consent Order - A legal and enforceable negotiated agreement between the Department and responsible parties where responsible parties agree to undertake investigation and cleanup or pay for the costs of investigation and cleanup work at a site. The order includes a description of the remedial actions to be undertaken at the site and a schedule for implementation.

Contact List - Names, addresses and/or telephone numbers of individuals, groups, organizations and media interested and/or affected by a particular hazardous waste site. Compiled and updated by the Department. Interest in the site, stage of remediation and other factors guide how comprehensive the list becomes. Used to assist the Department to inform and involve the interested/affected public.

Degradation Products - The solvent Tetrachloroethlyene (PCE), when released in the environment, will naturally degrade by microbial action in soil and/or groundwater into similar compounds that have fewer chlorine atoms. For instance, PCE has 4 chlorine atoms but TCE has only 3. The same principle holds true for 1,1,1- Trichloroethane (TCA).

Delisting - Removal of a site from the state Registry based on study which shows the site does not contain hazardous wastes.

1,2 - Dichloroethylene - At room temperature it is a liquid. It is used as a solvent for waxes, a refrigerant, in the manufacture of pharmaceuticals and artificial pearls, and in the removal of oils and fats from fish and meat.

Document Repository - Typically, a regional DEC and/or public building, such as a library, near a particular site, at which documents related to remedial and citizen participation activities at the site are available for public review. Provides access to documents at times and a location convenient to the public. Environmental Management Councils (EMCs), Conservation Advisory Committees (CACs) as well as active local groups often can serve as supplemental document repositories.

Fact Sheet - A written discussion of a site's remedial process, or some part of it, prepared by the Department for the public in easily understandable language. May be prepared for the "general" public or a particular segment. Uses may include, for example: discussion of an element of the remedial program, opportunities for public involvement, availability of a report or other information, or announcement of a public meeting. May be mailed to all or part of the interested public, distributed at meetings, and availability sessions or sent on an "as requested" basis.

Fish and Wildlife Impact Analysis - An engineering investigation of fish and wildlife concerns associated with the cleanup of a hazardous waste disposal site. The objectives of this evaluation are to characterize the existing ecology of the site and surrounding area and to identify fish and wildlife potentially exposed to the pollution called receptors. Further steps evaluate the risk to these receptors.

The ponds at the base of the cliff at Seneca Lake represents the probable (primary) receptor area. If a risk exists, it is necessary to develop remedial measures to eliminate the risk and afterwards provide follow-up monitoring.

Halogenated Volatile Organic Compounds - A group of organic (carbon) compounds of 5 chemically related non-metallic elements such as chlorine that evaporate readily at normal temperatures and pressures. The liquid degreaser TCE is an example. Includes all "chlorintaed solvents".

Health and Safety Plan - A plan included into the RI workplan which outlines protective measures for site workers and the community during investigative activities.

Health Risk Assessment - A process which estimates the likelihood that people who have been exposed to chemicals may have health effects. The four steps of a risk assessment are: hazard identification (Can this substance damage health?); dose-response assessment (What dose causes what effect?); exposure assessment (How and how much do people contact it?); and risk characterization (combining the other three steps to estimate risk).

Hydrogeologic Testing - Physical tests performed on monitoring wells in order to obtain specific groundwater and geologic data.

Microgram Per Liter (ug/l) - One microgram per liter means one microgram of chemical per liter of water, and is equivalent to one part per billion (ppb).

Monitoring Well - A hole drilled into the soil or bedrock which has a screen pipe and riser pipe installed in the borehole. The well enables the samples of groundwater at a specific horizontal and vertical location for chemical analysis.

Parts Per Billion (ppb) - The concentration of a substance of air, water or soil. One ppb means that there is one part of a substance for every billion parts of the air, water or soil in which it is measured. One ppb is about one drop of dye in 18,000 gallons of water or about one second in 32 years. One ppb is 1,000 times less than one ppm. See "parts per million."

Parts Per Million (ppm) - The concentration of a substance in air, water or soil. One ppm means that there is one part of a substance for every million parts of the water or soil in which it is measured. One ppm is about one drop of dye in 18 gallons of water, about the one inch in 16 miles, or one penny in $10,000.

Plume - An area of chemicals moving away form its source in a long band or column. A plume, for example, can be a column of smoke drifting away from a chimney or a similarly shaped area of dissolved chemicals moving with groundwater.

Project Manager - A Department staff member within the Division of Hazardous Waste Remediation (usually an engineer, geologist or hydrogeologist) responsible for the day-to-day administration of activities, and ultimate disposition of, one or more hazardous waste sites. The Project Manager works with the Office of Public Affairs as well as fiscal and legal staff to accomplish site-related goals and objectives.

Proposed Remedial Action Plan (PRAP) - The end product of the Feasibility Study consisting of an analysis of each alternative and the rationale for selecting the proposed alternative. This plan is reviewed by the public and other government agencies; NYS Department of Health and NYS Department of Law.

Public - The universe of individuals, groups and organizations: a) affected (or potentially affected) by an inactive hazardous waste site and/or it's remedial program; b) interested in the site and/or its remediation; c) having information about the site and it's history.

Public Meeting - A scheduled gathering of the Department staff and the public to give and receive information, ask questions and discuss concerns. May take one of the following forms: large-group meeting called by the Department; participation by the Department at a meeting sponsored by another organization such as a town board or Department of Health; working group or workshop; tour of the hazardous waste site.

Public Notice - A written or verbal informational technique for telling people about an important part of a site's remedial program coming up soon (examples: announcement that the report for the IRM or RI/FS is publicly available; a public meeting has been scheduled).

The public notice may be formal and meet legal requirements (for example: what it must say, such as announcing beginning of a public comment period; where, when and how it is published).

- Publish - For purposes of 6NYCRR Part 375.7, at a minimum requires publication of a legal notice in a local newspaper of general circulation.

Another kind of public notice may be more informal and may not be legally required (examples: paid newspaper advertisement; telephone calls to key citizen leaders; targeted mailings).

Quality Assurance Project Plan - A plan included into the RI workplan which: 1) discusses the data quality objectives and analytical requirements for the RI/FS, 2) describes sampling and field monitoring procedures, 3) describes requirements for maintaining sample integrity and 4) outlines instrument calibration and maintenance procedures.

Registry of Inactive Hazardous Waste Disposal Sites in New York State - This is a compilation of all known and suspected hazardous waste sites in New York State, updated every 3 months.

Responsible Parties - Individuals, companies (e.g. site owners, operators, transporters or generators of hazardous waste) responsible for or contributing to the contamination problems at a hazardous waste site. "PRP" is a Potentially Responsible Party.

Responsiveness Summary - A formal or informal written or verbal summary and response by the Department to public questions and comments. Prepared during or after important elements in a site's remedial program. The responsiveness summary may list and respond to each question, or summarize and respond to questions in categories.

Site Classification - The NYSDEC assigns sites to classifications established by state law, as follows:

- Classification 1 - A site causing or presenting an imminent danger of causing irreversible or irreparable damage to the public health or environment - immediate action required.
- Classification 2 - A site posing a significant threat to the public health or environment - action required.
- Classification 2a - A temporary classification for a site known or suspected to contain hazardous waste. Most likely the site will require a Phase I and Phase II investigation to obtain more information. Based on the results, the site then would be reclassified or removed from the State Registry if found not to contain hazardous wastes.
- Classification 3 - A site which has hazardous waste confirmed, but not a significant threat to the public health or environment - action may be deferred.
- Classification 4 - A site which has been properly closed - required continued management.
- Classification 5 - A site which has been properly closed, with no evidence of present or potential adverse impact - no further action required.

Soil Boring - A circular hole made in the ground by an auger or mechanical drill rig to collect soil samples deep in the ground. The best samples are saved for testing to see if the subsoil has been contaminated. Sometimes these borings are converted into groundwater monitoring wells.

Soil Gas Survey - This is a method for investigating underground distributions of volatile organic compounds (VOCs) such as TCE by looking for their vapors in the shallow soil gas (voids) that exist between soil particles. The method involves pumping a small amount of soil gas out of the ground through a hollow probe driven into the ground and testing the gas for the presence of volatile compounds. The presence of VOCs in shallow soil gas indicates the observed compounds may either be in the unsaturated (dry) soil or in the groundwater below the probe.

This survey is used to trace the outline of a groundwater contaminant plume and help determine the best location to install groundwater monitoring wells.

Superfund (federal and states) - The federal and state programs to investigate and clean up inactive hazardous waste sites. The federal program gives the U.S. Environmental Protection Agency the funding and authority to investigate, rank and conduct or supervise cleanup of sites on the National Priority List. New York State's superfund program gives the Department of Environmental Conservation the same authority to deal with sites that do not qualify for the federal superfund list.

Tetrachloroethene (perchloroethene) - Is a clear, colorless, non-flammable liquid with a characteristic odor. It is a widely used solvent with particular use as a dry cleaning agent and a degreaser.

Tetrachloromethane - Is a colorless, non-flammable liquid with a characteristic odor. It is used as a solvent for oils, fats, lacquers, varnishes, rubber, waxes, and resins. It is also used as a dry-cleaning agent, a fire extinguishing agent, and a fumigant.

Toll-Free "800" Telephone Information Number - Provides cost-free access to the Department by members of the public who have questions, concerns or information about a particular hazardous waste site. Calls are taken and recorded 24 hours a day, and a Department staff member contacts the caller as soon as possible (usually the same day).

1,1,1-Trichloroethane (1,1,1 TCA) - Colorless, non-flammable, man-made liquid solvent. In liquid form it is used as a degreaser and for cold cleaning, dip-cleaning and bucket cleaning of metals. Other industrial applications of 1,1,1-TCA's solvent properties include its use as a dry-cleaning agent, a vapor degreasing agent, and a propellant.

Trichloroethene (TCE) - Trichloroethene (also called trichloroethylene) is a colorless, man-made liquid used primarily as a solvent for removing grease from metal. It has a variety of other uses such as a dry cleaning solvent and in the production of other chemicals. It generally gets into drinking water by improper waste disposal.

Volatile Organic Compound - Carbon-containing chemicals which readily evaporate (cleaning solvents, gasoline, etc.).

8.2 Definitions of Major Program Elements:

NOTE: The definitions represent major elements of the remedial process. They are presented in the order in which they most commonly occur, rather than in alphabetical order, to provide a context to aid in their definition.

Interim Remedial Measure (IRM) - An Interim Remedial Measure (IRM) means a discrete set of activities to address both emergency and non-emergency site conditions, which can be carried out without extensive investigation and evaluation, to prevent, mitigate, or remedy environmental damage attributable to a site listed in the registry.

An IRM workplan is prepared to address one or more specific problems and will be included in the final remedy for the whole site. An IRM is designed to be a permanent part of the final remedy. When an IRM constitutes the entire remedy, DEC prepares a Record of Decision (ROD). The ROD contains the results of a remedial investigation and remedy selection process.

At many hazardous waste sites, contamination problems and the process of selecting an effective remedial program may require years of site investigation, remedial design and construction. The IRM, which can be carried out months and sometimes years before full remediation, can quickly prevent, mitigate or remedy environmental damage and lessen the risks to public health. Often, an IRM can be initiated before the full nature and extent of contamination is known.

IRMs range in size from small to large projects and include:

- Removing wastes and contaminated materials including contaminated soil and water;
- Constructing diversion ditches, collection systems, or leachate collection systems;
- Construction fences or other barriers;
- Installing water filters or providing alternative water supplies;
- Posting warning signs around a site's perimeter.

Remedial Investigation (RI) - A process to determine the nature and extent of contamination by collection data and analyzing the site. It includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for, and proposed extent of, a remedial program for the site.

Feasibility Study (FS) - A process for developing, evaluating and selecting remedial actions, using data gathered during the remedial investigation to: define the objectives of the remedial program for the site and broadly develop remedial action alternatives; perform an initial screening of these alternatives; and perform a detailed analysis of a limited number of alternatives which remain after the initial screening stage.

Remedial Design - Once a remedial action has been selected, technical drawings and specifications for remedial construction at a site are developed, as specified in the final RI/FS report. Design documents are used to bid and construct the chosen remedial actions. Remedial design is prepared by consulting engineers with experience in inactive hazardous waste disposal site remedial actions.

Record of Decision (ROD) - Presents the remedial action for an inactive hazardous waste site and documents the information and rationale used to arrive at the decision.

The ROD is the culmination of extensive investigations and a remedy selection that identifies a solution to remove the threat of harm from public health and the environment. It serves as the definitive record of the remedial action decision for the site and as a convenient reference to other documents that were developed during the remedial process.

Construction - The PRP selects contractors and supervises construction work to carry out the designed remedial alternative. The DEC provides regulatory oversight. Construction may be as straightforward as excavation of contaminated soil with disposal at a permitted hazardous waste facility. On the other hand, it may involve drum sampling and identification, complete encapsulation, leachate collection, storage and treatment, groundwater management, or other technologies. Construction costs may vary from several thousand dollars to many millions of dollars, depending the size of the site, the soil, groundwater and other conditions, and the nature of the wastes.

Monitoring/Maintenance - Denotes post-closure activities to insure continued effectiveness of the remedial actions. Typical monitoring/maintenance activities include quarterly inspection by an engineering technician; measurement of level of water in monitoring wells; or collection of groundwater and surface water samples and analysis for factors showing the condition of water, presence of toxic substances, or other indicators of possible pollution from the site. Monitoring/maintenance may be required indefinitely at many sites.

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APPENDIX M

Well Survey Questionnaire and List of
Homes to be Contacted

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Thomas C. Jorling
Commissioner

Dear Resident:

Re: Enarc-O Machine Products, Site #8-26-011, Livingston County

Enarc-O Machine Products, Inc. and the New York State Department of Environmental Conservation (NYSDEC) are working together in conducting a Remedial Investigation and Feasibility Study (RI/FS) for the Enarc-O Machine Products Site in North Bloomfield. In cooperation with the NYSDEC and the New York State Department of Health (NYSDOH), Enarc-O has hired the engineering services of H&A of New York to perform the RI/FS, and to obtain information concerning residential water usage near the Enarc-O Machine Products Site. Although we realize that most residents are currently using municipal water for their everyday needs, you may have a well which you no longer use that we could incorporate into our study.

Please fill out the enclosed brief questionnaire to the best of your knowledge and mail it in the stamped, self-addressed envelope provided. If you have any questions concerning this survey, feel free to call Mr. David Napier - NYSDOH at (716) 423-8071, Mr. Vince Dick - H&A of New York at (716) 232-7386, Linda Vera - NYSDEC Citizen Participation Specialist at (716) 226-2466, or me at (518) 457-3373. You may also reach NYSDEC staff by calling the Department's Inactive Hazardous Waste Site Remedial Program in Albany, toll-free, at 1-800-342-9296 and leaving a message. Your call will be returned shortly.

Thank you for your cooperation in this matter.

Sincerely,

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

David J. Chiusano
Environmental Engineer
Remedial Section C
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation

Enclosure

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New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Thomas C. Jorling
Commissioner

WATER USAGE RECONNAISSANCE SURVEY
ENARC-O MACHINE PRODUCTS, INC. SITE AREA

NAME: _____

ADDRESS: _____

TELEPHONE: _____
(optional)

A. Do you have a water well? Yes _____ No _____

Answer questions A.1 - A.6 only if you answered yes to Question A.

A.1 Please list your uses for this well water (if any) such as drinking, agriculture, livestock.

1. _____
2. _____
3. _____
4. _____
5. _____

A.2 If the well is abandoned, is it:

Capped _____ Open _____ Accessible _____

Plugged with cement _____ Unknown _____

A.3 When was your well constructed? 19__

A.4 Was it dug, hand driven, or drilled?

dug _____ hand driven _____ drilled _____

Please provide the name and phone number of the driller, if known.

(Name) _____ (Phone) _____

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A.5 How deep is your well? ____ feet

Is the well currently occupied by a submersible pump or water lines?

____ Pump ____ Water Lines ____ Well is open and unoccupied

A.6 Are you currently using municipal water? ____ Yes ____ No

B. Do you have a sump in your basement? ____ Yes ____ No

B.1 If Yes, does your sump contain water on a regular basis?
____Yes ____No

B.2 On an intermittant basis?

____ Winter ____ Spring ____ Summer ____ Fall

GENERAL COMMENTS

PLEASE USE BACK OF FORM FOR ANY COMMENTS

ENCLOSURE #2

Enarc-O Home Survey

Mailing List

Martin Road

7660	7720	7796	7873
7666	7735	7801	7880
7672	7744	7808	7883
7678	7745	7820	7886
7680	7750	7829	9617
7694	7756	7838	9622
7696	7777	7840	9624
7702	7780	7852	9626
7708	7783	7859	9680
7714	7787	7865	

Ideson Road

1070	1121
1080	1129
1081	1146
1091	1154
1108	1155
1111	
1116	

Clay Street

2028

Bragg Street

1167
1175
1191
1301

Ontario Street

155	1918
1886	1922
1896	1926
1897	1930
1901	1934
1903	1950
1913	

State Rt. 65

1932
1933
1942
1944
1946

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APPENDIX N

Previously Collected Data

00-17-1 (5/76)
Formerly GA-4

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

TRANSMITTAL SLIP

TO: Ronald Iannucci, Sr.: Kaddis Manufacturing

FROM: David Chiusano, NYSDEC - Albany | DATE: 9/9/93

RE: Enarc-O Machine Products, Site # 8-26-011

FYI: Sample results from NYSDOH Sampling of [redacted] Sump on 8/12/93.

cc: V. Dick (H&A)

FOR ACTION AS INDICATED:

- ☐ Please Handle
- ☐ Prepare Reply
- ☐ Prepare Reply for _____ Signature
- ☒ Information
- ☐ Approval
- ☐ Prepare final/draft in _____ Copies
- ☐ Comments
- ☐ Signature
- ☐ File
- ☐ Return to me
- ☐ _____
- ☐ _____

RECEIVED
SEP 13 1993
H & A OF NEW YORK

861

1647 NEW YORK STATE DEPARTMENT OF HEALTH 072
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 931969 SAMPLE RECEIVED:93/08/13/ CHARGE: 8.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2524
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 ENARC-D
DESCRIPTION: [redacted], SUMP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VH05021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 93/08/12 10:30 DATE PRINTED:93/08/24

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 93/08/24 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	5. MCG/L
CHLOROFORM	5. MCG/L
1,2-DICHLOROETHANE	0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	2. MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	56. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(1), RO(1), LPHE(1), FED( ), INFO-P( ), INFO-L( )

REGIONAL DIRECTOR OF PH ENGINEERING
NEW YORK STATE DEPARTMENT OF HEALTH
42 SOUTH WASHINGTON ST.
ROCHESTER, N.Y. 14608

SUBMITTED BY:NAPIER

1648 NEW YORK STATE DEPARTMENT OF HEALTH 072
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 931969 SAMPLE RECEIVED:93/08/13/ CHARGE: 8.00
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LOCATION: 826011 ENARC-0
TIME OF SAMPLING: 93/08/12 10:30 DATE PRINTED:93/08/24

----------PARAMETER----------	----------RESULT----------
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	1. MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
PH OF HALOGENATED ALIQUOT	2

**** END OF REPORT ****

200

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Thomas C. Jorling
Commissioner

MAY 18 1993

Mr. Ronald Iannucci, President
Kaddis Manufacturing Corporation
P.O. Box 92985
1100 Beahan Road
Rochester, NY 14692-9085

Dear Mr. Iannucci:

Re: Residential Water Sample, Enarc-O Machine Products Site, #8-26-011, Livingston County

For your information I have enclosed the data generated from the NYSDOH's sampling of [redacted]s basement sump on 4/19/93. As you can see, low levels of volatile organic contamination were again detected.

If you have any questions, please do not hesitate to contact Mr. David Napier, NYSDOH, at (716) 423-8071, or myself at (518) 457-3373.

Sincerely,

David J. Chiusano
Environmental Engineer
Remedial Section C
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation

Enclosure

cc: D. Napier, NYSDOH-Rochester
R. Van Houten, LCHD
V. Dick, H&A
W. Helferich, (Harter, Secrest & Emery)

RECEIVED
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H & A OF NEW YORK

201

0535 NEW YORK STATE DEPARTMENT OF HEALTH 072
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 930842 SAMPLE RECEIVED:93/04/20/ CHARGE: 8.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2524
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 ENARC-0
DESCRIPTION: [redacted], SUMP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VH05021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 93/04/19 08:10 DATE PRINTED:93/05/07

New York State Department of Health
MAY 13 1993
Rochester Area Office

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 93/05/07 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	4.7 MCG/L
CHLOROFORM	2.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	2.4 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	22. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

RECEIVED
MAY 17 1993
BUREAU OF WESTERN REMEDIAL ACTION
DIVISION OF HAZARDOUS WASTE REMEDIATION

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REGIONAL DIRECTOR OF PH ENGINEERING
NEW YORK STATE DEPARTMENT OF HEALTH
42 SOUTH WASHINGTON ST.
ROCHESTER, N.Y. 14608

SUBMITTED BY:NAPIER

202

0536 NEW YORK STATE DEPARTMENT OF HEALTH 072
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 930842 SAMPLE RECEIVED:93/04/20/ CHARGE: 8.00
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LOCATION: 826011 ENARC-0
TIME OF SAMPLING: 93/04/19 08:10 DATE PRINTED:93/05/07

PARAMETER	RESULT
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
PH OF HALOGENATED ALIQUOT	2

**** END OF REPORT ****

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Western Region — Rochester Field Office 42 S. Washington Street Rochester, New York 14608

Lorna McBarnette
Executive Deputy Commissioner

OFFICE OF PUBLIC HEALTH
Sue Kelly
Executive Deputy Director
Olivia Smith-Blackwell, M.D., M.P.H
Regional Health Director

Letter #55-92

May 27, 1992

Mr. and Mrs. [redacted]
[redacted] Martin Road
Honeoye Fall, N.Y. 14485

RE: Indoor Air and Sump Sample Results
Enarc-O, Site #826011
Lima, Livingston Co.

Dear Mr. and Mrs. [redacted]:

Attached are results of the analysis of indoor air samples collected on March 3, 1992 and two sump water samples collected on January 15, 1992 and March 3, 1992 in your home by the New York State Department of Health. Also attached is a summary chart (Table 1) of the indoor air sample results from your home and the control home for comparison. The indoor air samples were taken to determine whether there is an influence from the chemicals found in your sump water on the indoor air quality in your home. Indoor air samples taken last summer did not show any impact from your sump water, but additional sampling was conducted to determine if a seasonal variation exists. Included for comparison is data from the U.S. Environmental Protection Agency's (EPA) Indoor Air Quality Database for Organic Compounds (Table 2). This publication is a summary of indoor air sampling results from studies performed nationwide.

The results from the sump water samples shows that the level of contamination in your sump water continues to be present at approximately the same concentration. There were no chemical compounds detected in your basement air samples. This would indicate that there is not an impact on the indoor air quality of your house from the chemicals in your sump water. Benzene, toluene, ethylbenzene, xylenes, trimethylbenzene, p-cymene and n-butylbenzene were all found in the indoor air sample collected in your living room. Several of these chemicals were found in indoor air samples collected in your home last summer and were also found in samples from the control home. All of these chemicals are constituents of kerosine and other petroleum products. Their presence may be due to the use of a kerosene heater on the first floor of your home during the sampling.

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TABLE 1

Positive Indoor Air Results
Values in Micrograms Per Cubic Meter (mcg/m^3)

	[redacted] Residence		Control Residence	
	Basement	Living Room	Basement	Living Room
benzene		32	10 PL	10 PL
toluene		34	20	24
ethylbenzene		9		
m/p-xylene		24	10 PL	11
o-xylene		14		10 PL
1,2,4-trimethylbenzene		20		10 PL
4-isopropyltoluene		12		
n-butylbenzene		17		

PL = Present but less than the instrument can detect acurately.

#20830385

0361 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920906 SAMPLE RECEIVED:92/03/04/ CHARGE: 11.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2524
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 EVARCO - [redacted] RES., [redacted] MARTIN RD.
DESCRIPTION:BASEMENT, TUBE #T05286-29.88 LITERS,T05303-32.37 LITERS
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-AIR:VOLATILE ORGANICS IN AIR
SAMPLE TYPE: 902:AMBIENT AIR - INDOOR
TIME OF SAMPLING: 92/03/03 09:24 TO 92/03/03 10:47 DATE PRINTED:92/03/10

ANALYSIS: VOL3-AIR VOLATILE ORGANICS IN AIR (DES 311-6)
DATE PRINTED: 92/03/10 FINAL REPORT

PARAMETER	RESULT
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 10. MCG/CU.M.
TRANS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
1,1-DICHLOROETHANE	< 10. MCG/CU.M.
CIS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
CHLOROFORM	< 10. MCG/CU.M.
1,1,1-TRICHLOROETHANE	< 10. MCG/CU.M.
1,1-DICHLOROPROPENE	< 10. MCG/CU.M.
CARBON TETRACHLORIDE	< 10. MCG/CU.M.
1,2-DICHLOROETHANE	< 10. MCG/CU.M.
BENZENE	< 10. MCG/CU.M.
TRICHLOROETHENE	< 10. MCG/CU.M.
1,2-DICHLOROPROPANE	< 10. MCG/CU.M.
BROMODICHLOROMETHANE	< 10. MCG/CU.M.
CIS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
TOLUENE	< 10. MCG/CU.M.
TRANS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
1,1,2-TRICHLOROETHANE	< 10. MCG/CU.M.
TETRACHLOROETHENE	< 10. MCG/CU.M.
DIBROMOCHLOROMETHANE	< 10. MCG/CU.M.
CHLOROBENZENE	< 10. MCG/CU.M.
1,1,1,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
ETHYLBENZENE	< 10. MCG/CU.M.
M/P-XYLENE	< 10. MCG/CU.M.
O-XYLENE	< 10. MCG/CU.M.
STYRENE	< 10. MCG/CU.M.
ISOPROPYLBENZENE (CUMENE)	< 10. MCG/CU.M.
BROMOFORM	< 10. MCG/CU.M.
1,1,2,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
N-PROPYLBENZENE	< 10. MCG/CU.M.
BROMOBENZENE	< 10. MCG/CU.M.

**** CONTINUED ON NEXT PAGE ****

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G. ANDERS CARLSON
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEP'T. HEALTH SUBMITTED BY:HOUSE
11 UNIVERSITY PLACE - RM. 205
ALBANY, NY 12203 *INTERAGENCY MAIL*

206

0362 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920906 SAMPLE RECEIVED:92/03/04/ CHARGE: 11.00
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LOCATION: 926011-ENARCO - [redacted] RES., [redacted] MARTIN RD.
TIME OF SAMPLING: 92/03/03 09:24 TO 92/03/03 10:47 DATE PRINTED:92/03/10

PARAMETER	RESULT
1,3,5-TRIMETHYLBENZENE	< 10. MCG/CU.M.
O-CHLOROTOLUENE	< 10. MCG/CU.M.
P-CHLOROTOLUENE	< 10. MCG/CU.M.
TERT-BUTYLBENZENE	< 10. MCG/CU.M.
1,2,4-TRIMETHYLBENZENE	< 10. MCG/CU.M.
SEC-BUTYLBENZENE	< 10. MCG/CU.M.
4-ISOPROPYLTOLUENE (P-CYMENE)	< 10. MCG/CU.M.
1,3-DICHLOROBENZENE	< 10. MCG/CU.M.
1,4-DICHLOROBENZENE	< 10. MCG/CU.M.
N-BUTYLBENZENE	< 10. MCG/CU.M.
1,2-DICHLOROBENZENE	< 10. MCG/CU.M.
1,2,4-TRICHLOROBENZENE	< 10. MCG/CU.M.
NAPHTHALENE	< 10. MCG/CU.M.
1,2,3-TRICHLOROBENZENE	< 10. MCG/CU.M.
AIR VOLUME	0.0299 CU.M.

**** END OF REPORT ****

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0351 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920904 SAMPLE RECEIVED:92/03/04/ CHARGE: 11.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2524
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826411 ENARCO
DESCRIPTION: [redacted] RES., [redacted] MARTIN RD., LIVING ROOM
DESCRIPTION:PUMP #I05283 - 30.1 LITERS,I05308 - 30.1 LITERS
REPORTING LAB: IDX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-AIR:VOLATILE ORGANICS IN AIR
SAMPLE TYPE: 902:AMBIENT AIR - INDOOR
TIME OF SAMPLING: 92/03/03 09:09 TO 92/03/03 10:35 DATE PRINTED:92/03/10

ANALYSIS: VOL3-AIR VOLATILE ORGANICS IN AIR (DES 311-5)
DATE PRINTED: 92/03/10 FINAL REPORT

PARAMETER	RESULT
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 10. MCG/CU.M.
TRANS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
1,1-DICHLOROETHANE	< 10. MCG/CU.M.
CIS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
CHLOROFORM	< 10. MCG/CU.M.
1,1,1-TRICHLOROETHANE	< 10. MCG/CU.M.
1,1-DICHLOROPROPENE	< 10. MCG/CU.M.
CARBON TETRACHLORIDE	< 10. MCG/CU.M.
1,2-DICHLOROETHANE	< 10. MCG/CU.M.
BENZENE	32. MCG/CU.M.
TRICHLOROETHENE	< 10. MCG/CU.M.
1,2-DICHLOROPROPANE	< 10. MCG/CU.M.
BROMODICHLOROMETHANE	< 10. MCG/CU.M.
CIS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
TOLUENE	34. MCG/CU.M.
TRANS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
1,1,2-TRICHLOROETHANE	< 10. MCG/CU.M.
TETRACHLOROETHENE	< 10. MCG/CU.M.
DIBROMOCHLOROMETHANE	< 10. MCG/CU.M.
CHLOROBENZENE	< 10. MCG/CU.M.
1,1,1,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
ETHYLBENZENE	9. MCG/CU.M.
M/P-XYLENE	24. MCG/CU.M.
O-XYLENE	14. MCG/CU.M.
STYRENE	< 10. MCG/CU.M.
ISOPROPYLBENZENE (CUMENE)	< 10. MCG/CU.M.
BROMOFORM	< 10. MCG/CU.M.
1,1,2,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
N-PROPYLBENZENE	< 10. MCG/CU.M.

**** CONTINUED ON NEXT PAGE ****

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MAR 16 1992
Bureau of Environmental
Exposure Investigation

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G. ANDERS CARLSON
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEPT. HEALTH
11 UNIVERSITY PLACE - RM. 205
ALBANY, NY 12203 *INTERAGENCY MAIL*

SUBMITTED BY:HOUSE

308

SAMPLE ID: 920904 SAMPLE RECEIVED:92/03/04/ CHARGE: 11.00
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LOCATION: 926011 ENARCO
TIME OF SAMPLING: 92/03/03 09:09 TO 92/03/03 10:35 DATE PRINTED:92/03/10

PARAMETER	RESULT
BROMOBENZENE	< 10. MCG/CU.M.
1,3,5-TRIMETHYLBENZENE	< 10. MCG/CU.M.
O-CHLOROTOLUENE	< 10. MCG/CU.M.
P-CHLOROTOLUENE	< 10. MCG/CU.M.
TERT-BUTYLBENZENE	< 10. MCG/CU.M.
1,2,4-TRIMETHYLBENZENE	20. MCG/CU.M.
SEC-BUTYLBENZENE	< 10. MCG/CU.M.
4-ISOPROPYLTOLUENE (P-CYMENE)	12. MCG/CU.M.
1,3-DICHLOROBENZENE	< 10. MCG/CU.M.
1,4-DICHLOROBENZENE	< 10. MCG/CU.M.
N-BUTYLBENZENE	17. MCG/CU.M.
1,2-DICHLOROBENZENE	< 10. MCG/CU.M.
1,2,4-TRICHLOROBENZENE	< 10. MCG/CU.M.
NAPHTHALENE	< 10. MCG/CU.M.
1,2,3-TRICHLOROBENZENE	< 10. MCG/CU.M.
AIR VOLUME	0.0301 CU.M.

**** END OF REPORT ****

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0357 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920905 SAMPLE RECEIVED:92/03/04/ CHARGE: 11.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE TO: DRAINAGE BASIN: GAZETTEER CODE:2524
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: 920911 BARGO - [redacted] RES., [redacted] MARTIN RD.
DESCRIPTION:OUTDOORS, TUBE #T05296-33.81 LITER, T05295-26.22 LITERS
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-AIR:VOLATILE ORGANICS IN AIR
SAMPLE TYPE: 909:AMBIENT AIR - OUTDOOR
TIME OF SAMPLING: 92/03/03 09:17 TO 92/03/03 10:26 DATE PRINTED:92/03/10

ANALYSIS: VOL3-AIR VOLATILE ORGANICS IN AIR (DES 311-6)
DATE PRINTED: 92/03/10 FINAL REPORT

PARAMETER	RESULT
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 10. MCG/CU.M.
TRANS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
1,1-DICHLOROETHANE	< 10. MCG/CU.M.
CIS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
CHLOROFORM	< 10. MCG/CU.M.
1,1,1-TRICHLOROETHANE	< 10. MCG/CU.M.
1,1-DICHLOROPROPENE	< 10. MCG/CU.M.
CARBON TETRACHLORIDE	< 10. MCG/CU.M.
1,2-DICHLOROETHANE	< 10. MCG/CU.M.
BENZENE	< 10. MCG/CU.M.
TRICHLOROETHENE	< 10. MCG/CU.M.
1,2-DICHLOROPROPANE	< 10. MCG/CU.M.
BROMODICHLOROMETHANE	< 10. MCG/CU.M.
CIS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
TOLUENE	< 10. MCG/CU.M.
TRANS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
1,1,2-TRICHLOROETHANE	< 10. MCG/CU.M.
TETRACHLOROETHENE	< 10. MCG/CU.M.
DIBROMOCHLOROMETHANE	< 10. MCG/CU.M.
CHLOROBENZENE	< 10. MCG/CU.M.
1,1,1,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
ETHYLBENZENE	< 10. MCG/CU.M.
M/P-XYLENE	< 10. MCG/CU.M.
O-XYLENE	< 10. MCG/CU.M.
STYRENE	< 10. MCG/CU.M.
ISOPROPYLBENZENE (CUMENE)	< 10. MCG/CU.M.
BROMOFORM	< 10. MCG/CU.M.
1,1,2,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
N-PROPYLBENZENE	< 10. MCG/CU.M.
BROMOBENZENE	< 10. MCG/CU.M.

**** CONTINUED ON NEXT PAGE ****

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G. ANDERS GARGSON
BUR. ENVIRONMENTAL EXPOSURE INVESTIGAT.
NY STATE DEPT. HEALTH SUBMITTED BY:HOUSE
11 UNIVERSITY PLACE - RM. 205
ALBANY, NY 12203 *INTERAGENCY MAIL*

210

SAMPLE ID: 920905 SAMPLE RECEIVED:92/03/04/ CHARGE: 11.00
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LOCATION:--8260H-ENARCO - [redacted] RES., [redacted] MARTIN RD.
TIME OF SAMPLING: 92/03/03 09:17 TO 92/03/03 10:26 DATE PRINTED:92/03/10

PARAMETER	RESULT
1,3,5-TRIMETHYLBENZENE	< 10. MCG/CU.M.
O-CHLOROTOLUENE	< 10. MCG/CU.M.
P-CHLOROTOLUENE	< 10. MCG/CU.M.
TERT-BUTYLBENZENE	< 10. MCG/CU.M.
1,2,4-TRIMETHYLBENZENE	< 10. MCG/CU.M.
SEC-BUTYLBENZENE	< 10. MCG/CU.M.
4-ISOPROPYLTOLUENE (P-CYMENE)	< 10. MCG/CU.M.
1,3-DICHLOROBENZENE	< 10. MCG/CU.M.
1,4-DICHLOROBENZENE	< 10. MCG/CU.M.
N-BUTYLBENZENE	< 10. MCG/CU.M.
1,2-DICHLOROBENZENE	< 10. MCG/CU.M.
1,2,4-TRICHLOROBENZENE	< 10. MCG/CU.M.
NAPHTHALENE	< 10. MCG/CU.M.
1,2,3-TRICHLOROBENZENE	< 10. MCG/CU.M.
AIR VOLUME	0.0338 CU.M.

**** END OF REPORT ****

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PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920889 SAMPLE RECEIVED:92/03/04/ CHARGE: 8.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2524
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 ENARCO
DESCRIPTION: [redacted]
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VH05021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 92/03/03 09:30 DATE PRINTED:92/05/14

<> >>>>> INQUIRED 920402 BY D.E.H. (LDRO2) <<<<< <>
<> >>>>> INQUIRED 920514 BY D.E.H. (LDRO2) <<<<< <>

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 92/05/14 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	28. MCG/L
CHLOROFORM	10. MCG/L
1,2-DICHLOROETHANE	0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	2.0 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	2.0 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	76. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

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PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920889 SAMPLE RECEIVED:92/03/04/ CHARGE: 8.00
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LOCATION: 826011 ENARCO
TIME OF SAMPLING: 92/03/03 09:30 DATE PRINTED:92/05/14

PARAMETER	RESULT
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	0.7 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
pH of Halogenated Aliquot	2

**** END OF REPORT ****

0425 NEW YORK STATE DEPARTMENT OF HEALTH 072
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920888 SAMPLE RECEIVED:92/03/04/ CHARGE: 8.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2524
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 ENARCO
DESCRIPTION:YEARS
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VH05021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 92/03/03 10:12 DATE PRINTED:92/05/14

<> >>>>> INQUIRED 920402 BY D.E.H.(LORO2) <<<<< <>

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 92/05/14 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L

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PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920888 SAMPLE RECEIVED:92/03/04/ CHARGE: 8.00
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LOCATION: 826011 ENARCO
TIME OF SAMPLING: 92/03/03 10:12 DATE PRINTED:92/05/14

PARAMETER	RESULT
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
pH of Halogenated Aliquot	2

**** END OF REPORT ****

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NEW YORK STATE DEPARTMENT OF HEALTH
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PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920295 SAMPLE RECEIVED:92/01/17 CHARGE: 6.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: 826011 ENARC-O
DESCRIPTION: [redacted]. SUMP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VHOS021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 92/01/15 15:00 DATE PRINTED:92/02/11

ANALYSIS: VHOS021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 92/02/11 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	65. MCG/L
CHLOROFORM	8. MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	3. MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	3. MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	87. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L

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 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920295 SAMPLE RECEIVED:92/01/17 CHARGE: 8.00
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION: 826011 ENARC-0
TIME OF SAMPLING: 92/01/15 15:00 DATE PRINTED:92/02/11

PARAMETER	RESULT
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	1. MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
PH OF HALOGENATED ALIQUOT	2

**** END OF REPORT ****

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PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 914245 SAMPLE RECEIVED:91/11/15/ CHARGE: 8.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 ENARC=0
DESCRIPTION: [redacted], BASEMENT CROCK
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VH05021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 91/11/13 08:40 DATE PRINTED:92/01/07

<> >>>>> INQUIRED 920103 BY D.E.H.(LDR02) <<<<< <>

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 92/01/07 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	2. MCG/L
CHLOROFORM	6. MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	1. MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	16. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L

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SUBMITTED BY:NAPIER

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NEW YORK STATE DEPAPTMENT OF HEALTH
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 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 914245 SAMPLE RECEIVED:91/11/15/ CHARGE: 8.00
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION: 826011 ENARC-0
TIME OF SAMPLING: 91/11/13 08:40 DATE PRINTED:92/01/07

PARAMETER	RESULT
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLORDETHANE	< 0.5 MCG/L
1,2,3-TRICHLORDPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLORDETHANE	< 0.5 MCG/L
TETRACHLORDETHENE	< 0.5 MCG/L
CHLORDBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
1,3-DICHLORDBENZENE	< 0.5 MCG/L
1,2-DICHLORDBENZENE	< 0.5 MCG/L
1,4-DICHLORDBENZENE	< 0.5 MCG/L
PH OF HALOGENATED ALIQUOT	2

**** END OF REPORT ****

DOH STATE OF NEW YORK
DEPARTMENT OF HEALTH
Rochester Field Office-42 S. Washington Street- Rochester, NY 14608-2099

David Axelrod, M.D.
Commissioner

OFFICE OF PUBLIC HEALTH
Linda A. Randolph, M.D., M.P.H.
Director

Olivia Smith-Blackwell, M.D., M.P.H.
Regional Health Director

Letter #639-91

July 30, 1991

Mr. and Mrs. [redacted]
[redacted] Martin Road
Lima, NY 14485

RE: Enarc-O Machine Products
Site # 826011
Lima, Livingston County

Dear Mr. and Mrs. [redacted]:

Attached are results of the analysis of samples of indoor air and the basement sump collected at your home by representatives of the New York State Department of Health on June 14th. Also attached is a summary chart of results for comparison. The indoor air samples were taken to determine whether there is an influence from the chemicals found in your sump water on the indoor air quality in your home. Samples were also collected in a control home, a house similar in construction to yours and in the same area, but believed not to be impacted by the Enarc-O site. These samples were analyzed for volatile organic chemicals at the NYS Department of Health's Wadsworth Center for Laboratories and Research in Albany. Based on these results, it appears that the contaminated groundwater continues to be impacting your sump water, but does not seem to be affecting the indoor air quality of your house.

Three compounds were found in your sump sample: 1,1,1 trichloroethane, trichloroethene, and tetrachloroethene. The level of trichloroethene found was higher than we found in the previous sump sample taken at your house. The values for the other two compounds were the same as in the previous sample collected. Based on these and previous sample results, it appears that the level of trichloroethene in your sump water has increased, which may indicate that the levels in the groundwater are also increasing over time.

Benzene, toluene and xylene were detected in the indoor air samples from your basement and living room at low levels. Naphthalene and 1,2,4-trimethylbenzene were also found in the living room samples at low levels. These levels are similar to the levels found in the control home. The results also concur with the values reported by the Environmental Protection Agency for indoor air. A summary of these results are given in the attached chart. None of these chemicals were found in your sump water and all of them are constituents of gasoline and other petroleum products. The presence of these compounds is probably due to the use of household

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products containing petroleum distillates. It is not uncommon to find petroleum product constituents at low concentrations in indoor air.

If you have any questions concerning these results please call me at 423-8071.

Sincerely,

David Napier

David L. Napier
Regional Toxics Coordinator
Bureau of Environmental Exposure
Investigation

ceb/11970164

Attachment

cc: Mr. Tramontano/Dr. Carlson
Dr. Smith-Blackwell
Mr. Hudson/Ms. Buckingham
Mr. Van Houten - Livingston County HD
Mr. Chiusano - DEC

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INDOOR AIR RESULTS

Values in Micrograms Per Cubic Meter (mcg/m^3)

	[redacted] Residence		Control Residence		EPA Data
	Basement	Living Room	Basement	Living Room	
Benzene	10	10			10
Toluene	10	22	10	11	32
M/P-Xylene	10	12		10	13
O-Xylene		10			5
1,2,4-Trimethyl-Benzene		10			1
Naphthalene		23			

* EPA figures from the "National Ambient Volatile Organic Compounds Database Update"
March 1988

12100820

0266 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 912031 SAMPLE RECEIVED:91/06/17/ CHARGE: 11.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 820011 ENARCO
DESCRIPTION:LIVING ROOM [redacted] RES., [redacted] MARTIN RD.,I04805,I04806
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-AIR:VOLATILE ORGANICS IN AIR
SAMPLE TYPE: 902:AMBIENT AIR - INDOOR
TIME OF SAMPLING: 91/06/14 09:14 TO 91/06/14 10:11 DATE PRINTED:91/07/01

ANALYSIS: VOL3-AIR VOLATILE ORGANICS IN AIR
DATE PRINTED: 91/07/01 FINAL REPORT

PARAMETER	RESULT
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 10. MCG/CU.M.
TRANS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
1,1-DICHLOROETHANE	< 10. MCG/CU.M.
CIS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
CHLOROFORM	< 10. MCG/CU.M.
1,1,1-TRICHLOROETHANE	< 10. MCG/CU.M.
1,1-DICHLOROPROPENE	< 10. MCG/CU.M.
CARBON TETRACHLORIDE	< 10. MCG/CU.M.
1,2-DICHLOROETHANE	< 10. MCG/CU.M.
BENZENE	10. MCG/CU.M. [PL]
TRICHLOROETHENE	< 10. MCG/CU.M.
1,2-DICHLOROPROPANE	< 10. MCG/CU.M.
BROMODICHLOROMETHANE	< 10. MCG/CU.M.
CIS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
TOLUENE	22. MCG/CU.M.
TRANS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
1,1,2-TRICHLOROETHANE	< 10. MCG/CU.M.
TETRACHLOROETHENE	< 10. MCG/CU.M.
DIBROMOCHLOROMETHANE	< 10. MCG/CU.M.
CHLOROBENZENE	< 10. MCG/CU.M.
1,1,1,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
ETHYLBENZENE	< 10. MCG/CU.M.
M/P-XYLENE	12. MCG/CU.M.
O-XYLENE	10. MCG/CU.M. [PL]
STYRENE	< 10. MCG/CU.M.
ISOPROPYLBENZENE (CUMENE)	< 10. MCG/CU.M.
BROMOFORM	< 10. MCG/CU.M.
1,1,2,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
N-PROPYLBENZENE	< 10. MCG/CU.M.
BROMOBENZENE	< 10. MCG/CU.M.

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SUBMITTED BY:WILSON

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PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 912031 SAMPLE RECEIVED:91/06/17/ CHARGE: 11.00
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION: 326011 ENARCO
TIME OF SAMPLING: 91/06/14 09:14 TO 91/06/14 10:11 DATE PRINTED:91/07/01

PARAMETER	RESULT
1,3,5-TRIMETHYLBENZENE	10. MCG/CU.M. [PL]
O-CHLOROTOLUENE	< 10. MCG/CU.M.
P-CHLOROTOLUENE	< 10. MCG/CU.M.
TERT-BUTYLBENZENE	< 10. MCG/CU.M.
1,2,4-TRIMETHYLBENZENE	10. MCG/CU.M. [PL]
SEC-BUTYLBENZENE	< 10. MCG/CU.M.
4-ISOPROPYLTOLUENE (P-CYMENE)	< 10. MCG/CU.M.
1,3-DICHLOROBENZENE	< 10. MCG/CU.M.
1,4-DICHLOROBENZENE	< 10. MCG/CU.M.
N-BUTYLBENZENE	< 10. MCG/CU.M.
1,2-DICHLOROBENZENE	< 10. MCG/CU.M.
1,2,4-TRICHLOROBENZENE	< 10. MCG/CU.M.
NAPHTHALENE	23. MCG/CU.M.
1,2,3-TRICHLOROBENZENE	< 10. MCG/CU.M.
AIR VOLUME	0.0251 CU.M.

**** END OF REPORT ****

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PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 912030 SAMPLE RECEIVED:91/06/17/ CHARGE: 11.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 926011 ENARCO
DESCRIPTION:BASEMENT [redacted] RES., [redacted] MARTIN
DESCRIPTION:CART# T04795, T04797
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-AIR:VOLATILE ORGANICS IN AIR
SAMPLE TYPE: 902:AMBIENT AIR - INDOOR
TIME OF SAMPLING: 91/06/14 09:52 TO 91/06/14 06:57 DATE PRINTED:91/07/01

ANALYSIS: VOL3-AIR VOLATILE ORGANICS IN AIR
DATE PRINTED: 91/07/01 FINAL REPORT

PARAMETER	RESULT
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 10. MCG/CU.M.
TRANS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
1,1-DICHLOROETHANE	< 10. MCG/CU.M.
CIS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
CHLOROFORM	< 10. MCG/CU.M.
1,1,1-TRICHLOROETHANE	< 10. MCG/CU.M.
1,1-DICHLOROPROPENE	< 10. MCG/CU.M.
CARBON TETRACHLORIDE	< 10. MCG/CU.M.
1,2-DICHLOROETHANE	< 10. MCG/CU.M.
BENZENE	10. MCG/CU.M. [PL]
TRICHLOROETHENE	< 10. MCG/CU.M.
1,2-DICHLOROPROPANE	< 10. MCG/CU.M.
BROMODICHLOROMETHANE	< 10. MCG/CU.M.
CIS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
TOLUENE	10. MCG/CU.M. [PL]
TRANS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
1,1,2-TRICHLOROETHANE	< 10. MCG/CU.M.
TETRACHLOROETHENE	< 10. MCG/CU.M.
DIBROMOCHLOROMETHANE	< 10. MCG/CU.M.
CHLOROBENZENE	< 10. MCG/CU.M.
1,1,1,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
ETHYLBENZENE	< 10. MCG/CU.M.
M/P-XYLENE	10. MCG/CU.M. [PL]
O-XYLENE	< 10. MCG/CU.M.
STYRENE	< 10. MCG/CU.M.
ISOPROPYLBENZENE (CUMENE)	< 10. MCG/CU.M.
BROMOFORM	< 10. MCG/CU.M.
1,1,2,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
N-PROPYLBENZENE	< 10. MCG/CU.M.

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SUBMITTED BY:WILSON

225

SAMPLE ID: 912030 SAMPLE RECEIVED:91/06/17/ CHARGE: 11.00
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION:_ 826011 BARCO
TIME OF SAMPLING: 91/06/14 09:52 TO 91/06/14 08:57 DATE PRINTED:91/07/01

PARAMETER	RESULT
BROMOBENZENE	< 10. MCG/CU.M.
1,3,5-TRIMETHYLBENZENE	< 10. MCG/CU.M.
O-CHLORDTOLUENE	< 10. MCG/CU.M.
P-CHLORDTOLUENE	< 10. MCG/CU.M.
TERT-BUTYLBENZENE	< 10. MCG/CU.M.
1,2,4-TRIMETHYLBENZENE	< 10. MCG/CU.M.
SEC-BUTYLBENZENE	< 10. MCG/CU.M.
4-ISOPROPYLTOLUENE (P-CYMENE)	< 10. MCG/CU.M.
1,3-DICHLOROBENZENE	< 10. MCG/CU.M.
1,4-DICHLOROBENZENE	< 10. MCG/CU.M.
N-BUTYLBENZENE	< 10. MCG/CU.M.
1,2-DICHLOROBENZENE	< 10. MCG/CU.M.
1,2,4-TRICHLOROBENZENE	< 10. MCG/CU.M.
NAPHTHALENE	< 10. MCG/CU.M.
1,2,3-TRICHLOROBENZENE	< 10. MCG/CU.M.
AIR VOLUME	0.0201 CU.M.

**** END OF REPORT ****

0760 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 912029 SAMPLE RECEIVED:91/06/17/ CHARGE: 11.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 426011 ENARCO
DESCRIPTION:AMBIENT AIR FRONT YARD [redacted] RES., [redacted] MARTIN RD.
DESCRIPTION:ID04792 ID04794
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-AIR:VOLATILE ORGANICS IN AIR
SAMPLE TYPE: 909:AMBIENT AIR - OUTDOOR
TIME OF SAMPLING: 91/06/14 : DATE PRINTED:91/07/01

ANALYSIS: VOL3-AIR VOLATILE ORGANICS IN AIR
DATE PRINTED: 91/07/01 FINAL REPORT

PARAMETER	RESULT
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 10. MCG/CU.M.
TRANS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
1,1-DICHLOROETHANE	< 10. MCG/CU.M.
CIS-1,2-DICHLOROETHENE	< 10. MCG/CU.M.
CHLOROFORM	< 10. MCG/CU.M.
1,1,1-TRICHLOROETHANE	< 10. MCG/CU.M.
1,1-DICHLOROPROPENE	< 10. MCG/CU.M.
CARBON TETRACHLORIDE	< 10. MCG/CU.M.
1,2-DICHLOROETHANE	< 10. MCG/CU.M.
BENZENE	< 10. MCG/CU.M.
TRICHLOROETHENE	< 10. MCG/CU.M.
1,2-DICHLOROPROPANE	< 10. MCG/CU.M.
BROMODICHLOROMETHANE	< 10. MCG/CU.M.
CIS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
TOLUENE	< 10. MCG/CU.M.
TRANS-1,3-DICHLOROPROPENE	< 10. MCG/CU.M.
1,1,2-TRICHLOROETHANE	< 10. MCG/CU.M.
TETRACHLOROETHENE	< 10. MCG/CU.M.
DIBROMOCHLOROMETHANE	< 10. MCG/CU.M.
CHLOROBENZENE	< 10. MCG/CU.M.
1,1,1,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
ETHYLBENZENE	< 10. MCG/CU.M.
M/P-XYLENE	< 10. MCG/CU.M.
O-XYLENE	< 10. MCG/CU.M.
STYRENE	< 10. MCG/CU.M.
ISOPROPYLBENZENE (CUMENE)	< 10. MCG/CU.M.
BROMOFORM	< 10. MCG/CU.M.
1,1,2,2-TETRACHLOROETHANE	< 10. MCG/CU.M.
N-PROPYLBENZENE	< 10. MCG/CU.M.

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227

SAMPLE ID: 912029 SAMPLE RECEIVED:91/06/17/ CHARGE: 11.00
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION: 326011 ENARCO
TIME OF SAMPLING: 91/06/14 : DATE PRINTED:91/07/31

PARAMETER	RESULT
BROMOBENZENE	< 10. MCG/CU.M.
1,3,5-TRIMETHYLBENZENE	< 10. MCG/CU.M.
O-CHLOROTOLUENE	< 10. MCG/CU.M.
P-CHLOROTOLUENE	< 10. MCG/CU.M.
TERT-BUTYLBENZENE	< 10. MCG/CU.M.
1,2,4-TRIMETHYLBENZENE	< 10. MCG/CU.M.
SEC-BUTYLBENZENE	< 10. MCG/CU.M.
4-ISOPROPYLTOLUENE (P-CYMENE)	< 10. MCG/CU.M.
1,3-DICHLOROBENZENE	< 10. MCG/CU.M.
1,4-DICHLOROBENZENE	< 10. MCG/CU.M.
N-BUTYLBENZENE	< 10. MCG/CU.M.
1,2-DICHLOROBENZENE	< 10. MCG/CU.M.
1,2,4-TRICHLOROBENZENE	< 10. MCG/CU.M.
NAPHTHALENE	< 10. MCG/CU.M.
1,2,3-TRICHLOROBENZENE	< 10. MCG/CU.M.
AIR VOLUME	0.0201 CU.M.

**** END OF REPORT ****

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WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 — RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 912916 SAMPLE RECEIVED:91/06/17/ CHARGE: 5.50
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 825611 E.ARCO
DESCRIPTION: [redacted], [redacted] MARTI RD. Sump
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VHS021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 91/06/11 09:25 DATE PRINTED:91/07/02

ANALYSIS: VHOS021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 91/07/02 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	CO-ELUTE
CIS-1,2-DICHLOROETHENE	CO-ELUTE
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	4. MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	118. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L

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129

SAMPLE ID: 912019 SAMPLE RECEIVED:91/06/17/ Rochester Area Office 9.50
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION: 626011 EDARCO
TIME OF SAMPLING: 91/06/14 09:25 DATE PRINTED:91/07/02

PARAMETER	RESULT
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	1. MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
PH OF HALOGENATED ALIQUOT	2

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

PARAMETER	RESULT
CIS/TRANS-1,2-DICHLOROETHENE	30. MCG/L

**** END OF REPORT ****

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0246

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 912017 SAMPLE RECEIVED:91/06/17/ CHARGE: 8.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 ENARCO
DESCRIPTION:YEARS - SUMP
REPORTING LAB: IDX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VHO5021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 91/06/14 09:35 DATE PRINTED:91/07/01

ANALYSIS: VHO5021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 91/07/01 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 912017 SAMPLE RECEIVED:91/06/17/ CHARGE: 8.00
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION: 026011 ENARCO
TIME OF SAMPLING: 91/06/14 09:35 DATE PRINTED:91/07/01

PARAMETER	RESULT
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
PH OF HALOGENATED ALIQUOT	2

**** END OF REPORT ****

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 911290 SAMPLE RECEIVED:91/04/19/ CHARGE: 0.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:03 GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 ENACO
DESCRIPTION: [redacted], BASEMENT CROCK
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VH05021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 91/04/15 16:00 DATE PRINTED:91/05/13

<> NO FIELD BLANK ACCOMPANIED THIS SAMPLE. <>
<> >>>>> INQUIRED 910430 BY D.E.H.(JJM05) <<<<< <>
<> >>>>> INQUIRED 910508 BY D.E.H.(JJM05) <<<<< <>
<> >>>>> INQUIRED 910508 BY D.E.H.(JJM05) <<<<< <>
<> >>>>> INQUIRED 910513 BY D.E.H.(JJM05) <<<<< <>
<> >>>>> INQUIRED 910513 BY D.E.H.(JJM05) <<<<< <>

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 91/05/13 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	19. MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	4. MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	77. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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SUBMITTED BY:NAPIER

234

SAMPLE ID: 911290 SAMPLE RECEIVED:91/04/19/ CHARGE: 8.00
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION: 826011 ENACO
TIME OF SAMPLING: 91/04/16 16:00 DATE PRINTED:91/05/13

PARAMETER	RESULT
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	1. MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

**** END OF REPORT ****

0866 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910904 SAMPLE RECEIVED:91/03/13/ CHARGE: 4.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:03 GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 ENARCO
DESCRIPTION: [redacted]-BASEMENT CRUCK
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VH05021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 91/03/11 15:15 DATE PRINTED:91/04/03

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 91/04/01 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	8. MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	4. MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	54. MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

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REGIONAL DIRECTOR OF PH ENGINEERING
NEW YORK STATE DEPARTMENT OF HEALTH
42 SOUTH WASHINGTON ST.
ROCHESTER, N.Y. 14608

SUBMITTED BY:NAPIER

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PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910904 SAMPLE RECEIVED:91/03/13/ CHARGE: 4.00
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION: 826011 ENARCO
TIME OF SAMPLING: 91/03/11 15:15 DATE PRINTED:91/04/03

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

**** END OF REPORT ****

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910905 SAMPLE RECEIVED:91/03/13/ CHARGE: 0.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN:03 GAZETTEER CODE:2556
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 326011 SNARCO
DESCRIPTION:YEARS-BASEMENT SUMP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VH05021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 91/03/11 15:25 DATE PRINTED:91/04/03

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 91/04/01 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

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ROCHESTER, N.Y. 14608

SUBMITTED BY:NAPIER

PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 910905 SAMPLE RECEIVED:91/03/13/ CHARGE: e.00
POLITICAL SUBDIVISION:LIMA COUNTY:LIVINGSTON
LOCATION: 826011 ENARCO
TIME OF SAMPLING: 91/03/11 15:25 DATE PRINTED:91/04/03

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

**** END OF REPORT ****

CDM FEDERAL PROGRAMS CORPORATION

June 6, 1991

Cathy Moyik
Regional Project Officer
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Project: TES V, EPA Contract No. 68-W9-0002

Document No: TES5-C02024-EP-CBJS

Subject: Letter Report for Work Assignment No. C02024
Data Summary of Split Sampling
North Bloomfield Site
Town of Lima, New York
Document Control No: TES5-C02024-LR-CBJR

Dear Ms. Moyik:

Please find enclosed the Letter Report entitled "Data Summary of Split Sampling, North Bloomfield Site, Town of Lima, New York", as partial fulfillment of the reporting requirements for this work assignment.

If you have any comments regarding this submittal, please contact Susan Boone of CDM Federal Programs Corporation at (908) 757-9500 within two weeks from the date of this letter.

Sincerely,

CDM Federal Programs Corporation

Scott B. Graber
TES V Regional Manager

Enclosure

cc: Mark Granger, EPA Work Assignment Manager, CERCLA Region II
Jill Robbins, EPA Contracting Officer, EPA HQ (letter only)
Susan Boone, CDM FPC Work Assignment Manager
NYC Project File
NJ Project File
Document Control, CDM Federal Programs Corporation (2 copies)

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LETTER REPORT
DATA SUMMARY OF SPLIT SAMPLING
NORTH BLOOMFIELD SITE
TOWN OF LIMA, NEW YORK

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, D.C. 20460

EPA Work Assignment No.	: CO2024
EPA Region	: II
Site No.	: 2PL9
Contract No.	: 68-W9-0002
CDM Federal Programs Corporation Document No.	: TES5-CO2024-LR-CBJR
Report Prepared By	: CDM Federal Programs Corporation
CDM FPC Work Assignment Manager	: Susan Boone
Telephone Number	: (908) 757-9500
EPA Work Assignment Manager	: Mark Granger
Telephone Number	: (212) 264-7592
Date Prepared	: June 6, 1991

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CDM FEDERAL PROGRAMS CORPORATION

June 6, 1991

Mr. Mark Granger
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Project: TES V, EPA Contract No. 68-W9-0002

Document No: TES5-C02024-LR-CBJR

Subject: Letter Report for Work Assignment No. C02024
Data Summary of Split Sampling
North Bloomfield Site
Town of Lima, New York

Dear Mr. Granger:

This letter provides a data summary of split samples that were accepted by CDM Federal Programs Corporation (CDM FPC) during three sampling events. The first phase of the investigation consisted of a soil boring program. This took place during November 1990 and CDM FPC accepted five soil samples (four splits and one duplicate) from four borings. Two rounds of ground water sampling were performed during January and February 1991. CDM FPC accepted eight water samples (six splits and two duplicates) from three identical wells during both rounds. In addition to collecting samples for volatile organic analysis during the second round, samples for total petroleum hydrocarbons (TPH) analysis were collected at each well (6 samples and 1 duplicate) before purging the well. Figure 1 indicates the ground water and soil boring sample locations.

Attachment I contains data summary tables for all of the samples. Analysis during the soil boring program consisted of full Target Compound List (TCL) and Target Analyte List (TAL) parameters. Round 1 ground water samples were analyzed for TCL and TAL parameters and Round 2 samples were analyzed for volatile organic compounds (VOCs) and TPH only. All sample results for TPH were rejected because the laboratory failed to perform instrument calibration and calibration verification standards at mid-range and the method detection limit level immediately prior to sample analysis, as required by the method and SAS request.

Below is a summary of the contaminants that were detected in the soil and ground water samples. Ground water samples were compared to Maximum Contaminant Levels (MCLs) and New York State Ground Water Quality Standards (GWS). Compounds that were found in associated blanks, as well as the samples, are related to laboratory contamination or decontamination procedures and are not considered compounds of concern at the site.

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Ground Water Results

Compounds exceeding the standards for ground water included the following:

1,1-dichloroethene (GWS)
1,1,1-trichloroethane (GWS)
trichloroethene (GWS)
tetrachloroethene (MCL)

Bis(2-ethylhexyl)phthalate was detected in two samples at very low concentrations (less than the contract required detection limit). This compound is typically a laboratory contaminant and, at these concentrations, not expected to be representative of site contamination. The detections were at wells MW-1 and MW-5.

PCB, Aroclor 1242, was detected in well MW-1. The field blank taken the following day also contained detectable amounts of this compound.

Varying concentrations of all metals were detected in the ground water samples. Iron was the only standard (GWS) that was exceeded.

Soil Results

The following compounds were detected in the soil boring samples at concentrations greater than contract required detection limits:

1,1-dichloroethane
1,2-dichloroethene (total)
chloroform
1,1,1-trichloroethane
trichloroethene
tetrachloroethene
ethylbenzene
xylene (total)

Two PAHs were detected in sample SB 1, naphthalene and 2-methylnaphthalene.

Varying concentrations of all metals were detected in the soil samples.

Should you have any questions regarding the contents of this letter, please feel free to contact me at (908) 757-9500.

Sincerely,

CDM Federal Programs Corporation

Susan E. Boone
Work Assignment Manager

ATTACHMENT I

NORTH BLOOMFIELD
VOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	MW-1	MW-1	MW-3	MW-3	MW-5	MW-5	MW-5 (DUP)
SAMPLE NUMBER:	BGY02	BGY38	BGY01	BGY40	BGY03	BGY42	BFY32
SAMPLE DATE:	1/7/91	2/25/91	1/7/91	2/25/91	1/8/91	2/26/91	2/26/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Chloromethane	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Bromomethane	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Vinyl Chloride	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Chloroethane	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Methylene Chloride	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Acetone	10 U	10 UJ	10 U	10 UJ	10 UJ	10 U	10 U
Carbon Disulfide	5 U	5 UJ	5 U	5 UJ	12 U	5 U	5 U
1,1-Dichloroethene	5 U	5 UJ	28	9 J	2 J	5 U	5 U
1,1-Dichloroethane	5 U	5 UJ	27	11 J	1 J	5 U	5 U
1,2-Dichloroethene (total)	5 U	5 UJ	130	70 J	170	90	87
Chloroform	1 J	5 UJ	2 J	5 UJ	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 UJ	1 J	5 UJ	5 U	5 U	5 U
2-Butanone	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
1,1,1-Trichloroethane	5 U	5 UJ	990 D	370 J	18	10	8
Carbon Tetrachloride	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Vinyl Acetate	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Bromodichloromethane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Trichloroethene	4 J	4 J	7900 D	3800 D	260 D	310 DJ	190
Dibromochloromethane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Benzene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
trans-1,3-Dichloropropene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Bromoform	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
4-Methyl-2-Pentanone	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
2-Hexanone	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Tetrachloroethene	5 U	5 UJ	150	75	1 J	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Toluene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Chlorobenzene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Ethylbenzene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Styrene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Xylene (total)	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.
D = Compound identified in an analysis at a secondary dilution factor.

NORTH BLOOMFIELD
VOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	TRIP BLANK	TRIP BLANK	FIELD BLANK	TRIP BLANK	FIELD BLANK	FIELD BLANK
SAMPLE NUMBER:	BGY06	BGY07	BGY04	BFY30	BFY29	BFY31
SAMPLE DATE:	1/7/91	1/8/91	1/8/91	2/26/91	2/25/91	2/26/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
Chloromethane	10 U	10 U	10 U	10 U	10 UJ	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 UJ	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 UJ	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 UJ	10 U
Methylene Chloride	1 BJ	5 B	3 BJ	5 U	5 UJ	5 U
Acetone	16	14 J	10 U	10 U	10 UJ	10 U
Carbon Disulfide	5 U	5 U	3 J	5 U	5 UJ	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 UJ	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
1,2-Dichloroethene (total)	5 U	5 U	5 U	5 U	5 UJ	5 U
Chloroform	5 U	5 U	5 U	5 U	10 J	11
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
2-Butanone	10 U	10 U	10 U	10 U	10 UJ	10 U
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
Carbon Tetrachloride	5	1 J	5 U	5 U	5 UJ	5 U
Vinyl Acetate	10 U	10 U	10 U	10 U	10 UJ	10 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 J	6
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 UJ	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 UJ	5 U
Trichloroethene	5 U	5 U	5 U	5 U	5 UJ	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	3 J	3 J
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
Benzene	5 U	5 U	5 U	5 U	5 UJ	5 U
trans-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 UJ	5 U
Bromoform	5 U	5 U	5 U	5 U	5 UJ	5 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 UJ	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 UJ	10 U
Tetrachloroethene	5 U	5 U	5 U	5 U	5 UJ	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
Toluene	2 J	2 J	5 U	5 U	5 UJ	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 UJ	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 UJ	5 U
Styrene	5 U	5 U	5 U	5 U	5 UJ	5 U
Xylene (total)	1 J	5 U	5 U	5 U	5 UJ	5 U

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.
D = Compound identified in an analysis at a secondary dilution factor.

NORTH BLOOMFIELD
SEMIVOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	MW-1	MW-3	MW-5	FIELD BLANK
SAMPLE NUMBER:	BGY02	BGY01	BGY03	BGY04
SAMPLE DATE:	1/7/91	1/7/91	1/8/91	1/8/91
MATRIX:	WATER	WATER	WATER	WATER
Phenol	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U
Benzyl alcohol	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U
Benzoic acid	50 U	50 U	50 U	50 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U	50 U
Dimethylphthalate	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.

NORTH BLOOMFIELD
SEMIVOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	MW-1	MW-3	MW-5	FIELD BLANK
SAMPLE NUMBER:	BGY02	BGY01	BGY03	BGY04
SAMPLE DATE:	1/7/91	1/7/91	1/8/91	1/8/91
MATRIX:	WATER	WATER	WATER	WATER
3-Nitroaniline	50 U	50 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	50 U	50 U	50 U	50 U
4-Nitrophenol	50 U	50 U	50 U	50 U
Dibenzofuran	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U
4-Nitroaniline	50 U	50 U	50 U	50 U
4,6-Dinitro-2-methylphenol	50 U	50 U	50 U	50 U
N-Nitrosodiphenylamine (1)	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U
Di-n-Butylphthalate	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20 U	20 U	20 U	20 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	0.8 J	10 U	3 J	10 U
Di-n-octylphthalate	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U
TOTAL SEMIVOLATILES				

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.

NORTH BLOOMFIELD
PESTICIDE/PCB DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	MW-1	MW-3	MW-5	FIELD BLANK
SAMPLE NUMBER:	BGY02	BGY01	BGY03	BGY04
SAMPLE DATE:	1/7/91	1/7/91	1/8/91	1/8/91
MATRIX:	WATER	WATER	WATER	WATER
Alpha-BHC	0.05 U	0.05 U	0.05 U	0.05 U
Beta-BHC	0.05 U	0.05 U	0.05 U	0.05 U
Delta-BHC	0.05 U	0.05 U	0.05 U	0.05 U
Gamma-BHC (Lindane)	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor	0.05 U	0.05 U	0.05 U	0.05 U
Aldrin	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor Epoxide	0.05 U	0.05 U	0.05 U	0.05 U
Endosulfan I	0.05 U	0.05 U	0.05 U	0.05 U
Dieldrin	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDD	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan Sulfate	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	0.1 U	0.1 U	0.1 U	0.1 U
Methoxychlor	0.5 U	0.5 U	0.5 U	0.5 U
Endrin Ketone	0.1 U	0.1 U	0.1 U	0.1 U
Alpha-Chlordane	0.5 U	0.5 U	0.5 U	0.5 U
Gamma-Chlordane	0.5 U	0.5 U	0.5 U	0.5 U
Toxaphene	1 U	1 U	1 U	1 U
Aroclor-1016	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1221	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1232	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1242	1.6	0.5 U	0.5 U	0.32 J
Aroclor-1248	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1254	1 U	1 U	1 U	1 U
Aroclor-1260	1 U	1 U	1 U	1 U

QUALIFIERS
U = Compound analyzed for but not detected.
J = Estimated value.

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NORTH BLOOMFIELD
INORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in MG/KG

SAMPLE LOCATION:	MW-1	MW-3	MW-5	FIELD BLANK
SAMPLE NUMBER:	MBEP02	MBEP01	MBEP03	MBEP04
SAMPLE DATE:	1/7/91	1/7/91	1/8/91	1/8/91
MATRIX:	WATER	WATER	WATER	WATER
Aluminum	1190	366	1080	19 U
Antimony	14 U	14 U	14 U	14 U
Arsenic	2.4 B	2.8 B	2 U	2 UW
Barium	192 B	58.1 B	51.8 B	2 U
Beryllium	1 U	1 U	1 U	1 U
Cadmium	3 U	3 U	3 U	3 U
Calcium	91000	88300	102000	131 B
Chromium	18.5	4.8 B	5.2 B	4 U
Cobalt	4 U	4.5 B	4 U	4 U
Copper	6 B	13.9 B	38.9	2 U
Iron	1520	626	2010	62 B
Lead	3.9	4.8 W*	4.4	1.9 B
Magnesium	34500	22100	20700	37.3 B
Manganese	60.5	30.7	45.1	1 U
Mercury	.2 UN*J	.64 N*J	.2 UN*J	.2 UN*J
Nickel	10.2 B	14.4 B	18.9 B	4 U
Potassium	2910 B	3060 B	3420 B	68 U
Selenium	4 UWJ	4 UWJ	4 UJ	4 UWJ
Silver	2 U	2 U	2 U	2 U
Sodium	11100	54100	11200	527 B
Thallium	2 UJNW	2 UJNW	2 UJNW	2 UJN
Vanadium	2.9 B	2 U	2 B	2 U
Zinc	20.9	41.6	59.1	14.7 B
Cyanide	10 U	16.7 U	10 U	10 U

QUALIFIERS
- U = Compound analyzed for but not detected.
- B = Value is less than CRDL but greater than IDL.
- * = Duplicate analysis not within control limits.
- J = Estimated value.
- N = Spiked sample recovery not within control limits.
- + = Correlation coefficient for the MSA is less than 0.995.
- E = The reported value is estimated because of the presence of interference.
- W = Post-digestion spike for Furnace AA analysis out of control limits, while sample absorbance is less than 50% of spike absorbance.

NORTH BLOOMFIELD
VOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')	FIELD BLANK	TRIP BLANK
SAMPLE NUMBER:	BDE41	BDE37	BDE39	BDE40	BDE36	BDE38	BDE42
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90	11/29/90	11/30/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	WATER	WATER
Chloromethane	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
Bromomethane	1500 UJ	57 UJ	58 UJ	11 UJ	12 UJ	10 U	10 U
Vinyl Chloride	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
Chloroethane	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
Methylene Chloride	720 UJ	28 U	29 U	6 U	7 U	3 BJ	2 BJ
Acetone	1500 UJ	210 U	140 U	23 U	12 UJ	14 BJ	10 BJ
Carbon Disulfide	720 UJ	28 U	29 U	1 J	6 U	5 U	5 U
1,1-Dichloroethene	720 UJ	28 U	29 U	2 J	6 U	5 U	5 U
1,1-Dichloroethane	720 UJ	28 U	9 J	2 J	6 U	5 U	5 U
1,2-Dichloroethene (total)	720 UJ	89	630	170	0.8 J	5 U	5 U
Chloroform	100 J	28 U	29 U	6 U	6 U	5 U	5 U
1,2-Dichloroethane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
2-Butanone	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
1,1,1-Trichloroethane	720 UJ	100	21 J	1 J	6 U	5 U	5 U
Carbon Tetrachloride	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Vinyl Acetate	1500 UJ	57 U	58 U	11 U	12 UJ	10 U	10 U
Bromodichloromethane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
1,2-Dichloropropane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
cis-1,3-Dichloropropene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Trichloroethene	720 UJ	400	880	23	2 J	5 U	5 U
Dibromochloromethane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
1,1,2-Trichloroethane	720 UJ	3 J	29 U	6 U	6 U	5 U	5 U
Benzene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
trans-1,3-Dichloropropene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Bromoform	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
4-Methyl-2-Pentanone	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
2-Hexanone	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
Tetrachloroethene	720 UJ	100	5 J	2 J	6 U	5 U	5 U
1,1,2,2-Tetrachloroethane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Toluene	720 UJ	28 U	29 U	6 U	6 U	1 BJ	2 BJ
Chlorobenzene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Ethylbenzene	690 J	28 U	29 U	6 U	6 U	5 U	5 U
Styrene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Xylene (total)	12000 J	28 U	29 U	6 U	6 U	5 U	5 U

QUALIFIERS
- U = Compound was analyzed for but not detected.
- J = Estimated value.
- B = Analyte was found in the associated blank as well as in the sample.
- D = Compound identified in an analysis at a secondary dilution factor.

NORTH BLOOMFIELD
SEMIVOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')	FIELD BLANK
SAMPLE NUMBER:	BDE41	BDE37	BDE39	BDE40	BDE36	BDE38
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90	11/29/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
Phenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
bis(2-Chloroethyl)ether	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Chlorophenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
1,3-Dichlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
1,4-Dichlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzyl alcohol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
1,2-Dichlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Methylphenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
bis(2-Chloroisopropyl)ether	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Methylphenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
N-Nitroso-di-n-propylamine	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Hexachloroethane	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Nitrobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Isophorone	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Nitrophenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4-Dimethylphenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzoic acid	1860 U	130 BJ	3700 U	3600 U	390 BJ	50 U
bis(2-Chloroethoxy)methane	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4-Dichlorophenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
1,2,4-Trichlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Naphthalene	170 J	750 UJ	770 U	740 U	770 UJ	10 U
4-Chloroaniline	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Hexachlorobutadiene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Chloro-3-methylphenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Methylnaphthalene	240 J	750 UJ	770 U	740 U	770 UJ	10 U
Hexachlorocyclopentadiene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4,6-Trichlorophenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4,5-Trichlorophenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
2-Chloronaphthalene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Nitroaniline	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
Dimethylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Acenaphthylene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,6-Dinitrotoluene	770 U	750 UJ	770 U	740 U	770 UJ	10 U

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.

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NORTH BLOOMFIELD
SEMIVOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')	FIELD BLANK
SAMPLE NUMBER:	BDE41	BDE37	BDE39	BDE40	BDE36	BDE38
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90	11/29/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
3-Nitroaniline	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
Acenaphthene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4-Dinitrophenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
4-Nitrophenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
Dibenzofuran	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4-Dinitrotoluene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Diethylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Chlorophenyl-phenylether	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Fluorene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Nitroaniline	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
4,6-Dinitro-2-methylphenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
N-Nitrosodiphenylamine (1)	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Bromophenyl-phenylether	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Hexachlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Pentachlorophenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
Phenanthrene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Anthracene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Di-n-Butylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Fluoranthene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Pyrene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Butylbenzylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
3,3'-Dichlorobenzidine	1500 U	1500 UJ	1500 U	1500 U	1500 UJ	20 U
Benzo(a)anthracene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Chrysene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
bis(2-Ethylhexyl)phthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Di-n-octylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzo(b)fluoranthene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzo(k)fluoranthene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzo(a)pyrene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Indeno(1,2,3-cd)pyrene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Dibenz(a,h)anthracene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzo(g,h,i)perylene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
TOTAL SEMIVOLATILES						

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.

NORTH BLOOMFIELD
INORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in MG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')
SAMPLE NUMBER:	MBBY41	MBBY38	MCBY39	MBBY40	MBBY37
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
Aluminum	11600	11300	8530	9660	12700
Antimony	3.1 UNJ	3.1 BNJ	3.2 UNJ	3.1 UNJ	3.2 UNJ
Arsenic	3.4	3.2	3.8	2.8	3.4
Barium	93.2	92.7	72.1	80.8	81.5
Beryllium	0.52 B	0.52 B	0.41 B	0.44 B	0.56 B
Cadmium	0.66 U	0.65 U	0.68 U	0.66 U	0.68 U
Calcium	71800	72800	86800	76500	70800
Chromium	17.2	17.4	19.4	16.4	18.1
Cobalt	8.8 B	8.5 B	8.5 B	7.2 B	8.1 B
Copper	15.9	15.5	13	13.3	28.4
Iron	19200	20100	17100	17600	20200
Lead	10.5 NJ	9.4 *NJ	7.6 NJ	8.5 NJ	11.1 *NJ
Magnesium	19800	18500	30600	21700	19300
Manganese	513	488	455	462	561
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Nickel	19.1 J	18.8 J	21 J	16 J	17.8 J
Potassium	2290	2380	2000	2100	2700
Selenium	.45 UWNJ	.44 UWNJ	0.46 UNJ	0.45 UNJ	.45 UWNJ
Silver	0.44 U	0.44 U	0.46 U	0.44 U	0.45 U
Sodium	210 B	256 B	200 B	204 B	248 B
Thallium	0.27 B	0.29 B	0.25 BW	0.22 U	0.22 B
Vanadium	21.7	21.6	17.8	19.5	24.4
Zinc	50.8 EJ	47.7 EJ	41.1 EJ	72.5 EJ	65.6 EJ
Cyanide	1.8 U	1.9 U	1.9 U	1.6 U	1.5 U

QUALIFIERS
- U = Compound analyzed for but not detected.
- B = Value is less than CRDL but greater than IDL.
- * = Duplicate analysis not within control limits.
- J = Estimated value.
- N = Spiked sample recovery not within control limits.
- + = Correlation coefficient for the MSA is less than 0.995.
- E = The reported value is estimated because of the presence of interference.
- W = Post-digestion spike for Furnace AA analysis out of control limits, while sample absorbance is less than 50% of spike absorbance.

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NORTH BLOOMFIELD
PESTICIDE/PCB DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')	FIELD BLANK
SAMPLE NUMBER:	BDE41	BDE37	BDE39	BDE40	BDE36	BDE38
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90	11/29/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
Alpha-BHC	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Beta-BHC	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Delta-BHC	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Gamma-BHC (Lindane)	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Heptachlor	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Aldrin	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Heptachlor Epoxide	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Endosulfan I	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Dieldrin	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
4,4'-DDE	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Endrin	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Endosulfan II	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
4,4'-DDD	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Endosulfan Sulfate	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
4,4'-DDT	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Methoxychlor	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Endrin Ketone	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Alpha-Chlordane	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Gamma-Chlordane	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Toxaphene	370 U	360 UJ	370 U	360 U	370 UJ	1 U
Aroclor-1016	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1221	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1232	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1242	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1248	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1254	370 U	360 UJ	370 U	360 U	370 UJ	1 U
Aroclor-1260	370 U	360 UJ	370 U	360 U	370 UJ	1 U

QUALIFIERS
U = Compound analyzed for but not detected.
J = Estimated value.

NORTH BLOOMFIELD
TOTAL PETROLEUM HYDROCARBONS
CONCENTRATIONS: Water in MG/L

SAMPLE LOCATION:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-5 (DUP)	MW-6	FIELD BLANK	FIELD BLANK
SAMPLE NUMBER:	BGY38	BGY39	BGY40	BGY41	BGY42	BFY32	BGY43	BFY29	BFY31
SAMPLE DATE:	2/25/91	2/26/91	2/26/91	2/25/91	2/26/91	2/26/91	2/25/91	2/25/91	2/26/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
TPH	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R

QUALIFIERS
R = Sample result was rejected.

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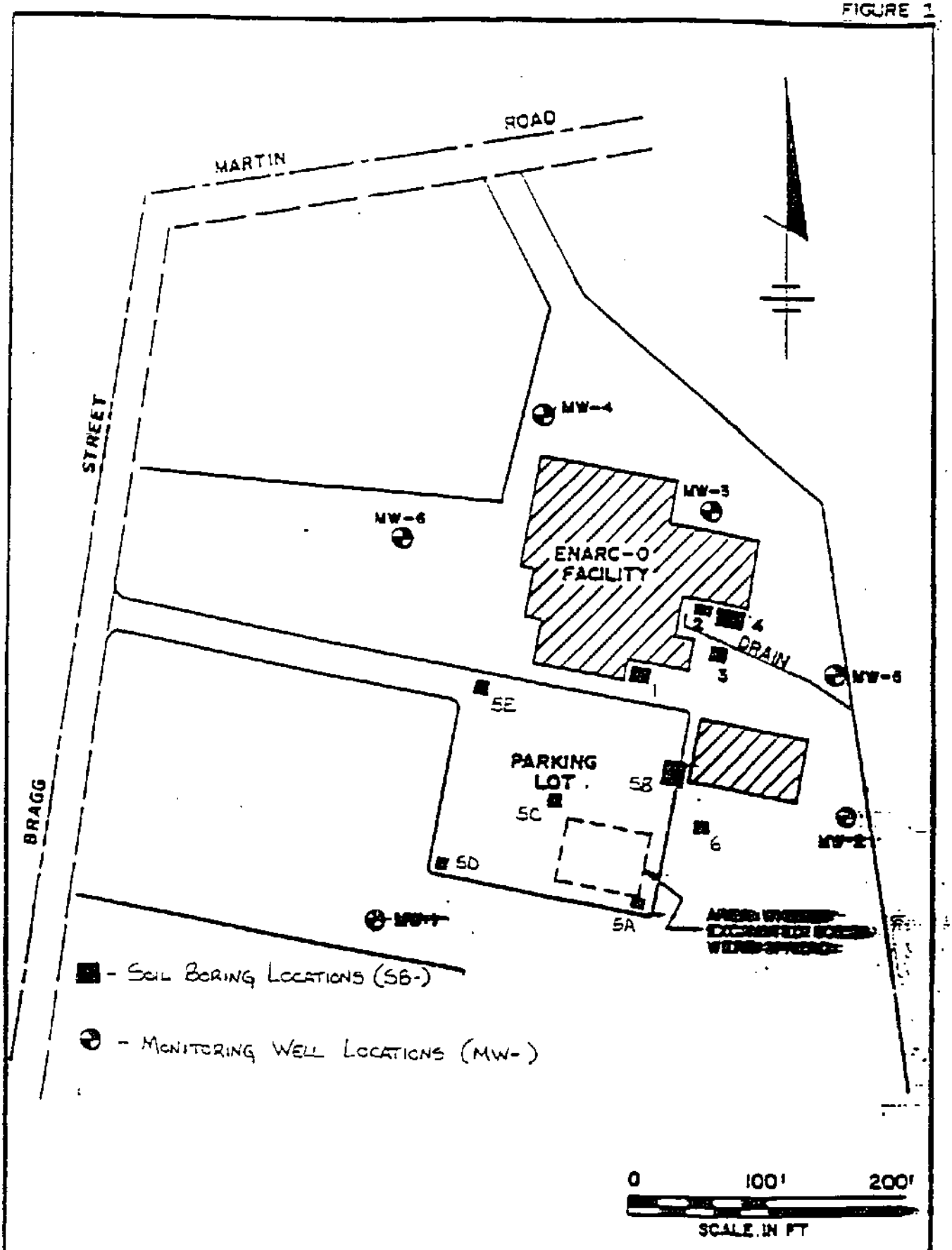

KADDIS CORPORATION (ENARC-O)
NORTH BLOOMFIELD, NEW YORK

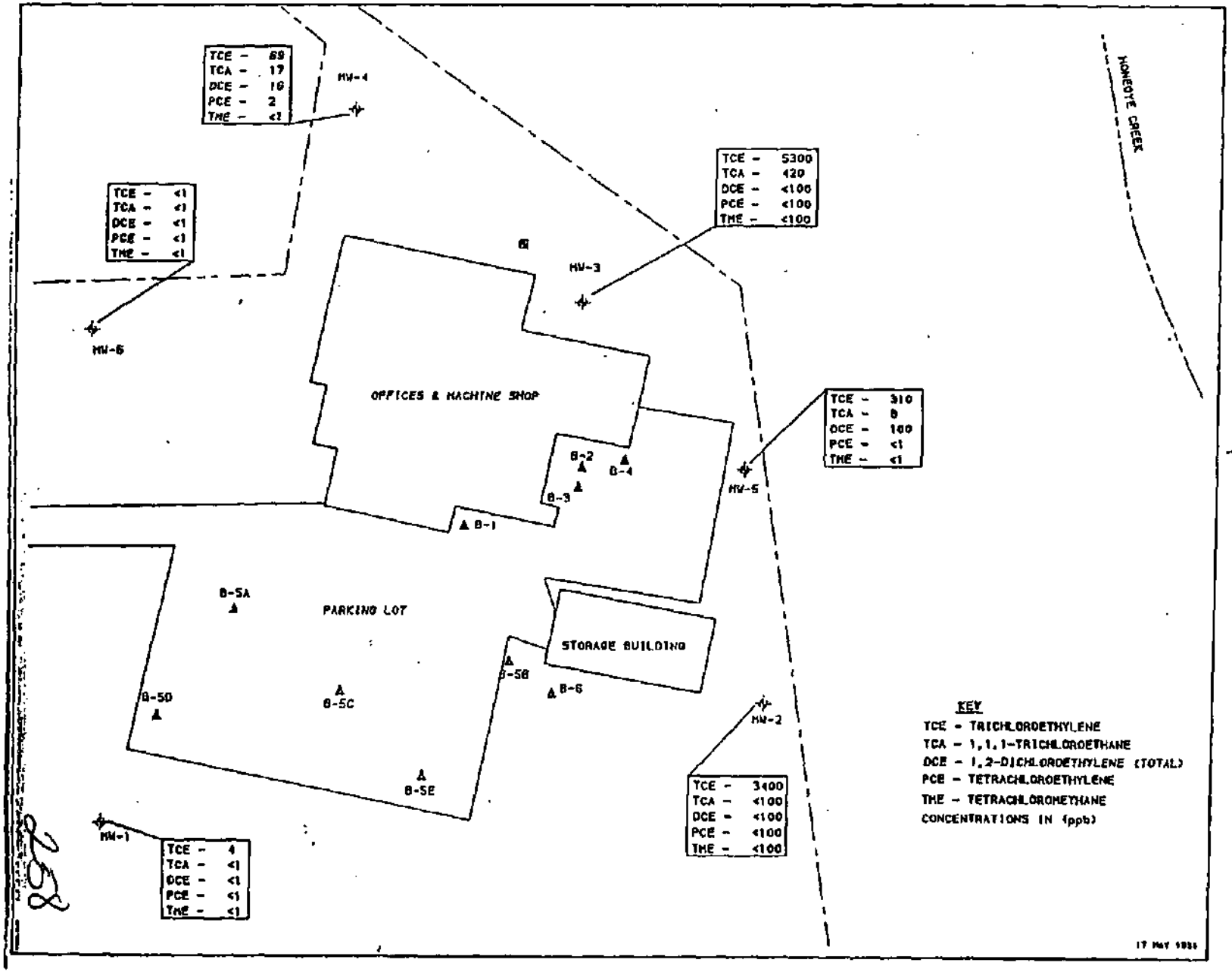

FIGURE 8

ENARC-O MACHINE PRODUCTS
NORTH BLOOMFIELD, NEW YORK

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- SUPPLY WELL LOCATION
- APPROXIMATE LOCATION OF PROPERTY LINE
- CREEK

GROUND WATER
QUALITY MAP
FEBRUARY 25 & 26, 1991

50 0 50

SCALE IN FEET

7387.005.730

O'BRIEN & GERE ENGINEERS, INC.

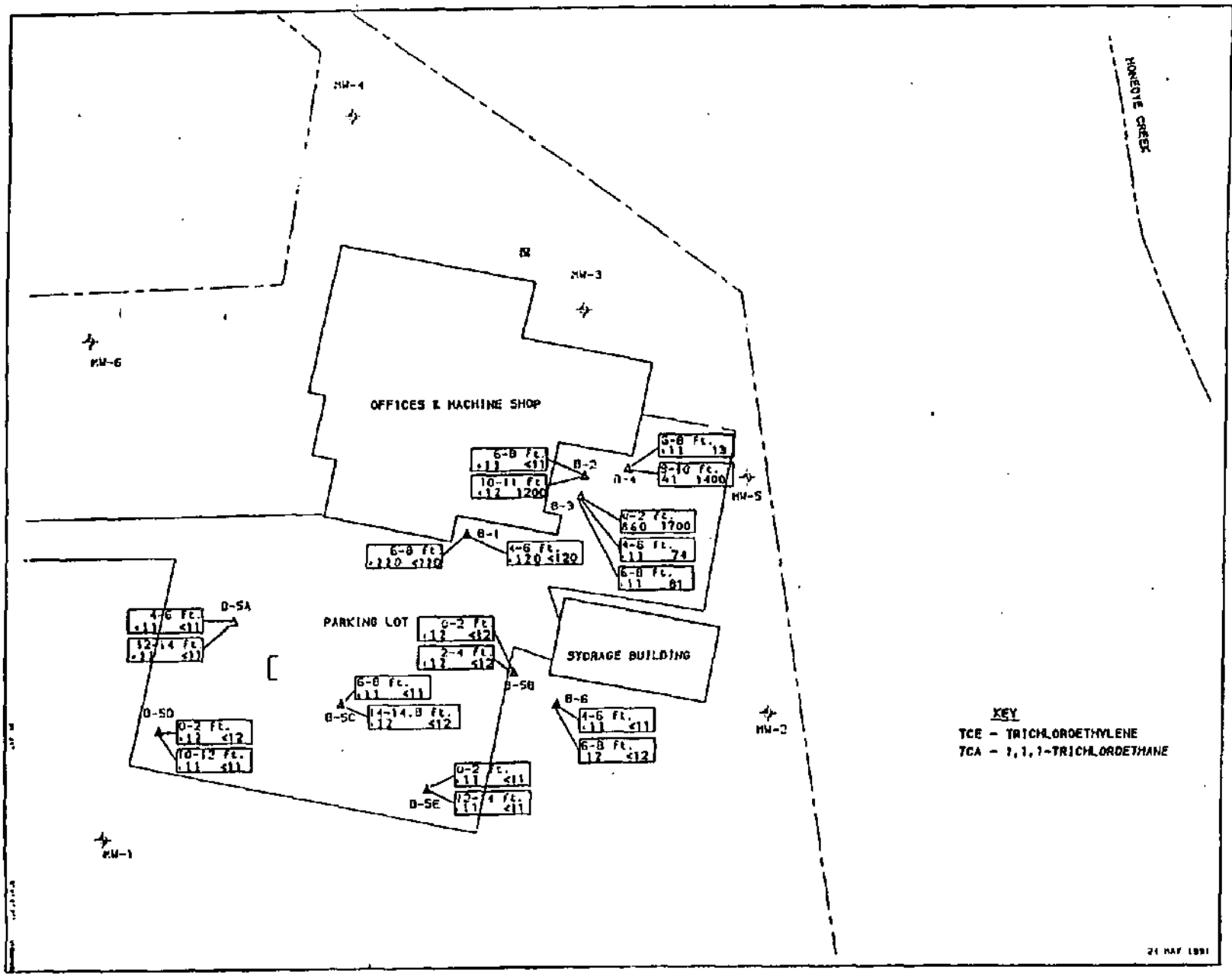

FIGURE 6

ENARC-O MACHINE PRODUCTS
NORTH BLOOMFIELD, NEW YORK

LEGEND

- MONITORING WELL LOCATION
- A SOIL BORING LOCATION
- SUPPLY WELL LOCATION
- APPROXIMATE LOCATION OF PROPERTY LINE
- CREEK
- DEPTH / TCA / TCE

SOIL SAMPLE ANALYTICAL DATA

NOTE: CONCENTRATION IN ug/kg DRY WEIGHT.

SCALE IN FEET

2387.006.730

O'BRIEN & GERE ENGINEERS, INC.

259

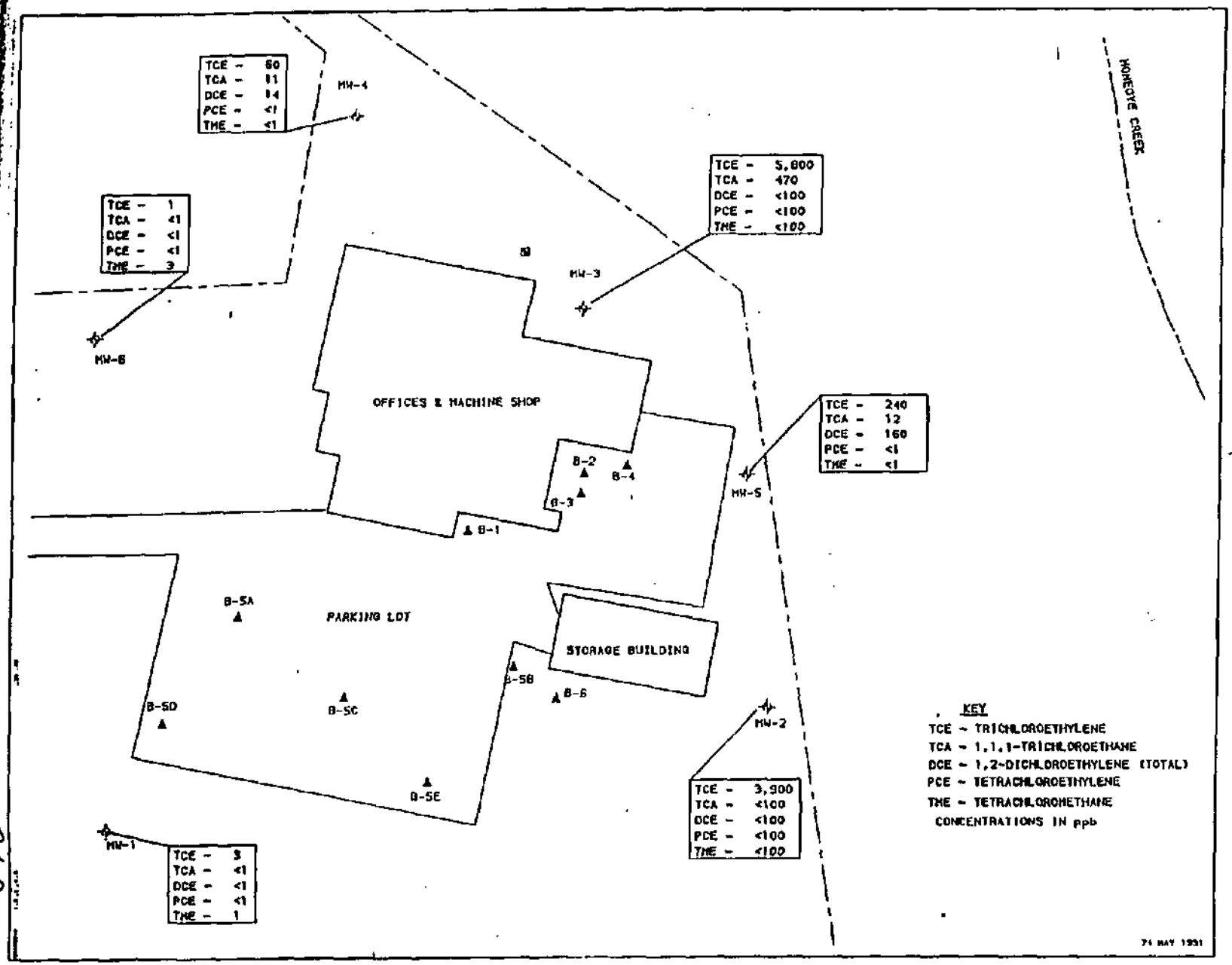

FIGURE 7

ENARC-O MACHINE PRODUCTS
NORTH BLOOMFIELD, NEW YORK

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- SUPPLY WELL LOCATION
- APPROXIMATE LOCATION OF PROPERTY LINE
- CREEK

GROUND WATER
QUALITY MAP
JANUARY 7 & 8, 1991

50 0 50

SCALE IN FEET

2207.006.730

O'BRIEN & GERE ENGINEERS, INC.

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AQUIFER CONTAMINATION

STREET	ADDRESS	NAME	BACTERIAL TEST EXCEEDS STATE STANDARD	COLIFORM COUNT IF ABOVE STANDARD
	STATE D.O.H. STANDARD			MAX "O"
Bragg Street	1167	Smalley		N.T.
	1175	Enarc-O	YES	B.G.
	1191	Tondryk		N.T.
	1382	Horan		N.T.
Ideson Rd.	1081	Miller	YES	5
	1090	Colavito	YES	540
	1091	Chambers	YES	540
	1108	Endicott	YES	8
	1111	Hart	YES	33
	1116	Maloy	YES	350
	1121	Cooper	YES	200
	1126		YES	280
	1129	Johnson	YES	19
	1140	Sackett	YES	4
	1146	Reano	YES	1
	1147	Freedman	YES	2
	1154	Shellman	YES	2
	1155	Tompkins	YES	12
Martin Rd.	7820	Johnson	YES	B.G.
	7838	Saunders	YES	7
	7852	Hopkins	YES	N.D.
	7859	Boonstra	YES	B.G.
	7865	Cavalier	YES	50
	7873	Years		N.T.
	7880	Rogers	YES	5
	7883	Garvey	YES	1 B.G.
	7886	Vellekoop		N.T.

	#	%
Total Sampled	22	100
Below Standard	0	-
Up to 1X Above Std.	2	9.10
Up to 2X Above Std.	2	9.10
Up to 3X Above Std.	0	-
Up to 4X Above Std.	1	4.55
Up to 5X Above Std.	2	9.10
Up to 10X Above Std.	2	9.10
Up to 50X Above Std.	4	18.20
Up to 100X Above Std.	0	-
Up to 200X Above Std.	1	4.55
Up to 300X Above Std.	1	4.55
Up to 500X Above Std.	1	4.55
Above 500X	2	9.10
N.D.	1	4.55
B.G.	3	13.60

Identifications based on information supplied by Livingston County Health Department.

B.G. = Confluent Growth over the entire area of the sample culture. The density of Growth prevents the reading of individual colonies. It should be interpreted as a positive reading and an indication of the requirement for another sample.

N.D. = Not Determined. Growth characteristics in the culture prevent isolation of individual colonies. It should be interpreted as a positive reading and an indication of the requirement for another sample.

N.T. = Not Tested.

APPENDIX I

RESIDENTIAL WELL SAMPLES RESULTS
FOR NORTH BLOOMFIELD, NEW YORK [1]

	SAMPLING	JUNE 19, 1985				JULY 1, 1985				JULY 24, 1985				AUGUST 7, 1985			
	LOCATION (NAME/ADDRESS)	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
	Boonstra 7859M					20	4	<1	<1								
	Bush 7787M													<1	<1	<1	<1
	Cavalier 7865M					22	2	1	<1								
	Colavito 10701													2	<1	<1	<1
***	Cooper 1121I									24	8	1	<1				
**	Enarc-O 1175B	<10	<10	560	<10	8	4	22	<1								
	Endicott 1108I													<1	<1	<1	<1
	Freedman 1147I									49	8	1	<1				
	Garvey 7883M	290	75	8	<10	318	89	3	2								
	George 1806O													<1	<1	<1	<1
***	Hart 1111I									19	5	1	<1				

A- Trichloroethylene
B - Trans-1,2-Dichloroethene
C - 1,1,1-Trichloroethane
D - 1,2-Dichloroethane
A - Trichloroethylene

B - Bragg Street
BH - Bean Hill Road
I - Ideson Road
M - Martin Road
O - Ontario Road

* - Indicates that during August 7, 1985 sampling, chlorofo was found to be present when using gas chromotography
** - Indicates that during June 19, 1985 sampling, 1,1,2,2-Tetrachloroethane and Tetrachloroethene were found at concentrations of 100 ppb and 68 ppb, respectively.
*** - Indicates that during July 24, 1985 sampling, 1,1-Dichloroethane was found at a concentration of 1 ppb.
1 - All concentrations are reported in ppb.

APPENDIX 1 (Continued)

	SAMPLING	JUNE 19, 1985				JULY 1, 1985				JULY 24, 1985				AUGUST 7, 1985			
	LOCATION (NAME/ADDRESS)	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
	Hopkins 7852M					80	4	1	<1								
	Horan 1382B									<1	<1	<1	<1				
	Johnson 11271									19	3	<1	<1				
	Johnson 1820M									31	4	<1	<1				
*	Maloy 1116I													8	1	<1	<1
	Mantegna 239 O													<1	<1	<1	<1
	Miller 1081I									<1	<1	<1	<1				
	Reano 1146I													46	8	2	<1
	Rogers 7880M	260	75	<10	<10	197	43	2	2								
	Sackett 1140I													29	5	1	<1
	Saunders 7838M													22	4	<1	<1

A - Trichloroethylene
B - Trans-1,2-Dichloroethene
C - 1,1,1-Trichloroethane
D - 1,2-Dichloroethane

B - Bragg Street
BH - Dean Hill Road
I - Ideson Road
M - Martin Road
O - Ontario Road

* - Indicates that during August 7, 1985 sampling, chloroform was detected when using gas chromatograghy
** - Indicates that during June 19, 1985 sampling, Tetrachloroethane and Tetrachloroethene were found at concentrations ob 100 ppb and 68 ppb, respectively.
*** - Indicates that during July 24, 1985 sampling, 1, 1-Dichloroethane was found at a concentration of 1 ppb.
1 - All concentrations are reporting in ppb.

APPENDIX I (Continued)

	SAMPLING	JUNE 19, 1985				JULY 1, 1985				JULY 24, 1985				AUGUST 7, 1985			
	LOCATION (NAME/ADDRESS)	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
	Seltzer 7644BH									<1	<1	<1	<1				
	Shellman 1154I													<5	<5	<5	<
	Smith 1167B	77	21	1	2	98	17	1	<1								
	Swanger 7750M													<1	<1	<1	<
*	Tompkins 1155I													11	3	2	<
	Tondryk 1191B	4	<2	<2	<2	3	<1	<1	<1								
	Vellekoop 7886M	110	41	8	<10	92	16	8	<1								
	Wagner 1897O									<1	<1	<1	<1				
	Years 7873M					72	19	1	<1								

A - Trichloroethylene
B - Trans-1,2-Dichloroethene
C - 1,1,1-Trichloroethane
D - 1,2-Dichloroethane

B - Bragg Street
BH - Bean Hill Road
I - Ideson Road
M - Martin Road
O - Ontario Road

* - Indicates that during August 7, 1985 sampling, chloroform was detected when using gas chromotograghy
** - Indicates that during June 19, 1985 sampling, 1,1,2,2-Tetrachloroethane and Tetrachloroethene were found at concentrations of 100 ppb and 68 ppb, respectively.
*** - Indicates that during July 24, 1985 sampling, 1, 1-Dichloroethane was found at a concentration of 1 ppb.
1 - All concentrations are reported in ppb.

(SEE NOTE ON NEXT PAGE)

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NOTE: On March 22, 1985, the NYSDEC sampled drinking water supply well at the Enarc-O-Machine Products facility. The results are presented below:

CONTAMINANT	CONCENTRATION (ppb)
Trichloroethylene	1,800
1,1,1-Trichloroethane	370

On November 1, 1985, the NYSDOH forwarded results of their September 26, 1985 sampling activity. The results of the sampling indicated that no contaminants were found in the drinking water of the following residents:

RESIDENT	ADDRESS
Fessler	7783 Martin Road
Ghostlaw	7808 Martin Road
Slade	7796 Martin Road
Chambers	1091 Ideson Road
Stinson	1550 Ontario St.

On November 21, 1985, the NYSDOH forwarded results of their October 31, 1985 sampling activity. The results of the sampling are presented below.

RESIDENT	ADDRESS	CONTAMINANT
Miller	7744 Martin Rd.	None
Neverett	7829 Martin Rd.	2 ppb Trichloroethylene
Obrien	7801 Martin Rd.	None

SUMMARY OF ALL SAMPLE READINGS

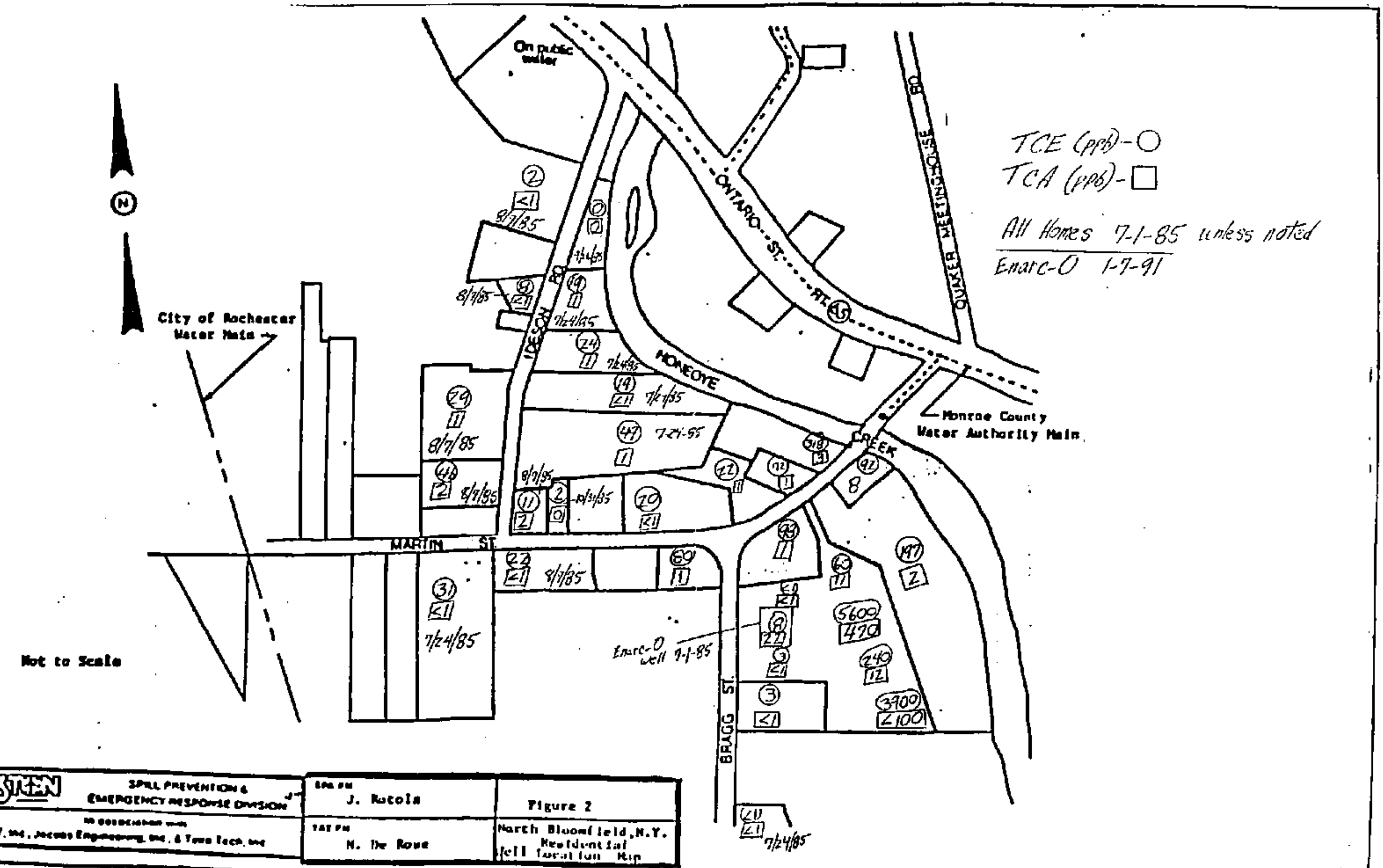
Enarco Machine Products
Sample Readings
EPA

Name	Street	No.	Sample Date	T41109 TRICHLOROETHYLENE	T61209 Trans-1, 2-DICHLOROETHENE	T23609 1, 1, 1-TRICHLOROETHANE	T50809 1,2-DICHLOROETHANE
Boonstra	Martin Rd.	7859	7/1/85	20	4	<1	<1
Bush	Martin Rd.	7787	8/7/85	<1	<1	<1	<1
Cavalier	Martin Rd.	7865	7/1/85	22	2	1	<1
Chambers	Ideson Rd.	1091	9/26/85	0	0	0	0
Colavito	Ideson Rd.	1090	8/7/85	2	<1	<1	<1
Cooper	Ideson Rd.	1121	7/24/85	24	8	1	<1
Enarco	Bragg St.	1175	7/1/85	8	4	22	<1
Endicott	Ideson Rd.	1108	8/7/85	<1	<1	<1	<1
Fessler	Martin Rd.	7783	9/26/85	0	0	0	0
Freedman	Ideson Rd.	1147	7/24/85	49	8	1	<1
Garvey,Robert	Martin Rd.	7883	6/19/85	290	75	8	<10
Garvey,Robert	Martin Rd.	7883	7/1/85	318	89	3	2
George, V.	Ontario St.	1886	8/7/85	<1	<1	<1	<1
Ghostlaw	Martin Rd.	7808	9/26/85	0	0	0	0
Hart	Ideson Rd.	1111	7/24/85	19	5	1	<1
Hopkins	Martin Rd.	7852	7/1/85	80	4	1	<1
Horan	Bragg St.	1382	7/24/85	<1	<1	<1	<1
Johnson	Ideson Rd.	1127	7/24/85	19	3	<1	<1
Johnson	Martin Rd.	7820	7/24/85	31	4	<1	<1
Maloy	Ideson Rd.	1116	8/7/85	8	1	<1	<1
Mantegna	Ontario St.	239	8/7/85	<1	<1	<1	<1
Miller	Ideson Rd.	1081	7/24/85	<1	<1	<1	<1
Miller	Martin Rd.	7744	10/31/85	0	0	0	0
Neverett	Martin Rd.	7829	10/31/85	2	0	0	0
Obrien	Martin Rd.	7801	10/31/85	0	0	0	0
Reano	Ideson Rd.	1146	8/7/85	46	8	2	<1
Rogers,Larry	Martin Rd.	7880	6/19/85	260	75	<10	<10
Rogers,Larry	Martin Rd.	7880	7/1/85	197	43	2	2
Sackett, L.	Ideson Rd.	1140	8/7/85	29	5	1	<1
Saunders,R.	Martin Rd.	7838	8/7/85	22	4	<1	<1
Seltzer	Bean Hill Rd.	9644	7/24/85	<1	<1	<1	<1
Shelman	Ideson Rd.	1154	8/7/85	<5	<5	<5	<5
Slade	Martin Rd.	7796	9/26/85	0	0	0	0
Smith	Bragg St.	1167	6/19/85	77	21	1	2
Smith	Bragg St.	1167	7/1/85	98	17	1	<1
Stinson	Ontario St.	155	9/26/85	0	0	0	0
Swager,C.	Martin Rd.	7750	8/7/85	<1	<1	<1	<1
Tompkins	Ideson Rd.	1155	8/7/85	11	3	2	<1
Tondryk,Edward	Bragg St.	1191	6/19/85	4	<2	<2	<2
Tondryk,Edward	Bragg St.	1191	7/1/85	3	<1	<1	<1
Vellekoop,Harry	Martin Rd.	7886	6/19/85	110	41	8	<10
Vellekoop,Harry	Martin Rd.	7886	7/1/85	92	16	8	<1
Wagner	Ontario St.	1897	7/24/85	<1	<1	<1	<1
Years,Ronald	Martin Rd.	7873	7/1/85	72	19	1	<1

EXCLUDES ENARC-O READINGS OF 3/22/1985, 6/19/1985 TAKEN UNDER IMPROPER TEST PROCEDURES.

Lone

Smith



SPILL PREVENTION & EMERGENCY RESPONSE DIVISION

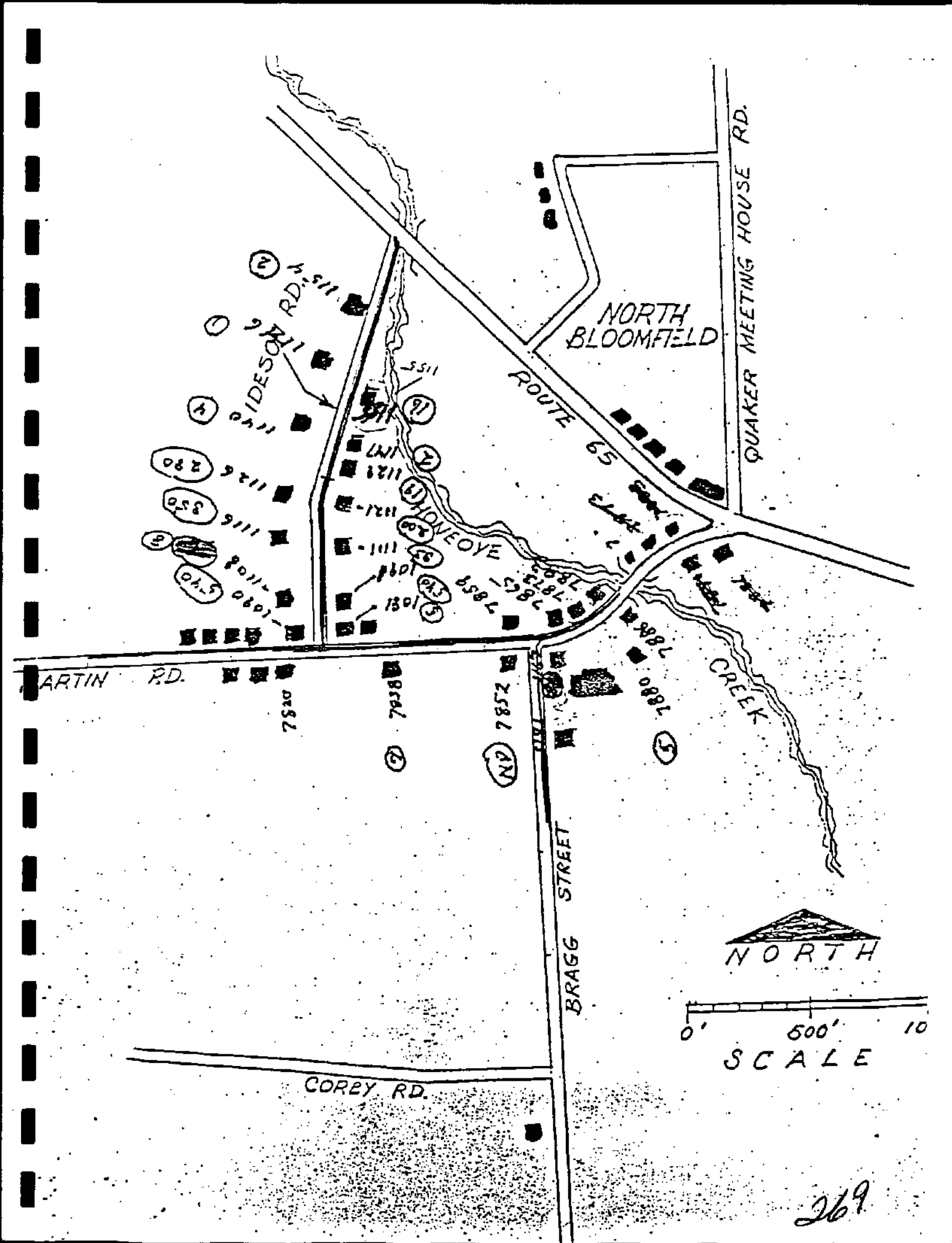
ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

J. Rutola

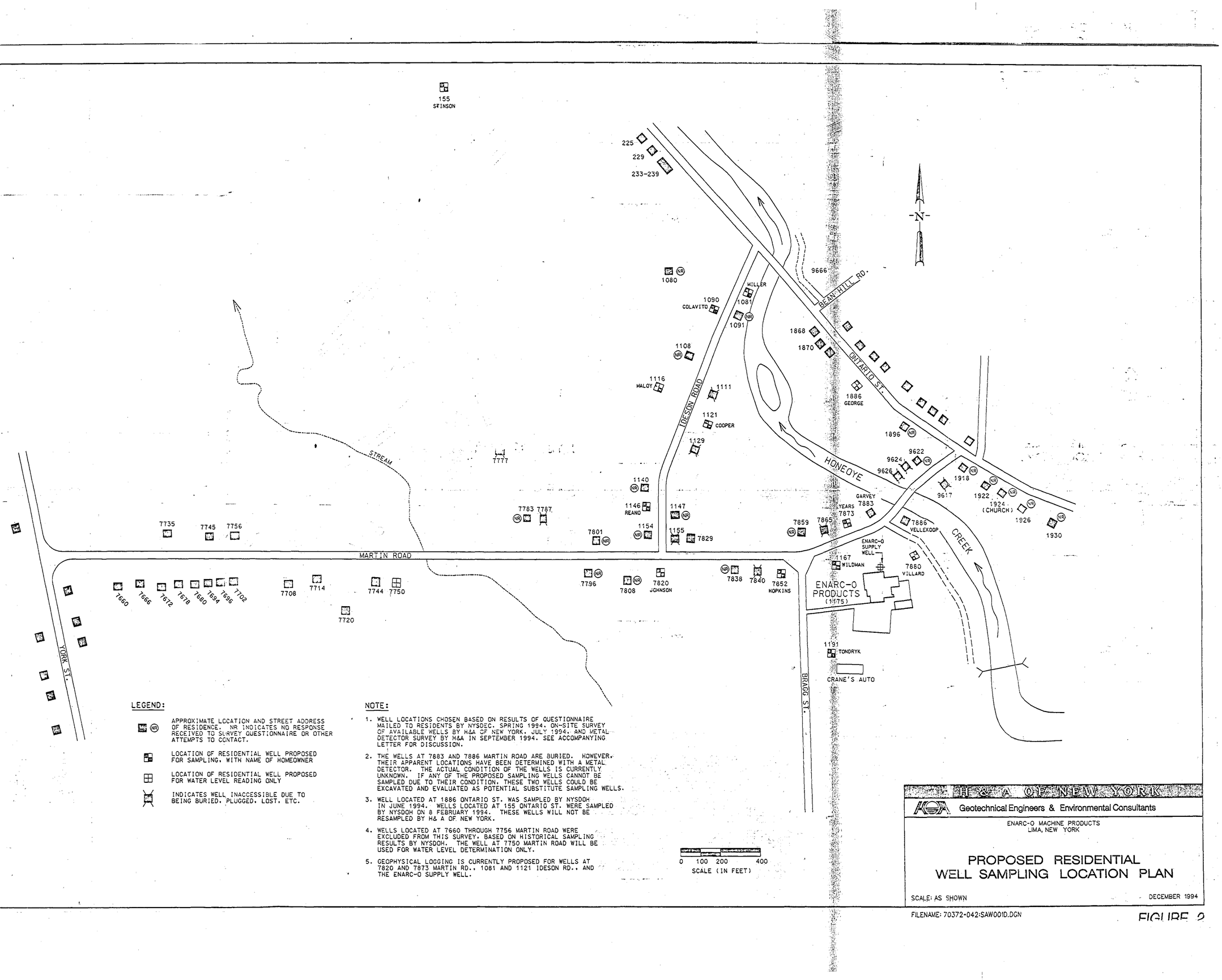
N. De Rose

Figure 2

North Bloomfield, N.Y. Residential Well Location Map


NORTH BLOOMFIELD
ROUTE 65
QUAKER MEETING HOUSE RD.
IDE SOYE
MARTIN RD.
BRAGG STREET
COREY RD.
CREEK
NORTH
0'
600'
SCALE

REFERENCE NO. 31



LEGEND:

- 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, ON-SITE SURVEY OF AVAILABLE WELLS BY H&A OF NEW YORK, JULY 1994, AND METAL DETECTOR SURVEY BY H&A IN SEPTEMBER 1994. SEE ACCOMPANYING LETTER FOR DISCUSSION.
2. THE WELLS AT 7883 AND 7886 MARTIN ROAD ARE BURIED. HOWEVER, THEIR APPARENT LOCATIONS HAVE BEEN DETERMINED WITH A METAL DETECTOR. THE ACTUAL CONDITION OF THE WELLS IS CURRENTLY UNKNOWN. IF ANY OF THE PROPOSED SAMPLING WELLS CANNOT BE SAMPLED DUE TO THEIR CONDITION, THESE TWO WELLS COULD BE EXCAVATED AND EVALUATED AS POTENTIAL SUBSTITUTE SAMPLING WELLS.
3. 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.
4. WELLS LOCATED AT 7660 THROUGH 7756 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.
5. GEOPHYSICAL LOGGING IS CURRENTLY PROPOSED FOR WELLS AT 7820 AND 7873 MARTIN RD., 1081 AND 1121 IDESON RD., AND THE ENARC-O SUPPLY WELL.

0 100 200 400
SCALE (IN FEET)

H & A OF NEW YORK
Geotechnical Engineers & Environmental Consultants

ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

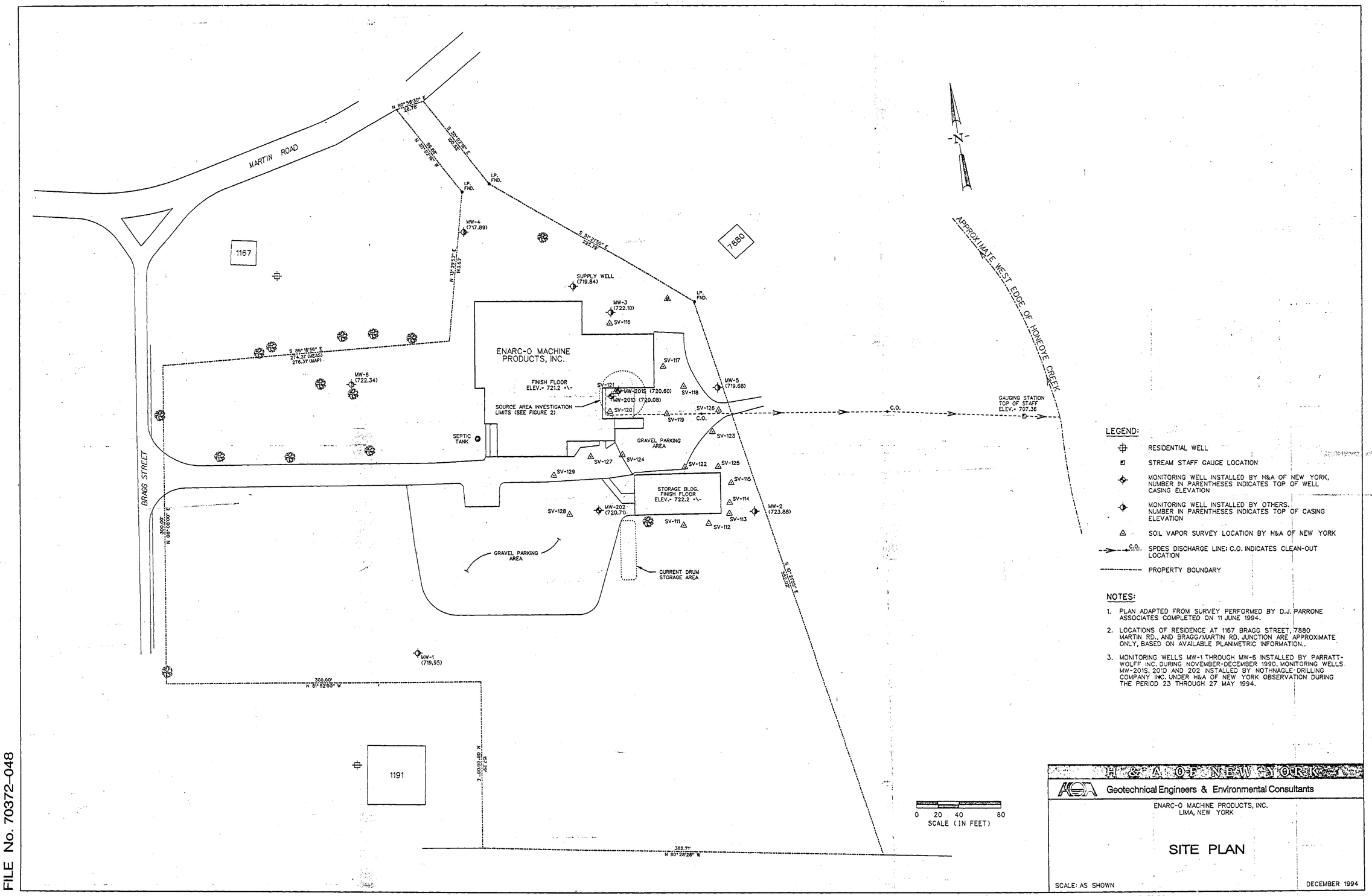
PROPOSED RESIDENTIAL WELL SAMPLING LOCATION PLAN

SCALE: AS SHOWN — DECEMBER 1994

FILENAME: 70372-042:SAW001D.DGN

FIGURE 2

FILE No. 70372-042



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

DECEMBER 1994

FILENAME: 70372-048:RIS005D.DGN

FILE No. 70372-048

FIGURE 3

QUARTERLY PROGRESS REPORT NO. 3
2 SEPTEMBER TO 2 DECEMBER, 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
December 1994

Geotechnical Engineers &
Environmental Consultants

9 December 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. 3
Enarc-O Machine Products, Inc. RI/FS

Dear Mr. Iannucci:

H&A has prepared the attached Quarterly Report No. 3 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 during the quarter on the project includes: 1) on-site monitoring well sampling; 2) residential well evaluation and preparation for geophysical logging/sampling events; 3) assessment of the number of and material contained in the drums staged on-site; 4) laboratory analysis of on-site groundwater samples; 5) monitoring of water levels in on-site monitoring wells and Honeoye Creek; and 6) a meeting attended by representatives from Kaddis Manufacturing, NYSDEC and H&A of New York.

Details on these tasks and preliminary results of laboratory analyses are included in the Progress Report. Copies of this report have been forwarded to NYSDEC (see below) as required by the Consent Order.

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: 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

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LIST OF TABLES

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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 third 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 2 September through 2 December 1994.

II. ACTIONS TAKEN

Project activities conducted during the reporting period consisted of:

- assembly and tabulation of historic and recent analytical data;
- assessment of the soil and water generated during this and previous investigation phases and staged in drums on-site;
- quarterly on-site monitoring well sampling;
- off-site residential well evaluation and preparation for geophysical logging and sampling;
- water level measurement in Honeoye Creek and on-site monitoring wells;
- meeting at H&A of New York's office with NYSDEC, H&A and Kaddis Manufacturing.; and
- analytical data validation.

Each of these tasks is discussed below.

Analytical Data

H&A tabulated available historical and recent analytical data for both groundwater and soil on- and of-site. This data is presented in Tables 1 and 2.

Drum Assessment

H&A inventoried the amount and contents of drums of investigation-derived waste (IDW) stored on-site, in order to evaluate the cost of removal and disposal of the drummed material.

There are presently 70 drums of IDW in the staging area. There are 15 drums containing water and 55 drums of soil (drill cuttings). An evaluation of removal and disposal methods and contractors has been initiated.

On-site Monitoring Well Sampling

H&A conducted the second quarterly groundwater sampling of all on-site monitoring wells (except MW-201S, which was dry) on 2 November 1994 (see well locations on Figure 3). Samples were analyzed according to NYSDEC Method 91-1 Analytical Services Protocol. Results of the analyses are presented in Appendix A.

Off-site Residential Well Evaluation/Preparation

H&A has continued to evaluate residential wells to determine the feasibility of using these wells in the off-site residential well sampling program. H&A has conducted a review of existing data, including NYSDEC and LCHD Water Well Survey forms and driller's logs from selected wells, as well as contacted residents by phone and conducted visual inspections of the wells on their property.

NYSDEC comments on H&A's 12 August 1994 letter required H&A to locate additional downgradient residential wells immediately north of the Enarc-O facility. H&A located two additional wells at 7873 and 7880 Martin Road, using a subsurface metal detector, and proposed a final list of residential wells to be sampled in a 10 October 1994 letter to NYSDEC. Based on verbal approval by Mr. Gardiner Cross of this letter by NYSDEC, a final list of residential wells to be sampled was created (see Table 3 and Figure 2).

Pumps were then removed by Nothnagle Drilling Company Inc. as required. The pumps and water lines have been stored on the homeowner's property. All residential wells on the sampling list are ready for geophysical logging and/or sampling.

Arrangements are presently underway to 1) conduct geophysical logging on five of the domestic wells, in accordance with NYSDEC's 29 August letter, and 2) have the listed wells surveyed by a licensed surveyor for groundwater level measuring reference point elevations (See Figure 2). The geophysical logging had been scheduled for November 1994, however equipment malfunctions have necessitated the geophysical subcontractor to postpone the work to a later date, to be determined.

Stream and Groundwater Level Monitoring

A stream staff gauge was installed previously on the Honeoye Creek streambank to provide a fixed reference point from which to measure stream water levels. Water levels in the monitoring wells and Honeoye Creek were measured periodically during this quarter. Hydrographs depicting groundwater and stream level elevations over time are presented in Appendix B.

Meeting

A meeting was held at H&A of New York on 26 October 1994, attended by the following personnel:

- Vincent Dick, Robert Mahoney, Michael Beikirch, David Edwards - H&A
- Gardiner Cross, Martin Doyle - NYSDEC
- Ronald Iannucci, Sr. - Kaddis Manufacturing

Discussions included, but were not limited to, the following:

- potential problems with regard to data generated from a pump test conducted in the fractured rock setting at the site;
- substituting the pump test with slug tests conducted on selected residential wells; and
- postponing the pump test until the feasibility study phase of the project.

H&A summarized these concerns, and presented a formal request regarding postponement of the hydrogeologic testing until the feasibility study, in a letter to NYSDEC dated 14 November 1994. NYSDEC (Gardiner Cross) responded via telephone that pump test postponement would be allowed.

Data Validation

Data validation procedures performed as part of the Enarco Machine Products Remedial Investigation included the evaluation of each round of soil and groundwater sampling and analysis conducted. The evaluation included the review of each analytical data report and Chain of Custody (COC) record for compliance with regard to: 1) sample holding time requirements; 2) surrogate compound recoveries; 3) internal standard recoveries; and 4) method-specific quality control and quality assurance sample analyses. The data validation was performed with guidance provided from the "Functional Guidelines For Evaluating Organic and Inorganic Analyses", USEPA 1988.

Quality Assurance and Quality Control (QA/QC) analyses performed as part of the remedial investigation included field trip blanks (volatiles only), field duplicate samples, matrix spike and matrix spike duplicate analyses, laboratory control and method blank sample analysis. QA/QC samples were analyzed concurrently with project samples for each target analyte of the prescribed analytical methodology to assess the precision and accuracy of the field and laboratory procedures performed during the investigation.

The following observations were made relative to the QA/QC analyses performed.

- Holding time for the preparation and analysis of each project sample meet NYSDEC ASP method-specific requirements, without exception.
- Given the concentrations of the target compounds detected in each sample aliquot, the calculated precision and variability is acceptable and indicative of representative environmental samples.
- The recovery of each MS/MSD analyte falls within laboratory-specific quality control limits without exception. The data indicates the analyses were accurate and the results are representative of site conditions.
- Surrogate compound recoveries for organic analyses are within laboratory-specific quality control limits without exception.
- Target analytes were not detected above the practical quantitation limit (PQL) in laboratory method blank samples.

In summary, the QA/QC sample analyses performed as part of the Enarco Machine Products Remedial Investigation meet or exceed the accepted precision and accuracy requirements of high quality environmental analysis data. The field and laboratory QA/QC analyses performed indicate the data presented for the analysis of soil and groundwater is representative of site conditions at the time of sample collection.

Fish and Wildlife Impact Analysis

A draft copy of the Fish and Wildlife Impact Analysis report prepared by TPC Consulting for the site is included in Appendix C. Field work for this task was performed during the previous quarter.

The report identifies resources subject to possible evaluation subsequent to completion of the remaining field work (i.e. residential well sampling, etc.). The primary conclusions of the report are as follows:

- No significant habitats or habitats supporting endangered, threatened or rare species are present within a two-mile radius of the site.
- Honeoye Creek in the vicinity of the site is designated as a Class B stream by NYSDEC, indicating it is suitable for primary contact recreation such as swimming and wading. The creek appears also to be suitable for light fishing, in some of the deeper holes.
- The report presents a complete listing of possible floral and faunal communities in the study area.

III. DELIVERABLES

In accordance with the consent order requirements, Quarterly Report No. 2, for the reporting period 3 June to 2 September 1994, was mailed to NYSDEC and the consent order mailing list parties on 9 September 1994. No other deliverables were warranted during this quarter.

IV. FUTURE ACTIVITIES

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

- geophysical logging of off-site residential wells;
- residential well sampling (first quarter);
- hydrogeologic testing (pump test or alternate testing);
- additional stream gauge data collection; and
- survey of residential well elevations.

H&A will summarize results of the geophysical survey, and will provide proposed sampling intervals for each well based on the results, prior to initiating the sampling.

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 second quarter of 1995.

In addition, the following activities will be initiated during the next quarter:

- Environmental Risk Assessment (resource hazard evaluation);
- Health Risk Assessment;
- Focused IRM Feasibility Evaluation; and
- Additional Quarterly Sampling.

V. WORK SCHEDULE AND PERCENT COMPLETION

A project schedule and list of work tasks is shown in Figure 4. The following 12 work tasks as described in the work plan have been completed:

- site survey and base map preparation:
- on-site monitoring well installations;
- source area soil vapor study;
- delineation phase soil vapor study;
- stream staff gauge installation;
- off-site residential soil sampling;
- Enarc-O septic tank sampling;
- first two quarterly on-site monitoring well sampling events;
- on-site well permeability testing (rising head tests);
- ecological site evaluation portion of the environmental risk assessment;
- residential well field evaluation; and
- residential well preparation, including pump-pulling.

H&A estimates that the Remedial Investigation is more than half done, with approximately 12 of 21 estimated tasks completed (see Figure 4).

VI. WORK PLAN MODIFICATION

Modification to the work plan during this quarter consisted of additional data collection from the residential water wells. Due to a lack of available well construction data, NYSDEC has required downhole geophysical logging in five of the residential wells to evaluate well construction and hydrogeologic characterization of the bedrock for sampling depth(s) determination. NYSDEC suggested the additional data collection in a response letter sent to H&A on 29 August 1994.

H&A has since arranged for Gartner Lee, Inc. of Niagara Falls to conduct the geophysical logging, which should be completed early next quarter.

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/cad
rjm:70372-048:qrter3.wp

TABLE 1

ENARC-O MACHINE PRODUCTS

LIMA, NEW YORK

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER

OFF - SITE

ADDRESS	RESIDENT	SAMPLED FROM	DATE	DETECTED COMPOUNDS - CONCENTRATION IN PARTS PER BILLION (PPB)														
				TCE	1,1,1-TCA	cis-1,2-DCE	trans-1,2-DCE	1,2-DCA	1,1-DCE	1,1-DCA	MeCl2	PERC	CHLORO-FORM	BDCM	1,1,2,2-TCA	CARB. TET.	VINYL CHLORIDE	TOTAL VOCs
MARTIN RD.																		
7744	MILLER	WELL	10/31/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7750	CHAS. SWANGER	WELL	08/07/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7750	CHAS. SWANGER	WELL	01/25/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7783	FESSLER	WELL	09/26/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7787	HARRY BUSH	WELL	08/07/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7796	SLADE	WELL	09/26/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7801	O'BRIEN	WELL	10/31/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7808	GHOSTLAW	WELL	09/26/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7820	JOHNSON	WELL	07/24/85	31	--	4	--	--	--	--	--	--	--	--	--	--	--	35
7829	NEVERETT	WELL	10/31/85	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2
7838	SAUNDERS	WELL	08/07/85	22	--	4	--	--	--	--	--	--	--	--	--	--	--	26
7852	HOPKINS	WELL	07/01/85	80	1	4	--	--	--	--	--	--	--	--	--	--	--	85
7859	BOONSTRA	WELL	07/01/85	20	--	4	--	--	--	--	--	--	--	--	--	--	--	24
7865	CAVALIER	WELL	07/01/85	22	1	2	--	--	--	--	--	--	--	--	--	--	--	25
7873	YEARS, R.	WELL	07/01/85	72	1	19	--	--	--	--	--	--	--	--	--	--	--	92
7873	YEARS, R.	SUMP	03/11/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7873	YEARS, R.	SUMP	06/14/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7873	YEARS, R.	SUMP	03/03/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
7873	YEARS, R.	SUMP	01/25/94	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1
7880	ROGERS, L.	WELL	06/19/85	260	--	75	--	--	--	--	--	--	--	--	--	--	--	335
7880	ROGERS, L.	WELL	07/01/85	197	2	43	--	2	--	--	--	--	--	--	--	--	--	244
7883	GARVEY	WELL	06/19/85	290	8	75	--	--	--	--	--	--	--	--	--	--	--	373
7883	GARVEY	WELL	07/01/85	318	3	89	--	2	--	--	--	--	--	--	--	--	--	412
7883	GARVEY	SUMP	06/14/91	118	4	30	--	--	--	--	--	1	--	--	--	--	--	153
7883	GARVEY	SUMP	01/15/92	87	3	65	--	--	--	--	--	1	8	3	--	--	--	167
7883	GARVEY	SUMP	03/03/92	76	2	28	--	0.5	--	--	--	0.7	10	2	--	--	--	119.2
7883	GARVEY	SUMP	04/19/93	22	2.4	4.7	--	--	--	--	--	--	2.5	--	--	--	--	31.6
7883	GARVEY	SUMP	08/12/93	58	2	5	--	0.5	--	--	0.5	1	5	--	--	--	--	70
7883	GARVEY	SUMP	01/25/94	26	2.5	8.7	--	--	--	--	--	--	4.7	--	--	--	--	41.9
7886	VELLEKOOP	WELL	06/19/85	110	8	41	--	--	--	--	--	--	--	--	--	--	--	159
7886	VELLEKOOP	WELL	07/01/85	92	8	16	--	--	--	--	--	--	--	--	--	--	--	116

See notes on pg. 3

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TABLE 1

ENARC-O MACHINE PRODUCTS

LIMA, NEW YORK

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER

OFF - SITE

ADDRESS	RESIDENT	SAMPLED FROM	DATE	DETECTED COMPOUNDS - CONCENTRATION IN PARTS PER BILLION (PPB)														
				TCE	1,1,1-TCA	cis-1,2-DCE	trans-1,2-DCE	1,2-DCA	1,1-DCE	1,1-DCA	MeCl2	PERC	CHLORO-FORM	BDCM	1,1,2,2-TCA	CARB. TET.	VINYL CHLORIDE	TOTAL VOCs
1167	SMITH	WELL	06/19/85	77	1	21	—	2	—	—	—	—	—	—	—	—	—	101
1167	SMITH	WELL	07/01/85	98	1	17	—	—	—	—	—	—	—	—	—	—	—	116
1175	ENARC-O	SUPP WEL	01/18/84	0.6	120	—	—	—	—	—	—	—	—	—	—	—	—	120.6
1175	ENARC-O	SUPP WEL	05/08/84	4	6.1	—	—	—	—	—	—	—	—	—	—	—	—	10.1
1175	ENARC-O	SUPP WEL	09/06/84	2	5	—	—	—	—	—	—	—	—	—	—	—	—	7
1175	ENARC-O	SUPP WEL	03/22/85	1800	370	—	—	—	—	—	—	—	—	—	—	—	—	2170
1175	ENARC-O	SUPP WEL	06/19/85	—	560	—	—	—	—	—	—	68	—	—	100	—	—	728
1175	ENARC-O	SUPP WEL	07/01/85	8	22	4	—	—	—	—	—	—	—	—	—	—	—	34
1191	ED TONDRYK	WELL	06/19/85	4	—	—	—	—	—	—	—	—	—	—	—	—	—	4
1191	ED TONDRYK	WELL	07/01/85	3	—	—	—	—	—	—	—	—	—	—	—	—	—	3
1382	HORAN	WELL	07/24/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
IDESON RD.																		0
1081	MARY MILLER	WELL	07/24/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1090	COLAVITO	WELL	08/07/85	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
1091	CHAMBERS	WELL	09/26/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1108	ENDICOTT	WELL	08/07/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1111	HART	WELL	07/24/85	19	1	5	—	—	—	1	—	—	—	—	—	—	—	26
1116	WM. MALOY	WELL	08/07/85	8	—	1	—	—	—	—	—	—	—	—	—	—	—	9
1121	PETER COOPER	WELL	07/24/85	24	1	8	—	—	—	1	—	—	—	—	—	—	—	34
1127	JOHNSON	WELL	07/24/85	19	—	3	—	—	—	—	—	—	—	—	—	—	—	22
1140	LOUISE SACKETT	WELL	08/07/85	29	1	5	—	—	—	—	—	—	—	—	—	—	—	35
1146	REANO	WELL	08/07/85	46	2	8	—	—	—	—	—	—	—	—	—	—	—	56
1147	FREEDMAN	WELL	07/24/85	49	1	8	—	—	—	—	—	—	—	—	—	—	—	58
1154	SHELMAN	WELL	08/07/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1155	TOMPKINS	WELL	08/07/85	11	2	3	—	—	—	—	—	—	—	—	—	—	—	16
ONTARIO ST.																		0
155	WM. STINSON	WELL	09/26/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
155	WM. STINSON	DEEP WELL	01/25/94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
155	WM. STINSON	SHAL WELL	01/25/94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
239	MANTEGNA	WELL	08/07/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1886	GEORGE	WELL	08/07/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1897	WAGNER	WELL	07/24/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
BEAN HILL RD.																		0
9844	SELTZER	WELL	07/24/85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0

See notes on pg. 3

[redacted]BLE [redacted]

ENARC-O MACHINE PRODUCTS

LIMA, NEW YORK

SUMMARY OF ANALYTICAL RESULTS – GROUNDWATER

ON – SITE

DATE	MONITORING WELL NO.	SAMPLED BY	DETECTED COMPOUNDS – CONCENTRATION IN PARTS PER BILLION (PPB)														TOTAL VOCs
			TCE	1,1,1-TCA	cis-1,2-DCE	trans-1,2-DCE	1,2-DCA	1,1-DCE	1,1-DCA	MeCl2	PERC	CHLOROFORM	BDCM	1,1,2,2-TCA	CARB. TET.	VINYL CHLORIDE	
01/07/91	MW-1	OBG	3	--	--	--	--	--	--	--	--	--	--	--	1	--	4
01/07/91		CDM-FPC	4	--	--	--	--	--	--	--	--	1	--	--	--	--	5
02/25/91		OBG	4	--	--	--	--	--	--	--	--	--	--	--	--	--	4
02/25/91		CDM-FPC	4	--	--	--	--	--	--	--	--	--	--	--	--	--	4
07/14/94		H&A	3J	--	--	--	--	--	--	--	--	--	--	--	--	--	0
11/02/94		H&A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
01/08/91	MW-2	OBG	3900	--	--	--	--	--	--	--	--	--	--	--	--	--	3900
02/26/91		OBG	3400	--	--	--	--	--	--	--	--	--	--	--	--	--	3400
07/14/94		H&A	1400	--	--	--	--	--	--	--	--	--	--	--	--	--	1400
11/02/94		H&A	420E	6J	29	--	--	--	--	--	--	--	--	--	--	--	449
11/02/94	(dilution)	H&A	500	--	31	--	--	--	--	--	--	--	--	--	--	--	531
01/07/91	MW-3	CDM-FPC	7900	990	130	--	1	28	27	--	150	2	--	--	--	--	9228
01/07/91		OBG	5600	470	--	--	--	--	--	--	--	--	--	--	--	--	6070
02/25/91		CDM-FPC	3800	370	70	--	--	9	11	--	75	--	--	--	--	--	4335
02/25/91		OBG	5300	420	--	--	--	--	--	--	--	--	--	--	--	--	5720
07/14/94		H&A	1100	130	--	--	--	--	--	--	17	--	--	--	--	--	1247
11/02/94		H&A	2700E	--	51J	--	--	--	--	13J	23J	--	--	--	--	--	2700
11/02/94	(dilution)	H&A	3200D	260D	58	--	--	--	--	--	28DJ	--	--	--	--	--	3518
01/08/91	MW-4	OBG	60	11	14	--	--	--	--	--	--	--	--	--	--	--	85
02/25/91		OBG	69	17	16	--	--	--	--	--	2	--	--	--	--	--	104
07/14/94		H&A	10	28	--	--	--	--	--	--	--	--	--	--	--	--	38
11/02/94		H&A	15	15	--	--	--	--	--	2J	--	--	--	--	--	--	30
01/08/91	MW-5	CDM-FPC	260	18	170	--	--	2	1	--	1	--	--	--	--	--	452
02/26/91		CDM-FPC	310	10	90	--	--	--	--	--	--	--	--	--	--	--	410
01/08/91		OBG	240	12	160	--	--	--	--	--	--	--	--	--	--	--	412
02/26/91		OBG	310	8	100	--	--	--	--	--	--	--	--	--	--	--	418
07/14/94		H&A	510	--	58	--	--	--	--	--	--	--	--	--	--	--	568
11/02/94		H&A	900E	55	72	--	5J	--	--	--	--	--	--	--	--	--	1027
11/02/94	(dilution)	H&A	1100D	63DJ	83DJ	--	--	--	--	--	--	--	--	--	--	--	1100
01/07/91	MW-6	OBG	1	--	--	--	--	--	--	--	--	--	--	--	3	--	4
02/25/91		OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
07/14/94		H&A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
11/02/94		H&A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
07/14/94	MW-201D	H&A	7400	--	1100	--	--	--	--	--	--	--	--	--	--	--	8500
11/02/94		H&A	4000	100J	830	--	--	--	--	--	81J	--	--	--	--	--	4330
07/14/94	MW-202	H&A	15	--	11	--	--	--	--	--	--	--	--	--	--	--	26
11/02/94		H&A	25	--	45	3J	--	--	--	--	--	--	--	--	--	7J	70

NOTES:

1. "--" indicates analyte not detected or not analyzed for.
2. **Compound abbreviations: TCE:** Trichloroethene; TCA: Trichloroethane; DCE: Dichloroethene; DCA: Dichloroethane; **MeCl2: Methylene chloride;** PERC: Perchloroethene; BDCM: Bromodichloromethane; **TCA:** Trichloroethane; TCE: Trichloroethene; CARB. TET.: Carbon Tetrachloride; VOCs: Volatile Organic Compounds.
3. **OBG** = O'Brien & Gere
   CDM-FPC = CDM Federal Programs Corporation
4. *Modifiers for detected values: J: Estimated value, below quantitation limit; D: Diluted Sample; E: Exceeds calibration range of instrument.*
5. J-values not included in Total VOC column values.

MCB:VKS\70273\HISTOGW.WKS

TABLE 2
ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

SUMMARY OF ANALYTICAL RESULTS - SOIL

EXPLORATION LOCATION	DEPTH (ft.)	DATE	SAMPLED BY	COMPOUNDS DETECTED - CONCENTRATIONS IN PARTS PER BILLION														TOTAL VOCs
				TCE	1,1,1-TCA	1,2-DCE	1,2-DCA	1,1-DCE	1,1-DCA	ACETONE	PERC	CHLORO-FORM	ETHYL-BENZENE	XYLENE	1,1,2-TCA	2-BUTANONE	TOL	
B-1	4-6	11/29/90	OBG	--	--	--	--	--	--	--	--	--	--	4700	--	--	210	4910
B-1	6-8	11/29/90	CDM-FPC	--	--	--	--	--	--	--	--	100	690	12000	--	--	--	12790
B-1	6-8	11/29/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-2	6-8	11/29/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-2	10-11	11/29/90	OBG	1200	--	200	--	--	--	--	30	--	--	--	--	--	--	1430
B-3	2-4	11/28/90	OBG	1700	860	480	--	76	--	--	490	--	--	--	--	--	29	3635
B-3	4-6	11/28/90	OBG	74	--	150	--	--	--	--	--	--	--	--	--	--	--	224
B-3	4-6	11/28/90	CDM-FPC	490	100	89	--	--	--	--	100	--	--	--	3	--	--	782
B-3	6-8	11/28/90	OBG	81	--	24	--	--	--	--	24	--	--	--	--	--	--	129
B-4	8-10	11/29/90	CDM-FPC	880	21	630	--	--	9	--	5	--	--	--	--	--	--	1545
B-4	6-8	11/29/90	OBG	--	--	--	--	--	--	--	13	--	--	--	--	--	--	13
B-4	8-10	11/28/90	OBG	1400	41	900	--	--	16	--	--	--	--	--	--	--	--	2357
B-5A	4-6	11/27/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-5A	12-14	11/27/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-5B	0-2	11/28/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-5B	2-4	11/28/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-5B	2-4	11/28/90	CDM-FPC	4	--	0.8	--	--	--	--	--	--	--	--	--	--	--	4.8
B-5C	6-8	11/27/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-5C	14-16	11/27/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-5D	0-2	11/27/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-5D	10-12	11/27/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-5E	12-14	11/28/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-6	4-6	11/26/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
B-6	6-8	11/26/90	OBG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
INTERIOR SAMPLES																		
SS101	3.3-4.3	05/09/94	H&A	190	45	--	--	4	--	--	2	--	--	--	--	--	--	241
SS102	3.3-4.3	05/09/94	H&A	1500	670	8	27	130	63	--	59	--	--	--	--	--	--	2477
SS105	3.3-4.3	05/09/94	H&A	200	71	--	--	5	--	--	--	--	--	--	--	--	--	276
SS107	3.3-4.3	05/09/94	H&A	160	29	52	--	--	--	--	--	--	--	--	--	--	--	241
OFFSITE SAMPLES																		
SS1	0.5	05/31/94	H&A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
SS2	0.5	05/31/94	H&A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
SS3	0.5	05/31/94	H&A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
SS4	0.5	05/31/94	H&A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
SEPTIC TANK	--	05/31/94	H&A	--	--	--	--	--	--	14000	--	--	--	--	--	13000	14000	13[illegible]0

NOTES:

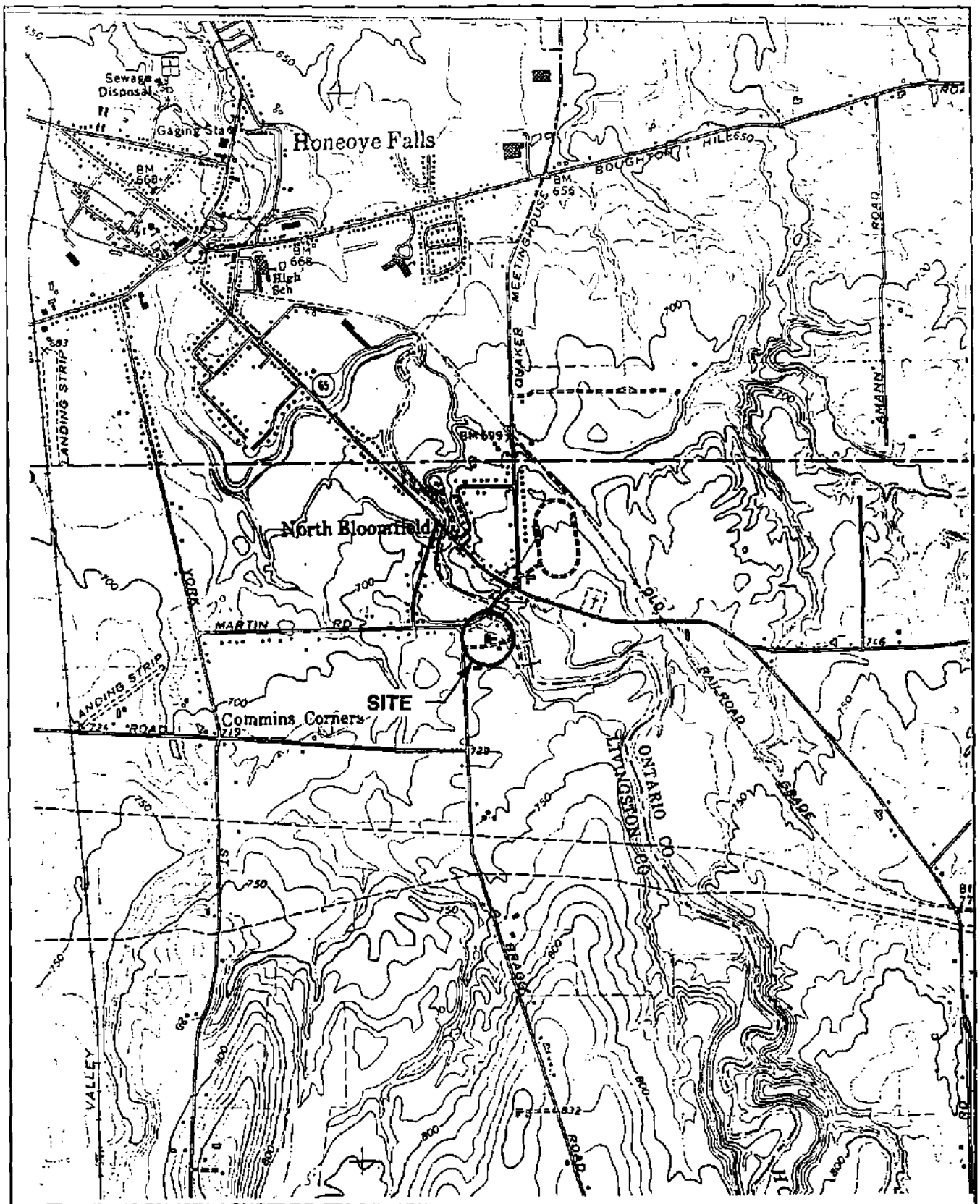
1. "--" indicates analyte not detected or not analyzed for.
2. Compound abbreviations: TCE: Trichloroethene; TCA: Trichloroethane, DCE: Dichloroethene; DCA: Dichloroethane; PERC: Perchloroethene; TOL: Toluene; VOCs: Volatile Organic Compounds.
3. OBG = O'Brien & Gere
   CDM-FPC= CDM Federal Programs Corporation

TABLE 3
ENARC-O MACHINE PRODUCTS, INC.
LIMA, NEW YORK
FINALIZED LIST OF RESIDENTIAL WELLS FOR SAMPLING

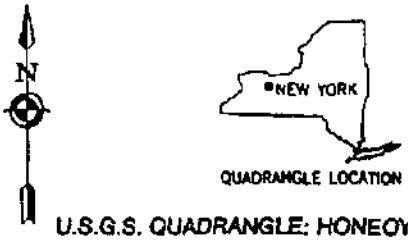
ADDRESS	OWNER	WELL IN USE	PUMP PRESENT	TOTAL DEPTH(FT.)	DEPTH TO WATER (FT.)	REMARKS
MARTIN RD.						
7750	CHAS. SWANGER	Y	Y	89		WATER LEVEL MONITORING ONLY
7820	LEO JOHNSON	N	N	125	72	WELL IS CLEAR, READY FOR SAMPLING/LOGGING
7852	ALLEN HOPKINS	N	N	140	25	WELL IS CLEAR, READY FOR SAMPLING
7873	RON YEARS	N	N	120	58	WELL IS CLEAR, READY FOR SAMPLING/LOGGING
7880	CATHY VILLARD	N	N			WELL IS CLEAR, READY FOR SAMPLING
BRAGG ST.						
1167	WILDMAN/HICKLING	N	N	130	84	WELL IS CLEAR, READY FOR SAMPLING
1175	ENARC-O PRODUCTS	N	N	130	73	WELL IS CLEAR, READY FOR SAMPLING/LOGGING
1191	EDWARD TONDRYK	N	N	77	25	WELL IS CLEAR, READY FOR SAMPLING
IDESON RD.						
1081	MARY MILLER	N	N	82	46	WELL IS CLEAR, READY FOR SAMPLING/LOGGING
1090	MICHAEL COLAVITO	N	N	122	60	WELL IS CLEAR, READY FOR SAMPLING
1116	WILLIAM MALOY	N	N	125	63	WELL IS CLEAR, READY FOR SAMPLING
1121	PETER COOPER	N	N	125	54	WELL IS CLEAR, READY FOR SAMPLING/LOGGING
1146	ROWLAND REANO	N	N	130		WELL IS CLEAR, READY FOR SAMPLING

REVISED 12/05/94

RJM-123V22 M:\QPROS\70372\WELLTBL2



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



QUADRANGLE LOCATION

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

ENARC-O MACHINE PRODUCTS, INC.
LIMA, NEW YORK
REMEDIAL INVESTIGATION QUARTERLY REPORT NO.3

PROJECT SCHEDULE

(revised 12/7/94)

TASK	MARCH MONTH 1	APRIL MONTH 2	MAY MONTH 3	JUNE MONTH 4	JULY MONTH 5	AUGUST MONTH 6	SEPTEMBER MONTH 7	OCTOBER MONTH 8	NOVEMBER MONTH 9	DECEMBER MONTH 10	JANUARY MONTH 11	FEBRUARY MONTH 12
1. WORK PLAN APPROVAL/PUBLIC MTG. COMPLETION	complete											
2. WELL DATA SURVEY									complete			
3. RE-SURVEY, BASE MAP PREPARATION				complete								
4. GEOPHYSICAL LOGGING												
5. WELL SAMPLING/ANALYSIS ON-SITE												
6. WELL SAMPLING/ANALYSIS OFF-SITE												
7. SOIL GAS SURVEYs			complete									
8. MONITORING WELL INSTALLATION			complete									
9. NEW WELLS SAMPLE/ANALYSIS												
10. HYDROGEOLOGIC TESTING				complete								
11. STREAM GAUGE INSTALL./MEASUREMENT												
12. SEPTIC TANK/OFF-SITE SURFACE SOIL SAMPLING			complete									
13. ENVIRON. & HEALTH RISK ASSESSMENTS					Field Work							
14. DATA REDUCTION/VALIDATION												
15. RI REPORT PREP./SUBMITTAL												
16. AGENCY REVIEW/COMMENT/APPROVE												
17. IRM/FOCUSSED FS EVALUATION												
18. AGENCY REVIEW/COMMENT/APPROVE												
19. FULL FS PREP												
20. AGENCY REVIEW/COMMENT												
21. FINAL FS/APPROVE												
22. QUARTERLY SAMPLING/ANALYSIS												
23. RECORD OF DECISION												

NYSDEC Notice-
To Proceed

FIGURE 4

LEGEND:

ORIGINAL SCHEDULE

ACTUAL SCHEDULE

rjm+123v22 m:\qpro5\70372\qtlyschd

APPENDIX A

Analytical Data for Groundwater

On-site Monitoring Wells

General Testing Corporation

Job #: R94/04290

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

000000

ORGANICS QUALIFIERS - 1991

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

J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result isless than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tenatively identified compound, where the identification is based on a mass spectral library search.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

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

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC.MS instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.

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

X - As specified in Case Narrative.

General Testing Corporation

Job #: R94/04290

SECTION A

NYSDEC Data Package Summary Forms

000007

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
HATB	R94/04290-1	X					
MW202D	R94/04290-2	X					
MW201D	R94/04290-3	X					
MW5	R94/04290-4	X					
HADUP	R94/04290-5	X					
MW4	R94/04290-6	X					
MW6	R94/04290-7	X					
MW2	R94/04290-8	X					
MW1	R94/04290-9	X					
MW3	R94/04290-10	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
R94/04290-1	WATER	11/02/94	11/02/94	LOW	11/08/94
R94/04290-2	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-3	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-4	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-5	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-6	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-7	WATER	11/02/94	11/02/94	LOW	11/08/94
R94/04290-8	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-9	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-10	WATER	11/02/94	11/02/94	LOW	11/09/94

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
94/04290-1	WATER	91-1			1.0
R94/04290-2	WATER	91-1			1.0
94/04290-3	WATER	91-1			25
R94/04290-4	WATER	91-1			2.0, 10
R94/04290-5	WATER	91-1			2.0, 10
R94/04290-6	WATER	91-1			1.0
R94/04290-7	WATER	91-1			1.0
R94/04290-8	WATER	91-1			1.0, 5.0
R94/04290-9	WATER	91-1			1.0
R94/04290-10	WATER	91-1			10, 20

NCF2 9/89

General Testing Corporation

Job #: R94/04290

SECTION B

SDG NARRATIVE

000002

CASE NARRATIVE

COMPANY: H & A of New York
Enarco Machine
JOB #: R94/04290
SDG#: HADUP

Volatile Organics

Water samples were analyzed for Target Compound List (TCL) volatile organics by Method 91-1 from the NYSDEC 1991 ASP. The following samples were analyzed with SDG# HADUP:

Client Sample ID	GTC Sample ID
HATB	R94/04290-1
MW202D	R94/04290-2
MW201D	R94/04290-3
MW5	R94/04290-4
MW5DL	R94/04290-4DL
HADUP	R94/04290-5
HADUPDL	R94/04290-5DL
MW4	R94/04290-6
MW6	R94/04290-7
MW2	R94/04290-8
MW2DL	R94/04290-8DL
MW1	R94/04290-9
MW3	R94/04290-10
MW3DL	R94/04290-10DL
VBLK1	METHOD BLANK
VBLK2	METHOD BLANK
VBLK1MS	BLANK SPIKE
MW6MS	R94/04290-7MS
MW6MSD	R94/04290-7MSD

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 internal standard areas were within QC limits.

000007

All matrix spiking compounds were within limits for recovery in the MS/MSD of MW6 and VBLK1MS. All %RPD were within limits in the MS/MSD of MW6.

Samples MW-5, HANDUP, MW-2, and MW-3 were reaanalyzed at dilutions to bring target analytes within the calibration range of the method.

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

11/29/94
Date

General Testing Corporation

Job #:R94/04290

SECTION C

SAMPLE DATA

000003

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HADUP

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-5

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2256

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene chloride	20.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	20.	U
75-35-4	1,1-Dichloroethene	3.	J
75-34-3	1,1-Dichloroethane	20.	U
156-60-5	trans-1,2-Dichloroethene	20.	U
67-66-3	Chloroform	20.	U
107-06-2	1,2-Dichloroethane	20.	U
78-93-3	2-Butanone	20.	U
156-59-2	cis-1,2-Dichloroethene	73.	
71-55-6	1,1,1-Trichloroethane	46.	
56-23-5	Carbon tetrachloride	20.	U
75-27-4	Bromodichloromethane	20.	U
78-87-5	1,2-Dichloropropane	20.	U
10061-01-5	cis-1,3-Dichloropropene	20.	U
79-01-6	Trichloroethene	850.	E
124-48-1	Dibromochloromethane	20.	U
79-00-5	1,1,2-Trichloroethane	20.	U
71-43-2	Benzene	20.	U
50061-02-6	trans-1,3-Dichloropropene	20.	U
75-25-2	Bromoform	20.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	9.	J
79-34-5	1,1,2,2-Tetrachloroethane	20.	U
108-88-3	Toluene	20.	U
108-90-7	Chlorobenzene	20.	U
100-41-4	Ethylbenzene	20.	U
100-42-5	Styrene	20.	U
108-38-3	(m+p)Xylene	20.	U
95-47-6	o-Xylene	20.	U

000013

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

HADUP

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-5

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2256

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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

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	14.08	15.	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.					

000011

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HADUPDL

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-5DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2271

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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	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	78.	DJ
71-55-6	1,1,1-Trichloroethane	50.	DJ
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	1000.	D
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	100.	U
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

000012

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

HADUPDL

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-5DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2271

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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: 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.					

000013

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HATB

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-1

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2252

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

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

000014

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

HATB

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-1

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2252

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

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.					
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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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-9

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2259

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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

000018

1E

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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-9

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2259

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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.					
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000017

1A

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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-8

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2258

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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	29.	
71-55-6	1,1,1-Trichloroethane	6.	J
56-23-5	Carbon tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	420.	E
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

000013

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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-8

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2258

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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.	0	Unknown	14.06	10.	J
2.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2DL

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-8DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2269

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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	31.	DJ
71-55-6	1,1,1-Trichloroethane	50.	U
56-23-5	Carbon tetrachloride	50.	U
75-27-4	Bromodichloromethane	50.	U
78-87-5	1,2-Dichloropropane	50.	U
10061-01-5	cis-1,3-Dichloropropene	50.	U
79-01-6	Trichloroethene	500.	D
124-48-1	Dibromochloromethane	50.	U
79-00-5	1,1,2-Trichloroethane	50.	U
71-43-2	Benzene	50.	U
50061-02-6	trans-1,3-Dichloropropene	50.	U
75-25-2	Bromoform	50.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	50.	U
108-88-3	Toluene	50.	U
108-90-7	Chlorobenzene	50.	U
100-41-4	Ethylbenzene	50.	U
100-42-5	Styrene	50.	U
108-38-3	(m+p)Xylene	50.	U
95-47-6	o-Xylene	50.	U

000020

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW2DL

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-8DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2269

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW201D

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-3

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2254

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 25.0

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	250.	U
74-83-9	Bromomethane	250.	U
75-01-4	Vinyl chloride	250.	U
75-00-3	Chloroethane	250.	U
75-09-2	Methylene chloride	250.	U
67-64-1	Acetone	250.	U
75-15-0	Carbon Disulfide	250.	U
75-35-4	1,1-Dichloroethene	250.	U
75-34-3	1,1-Dichloroethane	250.	U
156-60-5	trans-1,2-Dichloroethene	250.	U
67-66-3	Chloroform	250.	U
107-06-2	1,2-Dichloroethane	250.	U
78-93-3	2-Butanone	250.	U
156-59-2	cis-1,2-Dichloroethene	830.	
71-55-6	1,1,1-Trichloroethane	100.	J
56-23-5	Carbon tetrachloride	250.	U
75-27-4	Bromodichloromethane	250.	U
78-87-5	1,2-Dichloropropane	250.	U
10061-01-5	cis-1,3-Dichloropropene	250.	U
79-01-6	Trichloroethene	4000.	
124-48-1	Dibromochloromethane	250.	U
79-00-5	1,1,2-Trichloroethane	250.	U
71-43-2	Benzene	250.	U
50061-02-6	trans-1,3-Dichloropropene	250.	U
75-25-2	Bromoform	250.	U
108-10-1	4-Methyl-2-Pentanone	250.	U
591-78-6	2-Hexanone	250.	U
127-18-4	Tetrachloroethene	61.	J
79-34-5	1,1,2,2-Tetrachloroethane	250.	U
108-88-3	Toluene	250.	U
108-90-7	Chlorobenzene	250.	U
100-41-4	Ethylbenzene	250.	U
100-42-5	Styrene	250.	U
108-38-3	(m+p)Xylene	250.	U
95-47-6	o-Xylene	250.	U

000021

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW201D

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-3

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2254

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 25.0

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

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

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

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW202D-

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-2

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2253

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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	7.	J
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	3.	J
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	45.	
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	25.	
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

00002

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW202D

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-2

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2253

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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.					
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000028

1A

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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-10

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2260

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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	13.	J
67-64-1	Acetone	100.	U
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	100.	U
75-34-3	1,1-Dichloroethane	100.	U
156-60-5	trans-1,2-Dichloroethene	100.	U
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	100.	U
156-59-2	cis-1,2-Dichloroethene	51.	J
71-55-6	1,1,1-Trichloroethane	250.	
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	2700.	E
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-Dichlorgpropene	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	23.	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

000023

1E

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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-10

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2260

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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	14.10	67.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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000027

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3DL

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-10DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2266

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 20.0

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	200.	U
74-83-9	Bromomethane	200.	U
75-01-4	Vinyl chloride	200.	U
75-00-3	Chloroethane	200.	U
75-09-2	Methylene chloride	200.	U
67-64-1	Acetone	200.	U
75-15-0	Carbon Disulfide	200.	U
75-35-4	1,1-Dichloroethene	200.	U
75-34-3	1,1-Dichloroethane	200.	U
156-60-5	trans-1,2-Dichloroethene	200.	U
67-66-3	Chloroform	200.	U
107-06-2	1,2-Dichloroethane	200.	U
78-93-3	2-Butanone	200.	U
156-59-2	cis-1,2-Dichloroethene	58.	DJ
71-55-6	1,1,1-Trichloroethane	260.	D
56-23-5	Carbon tetrachloride	200.	U
75-27-4	Bromodichloromethane	200.	U
78-87-5	1,2-Dichloropropane	200.	U
10061-01-5	cis-1,3-Dichloropropene	200.	U
79-01-6	Trichloroethene	3200.	D
124-48-1	Dibromochloromethane	200.	U
79-00-5	1,1,2-Trichloroethane	200.	U
71-43-2	Benzene	200.	U
50061-02-6	trans-1,3-Dichloropropene	200.	U
75-25-2	Bromoform	200.	U
108-10-1	4-Methyl-2-Pentanone	200.	U
591-78-6	2-Hexanone	200.	U
127-18-4	Tetrachloroethene	28.	DJ
79-34-5	1,1,2,2-Tetrachloroethane	200.	U
108-88-3	Toluene	200.	U
108-90-7	Chlorobenzene	200.	U
100-41-4	Ethylbenzene	200.	U
100-42-5	Styrene	200.	U
108-38-3	(m+p)Xylene	200.	U
95-47-6	o-Xylene	200.	U

000028

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW3DL

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-10DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2266

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 20.0

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

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

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

EPA SAMPLE NO.

MW4

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-6

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2257

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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	2.	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	15.	
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

1E

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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-6

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2257

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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.					
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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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2255

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene chloride	20.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	20.	U
75-35-4	1,1-Dichloroethene	5.	J
75-34-3	1,1-Dichloroethane	20.	U
156-60-5	trans-1,2-Dichloroethene	20.	U
67-66-3	Chloroform	20.	U
107-06-2	1,2-Dichloroethane	20.	U
78-93-3	2-Butanone	20.	U
156-59-2	cis-1,2-Dichloroethene	72.	
71-55-6	1,1,1-Trichloroethane	55.	
56-23-5	Carbon tetrachloride	20.	U
75-27-4	Bromodichloromethane	20.	U
78-87-5	1,2-Dichloropropane	20.	U
10061-01-5	cis-1,3-Dichloropropene	20.	U
79-01-6	Trichloroethene	900.	E
124-48-1	Dibromochloromethane	20.	U
79-00-5	1,1,2-Trichloroethane	20.	U
71-43-2	Benzene	20.	U
50061-02-6	trans-1,3-Dichloropropene	20.	U
75-25-2	Bromoform	20.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	9.	J
79-34-5	1,1,2,2-Tetrachloroethane	20.	U
108-88-3	Toluene	20.	U
108-90-7	Chlorobenzene	20.	U
100-41-4	Ethylbenzene	20.	U
100-42-5	Styrene	20.	U
108-38-3	(m+p)Xylene	20.	U
95-47-6	o-Xylene	20.	U

1E

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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2255

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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

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	14.15	14.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
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27.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5DL

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-4DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2270

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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	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	83.	DJ
71-55-6	1,1,1-Trichloroethane	63.	DJ
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	1100.	D
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	100.	U
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW5DL

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-4DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2270

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

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

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

EPA SAMPLE NO.

MW6

Lab Name:GENERAL TESTING Contract:H & A

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

Matrix: (soil/water) WATER Lab Sample ID:4290-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2249

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

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

000003

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.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2249

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

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.					
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General Testing Corporation

Job #: R94/04290

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.:HADUP

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	HADUP	98	98	98		0
02	HADUPDL	100	100	96		0
03	HATB	98	96	96		0
04	MW1	94	98	98		0
05	MW2	98	98	96		0
06	MW201D	98	98	96		0
07	MW202D	100	104	94		0
08	MW2DL	100	100	82		0
09	MW3	98	102	106		0
10	MW3DL	102	104	92		0
11	MW4	102	98	100		0
12	MW5	98	98	98		0
13	MW5DL	100	102	92		0
14	MW6	102	98	94		0
15	MW6MS	100	100	92		0
16	MW6MSD	98	100	92		0
17	VBLK1	98	94	96		0
18	VBLK1MS	98	100	88		0
19	VBLK2	104	102	88		0
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 #: R94/04290

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.:HADUP

Matrix Spike - EPA Sample No.: MW6

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.	0.	48.	96	71-120
Benzene	50.	0.	49.	98	76-127
Toluene	50.	0.	47.	94	76-125
Chlorobenzene	50.	0.	47.	94	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.	49.	98	2	14	71-120
Benzene	50.	48.	96	2	11	76-127
Toluene	50.	47.	94	0	13	76-125
Chlorobenzene	50.	47.	94	0	13	75-130

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

000041

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

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

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.	62.	124	61-145
Trichloroethene	50.	0.	53.	106	71-120
Benzene	50.	0.	53.	106	76-127
Toluene	50.	0.	52.	104	76-125
Chlorobenzene	50.	0.	51.	102	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:

00004

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKIMS

Lab Name:GENERAL TESTING Contract:H & A

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

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

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2248

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

% Moisture: not dec. Date Analyzed:11/08/94

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	62.	
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	53.	
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	52.	
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

General Testing Corporation

Job #: R94/04290

SECTION F

BLANK DATA

00004

69

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

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

Lab File ID:Q2247 Lab Sample ID:METHOD BLANK

Date Analyzed:11/08/94 Time Analyzed:2024

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	HADUP	4290-5	Q2256	0213
02	HATB	4290-1	Q2252	2349
03	MW1	4290-9	Q2259	0402
04	MW2	4290-8	Q2258	0326
05	MW201D	4290-3	Q2254	0101
06	MW202D	4290-2	Q2253	0025
07	MW3	4290-10	Q2260	0438
08	MW4	4290-6	Q2257	0250
09	MW5	4290-4	Q2255	0137
10	MW6	4290-7	Q2249	2144
11	MW6MS	4290-7MS	Q2250	2228
12	MW6MSD	4290-7MSD	Q2251	2313
13	VBLK1MS	BLANK SPIKE	Q2248	2104
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COMMENTS:

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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.:HADUP

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

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2247

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

% Moisture: not dec. Date Analyzed:11/08/94

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

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

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

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

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2247

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

% Moisture: not dec. Date Analyzed:11/08/94

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.					
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VOLATILE METHOD BLANK SUMMARY

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

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

Lab File ID:Q2264 Lab Sample ID:METHOD BLANK

Date Analyzed:11/09/94 Time Analyzed:0927

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	HADUPDL	4290-5DL	Q2271	1424
02	MW2DL	4290-8DL	Q2269	1313
03	MW3DL	4290-10DL	Q2266	1054
04	MW5DL	4290-4DL	Q2270	1348
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COMMENTS:

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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.:HADUP

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

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2264

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

% Moisture: not dec. Date Analyzed:11/09/94

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

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.:HADUP

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

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2264

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

% Moisture: not dec. Date Analyzed:11/09/94

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.					
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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H&A

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

Lab File ID (Standard):Q2246 Date Analyzed:11/08/94

Instrument ID:MS5 Time Analyzed:1935

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	101151		9.99		444974		11.75		374273		18.24	
	UPPER LIMIT	202302		10.49		889948		12.25		748546		18.74	
	LOWER LIMIT	50576		9.49		222487		11.25		187137		17.74	
	EPA SAMPLE NO.												
01	VBLK1	97209		10.03		440283		11.78		378498		18.25	
02	VBLK1MS	91419		10.04		397516		11.78		350167		18.30	
03	MW6	94228		10.01		413464		11.76		347670		18.27	
04	MW6MS	95686		9.98		415363		11.74		360564		18.27	
05	MW6MSD	94428		9.97		415924		11.73		360045		18.25	
06	HATB	91375		10.06		398403		11.83		348025		18.34	
07	MW202D	90881		10.04		396130		11.79		333667		18.34	
08	MW201D	90805		10.08		395874		11.83		348976		18.34	
09	MW5	89293		10.06		398799		11.81		350080		18.29	
10	HADUP	90049		10.08		405659		11.85		348104		18.34	
11	MW4	84548		10.08		373708		11.85		319498		18.34	
12	MW2	89172		10.08		379142		11.85		335804		18.35	
13	MW1	88397		10.08		387126		11.83		343166		18.34	
14	MW3	78764		10.09		358988		11.86		318211		18.34	
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.

FORM VIII VOA

3/90

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

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

Lab File ID (Standard):Q2263 Date Analyzed:11/09/94

Instrument ID:MS5 Time Analyzed:0833

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	89932	10.06	401699	11.83	347452	18.35
UPPER LIMIT	179864	10.56	803398	12.33	694904	18.85
LOWER LIMIT	44966	9.56	200850	11.33	173726	17.85
EPA SAMPLE NO.						
01 VBLK2	87685	9.94	362993	11.69	325999	18.23
02 MW3DL	81066	10.04	352335	11.78	307916	18.29
03 MW2DL	93267	9.94	347633	11.66	339842	18.22
04 MW5DL	82283	10.03	355307	11.78	310412	18.27
05 HADUPDL	85043	10.09	377162	11.85	329525	18.34
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

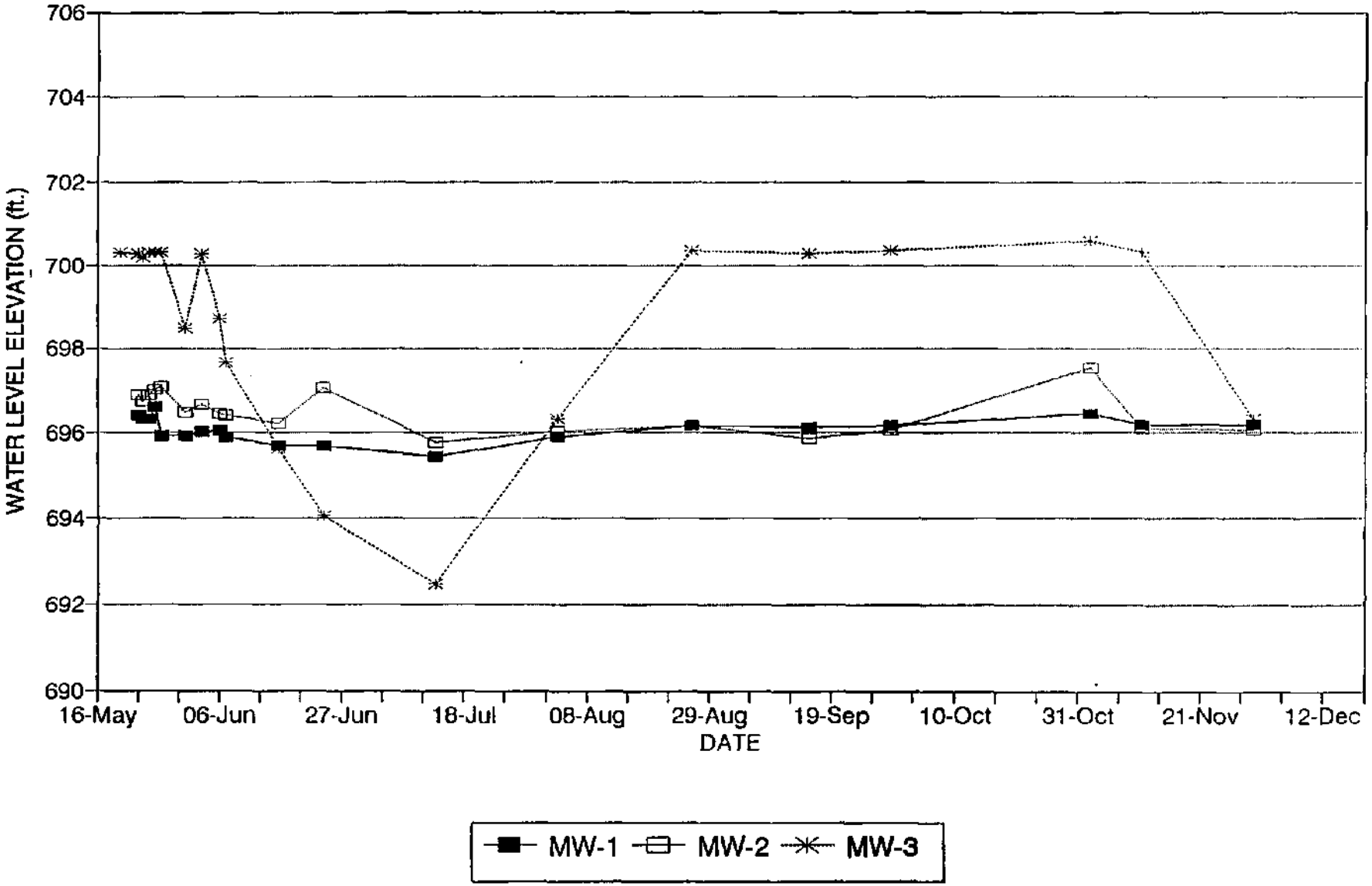
AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside of QC limits with an asterisk.
* Values outside of QC limits.

APPENDIX B

Hydrographs for Honeoye Creek and On-site Monitoring Wells

WELL HYDROGRAPHS
ENARC-O MACHINE PRODUCTS



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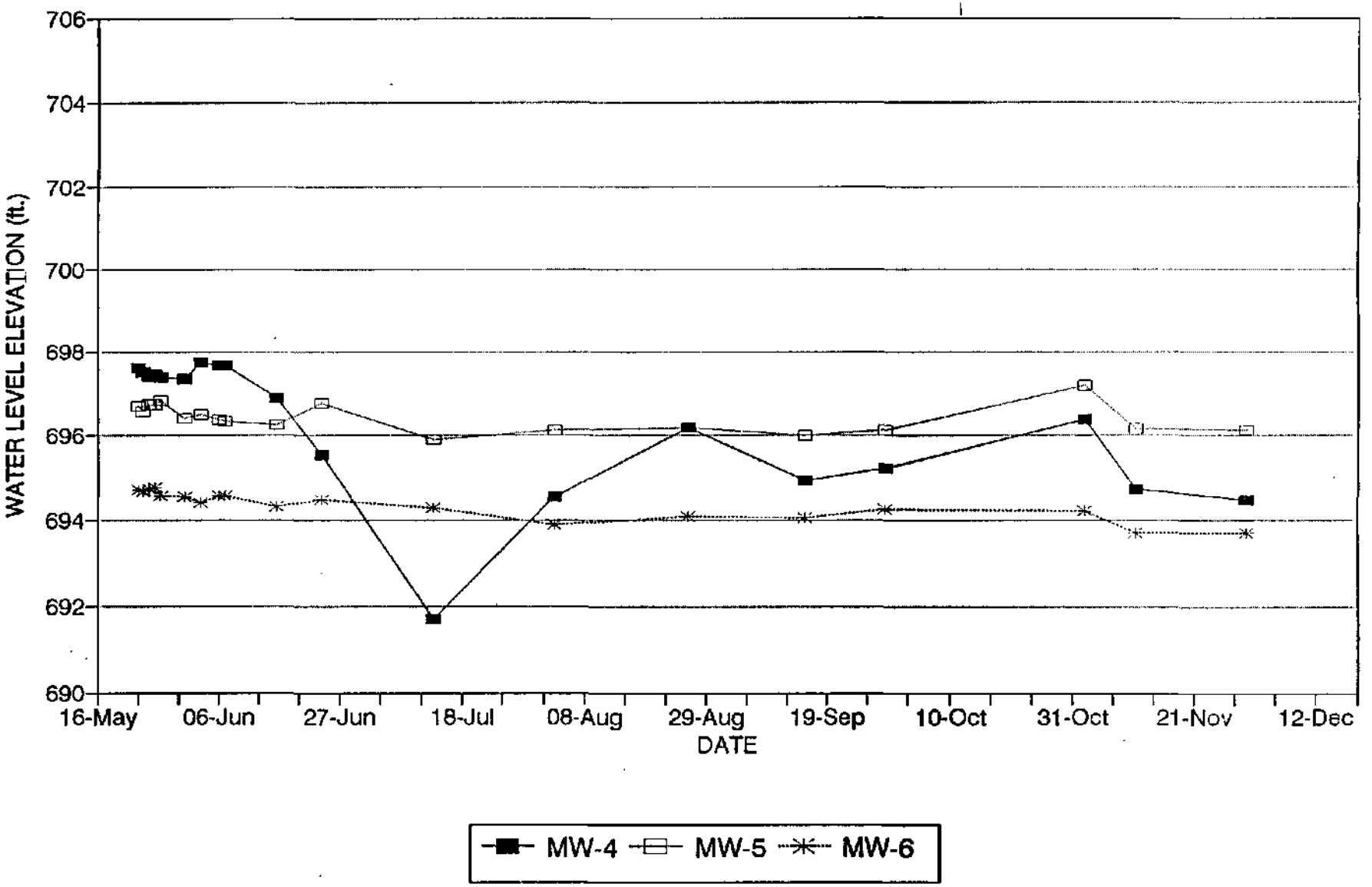
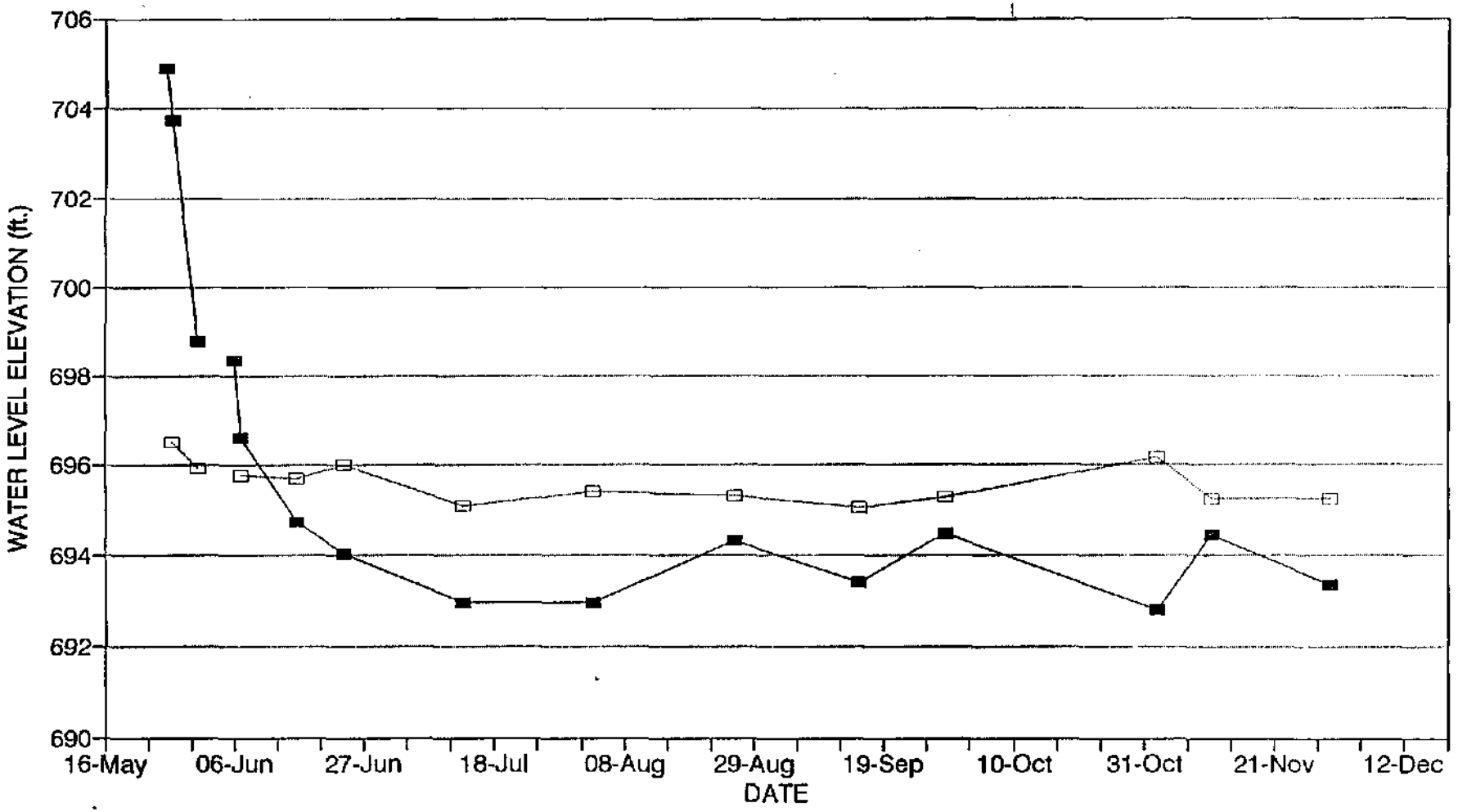
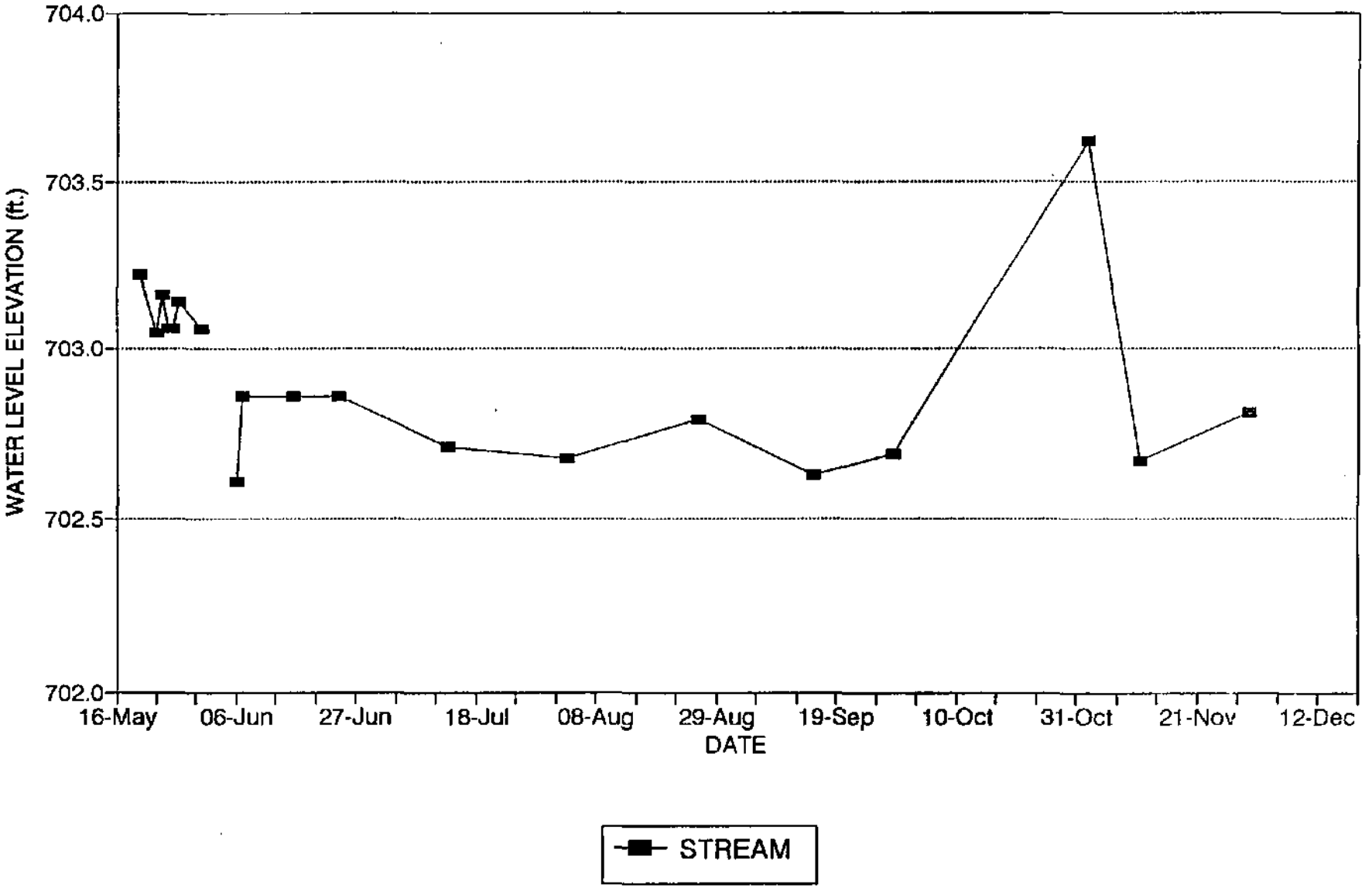
WELL HYDROGRAPHS
ENARC-O MACHINE PRODUCTS



WELL HYDROGRAPHS
ENARC-O MACHINE PRODUCTS



WELL HYDROGRAPHS
ENARC-O MACHINE PRODUCTS



APPENDIX C

Draft Fish and Wildlife Impact Analysis Report

Fish and Wildlife Impact Analysis

for the

Enarc-O Machine Products Site

DRAFT

Provided by: Thomas P. Connare, TPC Environmental Consulting

DRAFT

INTRODUCTION

This report presents a habitat-based analysis of fish and wildlife usage of the area surrounding the Enarc-O Machine Products site in Lima, Livingston County, New York. The analysis follows the guidelines established in Step One in the document prepared by the New York State Department of Environmental Conservation (NYSDEC) Division of Fish and Game entitled Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites (FWIA), (1991). The objective of Step One of the FWIA is to identify fish and wildlife resources that may potentially be impacted by site-related contaminants. Step One requires such resource information be provided in the form of site maps and descriptions of site covertypes and utilization of site covertypes by fish and wildlife.

The analysis was conducted by TPC Environmental of Buffalo, New York. Site information was collected during both an on-site field investigation on July 24, 1994 and a review of NYSDEC files in Avon, New York. Historic aerial photography of the site was obtained at the Soil and Water Conservation District Office for Livingston County in Leicester, New York.

TOPOGRAPHIC MAP

A topographic map showing the site location and significant water resources and New York State regulated wetlands within a two mile radius of the site is presented as Figure 1. The village of Lima is located just over two miles southwest of the Enarc-O site. The Town of Honeoye Falls is located about one mile northwest of the site. Honeoye Creek flows northwesterly through the site area

and is located adjacent to the site to the east. Spring Brook is located approximately two miles west of the site.

New York State Natural Heritage Program maps indicate that there are no NYSDEC significant habitats or habitats supporting endangered, threatened or rare species within a two mile radius of the site. Similarly, there are no wild and scenic rivers located within two miles of the site.

NYSDEC freshwater wetland maps for Monroe, Livingston and Ontario Counties indicate that state regulated wetland HF-4 is located approximately one mile southwest of the site and state regulated wetland HF-1 is located approximately 7000 feet southwest of the site.

NYSDEC deer wintering maps for the same three counties indicate that the closest deer wintering area to the site is just over two miles north of the site, north of Cheese Factory Road and west of Quaker Meetinghouse Road.

COVERTYPE MAP

A covertype map of the study area is presented as Figure 2. The study area is the area described by a circle within a 0.5 mile radius of the site. The covertype map identifies the location of significant vegetative communities, agricultural fields and aquatic resources. Identification of significant covertypes and fish and

wildlife resources in the study area was made by Thomas P. Connare (biologist) during the on-site field investigation on July 24, 1994.

COVERTYPES AND FISH AND WILDLIFE RESOURCES

Most of the general area including the site study area has historically been a rural farming community. Much of the area is still being farmed. The site is actually located in the small township of North Bloomfield. The study area north of the Enarc-O site is largely residential, especially along Ideson Road, Bean Hill Road, Martin Road, Quaker Meetinghouse Road and State Route 65. Most of the study area south of the site is agricultural. At the time of the field investigation, the main crops being grown were beans, corn and wheat. An agricultural area east of the site and immediately north of Route 65 was in corn and wheat. The old race track grounds were being used for hay and pasture.

When land used for farming and pasture shifted to commercial and residential development, most of the abandoned fields began to undergo ecological succession. Ecological succession is a fairly predictable sequence where an area disturbed by farming or logging will revert back to the climax vegetative community characteristic of the area. This process is characterized by a series of developing plant communities in which various plant species populations are usually replaced by others over time.

Many of the vegetative communities present in the study area represent different stages in this process. Areas of poor drainage and areas along stream courses, hedgerows and boundary lines typically represent the most advanced stages of succession. These stages are dominated by woody vegetation including both trees and shrubs. Younger stages in the successional process are dominated by herbaceous annuals and perennials. Species composition of the developing stages will depend on moisture regime, drainage and seed source. Covertypes identified in the study area include both upland and wetland vegetative communities. Plant species identified in these communities during the field investigation are listed in Table 1. Wetland plant communities were only identified along the immediate banks of portions of Honeoye Creek. .

UPLAND COVERTYPES

OLD FIELD

The old field plant community is an early stage in succession where recently abandoned agricultural fields are being colonized by an aggressive pioneer herbaceous community and seedlings of woody shrubs and trees. Plant species identified as common in old field communities in the study area include the grasses tall fescue, timothy and hairgrass along with Canada goldenrod, Canada thistle, Virginia creeper, poison ivy, staghorn sumac and green ash.

DRAFT

SHRUBLAND

Shrublands represent old field communities typically greater than ten years old where woody vegetation including shrub and saplings have become dominant. Shrublands are typically patchy in appearance with large clumps of shrubs mixed with saplings and open areas of persistent herbaceous species. There were no significant shrublands observed in the study area. What shrub areas there were tended to be along the margins of woodlots. A small shrubland was identified between two woodlot areas immediately north of a large wheat field east of Bragg Road. Plant species common in this shrubland include staghorn sumac, tartarian honeysuckle, green ash, scotch pine, black walnut, reed canary grass, Virginia creeper and summer grape. Typical woodlot edge plant species common in the study area include arrowwood, dogwoods, staghorn sumac, poison ivy, Virginia creeper, pokeweed, Canada thistle, raspberry and grape.

WOODLOT

Woodlots common to the study area are of several different types. The most common woodlot type observed is an upland forest community representing an advanced stage of old field succession. Tree species common in these woodlots include shagbark hickory, basswood, box elder, green ash, sugar maple, hawthorn and buckhorn. Other species common in these communities include

tartarian honeysuckle, Virginia creeper, white avens, enchanter's nightshade and grape.

Older, mature forested areas were observed along the upper banks and sloping areas associated with much of Honeoye Creek. Tree species identified in these areas include black walnut, black locust, basswood, sugar maple and beech. Other species include honeysuckle, Virginia creeper, garlic mustard, mayapple and enchanter's nightshade.

A small woodlot in the southwest portion of the study area, immediately west of a large bean field is dominated by conifers. This woodlot was apparently planted by man and includes many mature specimens of Norway sprùce, scotch pine and red pine as well as green ash, white oak, staghorn sumac, poison ivy, Virginia creeper and grape.

WETLAND COVERTYPES

No significant wetland areas were identified in the study area except immediately adjacent to Honeoye Creek. The wetter, less well drained sections of some of the woodlots in the study area had greater percentages of green ash, shagbark hickory and basswood.

The riparian wetlands bordering Honeoye Creek in the study area were mostly associated with the lower level of the bank close to the level of the creek bed. Tree species identified as common along the creek include black willow, green ash, eastern

cottonwood, basswood and box elder. Vegetation growing along the creek bottom and waters edge included lizard tail, cattail, buttonbush, joe pye weed, reed canary grass, green bulrush, Phragmites, white vervain, intermediate dogbane, silky dogwood and fowl manna grass.

AQUATIC HABITATS

Honeoye Creek is the only major aquatic resource in the study area. Honeoye Creek flows northwesterly through the study area, ultimately discharging into the Genesee River which flows to Lake Ontario.

Honeoye Creek, as observed in the study area, is a relatively wide and shallow, slow moving warm water stream. The primary substrate is sedimentary rock, principally limestone and shale. Throughout much of the summer and fall months, much of the stream bed lies above water except following heavy rains. A series of small falls are common along the stream's length and are typically associated with weathered joints in the bedrock. Deeper pool areas are found where sections of bedrock have weathered away in the vicinity of the falls. Algal growth is common along the shallower, slower moving sections of the creek. Beds of lizard tail, reed canary grass and cattail occur where suitable substrate is available.

No physical or chemical measurements were taken in the creek

during the site investigation. At that time the water level was low with much of the bedrock substrate exposed above the water level.

WILDLIFE USAGE

TERRESTRIAL BIOTA

The variety of covertypes in the study area support a diverse yet common wildlife community. The most common species in this community are those whose populations have flourished since human settlement. The proximity to active agricultural fields in the study area permits access to a readily available food source during much of the year for several wildlife species. The many woodlot habitats in the area provide ideal daily and seasonal cover for these species.

A list of mammal, reptile and amphibian species potentially present in the study area are presented in Tables 1-5. This species list was generated based on a field assessment of available wildlife habitat and on resource information indicating the mapped range for each species. During the field survey, several deer were observed in the agricultural fields. Numerous woodchuck burrows were also observed. Local residents indicated that red fox, eastern cottontail and raccoon are also common in the area including the site.

Bird species potentially breeding in the study area are listed in table 3. This list was generated based on a field

survey of suitable breeding habitat and on a recent breeding status report for New York State (1988). Birds display widespread migration and localized movement patterns and it would be difficult to assess passing versus territorial usage of the study area by different species. Birds observed during the field survey included migrant as well as permanent residents. Probable permanent resident species in the study area include American crow, starling, bluejay, black-capped chickadee, goldfinch, northern cardinal, house finch, house sparrow, song sparrow, brown creeper, white-breasted nuthatch, mourning dove, downy woodpecker, redtail hawk, American kestrel and dark sided junco. Other birds observed during the survey included northern flicker, redeyed vireo, eastern wood pewee, catbird, purple martin, barn swallow, kingfisher, pectoral sandpiper, great blue heron, killdeer, house wren, turkey vulture, northern oriole, robin, common grackle, cedar waxwing and indigo bunting.

The successional old field, shrubland and second growth woodlot covertypes in the study area, in combination with the agricultural fields and riparian corridor of Honeoye Creek, are patchy environments that provide ideal habitat for white tail deer, eastern cottontail, striped skunk, raccoon, woodchuck and numerous small rodents, especially gray and red squirrel, chipmunk and

meadow vole. Numerous bird species utilize these habitats on a year-round basis due to the bountiful supply of insects, berries and seeds common in the shrub and herbaceous vegetation. Predator species such as weasel, fox, shrew, redtail hawk, screech owl and American kestrel prey on the many small mammals and birds in these areas.

The more mature woodlots and wooded areas along portions of Honeoye Creek provide food, shelter and nesting sites for a variety of wildlife species including eastern gray squirrel, white tail deer, raccoon and small rodents such as deer mice, vole and chipmunk. Resident bird species utilizing these areas include bluejay, chickadee, brown creeper, white-breasted nuthatch, downy woodpecker, northern flicker, junco and American crow. Seasonal migrants commonly breeding here include northern oriole, eastern wood pewee, redeyed and warbling vireos, hooded warbler and wood thrush. The fragmentation of woodland habitat in most rural farming areas has resulted in the elimination or sharp reduction of many mammal and bird species that require forest interior habitat characteristic of large, unbroken tracts of woodland.

In addition to providing habitat for resident populations of mammals and birds, riparian habitat also serves as dispersal corridors for many species. Dispersal corridors provide long strips of protective habitat bordering relatively unsuitable habitat making it possible for species to colonize other fragmented

habitats. Honeoye Creek provides such a corridor.

AQUATIC BIOTA

Honeoye Creek is categorized as a warm water stream and as such is able to support a limited warm water fishery. Although no fish sampling has been conducted by NYSDEC fishery biologists in recent years, collections from the 1950's and the 1970's yielded the following species: northern hogsucker, rock bass, smallmouth bass, bluegill, pumpkinseed, black nose dace, common shiner, stoneroller, white sucker, creek chub, brown bullhead, several darters, logperch, golden shiner, crappie, carp, fat head minnow, redhorse and largemouth bass. A fishery biologist with the NYSDEC indicated that walleye and chain pickerel are resident in the Genesee River and may occasionally enter Honeoye Creek; he added that the creek does not provide a suitable environment for salmonids.

It is unlikely that Honeoye Creek supports a diverse fish community in the study area due to low water flow and the generally shallow nature of the creek in summer. Local residents indicated that some smallmouth bass are found in some of the deeper pool areas and that there is a good crayfish population in the creek.

In addition to a fishery, Honeoye Creek provides feeding and shelter habitat for a variety of mammal, reptile, amphibian and bird species. Raccoon, mink, muskrat and shrews would be expected

to feed here. Birds observed feeding in the creek during the survey included kingfisher, great blue heron, mallard, killdeer and pectoral sandpiper. A local resident observed that killdeer had nested on the dry creek bottom. Other species utilizing the creek habitat would include redwing blackbird, common grackle, swamp sparrow, marsh wren, common yellowthroat, song sparrow, green back heron, black crown night heron, eastern kingbird and several swallow species.

VALUE OF RESOURCES TO HUMANS

Human use of fish and wildlife resources within the study area include hunting, fishing and primary contact recreation in portions of Honeoye Creek. Local ordinances prohibit hunting within a specified distance of structures such as buildings, roads and railroad tracks. Deer are plentiful in the general region including the study area but it is not known if hunting actually occurs in the study area, given the proximity to residences and roads. Hunting of woodchuck, squirrel and certain bird species is possible within the study area.

Although sections of Honeoye Creek probably support a relatively diverse warm water fish community, fishing pressure is probably light within the study area. According to local residents, there is some fishing for smallmouth bass and perhaps sunfish and bullhead in a few of the deeper "holes" in the creek. Youths were

observed collecting crayfish in the creek during the field survey. Aside from these occasions of casual fishing, there probably is very little sport fishing in the creek in the study area.

Much of Honeoye Creek, especially in the areas of higher density human inhabitance, has been designated as Class B by New York State. Class B waters are classified as suitable for primary contact recreation such as swimming and wading. There was ample evidence during the stream survey that local residents utilize the creek for recreational activity such as wading, hiking and collecting.

DRAFT

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TABLE 1

COMMON AND SCIENTIFIC NAMES OF PLANT SPECIES
IDENTIFIED AT THE
ENARCO-O MACHINE PRODUCTS SITE

TREES	
COMMON NAME	SCIENTIFIC NAME
Green Ash	Fraxinus pennsylvanica
Black Locust	Robinia pseudoacacia
Black Willow	Salix nigra
Black Walnut	Juglans nigra
Eastern Cottonwood	Populus deltoides
Shagbark Hickory	Carya ovata
Sugar Maple	Acer saccharum
American Beech	Fagus grandifolia
American Basswood	Tilia americana
Box Elder	Acer negundo
Buckthorn	Rhamnus cathartica
Hawthorn	Crataegus sp.
Apple	Malus sp.
Black Cherry	Prunus serotina
American Elm	Ulmus americana
Red Maple	Acer rubrum
Scotch Pine	Pinus sylvestris
Red Pine	Pinus resinosa
Norway Spruce	Picea abies
Swamp White Oak	Quercus bicolor
SHRUBS AND VINES	
Silky Dogwood	Cornus amomum
Staghorn Sumac	Rhus typhina
Tartarian Honeysuckle	Lonicera tatarica
Northern Arrowwood	Viburnum dentatum

TABLE 1-CONTINUED

COMMON AND SCIENTIFIC NAMES OF PLANT SPECIES
IDENTIFIED AT THE
ENARCO-O MACHINE PRODUCTS SITE

Buttonbush	Cephalanthus occidentalis
Multifloral Rose	Rosa multiflora
Raspberry	Rubus alleganiensis
Poison Ivy	Toxicodendron radicans
Virginia Creeper	Parthenocissus quinquefolia
Summer Grape	Vitis aestivalis
Currant	Ribes sp.
HERBACEOUS	
Lizardtail	Saururey cernuus
Joe-pye Weed	Eupatorium maculatum
Reed Canary Grass	Phalaris arundinacea
Pokeweed	Phytolacca americana
Tall Fescue	Fescue elatior
Timothy	Phleum pratense
Hairgrass	Deschampsia flexuosa
Canada Goldenrod	Solidago canadensis
Canada Thistle	Cirsium arvense
Garlic Mustard	Alliaris officinalis
Moneywort	Lyoimachin numularia
White Avens	Geum laciniatum
Touch-me-not	Impatiens capensis
Mayapple	Podophyllum peltatum
Wild Bergamot	Monarda fistulosa
Daisy Fleabane	Erigeron annuus
Wild Ginger	Asarum canadense
Lance-leaved Goldenrod	Euthamia graminifolia
Cattail	Typha latifolia
Enchanter's Nightshade	Circe quadrisulcata
Agrimony	Agrimonia sp.

TABLE 1-CONTINUED

COMMON AND SCIENTIFIC NAMES OF PLANT SPECIES
IDENTIFIED AT THE
ENARCO-O MACHINE PRODUCTS SITE

Green Bulrush	Scirpus atrovirens
Fowl Manna Grass	Glyceria striata
Intermediate Dogbane	Apocynum medium
Common Reed	Phragmites communis
White Vervain	Verbena urticifolia

DRAFT

TABLE 2
MAMMAL SPECIES POTENTIALLY PRESENT AT THE
ENARC-O MACHINE PRODUCTS SITE

COMMON NAME	SCIENTIFIC NAME
Northern water shrew	Sorex palustris
Masked shrew	Sorex cinereus
Short-tailed shrew	Blarina brevicauda
Least shrew	Crypototis parva
Hairy-tailed mole	Parascalops breweri
Star-nosed mole	Condylura cristata
Little brown bat	Myotis lucifugus
Big brown bat	Eptesicus fuscus
Eastern cottontail rabbit	Sylvilagus floridanus
Opossum	Didelphis virginiana
Eastern chipmunk	Tamias striatus
Woodchuck	Marmota monax
Gray squirrel	Sciurus carolinensis
Red squirrel	Tamiasciurus hudsonicus
Deer mouse	Peromyscus maniculatus
White-footed mouse	Peromyscus leucopus
Meadow vole	Microtus pennsylvanicus
Muskrat	Ondotra zibethica
Norway rat	Rattus norvegicus
House mouse	Mus musculus
Meadow jumping mouse	Zapus hudsonicus
Woodland jumping mouse	Napaeozapus insignis
Coyote	Canis latrans
Red fox	Vulpes fulva
Eastern raccoon	Procyon lotor
Ermine	Mustela erminea

TABLE 2 - CONTINUED
MAMMAL SPECIES POTENTIALLY PRESENT AT THE
ENARC-O MACHINE PRODUCTS SITE

COMMON NAME	SCIENTIFIC NAME
Long-tailed weasel	Mustela frenata
Mink	Mustela vison
Striped skunk	Mephitis mephitis
White-tailed deer	Odocoileus virginianus

TABLE 3
BIRD SPECIES POTENTIALLY PRESENT AT THE
ENARC-O MACHINE PRODUCTS SITE

Mallard duck	Wood thrush
Killdeer	Northern shrike
Upland sandpiper	Mockingbird
Northern harrier	Brown thrasher
Red-tailed hawk	Cedar waxwing
American kestrel	Starling
Ring-necked pheasant	Warbling vireo
Mourning dove	Blue-winged warbler
Yellow-billed cuckoo	golden-winged warbler
Great horned owl	Yellow warbler
Eastern screech owl	Chestnut-sided warbler
Common nighthawk	Belted kingfisher
Chimney swift	Common yellowthroat
Ruby-throated hummingbird	American redstart
Northern flicker	Rose-breasted grosbeak
Downy woodpecker	Northern cardinal
Red-headed woodpecker	Indigo bunting
Eastern kingbird	Rufous-sided towhee
Great crested flycatcher	Savannah sparrow
Eastern wood pewee	Song sparrow
Eastern phoebe	Field sparrow
Least flycatcher	Chipping sparrow
Tree swallow	Dark-sided junco
Barn swallow	Bobolink
Bluejay	Eastern meadowlark
American crow	Red-winged blackbird

TABLE 3 - CONTINUED
BIRD SPECIES POENTIALLY PRESENT AT THE
ENARC-O MACHINE PRODUCTS SITE

Cooper's hawk	Sharp-shinned hawk
Common grackle	Brown-headed cowbird
Tufted titmouse	Orchard oriole
Black-capped chickadee	Northern oriole
White-breasted nuthatch	House sparrow
Brown creeper	American goldfinch
House wren	House finch
Eastern bluebird	American robin

TABLE 4
AMPHIBIAN SPECIES POTENTIALLY PRESENT AT THE
ENARC-O MACHINE PRODUCTS SITE

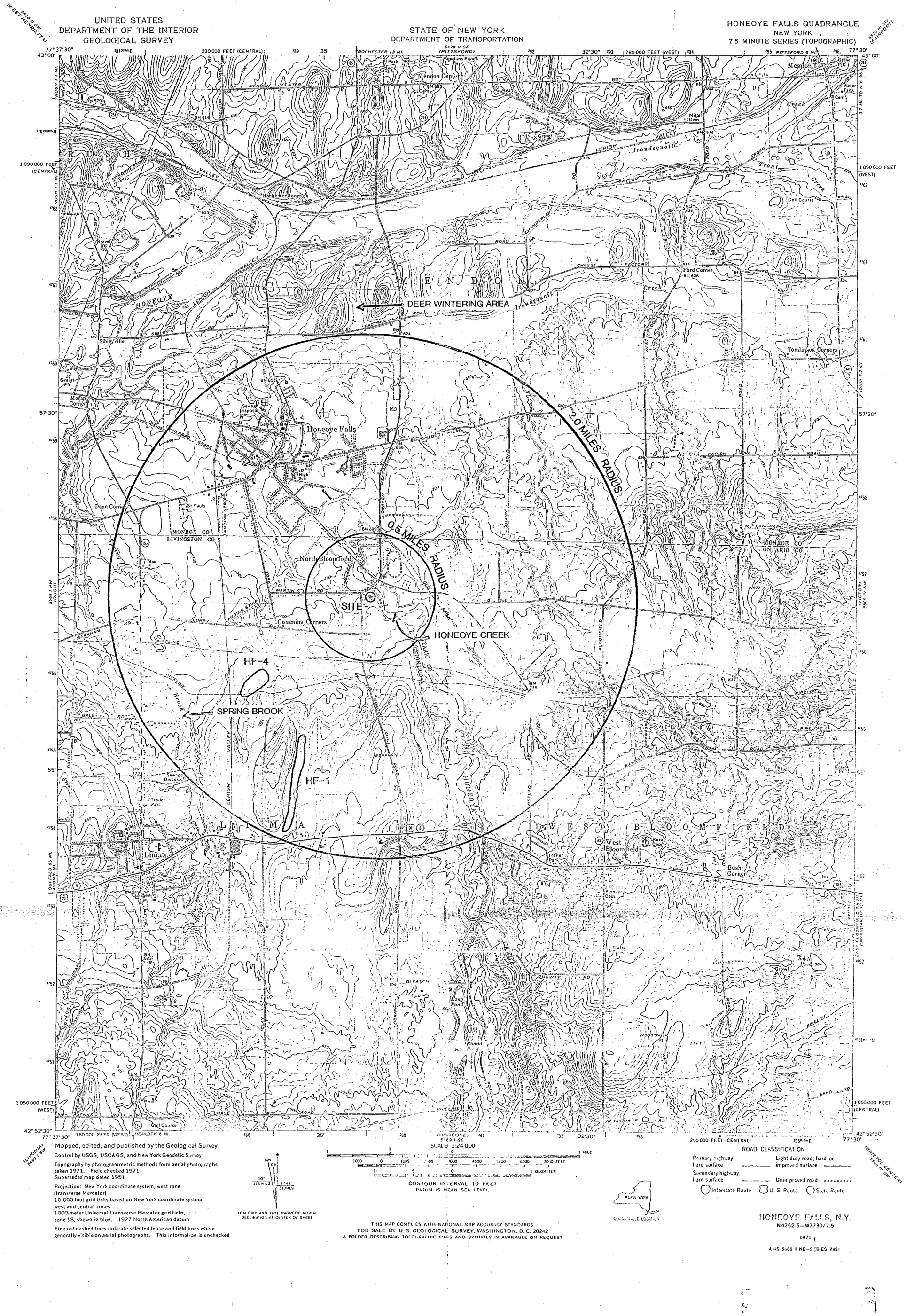
COMMON NAME	SCIENTIFIC NAME
Newt	Notophthalmus viridescens
American toad	Bufo americanus
Northern spring peeper	Hyla crucifer
Western chorus frog	Pseudacris triseriata
Gray treefrog	Hyla versicolor
Bullfrog	Rana catesbeiana
Green frog	Rana clamitans
Pickerel frog	Rana palustris
Leopard frog	Rana pipiens
Wood frog	Rana sylvatica

TABLE 5
REPTILE SPECIES POTENTIALLY PRESENT AT THE
ENARC-O MACHINE PRODUCTS SITE

COMMON NAME	SCIENTIFIC NAME
Northern ring-neck snake	Diadophis punctatus
Eastern smooth green snake	Opheodrys vernalis
Milk snake	Lampropeltis triangulum
Water snake	Natrix sipedon
Northern brown snake	Storeria dekayi
Northern red-bellied snake	Storeria occipitomaculata
Northern ribbon snake	Thamnophis sauritus
Garter snake	Thamnophis sirtalis
Northern black racer	Coluber constrictor
Snapping turtle	Chelydra serpentina
Midland painted turtle	Chrysemys picta

KADDIS MANUFACTURING
ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK

ENVIRONMENTAL RISK ASSESSMENT
STUDY AREA MAP



Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and New York Geodetic Survey

Topography by photogrammetric methods from aerial photographs taken 1971. Field checked 1971
Supersedes map dated 1951

Projection: New York coordinate system, west zone (transverse Mercator)
10,000-foot grid ticks based on New York coordinate system, west and central zones
1000-meter Universal Transverse Mercator grid ticks, zone 18, shown in blue. 1927 North American datum

Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Primary highway, hard surface — Light duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route · U.S. Route · State Route

HONEOYE FALLS, N.Y.
N4252.5—W7730/7.5
1971
AMS 5469 I NE-SERIES V821

FILENAME: 70372-048:QRS008D.MAN

[DRAFT]

FIGURE 1

KEY TO "COVER-TYPE" MAP

1. Agricultural (Ag) Field

2. Old Field

3. Shrubland

4 Woodlot

5. Riparian Wetland (follows Honeoye Creek - immediately adjacent to stream bank; a narrow strip of woodland)

Note: The remainder of the land area is residential and commercial.

DRAFT

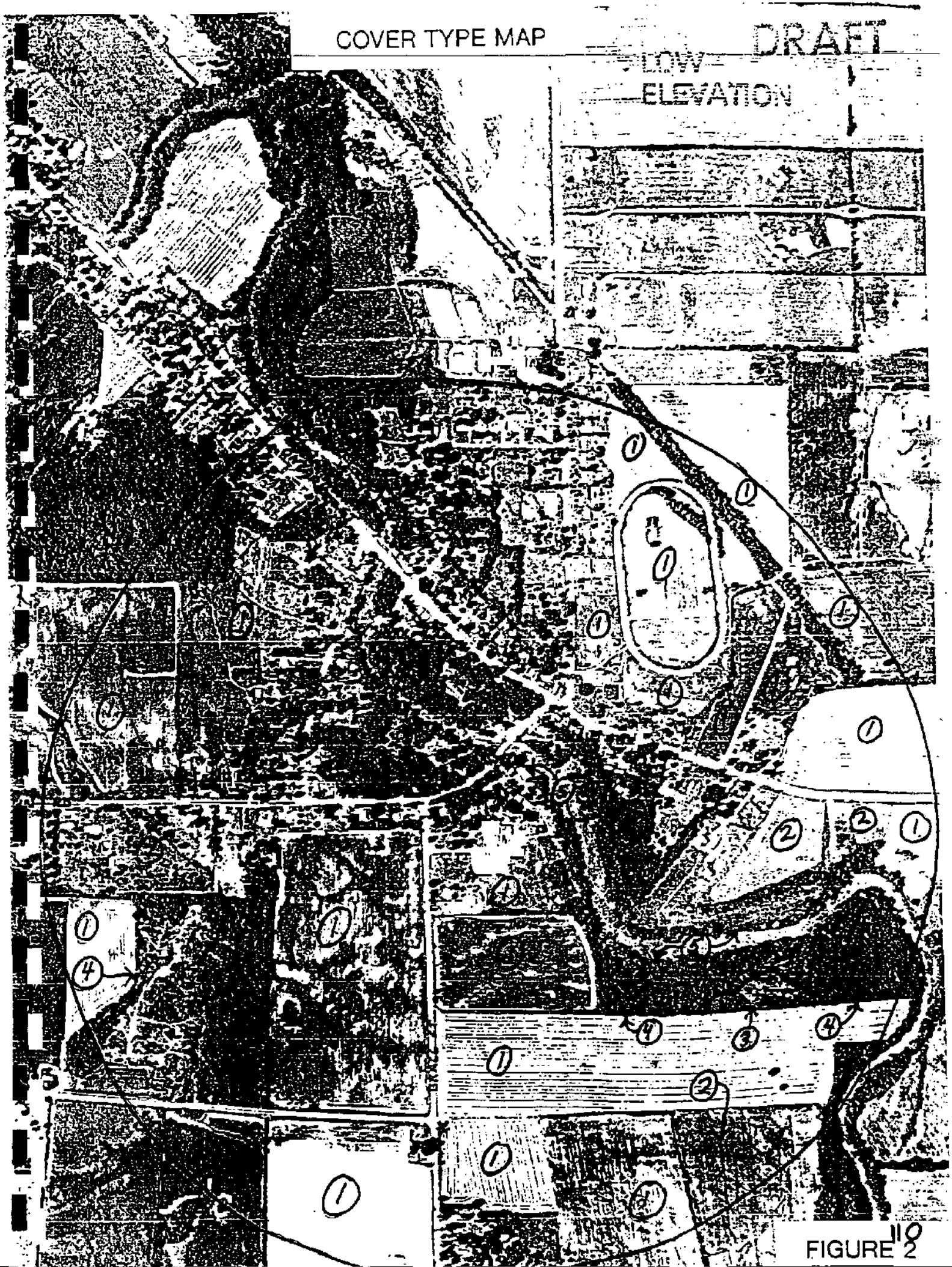


FIGURE 2

REFERENCE NO. 32

CDM FEDERAL PROGRAMS CORPORATION

June 6, 1991

Cathy Moyik
Regional Project Officer
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Project: TES V, EPA Contract No. 68-W9-0002

Document No: TES5-C02024-EP-CBJS

Subject: Letter Report for Work Assignment No. C02024
Data Summary of Split Sampling
North Bloomfield Site
Town of Lima, New York
Document Control No: TES5-C02024-LR-CBJR

Dear Ms. Moyik:

Please find enclosed the Letter Report entitled "Data Summary of Split Sampling, North Bloomfield Site, Town of Lima, New York", as partial fulfillment of the reporting requirements for this work assignment.

If you have any comments regarding this submittal, please contact Susan Boone of CDM Federal Programs Corporation at (908) 757-9500 within two weeks from the date of this letter.

Sincerely,

CDM Federal Programs Corporation

Scott B. Graber
TES V Regional Manager

Enclosure

cc: Mark Granger, EPA Work Assignment Manager, CERCLA Region II
Jill Robbins, EPA Contracting Officer, EPA HQ (letter only)
Susan Boone, CDM FPC Work Assignment Manager
NYC Project File
NJ Project File
Document Control, CDM Federal Programs Corporation (2 copies)

LETTER REPORT
DATA SUMMARY OF SPLIT SAMPLING
NORTH BLOOMFIELD SITE
TOWN OF LIMA, NEW YORK

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, D.C. 20460

EPA Work Assignment No.	: CO2024
EPA Region	: II
Site No.	: 2PL9
Contract No.	: 68-W9-0002
CDM Federal Programs Corporation Document No.	: TES5-CO2024-LR-CBJR
Report Prepared By	: CDM Federal Programs Corporation
CDM FPC Work Assignment Manager	: Susan Boone
Telephone Number	: (908) 757-9500
EPA Work Assignment Manager	: Mark Granger
Telephone Number	: (212) 264-7592
Date Prepared	: June 6, 1991

2

CDM FEDERAL PROGRAMS CORPORATION

June 6, 1991

Mr. Mark Granger
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Project: TES V, EPA Contract No. 68-W9-0002

Document No: TES5-C02024-LR-CBJR

Subject: Letter Report for Work Assignment No. C02024
Data Summary of Split Sampling
North Bloomfield Site
Town of Lima, New York

Dear Mr. Granger:

This letter provides a data summary of split samples that were accepted by CDM Federal Programs Corporation (CDM FPC) during three sampling events. The first phase of the investigation consisted of a soil boring program. This took place during November 1990 and CDM FPC accepted five soil samples (four splits and one duplicate) from four borings. Two rounds of ground water sampling were performed during January and February 1991. CDM FPC accepted eight water samples (six splits and two duplicates) from three identical wells during both rounds. In addition to collecting samples for volatile organic analysis during the second round, samples for total petroleum hydrocarbons (TPH) analysis were collected at each well (6 samples and 1 duplicate) before purging the well. Figure 1 indicates the ground water and soil boring sample locations.

Attachment I contains data summary tables for all of the samples. Analysis during the soil boring program consisted of full Target Compound List (TCL) and Target Analyte List (TAL) parameters. Round 1 ground water samples were analyzed for TCL and TAL parameters and Round 2 samples were analyzed for volatile organic compounds (VOCs) and TPH only. All sample results for TPH were rejected because the laboratory failed to perform instrument calibration and calibration verification standards at mid-range and the method detection limit level immediately prior to sample analysis, as required by the method and SAS request.

Below is a summary of the contaminants that were detected in the soil and ground water samples. Ground water samples were compared to Maximum Contaminant Levels (MCLs) and New York State Ground Water Quality Standards (GWS). Compounds that were found in associated blanks, as well as the samples, are related to laboratory contamination or decontamination procedures and are not considered compounds of concern at the site.

Ground Water Results

Compounds exceeding the standards for ground water included the following:

1,1-dichloroethene (GWS)
1,1,1-trichloroethane (GWS)
trichloroethene (GWS)
tetrachloroethene (MCL)

Bis(2-ethylhexyl)phthalate was detected in two samples at very low concentrations (less than the contract required detection limit). This compound is typically a laboratory contaminant and, at these concentrations, not expected to be representative of site contamination. The detections were at wells MW-1 and MW-5.

PCB, Aroclor 1242, was detected in well MW-1. The field blank taken the following day also contained detectable amounts of this compound.

Varying concentrations of all metals were detected in the ground water samples. Iron was the only standard (GWS) that was exceeded.

Soil Results

The following compounds were detected in the soil boring samples at concentrations greater than contract required detection limits:

1,1-dichloroethane
1,2-dichloroethene (total)
chloroform
1,1,1-trichloroethane
trichloroethene
tetrachloroethene
ethylbenzene
xylene (total)

Two PAHs were detected in sample SB 1, naphthalene and 2-methylnaphthalene.

Varying concentrations of all metals were detected in the soil samples.

Should you have any questions regarding the contents of this letter, please feel free to contact me at (908) 757-9500.

Sincerely,

CDM Federal Programs Corporation

Susan E. Boone
Work Assignment Manager

ATTACHMENT I

NORTH BLOOMFIELD
VOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	MW-1	MW-1	MW-3	MW-3	MW-5	MW-5	MW-5 (DUP)
SAMPLE NUMBER:	BGY02	BGY38	BGY01	BGY40	BGY03	BGY42	BFY32
SAMPLE DATE:	1/7/91	2/25/91	1/7/91	2/25/91	1/8/91	2/26/91	2/26/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Chloromethane	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Bromomethane	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Vinyl Chloride	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Chloroethane	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Methylene Chloride	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Acetone	10 U	10 UJ	10 U	10 UJ	10 UJ	10 U	10 U
Carbon Disulfide	5 U	5 UJ	5 U	5 UJ	12 U	5 U	5 U
1,1-Dichloroethene	5 U	5 UJ	28	9 J	2 J	5 U	5 U
1,1-Dichloroethane	5 U	5 UJ	27	11 J	1 J	5 U	5 U
1,2-Dichloroethene (total)	5 U	5 UJ	130	70 J	170	90	87
Chloroform	1 J	5 UJ	2 J	5 UJ	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 UJ	1 J	5 UJ	5 U	5 U	5 U
2-Butanone	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
1,1,1-Trichloroethane	5 U	5 UJ	990 D	370 J	18	10	8
Carbon Tetrachloride	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Vinyl Acetate	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Bromodichloromethane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Trichloroethene	4 J	4 J	7900 D	3800 D	260 D	310 DJ	190
Dibromochloromethane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Benzene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
trans-1,3-Dichloropropene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Bromoform	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
4-Methyl-2-Pentanone	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
2-Hexanone	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U
Tetrachloroethene	5 U	5 UJ	150	75	1 J	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Toluene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Chlorobenzene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Ethylbenzene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Styrene	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U
Xylene (total)	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.
D = Compound identified in an analysis at a secondary dilution factor.

NORTH BLOOMFIELD
VOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	TRIP BLANK	TRIP BLANK	FIELD BLANK	TRIP BLANK	FIELD BLANK	FIELD BLANK
SAMPLE NUMBER:	BGY06	BGY07	BGY04	BFY30	BFY29	BFY31
SAMPLE DATE:	1/7/91	1/8/91	1/8/91	2/26/91	2/25/91	2/26/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
Chloromethane	10 U	10 U	10 U	10 U	10 UJ	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 UJ	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 UJ	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 UJ	10 U
Methylene Chloride	1 BJ	5 B	3 BJ	5 U	5 UJ	5 U
Acetone	16	14 J	10 U	10 U	10 UJ	10 U
Carbon Disulfide	5 U	5 U	3 J	5 U	5 UJ	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 UJ	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
1,2-Dichloroethene (total)	5 U	5 U	5 U	5 U	5 UJ	5 U
Chloroform	5 U	5 U	5 U	5 U	10 J	11
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
2-Butanone	10 U	10 U	10 U	10 U	10 UJ	10 U
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
Carbon Tetrachloride	5	1 J	5 U	5 U	5 UJ	5 U
Vinyl Acetate	10 U	10 U	10 U	10 U	10 UJ	10 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 J	6
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 UJ	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 UJ	5 U
Trichloroethene	5 U	5 U	5 U	5 U	5 UJ	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	3 J	3 J
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
Benzene	5 U	5 U	5 U	5 U	5 UJ	5 U
trans-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 UJ	5 U
Bromoform	5 U	5 U	5 U	5 U	5 UJ	5 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 UJ	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 UJ	10 U
Tetrachloroethene	5 U	5 U	5 U	5 U	5 UJ	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 UJ	5 U
Toluene	2 J	2 J	5 U	5 U	5 UJ	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 UJ	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 UJ	5 U
Styrene	5 U	5 U	5 U	5 U	5 UJ	5 U
Xylene (total)	1 J	5 U	5 U	5 U	5 UJ	5 U

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.
D = Compound identified in an analysis at a secondary dilution factor.

NORTH BLOOMFIELD
SEMIVOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	MW-1	MW-3	MW-5	FIELD BLANK
SAMPLE NUMBER:	BGY02	BGY01	BGY03	BGY04
SAMPLE DATE:	1/7/91	1/7/91	1/8/91	1/8/91
MATRIX:	WATER	WATER	WATER	WATER
Phenol	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U
Benzyl alcohol	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U
Benzoic acid	50 U	50 U	50 U	50 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U	50 U
Dimethylphthalate	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.

NORTH BLOOMFIELD
SEMIVOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	MW-1	MW-3	MW-5	FIELD BLANK
SAMPLE NUMBER:	BGY02	BGY01	BGY03	BGY04
SAMPLE DATE:	1/7/91	1/7/91	1/8/91	1/8/91
MATRIX:	WATER	WATER	WATER	WATER
3-Nitroaniline	50 U	50 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	50 U	50 U	50 U	50 U
4-Nitrophenol	50 U	50 U	50 U	50 U
Dibenzofuran	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U
4-Nitroaniline	50 U	50 U	50 U	50 U
4,6-Dinitro-2-methylphenol	50 U	50 U	50 U	50 U
N-Nitrosodiphenylamine (1)	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U
Di-n-Butylphthalate	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20 U	20 U	20 U	20 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	0.8 J	10 U	3 J	10 U
Di-n-octylphthalate	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U
TOTAL SEMIVOLATILES				

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.

NORTH BLOOMFIELD
PESTICIDE/PCB DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	MW-1	MW-3	MW-5	FIELD BLANK
SAMPLE NUMBER:	BGY02	BGY01	BGY03	BGY04
SAMPLE DATE:	1/7/91	1/7/91	1/8/91	1/8/91
MATRIX:	WATER	WATER	WATER	WATER
Alpha-BHC	0.05 U	0.05 U	0.05 U	0.05 U
Beta-BHC	0.05 U	0.05 U	0.05 U	0.05 U
Delta-BHC	0.05 U	0.05 U	0.05 U	0.05 U
Gamma-BHC (Lindane)	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor	0.05 U	0.05 U	0.05 U	0.05 U
Aldrin	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor Epoxide	0.05 U	0.05 U	0.05 U	0.05 U
Endosulfan I	0.05 U	0.05 U	0.05 U	0.05 U
Dieldrin	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDD	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan Sulfate	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	0.1 U	0.1 U	0.1 U	0.1 U
Methoxychlor	0.5 U	0.5 U	0.5 U	0.5 U
Endrin Ketone	0.1 U	0.1 U	0.1 U	0.1 U
Alpha-Chlordane	0.5 U	0.5 U	0.5 U	0.5 U
Gamma-Chlordane	0.5 U	0.5 U	0.5 U	0.5 U
Toxaphene	1 U	1 U	1 U	1 U
Aroclor-1016	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1221	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1232	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1242	1.6	0.5 U	0.5 U	0.32 J
Aroclor-1248	0.5 U	0.5 U	0.5 U	0.5 U
Aroclor-1254	1 U	1 U	1 U	1 U
Aroclor-1260	1 U	1 U	1 U	1 U

QUALIFIERS
U = Compound analyzed for but not detected.
J = Estimated value.

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NORTH BLOOMFIELD
INORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in MG/KG

SAMPLE LOCATION:	MW-1	MW-3	MW-5	FIELD BLANK
SAMPLE NUMBER:	MBEP02	MBEP01	MBEP03	MBEP04
SAMPLE DATE:	1/7/91	1/7/91	1/8/91	1/8/91
MATRIX:	WATER	WATER	WATER	WATER
Aluminum	1190	366	1080	19 U
Antimony	14 U	14 U	14 U	14 U
Arsenic	2.4 B	2.8 B	2 U	2 UW
Barium	192 B	58.1 B	51.8 B	2 U
Beryllium	1 U	1 U	1 U	1 U
Cadmium	3 U	3 U	3 U	3 U
Calcium	91000	88300	102000	131 B
Chromium	18.5	4.8 B	5.2 B	4 U
Cobalt	4 U	4.5 B	4 U	4 U
Copper	6 B	13.9 B	38.9	2 U
Iron	1520	626	2010	62 B
Lead	3.9	4.8 W*	4.4	1.9 B
Magnesium	34500	22100	20700	37.3 B
Manganese	60.5	30.7	45.1	1 U
Mercury	.2 UN*J	.64 N*J	.2 UN*J	.2 UN*J
Nickel	10.2 B	14.4 B	18.9 B	4 U
Potassium	2910 B	3060 B	3420 B	68 U
Selenium	4 UWJ	4 UWJ	4 UJ	4 UWJ
Silver	2 U	2 U	2 U	2 U
Sodium	11100	54100	11200	527 B
Thallium	2 UJNW	2 UJNW	2 UJNW	2 UJN
Vanadium	2.9 B	2 U	2 B	2 U
Zinc	20.9	41.6	59.1	14.7 B
Cyanide	10 U	16.7 U	10 U	10 U

QUALIFIERS
U = Compound analyzed for but not detected.
B = Value is less than CRDL but greater than IDL.
* = Duplicate analysis not within control limits.
J = Estimated value.
N = Spiked sample recovery not within control limits.
+ = Correlation coefficient for the MSA is less than 0.995.
E = The reported value is estimated because of the presence of interference.
W = Post-digestion spike for Furnace AA analysis out of control limits, while sample absorbance is less than 50% of spike absorbance.

NORTH BLOOMFIELD
VOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')	FIELD BLANK	TRIP BLANK
SAMPLE NUMBER:	BDE41	BDE37	BDE39	BDE40	BDE36	BDE38	BDE42
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90	11/29/90	11/30/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	WATER	WATER
Chloromethane	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
Bromomethane	1500 UJ	57 UJ	58 UJ	11 UJ	12 UJ	10 U	10 U
Vinyl Chloride	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
Chloroethane	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
Methylene Chloride	720 UJ	28 U	29 U	6 U	7 U	3 BJ	2 BJ
Acetone	1500 UJ	210 U	140 U	23 U	12 UJ	14 BJ	10 BJ
Carbon Disulfide	720 UJ	28 U	29 U	1 J	6 U	5 U	5 U
1,1-Dichloroethene	720 UJ	28 U	29 U	2 J	6 U	5 U	5 U
1,1-Dichloroethane	720 UJ	28 U	9 J	2 J	6 U	5 U	5 U
1,2-Dichloroethene (total)	720 UJ	89	630	120	0.8 J	5 U	5 U
Chloroform	100 J	28 U	29 U	6 U	6 U	5 U	5 U
1,2-Dichloroethane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
2-Butanone	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
1,1,1-Trichloroethane	720 UJ	100	21 J	1 J	6 U	5 U	5 U
Carbon Tetrachloride	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Vinyl Acetate	1500 UJ	57 U	58 U	11 U	12 UJ	10 U	10 U
Bromodichloromethane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
1,2-Dichloropropane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
cis-1,3-Dichloropropene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Trichloroethene	720 UJ	490	880	23	4 J	5 U	5 U
Dibromochloromethane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
1,1,2-Trichloroethane	720 UJ	3 J	29 U	6 U	6 U	5 U	5 U
Benzene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
trans-1,3-Dichloropropene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Bromoform	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
4-Methyl-2-Pentanone	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
2-Hexanone	1500 UJ	57 U	58 U	11 U	12 U	10 U	10 U
Tetrachloroethene	720 UJ	100	5 J	2 J	6 U	5 U	5 U
1,1,2,2-Tetrachloroethane	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Toluene	720 UJ	28 U	29 U	6 U	6 U	1 BJ	2 BJ
Chlorobenzene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Ethylbenzene	690 J	28 U	29 U	6 U	6 U	5 U	5 U
Styrene	720 UJ	28 U	29 U	6 U	6 U	5 U	5 U
Xylene (total)	12000 J	28 U	29 U	6 U	6 U	5 U	5 U

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.
D = Compound identified in an analysis at a secondary dilution factor.

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NORTH BLOOMFIELD
SEMIVOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')	FIELD BLANK
SAMPLE NUMBER:	BDE41	BDE37	BDE39	BDE40	BDE36	BDE38
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90	11/29/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
Phenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
bis(2-Chloroethyl)ether	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Chlorophenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
1,3-Dichlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
1,4-Dichlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzyl alcohol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
1,2-Dichlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Methylphenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
bis(2-Chloroisopropyl)ether	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Methylphenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
N-Nitroso-di-n-propylamine	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Hexachloroethane	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Nitrobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Isophorone	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Nitrophenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4-Dimethylphenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzoic acid	1860 U	130 BJ	3700 U	3600 U	390 BJ	50 U
bis(2-Chloroethoxy)methane	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4-Dichlorophenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
1,2,4-Trichlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Naphthalene	170 J	750 UJ	770 U	740 U	770 UJ	10 U
4-Chloroaniline	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Hexachlorobutadiene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Chloro-3-methylphenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Methylnaphthalene	240 J	750 UJ	770 U	740 U	770 UJ	10 U
Hexachlorocyclopentadiene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4,6-Trichlorophenol	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4,5-Trichlorophenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
2-Chloronaphthalene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2-Nitroaniline	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
Dimethylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Acenaphthylene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,6-Dinitrotoluene	770 U	750 UJ	770 U	740 U	770 UJ	10 U

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.

NORTH BLOOMFIELD
SEMIVOLATILE ORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')	FIELD BLANK
SAMPLE NUMBER:	BDE41	BDE37	BDE39	BDE40	BDE36	BDE38
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90	11/29/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
3-Nitroaniline	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
Acenaphthene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4-Dinitrophenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
4-Nitrophenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
Dibenzofuran	770 U	750 UJ	770 U	740 U	770 UJ	10 U
2,4-Dinitrotoluene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Diethylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Chlorophenyl-phenylether	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Fluorene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Nitroaniline	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
4,6-Dinitro-2-methylphenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
N-Nitrosodiphenylamine (1)	770 U	750 UJ	770 U	740 U	770 UJ	10 U
4-Bromophenyl-phenylether	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Hexachlorobenzene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Pentachlorophenol	3700 U	3600 UJ	3700 U	3600 U	3700 UJ	50 U
Phenanthrene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Anthracene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Di-n-Butylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Fluoranthene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Pyrene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Butylbenzylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
3,3'-Dichlorobenzidine	1500 U	1500 UJ	1500 U	1500 U	1500 UJ	20 U
Benzo(a)anthracene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Chrysene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
bis(2-Ethylhexyl)phthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Di-n-octylphthalate	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzo(b)fluoranthene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzo(k)fluoranthene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzo(a)pyrene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Indeno(1,2,3-cd)pyrene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Dibenz(a,h)anthracene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
Benzo(g,h,i)perylene	770 U	750 UJ	770 U	740 U	770 UJ	10 U
TOTAL SEMIVOLATILES						

QUALIFIERS
U = Compound was analyzed for but not detected.
J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.

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NORTH BLOOMFIELD
INORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in MG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')
SAMPLE NUMBER:	MBBY41	MBBY38	MBBY39	MBBY40	MBBY37
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
Aluminum	11600	11300	8530	9660	12700
Antimony	3.1 UNJ	3.1 BNJ	3.2 UNJ	3.1 UNJ	3.2 UNJ
Arsenic	3.4	3.2	3.8	2.8	3.4
Barium	93.2	92.7	72.1	80.8	81.5
Beryllium	0.52 B	0.52 B	0.41 B	0.44 B	0.56 B
Cadmium	0.66 U	0.65 U	0.68 U	0.66 U	0.68 U
Calcium	71800	72800	86800	76500	70800
Chromium	17.2	17.4	19.4	16.4	18.1
Cobalt	8.8 B	8.5 B	8.5 B	7.2 B	8.1 B
Copper	15.9	15.5	13	13.3	28.4
Iron	19200	20100	17100	17600	20200
Lead	10.5 NJ	9.4 +NJ	7.6 NJ	8.5 NJ	11.1 *NJ
Magnesium	19800	18500	30600	21700	19300
Manganese	513	488	455	462	561
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Nickel	19.1 J	18.8 J	21 J	16 J	17.8 J
Potassium	2290	2380	2000	2100	2700
Selenium	.45 UWNJ	.44 UWNJ	0.46 UNJ	0.45 UNJ	.45 UWNJ
Silver	0.44 U	0.44 U	0.46 U	0.44 U	0.45 U
Sodium	210 B	256 B	200 B	204 B	248 B
Thallium	0.27 B	0.29 B	0.25 BW	0.22 U	0.22 B
Vanadium	21.7	21.6	17.8	19.5	24.4
Zinc	50.8 EJ	47.7 EJ	41.1 EJ	72.5 EJ	65.6 EJ
Cyanide	1.8 U	1.9 U	1.9 U	1.6 U	1.5 U

QUALIFIERS
U = Compound analyzed for but not detected.
B = Value is less than CRDL but greater than IDL.
* = Duplicate analysis not within control limits.
J = Estimated value.
N = Spiked sample recovery not within control limits.
+ = Correlation coefficient for the MSA is less than 0.995.
E = The reported value is estimated because of the presence of interference.
W = Post-digestion spike for Furnace AA analysis out of control limits, while sample absorbance is less than 50% of spike absorbance.

5

NORTH BLOOMFIELD
PESTICIDE/PCB DATA
CONCENTRATIONS: water in UG/L, soil in UG/KG

SAMPLE LOCATION:	SB 1 (6'-8')	SB 3 (4'-6')	SB 4 (8'-10')	SB 4 (DUP)	SB 5B (2'-4')	FIELD BLANK
SAMPLE NUMBER:	BDE41	BDE37	BDE39	BDE40	BDE36	BDE38
SAMPLE DATE:	11/29/90	11/28/90	11/29/90	11/29/90	11/28/90	11/29/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
Alpha-BHC	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Beta-BHC	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Delta-BHC	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Gamma-BHC (Lindane)	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Heptachlor	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Aldrin	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Heptachlor Epoxide	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Endosulfan I	19 U	18 UJ	19 U	18 U	19 UJ	0.05 U
Dieldrin	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
4,4'-DDE	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Endrin	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Endosulfan II	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
4,4'-DDD	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Endosulfan Sulfate	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
4,4'-DDT	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Methoxychlor	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Endrin Ketone	37 U	36 UJ	37 U	36 U	37 UJ	0.1 U
Alpha-Chlordane	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Gamma-Chlordane	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Toxaphene	370 U	360 UJ	370 U	360 U	370 UJ	1 U
Aroclor-1016	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1221	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1232	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1242	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1248	190 U	180 UJ	190 U	180 U	190 UJ	0.5 U
Aroclor-1254	370 U	360 UJ	370 U	360 U	370 UJ	1 U
Aroclor-1260	370 U	360 UJ	370 U	360 U	370 UJ	1 U

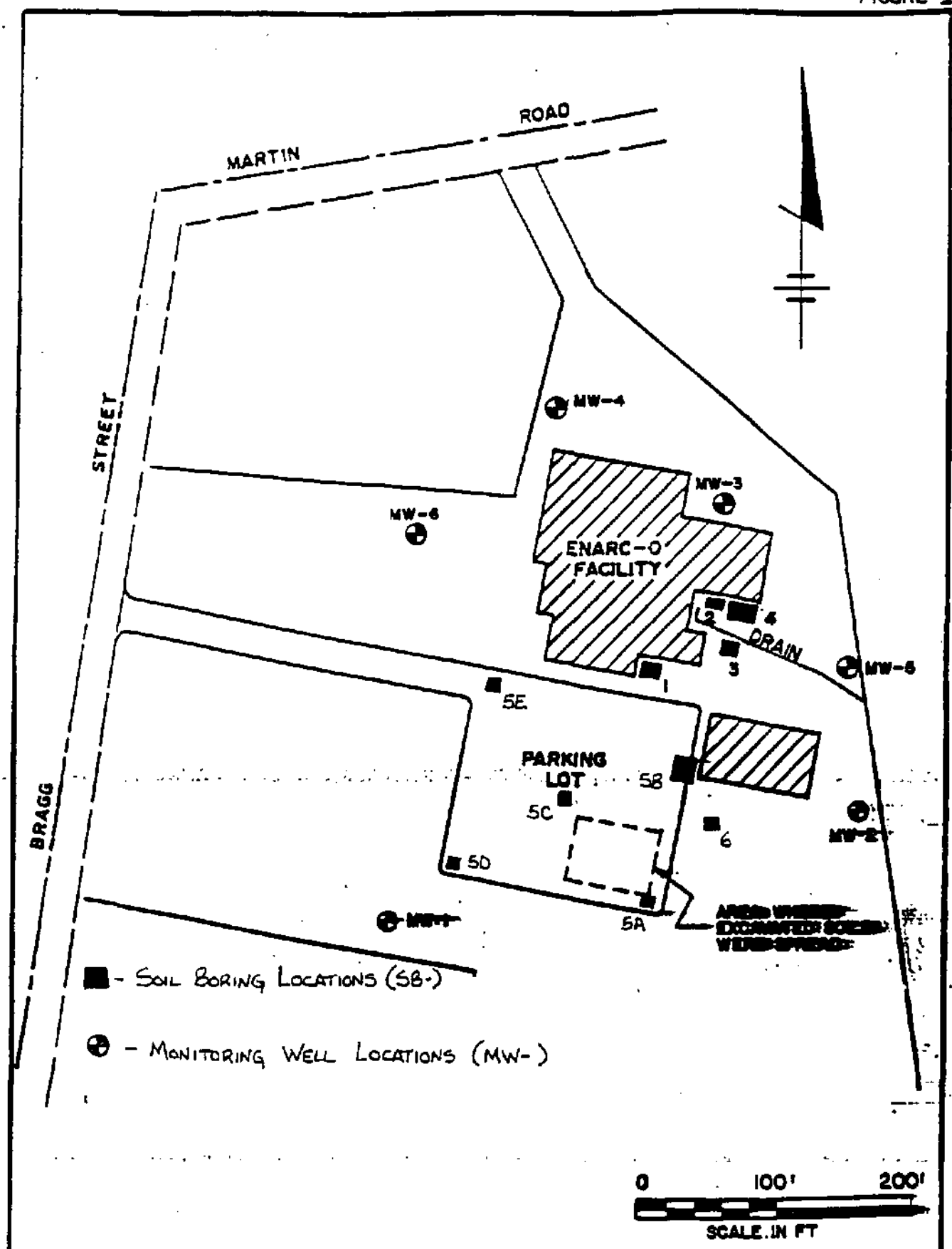
QUALIFIERS
U = Compound analyzed for but not detected.
J = Estimated value.

NORTH BLOOMFIELD
TOTAL PETROLEUM HYDROCARBONS
CONCENTRATIONS: water in MG/L

SAMPLE LOCATION:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-5 (DUP)	MW-6	FIELD BLANK	FIELD BLANK
SAMPLE NUMBER:	BGY38	BGY39	BGY40	BGY41	BGY42	BFY32	BGY43	BFY29	BFY31
SAMPLE DATE:	2/25/91	2/26/91	2/26/91	2/25/91	2/26/91	2/26/91	2/25/91	2/25/91	2/26/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
TPH	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R	<1.0 R

QUALIFIERS
R = Sample result was rejected.

FIGURE 1



KADDIS CORPORATION (ENARC-O)

NORTH BLOOMFIELD, NEW YORK

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Western Region — Rochester Field Office 42 S. Washington Street Rochester, New York 14608

Letter #54-92

Lorna McBarnette
Executive Deputy Commissioner

May 27, 1992

OFFICE OF PUBLIC HEALTH
Sue Kelly
Executive Deputy Director
Olivia Smith-Blackwell, M.D., M.P.H.
Regional Health Director

Ronald L. Years
7873 Martin Road
Honeoye Falls, N.Y. 14485

RE: Sump Sample Results
Enarc-O, Site #826011
Lima, Livingston Co.

Dear Mr. Years:

Attached are the results of the sump water sample which I collected at your residence on March 3, 1992. The sample was analyzed for volatile organic compounds at the NYS Department of Health's Wadsworth Center for Laboratories and Research in Albany. The less-than (<) symbol in front of the value means that the chemical was not present at an amount greater than the detection limit of the methodology used. The number given is the detection limit. The unit of measurement used is micrograms per liter (MCG/L) which is the same as parts per billion.

As you can see, none of the these chemicals were found in your sump water sample. Thank you for allowing me to collect the sample. If you have any questions please call me at 716-423-8071.

Sincerely,

David Napier

David L. Napier
Regional Toxics Coordinator
Bureau of Environmental Exposure
Investigation

Attachment

cc: Dr. Carlson/Mr. Wakeman
Dr. Smith-Blackwell
Mr. Van Houten - LCHD
Mr. Chiusano - DEC

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 920888 SAMPLE RECEIVED:92/03/04/ CHARGE: 8.00
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LOCATION: 826011 ENARCO
TIME OF SAMPLING: 92/03/03 10:12
DATE PRINTED:92/05/14

PARAMETER	RESULT
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
pH of Halogenated Aliquot	2

**** END OF REPORT ****

0425 NEW YORK STATE DEPARTMENT OF HEALTH 072
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 920888 SAMPLE RECEIVED:92/03/04/ CHARGE: 8.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:2524
POLITICAL SUBDIVISION:LIMA V. COUNTY:LIVINGSTON
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: 826011 ENARCO
DESCRIPTION:YEARS
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VH05021:VOLATILE HALOGENATED ORGANICS
SAMPLE TYPE: 230:SEEPAGE
TIME OF SAMPLING: 92/03/03 10:12 DATE PRINTED:92/05/14

<> >>>>> INQUIRED 920402 BY D.E.H.(LDRO2) <<<<< <>

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 92/05/14 FINAL REPORT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(2), RO(2), LPHE(1), FED( ), INFO-P( ), INFO-L( )

REGIONAL DIRECTOR OF PH ENGINEERING
NEW YORK STATE DEPARTMENT OF HEALTH
42 SOUTH WASHINGTON ST. SUBMITTED BY:NAPIER
ROCHESTER, N.Y. 14608

NORTH BLOOMFIELD
INORGANIC DATA
CONCENTRATIONS: water in UG/L, soil in MG/KG

SAMPLE LOCATION:	MW-1	MW-3	MW-5	FIELD BLANK
SAMPLE NUMBER:	MBEP02	MBEP01	MBEP03	MBEP04
SAMPLE DATE:	1/7/91	1/7/91	1/8/91	1/8/91
MATRIX:	WATER	WATER	WATER	WATER
Aluminum	1190	366	1080	19 U
Antimony	14 U	14 U	14 U	14 U
Arsenic	2.4 B	2.8 B	2 U	2 UW
Barium	192 B	58.1 B	51.8 B	2 U
Beryllium	1 U	1 U	1 U	1 U
Cadmium	3 U	3 U	3 U	3 U
Calcium	91000	88300	102000	131 B
Chromium	18.5	4.8 B	5.2 B	4 U
Cobalt	4 U	4.5 B	4 U	4 U
Copper	6 B	13.9 B	38.9	2 U
Iron	1520	626	2010	62 B
Lead	3.9	4.8 W*	4.4	1.9 B
Magnesium	34500	22100	20700	37.3 B
Manganese	60.5	30.7	45.1	1 U
Mercury	.2 UN*J	.64 N*J	.2 UN*J	.2 UN*J
Nickel	10.2 B	14.4 B	18.9 B	4 U
Potassium	2910 B	3060 B	3420 B	68 U
Selenium	4 UWJ	4 UWJ	4 UJ	4 UWJ
Silver	2 U	2 U	2 U	2 U
Sodium	11100	54100	11200	527 B
Thallium	2 UJNW	2 UJNW	2 UJNW	2 UJN
Vanadium	2.9 B	2 U	2 B	2 U
Zinc	20.9	41.6	59.1	14.7 B
Cyanide	10 U	16.7 U	10 U	10 U

QUALIFIERS
U = Compound analyzed for but not detected.
B = Value is less than CRDL but greater than IDL.
* = Duplicate analysis not within control limits.
J = Estimated value.
N = Spiked sample recovery not within control limits.
+ = Correlation coefficient for the MSA is less than 0.995.
E = The reported value is estimated because of the presence of interference.
W = Post-digestion spike for Furnace AA analysis out of control limits, while sample absorbance is less than 50% of spike absorbance.

REFERENCE NO. 33

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

Dave N:
Sump "well" (Garvey) @ 7863
has history of sampling

TABLE 1

ENARC-O MACHINE PRODUCTS, INC.

LIMA, NEW YORK

RESIDENTIAL WELL SURVEY SUMMARY

	QUESTIONNAIRE RESPONSE											FIELD EVALUATION		
ADDRESS	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
7665	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			1968	SPRING	NA		NOT INCLUDED IN H & A SURVEY
7702	F.E. WOODMAN	6242715	N	Y	Y	Y	160			1960	SPR., FALL	NA		NOT INCLUDED IN H & A SURVEY
7708	CHRIS GARDNER	6245870	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			35?			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	6241948	Y	Y	N	Y	66			1950	REG. BASIS	N		NOT ACCESSIBLE
7820	LEO JOHNSON	6241317	Y	Y	N	N	125		6			Y	72	
7829	ANDERSON	6249372	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	1989	SPRING	Y	25	PUMP IN WELL
7859	DOYLE	6249023		Y			85-90					N		CANNOT CONTACT
7865	ED J. TONDRYK	6245408	Y	Y			28			1951	NONE	N		PLUGGED
7873	YEARS	6241858		Y			120		6	1969		N		BURIED
7880	CATHY VILLARD	6245635	Y	Y	N	PIPES ONLY					NONE	N		BURIED, LOCATION UNKNOWN
7893	JANICE GARVEY	6242924	Y	N										BURIED, LOCATION UNKNOWN
7886	HARRY VELLEKOOP	6243184	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
1178	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	8	1972				
1111	TIM/CHERY HART	6244816	Y	Y	N	Y	50			1954	SPRING ONLY	N		PLUGGED WITH CEMENT
1116	WM. MALOY	6242808	Y	Y	N	N	125			1957	SPRING ONLY	Y		
1121	PETER COOPER	6242098	Y	Y	Y	Y	125		6	1989	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	6241858	Y				130			1960s	CISTERN	Y		
1155	TOMPKINS	6244783	Y	Y	N	N	50?				NONE	N		BURIED
ONTARIO ST.														
155	WM. STINSON	6242336	N	Y	Y	Y	50		6	1985	NONE	Y		DRINK. WELL IN USE; ALREADY SAMPLED BY DOH
165	WM. STINSON	6242336	N	Y	Y	Y	100		6			Y		HEAT PUMP WELL IN USE; ALREADY SAMPLED BY DOH
1885	JOANN GEORGE	6242740	N	Y	Y	Y	100?		6	1962		Y		WELL IN USE; ALREADY SAMPLED BY DOH
1926	LEWIS BUCKMAN	6243015	Y	Y	N	PLUGGED					SEASON., INTER.	N		PLUGGED WITH STONES
1944	CARL WAGNER	6242256	Y	N							REG. BASIS	N		NO WELL
1950	JOAN CLOSE	UNLIST	Y	N							REG. BASIS	N		NO WELL

Can we find these?

→ add

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	82	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 = QPRO5\70372\WELLTBL2

REV. 8/10/94

REFERENCE NO. 34

H & A OF NEW YORK

Geotechnical Engineers &
Environmental Consultants

3 February 1994
File No. 70372-42

New York State Department of
Environmental Conservation
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation
50 Wolf Road
Albany, New York 12233-7010

Attention: Mr. Gardiner Cross

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

Dear Mr. Cross:

This letter summarizes results of recent borehole geophysical investigations performed by H&A of New York (H&A) at the above-referenced site. The investigations were performed in general accordance with methods proposed in H&A's letter to the NYSDEC on 10 October 1994. The geophysical logging was performed in order to gain better understanding of the hydrogeologic conditions in the rock mass in the vicinity of the site, and to determine suitable sampling depths within each well.

I. PROGRAM DESCRIPTION

The five wells logged during the program are shown below, along with their approximate depths:

Well Location	Depth (Feet)
• 1081 Ideson Road (Miller)	82
• 1121 Ideson (Cooper)	120
• 7820 Martin (Johnson)	124
• 7873 Martin (Years)	110
• Enarc-O supply well	185

These wells were chosen based on their spatial distribution and accessibility.

The logging program was performed on 21 and 22 December 1994 by Gartner-Lee Inc. of Niagara Falls, New York under H&A of New York observation.

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Silver Spring, Maryland
Bedford, New Hampshire
Cleveland, Ohio

Each well was logged for diameter, fluid temperature, and fluid resistivity. In addition, the wells were videotaped with a downhole camera. A malfunction of the equipment rendered a videotape of poor quality that did not yield useful information. However, some notes and observations were made during the videotaping because a proper image was visible at the time of taping. These notes and observations were used in the interpretation of the geophysical data to the extent possible.

The parameters used in the logging were chosen to aid in determining potential zones where inflow of groundwater into the wellbore might be occurring. Identification of such zones would assist in determining the optimum locations for obtaining representative groundwater samples. In addition, the data might indicate potential sitewide features in the rock mass that could be used to determine sampling intervals in non-logged wells.

II. METHODOLOGY

Geophysical Logging Techniques

A Mount Sopris MGX-200 was used to geophysically log the abandoned wells water wells. The Mount Sopris MGX-200 is a digital, computer driven, portable logging device. The unit is equipped with a winch, 650 feet of cable, a laptop computer and console box.

Each geophysical log was referenced to the top of the steel casing for the groundwater monitoring wells. Logging depths were adjusted to compensate for the distance between the top of the casing and the measuring point of a particular logging tool. Each tool was decontaminated with Liquinox detergent and rinsed with potable water at the designated site decontamination area upon completion of data collection at each water well location. Decontamination procedures were followed to help minimize the possibility for cross-contamination of the water wells. The following geophysical logging probes and techniques were utilized at the site:

Fluid Temperature/Fluid Resistivity

Each monitor was initially logged with the combination fluid temperature/fluid resistivity tool to minimize any disturbance to borehole fluid stratification. Data were collected at approximately six feet per minute below the water table. Air temperature data were also collected within the borehole at a rate of seven to eight feet per minute. Temperature data were collected in units of degrees Celsius and fluid resistivity data were collected in units of Ohm-meters.

Fluid temperature and fluid resistivity logs are commonly used to assess the presence of fracture flow and water quality. In a thermally stable borehole, temperature will increase linearly with depth. A non-linear temperature change with depth can indicate the presence of hydrophysical disturbances such as groundwater entering or exiting the borehole through a fracture. Deviations in fluid conductivity values are often due to changes in the amount of total dissolved solids present, electrolytes present and fluid temperature changes. Anomalous values of fluid resistivity can be indicative of fluids with

different chemical or physical properties entering or exiting a borehole when measured in an undisturbed well.

Three-Arm Caliper

A motorized three-arm caliper tool was utilized at this site to measure the borehole smoothness in units of inches. The caliper tool used for this investigation had a diameter of investigation of 2 to 24 inches. Anomalous responses observed with the caliper tool may be indicative of incompetent zones of bedrock, bedrock fractures, bedrock voids or rough areas due to drilling. Caliper data were collected at a rate of approximately eight feet per minute at this site.

Video Inspection Logging

A Marks Products Geovision Borehole Video System was utilized to inspect the boreholes. The Geovision system was equipped with a high resolution solid state color video camera housed in a 0.75-inch outside diameter waterproof case. The system is equipped with 750 feet of PVC coated cable, a digital depth encoder, a PVC borehole centralizer, an active matrix color monitor and an 8-mm VCR.

A power problem with the unit's VCR and color monitoring system resulted in an inability to collect data at the Enarc-O supply well and the water well at 7873 Martin Road. The power problem was thought to have been corrected by the equipment supplier prior to the device's mobilization. The water wells at 1081 Ideson, 1121 Ideson and 7820 Martin roads were inspected with the video system and were reviewed during the taping using the system's color monitor prior to the development of the power problem. Unknown to the on-site geophysicist, faulty video recording heads on the VCR resulted in a very poor quality tape recording. Limited notes recorded during the inspection were used in the interpretation of the geophysical logging data; however, a detailed discussion of the video inspection results are unavailable.

III. WELL SURVEYING

Each of the offsite wells proposed for sampling was surveyed for elevation. The surveying was performed on 22 December 1994 by D.J. Parrone & Associates. Elevations of the top of the well casing were obtained at each well. All elevations are referenced to NGVD Datum.

IV. RESULTS AND DISCUSSION

The results of the logging are discussed below, first on an individual well basis, then with regard to sitewide conditions. Figure 1 shows a graphic representation of each well prepared by Gartner-Lee. Larger scale individual graphic logs for each well are shown as Figures 2 through 6. The water levels

shown on the logs are based on measurements taken on the day the logging was performed. All logs have been corrected to the surveyed casing elevations.

Table 1 summarizes key elevations for each well, and also summarizes H&A's recommended sampling depths for each well, as discussed in detail below.

1081 Ideson Road (Figure 2):

The most significant anomaly was observed in the resistivity log at approximate elevation (el.) 606 to 618 (Figure 2). This zone showed a significant increase in resistivity over the trend observed above this zone. There was also a corresponding caliper anomaly at approximately el. 607 that may represent a bedrock fracture. A caliper anomaly was also observed near the water table at el. 640, with a corresponding minor resistivity anomaly just below this depth. Based on these observations there may be significant flow to the borehole occurring in these zones. Based on these results sampling is proposed at approximate elevations 607 and 640.

1121 Ideson:

Significant flow to the borehole from the unsaturated zone was noted in this well below approximate el. 674. Cascading water was also observed during the videotaping. The cascading water created anomalous resistivity response throughout the interval above the water table, as shown on Figure 3.

Several minor caliper anomalies were observed below the water table in this borehole. In many cases there were minor "spikes" of less resistive water at corresponding elevations. The most notable of these were located at approximate elevations 584, 592, 605, and 611.

Based on these results it is proposed samples be obtained from the perched, cascading water, and from below the water table at el. 605. Analysis of the perched water will provide insight into potential contamination presence in the unsaturated zone. A description of the proposed sampling methodology is included in Appendix A. If a representative sample cannot be obtained, an alternate sample will be obtained from approximate el. 642. The sample at el. 605 will allow comparison with the sample from a similar elevation in the 1081 Ideson Road well, as discussed above.

7820 Martin Road:

Cascading perched water was also observed in this well, although at a much slower rate than that observed in the 1121 Ideson Road well. The water was observed during the videotaping to be flowing from the base of the well casing at el. 680. The fluid resistivity plot indicates relatively stable conditions in the upper 20 feet of the saturated zone, then a sharp decrease in resistivity in the interval from el. 627 to 623 (Figure 4). A corresponding caliper anomaly was also observed in this interval (el. 626), indicating potential fracturing of the rock. A minor decrease in fluid temperature was also noted at el. 626. The binary nature of the resistivity and temperature data may be indicative of

stratification of water in the borehole. The data above el. 623 may indicate a layer of water present from the inflow beneath the casing. This water may be exiting the borehole in the interval near el. 626.

A caliper anomaly was also noted at the base of the well at el. 583, with a corresponding minor anomaly in the resistivity at approximately the same elevation. This may be indicative of groundwater flow to the borehole.

Based on these results, H&A proposes obtaining groundwater samples from the cascading water (if flow is sufficient to obtain a representative sample) and near the bottom of the well at el. 583. If a representative sample of the cascading water cannot be obtained, an alternative sample will be obtained at approximate el. 640.

Enarc-O Supply Well:

A significant anomaly was observed in resistivity readings in the Enarc-O well (Figure 5) in the zone from el. 598 to 588, where resistivity decreased. A minor caliper anomaly was also noted at approximately el. 599, which may indicate fractures through which groundwater flow could occur. A small decrease in temperature also occurred at this interval.

H&A proposes a sample be obtained from approximately el. 598. In addition, a sample from approximately el. 637 (just below the water table). Minor caliper anomalies were noted here, along with a minor variation in the resistivity at this elevation. A sample in this area would be consistent with sampling intervals in the other offsite wells.

7873 Martin Road:

Caliper and resistivity anomalies were noted in the interval from el. 637 to 642, near the water table (Figure 6). Several lesser anomalies were observed below this zone, most notably at an approximate el. 592, where a distinct drop in resistivity was observed.

Based on these results H&A proposes samples be obtained in this well from the zones at elevations 637 and 592.

Sitewide Trends

The geophysical data were reviewed for indications of study-area-wide features or trends in the bedrock or groundwater that would aid in determining optimum sampling depths in unlogged wells. In general, none of the logging parameters appear to delineate specific zones of bedrock fracturing or ground water flow that are common to all wells logged.

Flow from the unsaturated zone was noted in only two of the five wells logged. The perched water observed in these wells may be a result of connection through fractures to the Honeoye Creek streambed. The wells are located approximately 250 ft. (1121 Ideson Rd.) and 900 ft. (7820 Martin Rd.) from the stream.

The caliper data indicate significant variation in caliper anomalies among the logged wells. The majority of the "spikes" in the caliper plots likely represent bedding planes in the rock formation and may not necessarily be fractures through which groundwater flow can occur. There were no specific zones or elevations where significant caliper anomalies were observed in all logged wells across the study area.

Fluid temperature measurements ranged from approximately 8° to 10.1°C. In most of the wells the fluid temperature remained relatively constant throughout the borehole, with minor variations. The well at 1081 Ideson Road showed the warmest near-surface water (approximately 10.1°C) and gradually decreased throughout the borehole with depth.

Fluid resistivity showed significant sitewide variation, ranging from approximately 10 to 23.5 ohm-meters (ohm-m). The well at 1081 Ideson Road had the highest resistivity values, ranging from approximately 20.5 to 23.5 ohm-m. This may be related to the relatively high temperatures observed in this well. The well at 7873 Martin Road showed the lowest resistivity values, averaging approximately 10 ohm-m. The remainder of the wells showed values between approximately 11.5 to 17 ohm-m. These results indicate variation in the total dissolved solids concentration in groundwater across the site and may be indicative of a variation in the source of groundwater flowing to individual wells.

Proposed Sampling in Unlogged Wells

The proposed sampling intervals for the geophysically-logged wells were discussed above and summarized in Table 1. As discussed above, distinct features or trends in bedrock or groundwater conditions across the study area were not apparent from the geophysical data. However, the intervals to be sampled in the unlogged wells can be approximated to provide reasonable data on the distribution of contaminants in groundwater.

The sample locations proposed for the logged wells generally fall into three intervals:

- perched water in the unsaturated zone, where present;
- shallow samples at or near the water table, approximately el. 635 to el. 640; and
- deeper samples in the interval from el. 582 to el. 612 where the apparent flow zones have been indicated.

The deepest proposed sample in the Enarc-O supply well does not correlate to other proposed sample intervals in the study area since the well is much deeper than the other wells.

These data indicate two primary zones that should be considered in the unlogged wells when choosing sampling intervals. The first would be shallow, within approximately five feet of the water table, or approximately el. 640. The second would be approximately el. 600. Obtaining data from similar elevations across the study area will allow reasonable comparison of data among wells and should provide an indication of vertical distribution of contaminants in groundwater. If flow from the unsaturated zone is encountered in any of the wells, a sample of this water could be substituted for the shallow water table sample. Table 1 summarizes proposed sampling elevations for the logged and unlogged wells.

We look forward to your response and authorization to proceed with the offsite sampling program as soon as possible. If you need additional information please do not hesitate to contact us.

Sincerely yours,
H&A OF NEW YORK

Robert J. Mahoney
Senior Environ. Geologist

Vincent B. Dick
Vice President

RJM/rjm:70372-42\lcross.wp

c: Ronald Iannucci, Sr., Kaddis Manufacturing
William Helferich III, Harter Secrest
David Napier, NYSDOH
Ralph Van Houten, LCDOH

Attachments
Table 1 - Proposed Sampling of Offsite Residential Wells
Figure 1 - Schematic Geophysical Logging Diagram
Figures 2 through 6 - Individual Geophysical Well Logs
Appendix A - Methodology for Sampling Cascading Water in the Unsaturated Zone

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

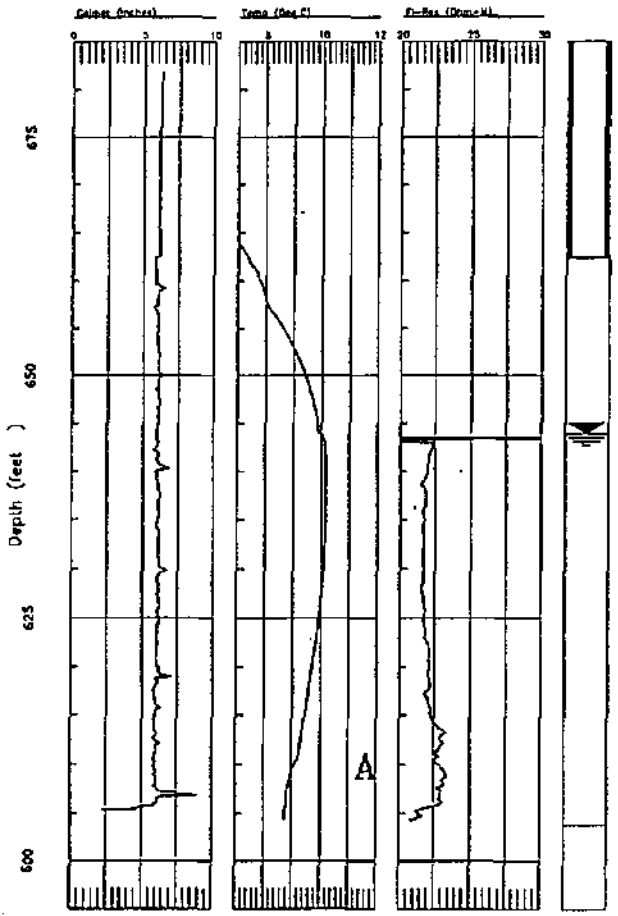
TABLE 1
PROPOSED GROUNDWATER SAMPLE LOCATIONS
OFFSITE RESIDENTIAL WELLS

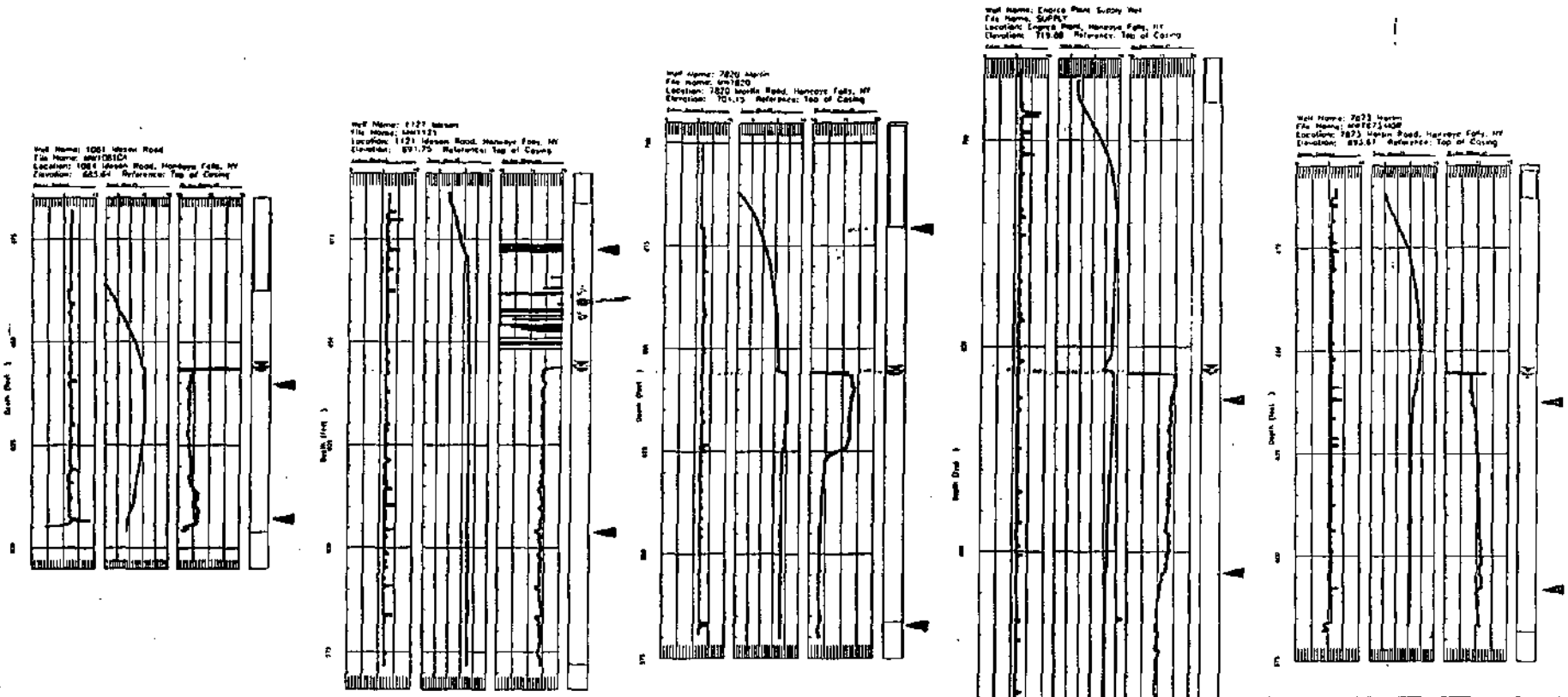
ADDRESS (OWNER)	WELL ELEVATIONS (ft.) TOP OF CASING	BOTTOM OF CASING	APPROX. WELL BOTTOM	WATER LEVEL*	PROPOSED SAMPLING ELEVATION(S) (APPROX.)
LOGGED WELLS:					
1081 Ideson (Miller)	685.64	672.5	603	643.96	640; 607
1121 Ideson (Cooper)	691.75	684	572	644.06	673 (cascading water); 605
7820 Martin (Johnson)	704.15	680	580	643.82	680 (cascading water); 583
Enarc–O Supply Well	719.88	687	535	643.17	637; 598
7873 Martin (Years)	693.61	709	583	644.43	637; 592
UNLOGGED WELLS:					
1090 Ideson	697.44	unknown	574	643.90	640; 600
1116 Ideson	697.92	unknown	572	643.98	640; 600
1146 Ideson	703.46	unknown	578	643.88	640; 600
7852 Martin	713.79	unknown	573	689.08	640; 600
7880 Martin	707.93	unknown	unknown	643.39	640; 600
1167 Bragg	715.3	unknown	584	643.66	640; 600
1191 Bragg	714.32	unknown	637	692.09	640; 600

NOTES:
1. Top of casing elevations surveyed by D.J.Parrone on 22 December 1994.
2. Refer to text for discussion of proposed sampling elevations.
3. * – water levels measured on 22 December 1994.

RJM – M:\WKS24\70372\WELLSAMP
REV. 1/23/95

Well Name: 1081 Ideson Road
File Name: MW1081CA
Location: 1081 Ideson Road, Honeoye Falls, NY
Elevation: 685.64 Reference: Top of Casing





LEGEND:

◄ PROPOSED LOCATION OF GROUNDWATER SAMPLE

NOTES:

1. PROPOSED GROUNDWATER SAMPLE LOCATIONS ADDED BY H&A OF NEW YORK
2. SEE ACCOMPANYING REPORT FOR DISCUSSION OF LOGGING RESULTS

GEOPHYSICAL LOGGING RESULTS

ENARCO PLANT, HONEOYE FALLS, NY

DRAWING SHOWING RESPONSES OF CALIPER, TEMPERATURE AND FLUID RESISTIVITY TOOLS OF WATER WELLS IN THE VICINITY OF THE ENARCO PLANT

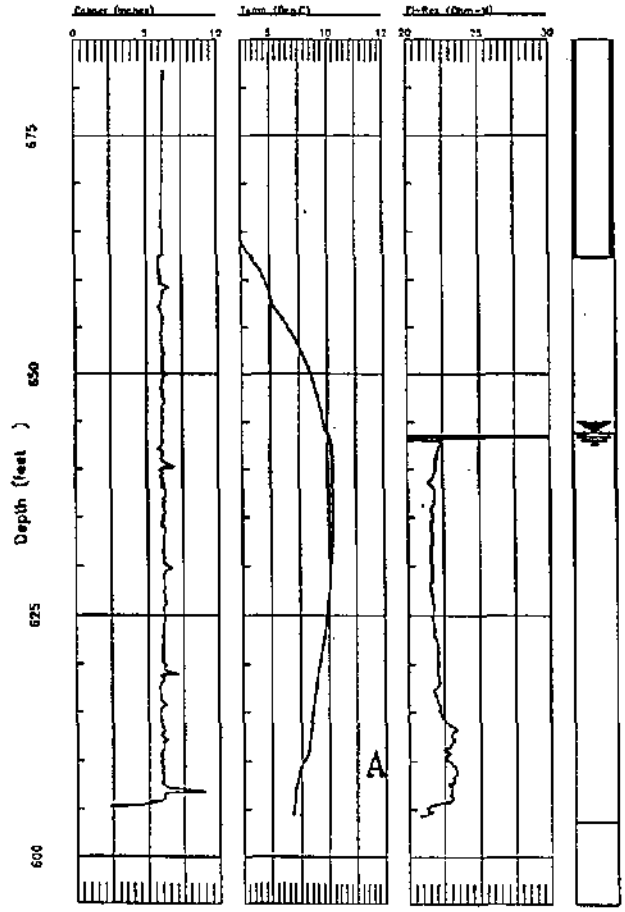
PROJECT No. 0184 DATE DECEMBER 1994 REVISED DRAWN

Gartner Lee
Niagara Falls, NY

FIGURE
1

10

Well Name: 1081 Ideson Road
File Name: MW1081CA
Location: 1081 Ideson Road, Honeoye Falls, NY
Elevation: 685.64 Reference: Top of Casing



GEOPHYSICAL LOGGING RESULTS

ENARCO PLANT, HONEOYE FALLS, NY

DRAWING SHOWING RESPONSES OF CALIPER, TEMPERATURE AND FLUID RESISTIVITY TOOLS FROM A WATER WELL AT 1081 IDESON ROAD

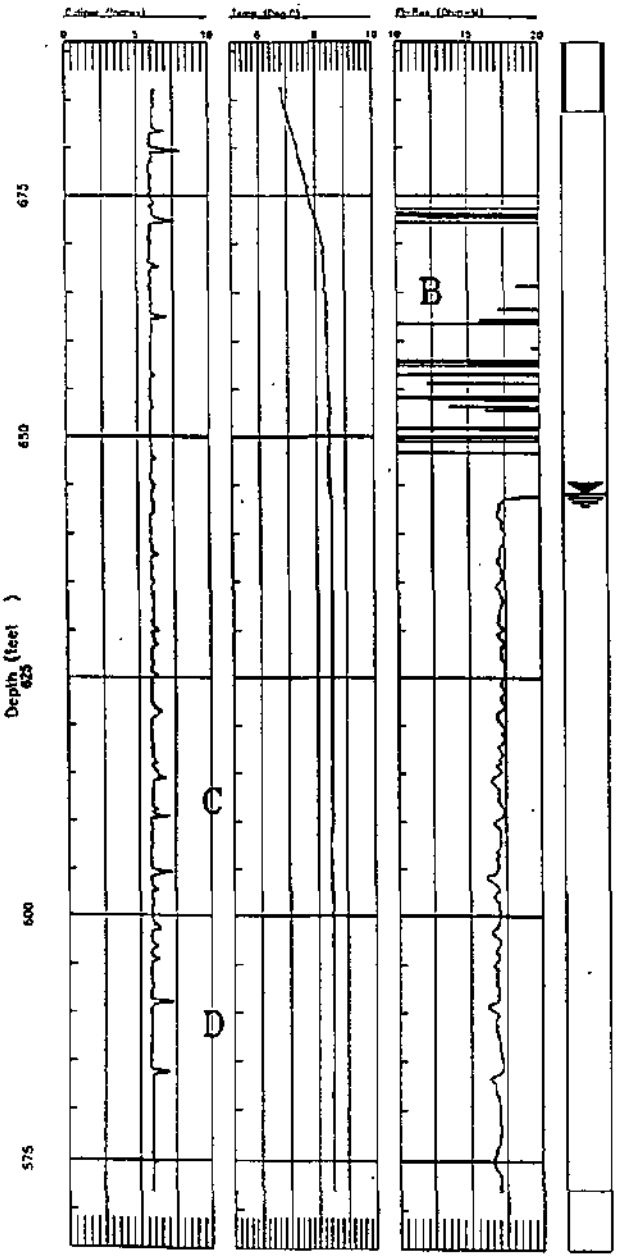
PROJECT No: 94-46 DATE: DECEMBER 1994 FILENAME: FIG1OCD

Gertner Lee Niagara Falls, NY

FIGURE 2

11

Well Name: 1121 Ideson
File Name: MW1121
Location: 1121 Ideson Road, Honeoye Falls, NY
Elevation: 691.75 Reference: Top of Casing



GEOPHYSICAL LOGGING RESULTS

ENARCO PLANT, HONEOYE FALLS, NY

DRAWING SHOWING RESPONSES OF CALIPER, TEMPERATURE AND FLUID RESISTIVITY TOOLS FROM A WATER WELL AT 1121 IDESON ROAD

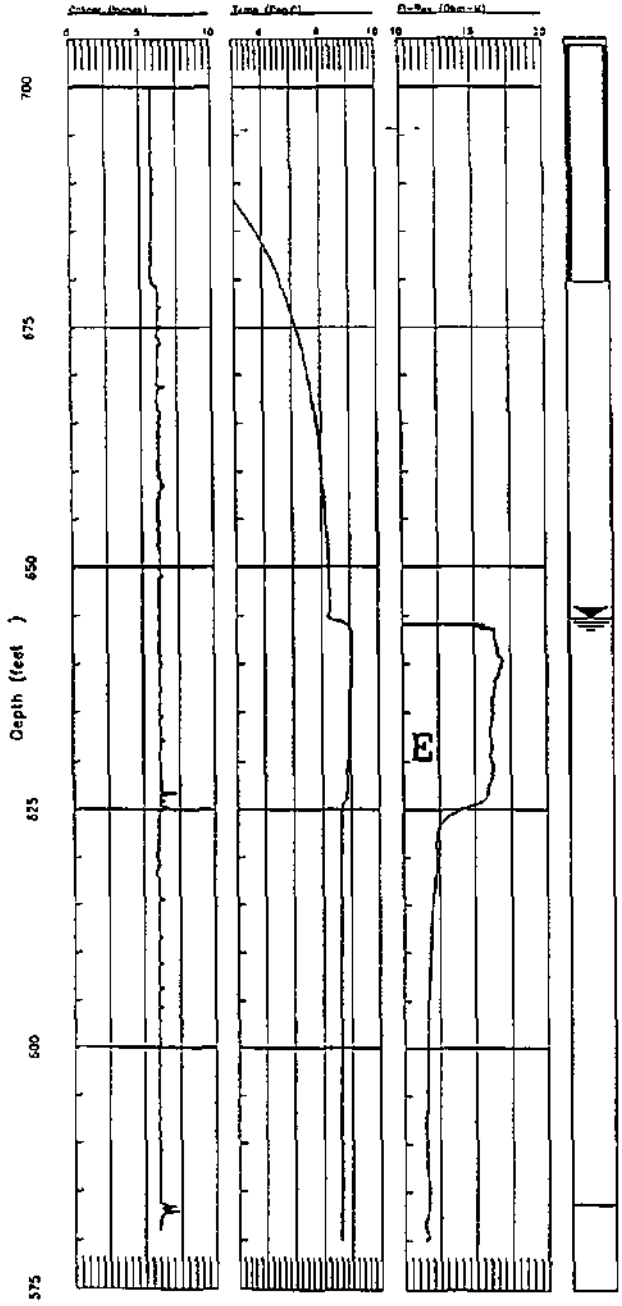
PROJECT No: 91-84 DATE: DECEMBER 1991 FILENAME: FE1DCD

Gardner Log
Niagara Falls, NY

FIGURE 3

12

Well Name: 7820 Martin
File Name: MW7820
Location: 7820 Martin Road, Honeoye Falls, NY
Elevation: 704.15 Reference: Top of Casing



GEOPHYSICAL LOGGING RESULTS

ENARCO PLANT, HONEOYE FALLS, NY

DRAWING SHOWING RESPONSES OF CALIPER, TEMPERATURE AND FLUID RESISTIVITY TOOLS FROM A WATER WELL AT 7820 MARTIN ROAD

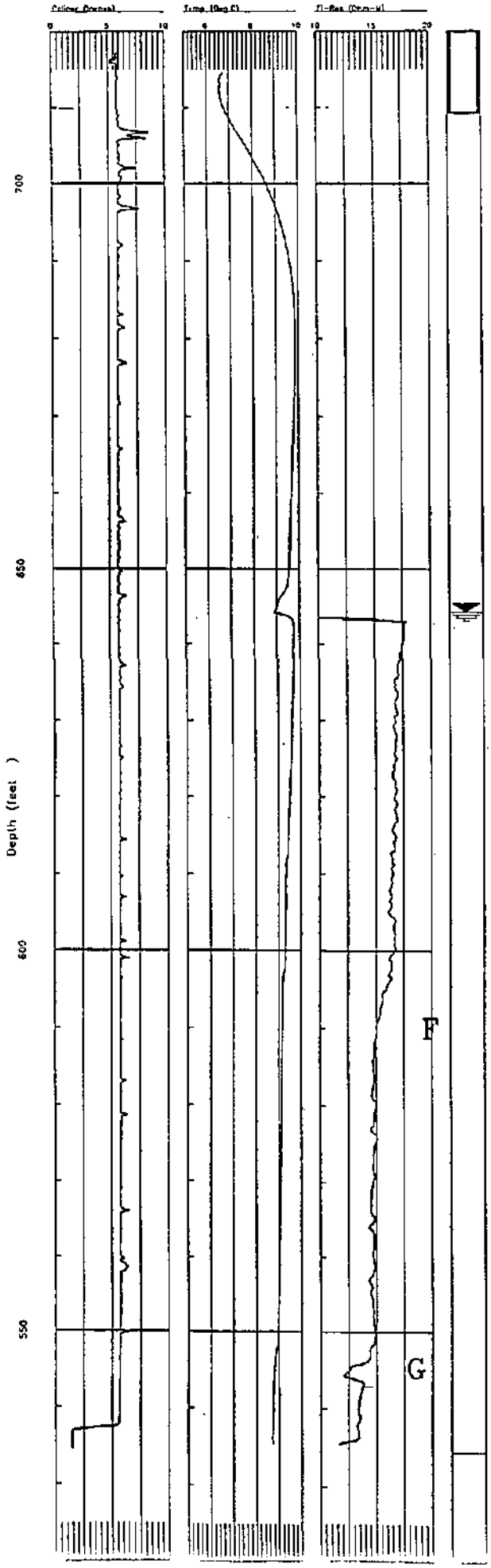
PROJECT No: [illegible] DATE: DECEMBER 1994 FILENAME: FIG4GEO

Gartner Lee
Niagara Falls, NY

FIGURE 4

13

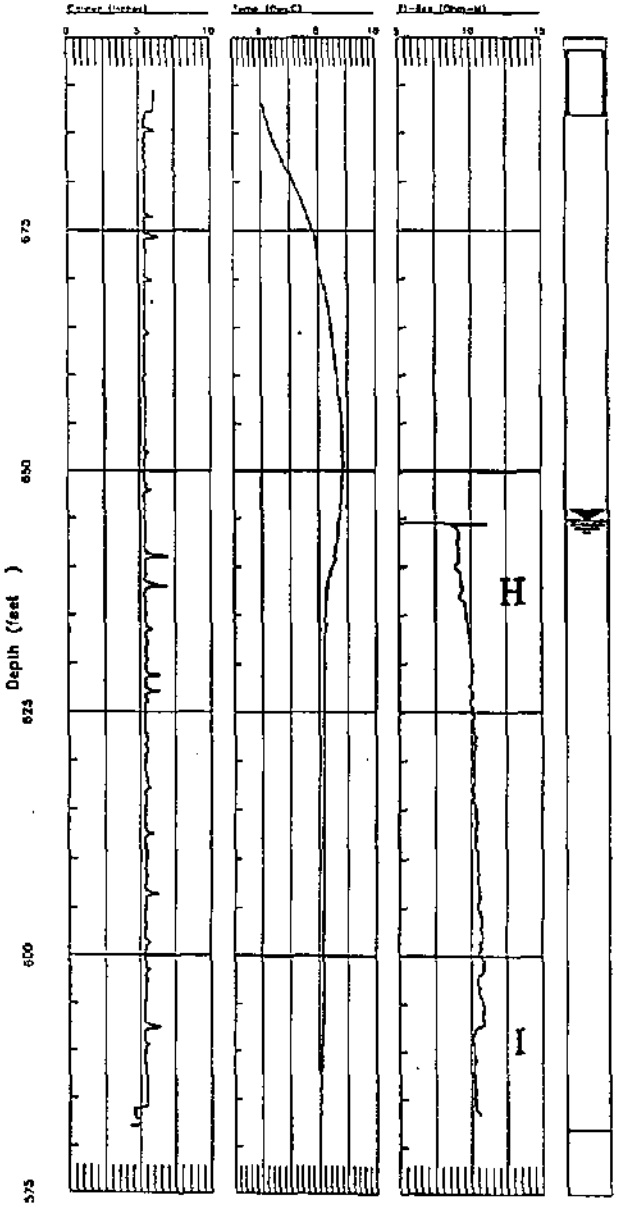
Well Name: Enarco Plant Supply Well
File Name: SUPPLY
Location: Enarco Plant, Honeoye Falls, NY
Elevation: 719.88 Reference: Top of Casing



GEOPHYSICAL LOGGING RESULTS

ENARCO PLANT, HONEOYE FALLS, NY

Well Name: 7873 Martin
File Name: MW7873.HOR
Location: 7873 Martin Road, Honeoye Falls, NY
Elevation: 693.61 Reference: Top of Casing



GEOPHYSICAL LOGGING RESULTS

ENARCO PLANT, HONEOYE FALLS, NY

DRAWING SHOWING RESPONSES OF CALIPER, TEMPERATURE AND FLUID RESISTIVITY TOOLS FROM A WATER WELL AT 7873 MARTIN ROAD

PROJECT No: 84-84 DATE: DECEMBER 1984 FILENAME: FIG6CCD

Cartner Lee
Niagara Falls, NY

FIGURE 6

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APPENDIX A

Methodology for Sampling Cascading Water in the Unsaturated Zone

APPENDIX A

Methodology for Sampling Cascading Water in the Unsaturated Zone

As discussed in the accompanying report, "cascading water" was encountered in two of the offsite residential wells during the geophysical logging program. H&A of New York has proposed obtaining samples of the perched water flowing to these boreholes from the unsaturated zone in bedrock.

In order to obtain samples of this water, H&A proposes to suspend a bailer or other open-top container into the well to the depth where inflow is occurring. In the case of the well at 1121 Ideson Road significant inflow was observed during the borehole videotaping. The flow was such that a bailer suspended in the zone of flow could be expected to retrieve a sufficient volume of water to perform the required laboratory analyses. The water would be transferred from the bailer to 40-ml glass vials immediately upon retrieval from the well.

In the case of the well at 7820 Martin Road, the flow to the borehole was slower than in the well at 1121 Ideson Road. The water was seen during the videotaping to seep from beneath the bottom of the well casing. H&A proposes to sample this well in a manner similar to the 1121 Ideson well, however it may be necessary to construct a sampling device that will divert the seepage water from the borehole wall into a sample container. A funnel-like device held against the borehole wall with a sufficient length of rigid pipe should suffice.

In both cases, the water obtained from the borehole will be transferred to glass sample vials in a manner that minimizes the loss of volatile organic compounds.

REFERENCE NO. 35

MALCOLM PIRNIE, INC.		PROJECT NOTE	
TO:	Project File	**DATE:**	March 13, 1995
FROM:	Warren K. Parry	**PROJECT #:**	8003-355
SUBJECT:	TIGER Data	**SITE NAME:**	North Bloomfield

The following table summarizes the population data provided by the Frost Associates TIGER Data Report (see attached).

Distance From Site	Population Data
0 - ¼ mile	21.26
¼ - ½ mile	78.19
½ - 1 mile	490.38
1 - 2 mile	2,237.43
2 - 3 mile	3,283.61
3 - 4 mile	3,031.77

TOTAL POPULATION: 9,142.64

FROST ASSOCIATES

P.O.Box 495, Essex, Connecticut 06426
(203) 767-7644 FAX (203) 767-1971

Jan 10, 1995

To: Lilli Gonzalez
Malcolm Pirnie Inc
104 Interchange Plaza
Cranbury, New Jersey 08512-8543

Fr: Bob Frost
Frost Associates
P.O. Box 495
Essex, Conn 06426

Tel: (203) 767-1254
Fax: (203) 767-7069

Sub: North Bloomfield Site
Lima, NY

Job: 8003-355-201

Site Longitude: 77-34-33 77.575844
Site Latitude : 42-56-14 42.937222

The CENTRACTS report below identifies the population, households, and private water wells of each Block Group that lies within, or partially within, the 4, 3, 2, 1, .5, and .25, mile "rings" of the latitude and longitude coordinates above. CENTRACTS may have up to ten radii of any length. 1000 block groups, and 15000 block group sides.

CENTRACTS uses the 1990 Block Group population and Block Group house count data found in the Census Bureau's 1990 STF-1A files. The sources of water supply data are from the Bureau's 1990 STF-3A files. The boundary line coordinates of the Block Groups were extracted from the Census Bureau's 1990 TIGER/Line Files.

CENTRACTS reports are created with programs written by Frost Associates, P.O. Box 495, Essex, Conn. The code was written using Microsoft's Quick-Basic Ver. 4.5.

Latitude and Longitude coordinates identifying a site are entered in degrees and decimal degrees. One or more county files holding Block Group boundary lines are selected for use by CENTRACTS by determining whether the site coordinates fall within the minimum and maximum Lat\Lon coordinates of each county in the state.

Each Block Group line segment has Lat\Lon coordinates representing the "From" and "To" ends of that line. All coordinates from the selected county files are read and converted from degrees, decimal degrees to X\Y miles from the site location. Each line segment is then examined whether it lies within or partially within the maximum ring from the site.

The unique Block Group ID numbers of each line segment that lie within the maximum ring are retained. All Block Group boundary lines matching the Block Group numbers are then extracted from the respective county files to obtain all sides of the included Block Groups. Boundary records are then sorted in adjacent side order to determine the shape and area of each Block Group polygon.

A method to solve for the area of a polygon is to take one-half the sum of the products obtained by multiplying each X-coordinate by the difference between the adjacent Y-coordinates. For a polygon with coordinates at adjacent angles A, B, C, D, and E. The formula can be expressed:

North Bloomfield Site
Lima, NY

Area = 1/2{Xa(Ye-Yb)+ Xb(Ya-Yb)+ Xc(Yb-Yd)+ Xd(Yc-Ye)+ Xe(Yd-Ya)}

For each ring, the selected Block Groups will be inside, outside, or intersected by the ring. When a polygon is intersected, the partial Block Group area within that ring is calculated using the method described below.

When a ring intersects a Block Group, the intersect points are solved and plotted at the points where the ring enters and exits the shape. The chord line, a line within the circle connecting the intersect points is determined. This chord line is used to calculate the segment area, the half moon shape between the chord line and the ring, and the sub-polygon created by the chord line and the Block Group boundaries that lie outside the ring.

The segment area is subtracted from the sub-polygon area to determine the area of the sub-polygon outside the ring. The area outside the ring is then subtracted from the area of the entire polygon to arrive at the inside area. This inside area is then divided by the tract's total area to determine the percentage of area within the ring. This process is repeated for each block group that is intersected by one of the rings. The total area, partial area, and percentage of partial area of those block groups within, or partially within a ring, are held in memory for the report.

On occasion, the algorithm described above is unable to determine the area of the partial area. Within the report program is a "Paint" routine which allows an enclosed shape to be highlighted. Another routine calculates the percentage of highlighted screen pixels to the pixels within the polygon. A manual entry is allowed. Both the "paint" method and manual entry method over ride the calculated method.

CENTRACTS lists, starting on page 4, all Block Groups in State, County, Census Tract, and Block Group ID order that lie within, or partially within, the maximum ring. Each Block Group is identified by a City or Town name and by the Block Group's State, County, Tract and Block Group ID number. Following is the Block Group's 1990 population and house count extracted from the Census Bureau's 1990 STF-1A files.

The next four columns display water source data from the 1990 STF-3A files. The first column is "Units with Public system or private company source of water", followed by "Units with individual well, Drilled, source of water"; "Units with individual well, Dug, source of water" and "Units with Other source of water".

For each ring, CENTRACTS then shows the Block Groups that are within that ring, the Block Group's total area in square miles, the partial area of the Block Group within that ring, and the partial percentage within the ring. The areas of the included Block Group and the partial areas are then totaled.

The last section tallies the demographic data within each ring. The percentage of area for each Block Group is multiplied times the census data for that Block Group and totaled for all Block Group's within the ring. Ring totals are then determined by subtracting the three mile data from the four mile, the two mile from the three mile, one from the two, etc... Population on private wells is calculated using the formula: ((Drilled + Dug Wells) / Households) * Population

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[redacted]orth Bloomfield Site
[redacted]ima, NY

No.	City	Block Group ID	Blk Grp People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	York	36051 0302 4	3124	1208	886	61	242	0
2	Lima	36051 0306 1	1759	638	169	73	376	40
3	Lima	36051 0306 2	2428	884	848	8	35	0
4	Mendon	36055 0124 4	2817	970	616	28	327	9
5	Mendon	36055 0124 5	2587	1106	1092	0	29	0
6	Rush	36055 0133 3	1291	468	283	12	163	6
7	East Bloomfield	36069 0505 1	1150	472	295	7	133	18
8	East Bloomfield	36069 0505 2	1386	524	230	22	301	0
	Totals:		16542	6270	4419	211	1606	73

North Bloomfield Site
Lima, NY

City	Census Tract ID		Tract People	House Count	Public Water	Drilled Wells	Dug Wells	Other Wells
East Bloomfield	36069 0505	1	1150	472	295	7	133	18
East Bloomfield	36069 0505	2	1386	524	230	22	301	0
	Sub Totals:		2536	996	525	29	434	18
Lima	36051 0306	2	2428	884	848	8	35	0
Lima	36051 0306	1	1759	638	169	73	376	40
	Sub Totals:		4187	1522	1017	81	411	40
Mendon	36055 0124	5	2587	1106	1092	0	29	0
Mendon	36055 0124	4	2817	970	616	28	327	9
	Sub Totals:		5404	2076	1708	28	356	9
Rush	36055 0133	3	1291	468	283	12	163	6
	Sub Totals:		1291	468	283	12	163	6
York	36051 0302	4	3124	1208	886	61	242	0
	Sub Totals:		3124	1208	886	61	242	0

North Bloomfield Site
Lima, NY

For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	York	36051 3024	27.641706	0.823154	2.98
2	East Bloomfield	36069 5052	18.662149	6.372819	34.15
3	Lima	36051 3062	3.261296	2.772079	85.00
4	Mendon	36055 1244	19.513077	13.201026	67.65
5	Mendon	36055 1245	5.437027	5.437027	100.00
6	Rush	36055 1333	12.028028	3.157627	26.25
7	East Bloomfield	36069 5051	6.259375	4.953599	79.14
8	Lima	36051 3061	30.919155	13.548152	43.82
	Totals:		123.721817	50.265484	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	East Bloomfield	36069 5052	18.662149	2.368847	12.69
3	Lima	36051 3062	3.261296	1.591216	48.79
4	Mendon	36055 1244	19.513077	6.787243	34.78
5	Mendon	36055 1245	5.437027	5.358376	98.55
6	Rush	36055 1333	12.028028	0.053044	0.44
7	East Bloomfield	36069 5051	6.259375	4.146589	66.25
8	Lima	36051 3061	30.919155	7.969019	25.77
	Totals:		96.080109	28.274334	

For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	East Bloomfield	36069 5052	18.662149	0.114859	0.62
3	Lima	36051 3062	3.261296	0.314157	9.63
4	Mendon	36055 1244	19.513077	1.152105	5.90
5	Mendon	36055 1245	5.437027	3.329562	61.24
7	East Bloomfield	36069 5051	6.259375	3.143806	50.23
8	Lima	36051 3061	30.919155	4.511881	14.59
	Totals:		84.052078	12.566370	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
5	Mendon	36055 1245	5.437027	0.691897	12.73

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North Bloomfield Site
Lima, NY

7	East Bloomfield	36069 5051	6.259375	0.956030	15.27
8	Lima	36051 3061	30.919155	1.493665	4.83
	Totals:		42.615555	3.141593	

For Radius of .5 Mi., Circle Area = 0.785398

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
5	Mendon	36055 1245	5.437027	0.012720	0.23
7	East Bloomfield	36069 5051	6.259375	0.389798	6.23
8	Lima	36051 3061	30.919155	0.382880	1.24
	Totals:		42.615555	0.785398	

For Radius of .25 Mi., Circle Area = 0.196350

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
7	East Bloomfield	36069 5051	6.259375	0.079579	1.27
8	Lima	36051 3061	30.919155	0.116771	0.38
	Totals:		37.178532	0.196350	

North Bloomfield Site
Lima, NY

========== Site Data ==========

Population:	9142.65
Households:	3504.49
Drilled Wells:	75.75
Dug Wells:	702.77
Other Water Sources:	39.44

========== Partial (RING) data ==========

---- Within Ring: 4 Mile(s) and 3 Mile(s) ----

Population:	3031.77
Households:	1100.08
Drilled Wells:	35.81
Dug Wells:	319.43
Other Wells:	14.05

** Population On Private Wells: 979.01

---- Within Ring: 3 Mile(s) and 2 Mile(s) ----

Population:	3283.61
Households:	1251.29
Drilled Wells:	23.21
Dug Wells:	219.38
Other Wells:	9.98

** Population On Private Wells: 636.61

---- Within Ring: 2 Mile(s) and 1 Mile(s) ----

Population:	2237.43
Households:	909.46
Drilled Wells:	12.13
Dug Wells:	121.79
Other Wells:	10.73

** Population On Private Wells: 329.47

---- Within Ring: 1 Mile(s) and .5 Mile(s) ----

Population:	490.38
Households:	203.78
Drilled Wells:	3.26
Dug Wells:	29.16
Other Wells:	3.07

** Population On Private Wells: 78.01

North Bloomfield Site
Lima, NY

---- Within Ring: .5 Mile(s) and .25 Mile(s) ----

Population:	78.19
Households:	31.47
Drilled Wells:	0.98
Dug Wells:	9.90
Other Wells:	1.24

** Population On Private Wells: 27.01

---- Within Ring: .25 Mile(s) and 0 Mile(s) ----

Population:	21.26
Households:	8.41
Drilled Wells:	0.36
Dug Wells:	3.11
Other Wells:	0.38

** Population On Private Wells: 8.79

REFERENCE NO. 36

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-355

Date: February 17, 1995 Time: 2:45 AM ☐ PM ☑

Outgoing Call

To: Gardiner Cross (518) 457-3373
Telephone No.

Affiliation: NYSDEC

Malcolm Pirnie Staff: Warren K. Parry (609) 860-0100
Telephone No.

Summary of Conversation:

I called Mr. Cross to discuss some questions I had regarding the information he sent me. I asked him if there has every been any TCL sample analysis associated with this site. He said he thinks there was, but wouldn't be able to put his hands on it. I should call David Shazano to determine if it has been done and where it is. Then I will call Mr. Cross and tell him where he can find it. He said he would then be able to help me with that.

I also asked Mr. Cross if he has ever observed people fishing directly near the plant. He has not, but imagines that people would tend to fish near the bridge (a couple of hundred yards downstream of the site) because access to the creek near the plant is more difficult.

Mr. Cross said that O'Brien and Gere had done some work to determine if there was Karst near the site. They have not found any sinkholes. Additionally, the downhole geologging does not give any indications of Karst. The only indication he has is that there are some enlarged joints along the stream bed (3-4 cm wide). But he cannot truly say that the site is underlain by a Karst Aquifer.

He could not locate the O'Brien and Gere report at the moment, but said if I sent him a letter (fax: 518-457-3972) as a reminder, he would keep looking for me.

For the SPDES data, I need to call the NYSDEC regional office in Avon, and speak to someone in the Division of Water. The number there is (716) 226-2466.

He believes that the locations for the soil samples are in the workplan. They did not change any locations for the actual work. If it is not there I will call him back to try to get that information.

REFERENCE NO. 37

MALCOLM PIRNIE, INC.		PROJECT NOTE	
TO:	Project File	**DATE:**	January 6, 1995
FROM:	Warren K. Parry	**PROJECT #:**	8003-355
SUBJECT:	Sensitive Environments	**SITE NAME:**	North Bloomfield

The following summarizes the information provided by the Natural Heritage Database System.

There are no federally or state endangered species within four miles of the site, or within fifteen miles along the surface water pathway.

REFERENCE NO. 38

MALCOLM PIRNIE, INC.		PROJECT NOTE	
TO:	Project File	**DATE:**	March 13, 1995
FROM:	Warren K. Parry	**PROJECT #:**	8003-355
SUBJECT:	Groundwater Apportionment	**SITE NAME:**	North Bloomfield

Some residents within 4-miles of the site utilize well water for their drinking water supply. Most of these are private wells, located at the residence. Public water supply within 4-miles of the site is obtained from surface water. Most towns north and northwest rely on public water supply systems for their water source. Other towns to the south also maintain public water supply systems. A house count of those individuals utilizing private well water is provided on the attached table. Those residences not included in the house count obtain public water.

The number of houses in each ring were multiplied by the appropriate people per household numbers obtained from the U.S. Census Bureau (attached). This produces the total population within each ring.

HOUSE COUNT - NORTH BLOOMFIELD SITE

Radius (Miles)	Livingston Co. Houses	Avg. People Per House	Total People Livingston Co.	Monroe Co. Houses	Avg. People Per House	Total People Monroe Co.	Ontario Co. Houses	Avg. People Per House	Total People Ontario Co.	TOTAL ALL PEOPLE
0 - ¼	0	2.68	0	0	2.54	0	4	2.64	10.56	10.56
¼ - ½	3	2.68	8.04	0	2.54	0	0	2.64	0	8.04
½ - 1	33	2.68	88.44	4	2.54	10.16	4	2.64	10.56	109.16
1 - 2	45	2.68	120.6	18	2.54	45.72	33	2.64	87.12	253.44
2 - 3	80	2.68	214.4	119	2.54	302.26	70	2.64	184.8	701.46
3 - 4	68	2.68	182.24	167	2.54	424.18	64	2.64	168.96	775.38
TOTALS	229	N/A	613.72	308	N/A	782.32	175	N/A	462	1858.04

Total Houses:	712
Total People:	1858.04
Livingston Co.:	613.72
Monroe Co.:	782.32
Ontario Co.:	462

Table 6. Household, Family, and Group Quarters Characteristics: 1990

For definitions of terms and meanings of symbols, see text

State County Place and [In Selected States] County Subdivision	Persons in households	All households	Family households			Nonfamily households			Persons per—		Persons in group quarters		
			Total	Married-couple family	Female householder, no husband present	Total	Householder living alone		Household	Family	Total	Institutionalized persons	Other persons in group quarters
							Total	65 years and over					
								Female					
The State	17 445 198	6 639 322	4 489 812	3 213 845	919 266	2 150 010	1 806 563	700 816	546 755	2.63	3.22	845 265	267 122	278 143
COUNTY														
Albany County	278 399	115 824	71 455	54 534	13 355	44 369	35 050	13 559	10 777	2.40	3.04	14 195	4 286	9 909
Allegany County	45 639	17 077	12 378	10 721	1 466	4 693	3 843	1 927	1 478	2.68	3.13	4 837	398	4 439
Bronx County	1 163 368	474 112	288 609	146 234	118 610	135 503	119 218	46 431	35 780	2.74	3.35	40 421	28 534	11 887
Broome County	204 344	81 843	54 619	44 163	8 183	27 024	22 037	9 065	7 203	2.50	3.05	7 816	3 420	4 396
Cattaraugus County	80 833	30 458	21 657	17 395	3 228	8 799	7 543	3 651	2 789	2.65	3.18	3 401	1 035	2 366
Cayuga County	77 968	29 075	20 927	16 660	3 127	8 148	6 874	3 418	2 680	2.68	3.19	4 345	3 955	390
Chautauqua County	136 558	53 696	37 203	29 962	5 506	16 493	14 035	6 849	5 459	2.54	3.07	5 337	2 557	2 780
Chemung County	90 460	35 275	24 808	19 666	4 058	10 467	8 992	4 387	3 505	2.56	3.08	4 735	3 788	947
Chenango County	50 896	19 141	13 821	11 438	1 670	5 320	4 451	2 085	1 602	2.66	3.14	872	840	32
Clinton County	77 971	29 123	20 839	17 279	2 594	8 284	6 429	2 626	2 111	2.68	3.14	7 998	4 282	3 716
Columbia County	60 884	23 696	16 882	13 658	2 339	6 814	5 689	2 759	2 078	2.57	3.04	2 098	1 825	273
Cortland County	45 664	17 247	11 799	9 461	1 681	5 448	4 070	1 860	1 513	2.65	3.13	3 299	510	2 789
Delaware County	45 233	17 646	12 374	10 224	1 552	5 272	4 458	2 308	1 748	2.56	3.07	1 992	660	1 332
Dutchess County	240 984	89 567	64 757	53 635	8 353	24 810	19 884	7 705	6 051	2.69	3.18	18 478	11 475	7 003
Erie County	944 115	376 994	256 472	192 646	49 968	122 522	105 083	45 370	35 665	2.50	3.09	26 617	15 138	11 279
Essex County	34 824	13 721	9 498	7 805	1 204	4 223	3 520	1 682	1 280	2.54	3.07	2 328	2 223	105
Franklin County	42 549	16 284	11 265	8 976	1 677	5 019	4 197	2 064	1 612	2.61	3.16	3 991	3 012	979
Fulton County	53 276	20 995	14 602	11 601	2 242	6 393	5 412	2 894	2 281	2.54	3.05	915	700	215
Genesee County	58 858	21 616	16 050	13 269	2 054	5 564	4 671	2 332	1 860	2.72	3.19	1 202	800	402
Greene County	47 080	16 596	11 642	9 465	1 612	4 954	4 245	2 033	1 488	2.54	3.05	2 659	2 474	185
Hamilton County	5 197	2 153	1 508	1 266	170	645	550	241	172	2.41	2.89	82	82	-
Herkimer County	64 636	24 936	17 576	14 347	2 369	7 360	6 246	3 602	2 594	2.59	3.11	1 161	840	321
Jefferson County	103 614	37 851	28 163	23 155	3 680	9 688	8 005	3 772	2 996	2.74	3.19	7 329	2 589	4 740
Kings County	2 266 401	828 199	535 284	335 295	177 871	292 915	236 977	92 972	71 504	2.74	3.40	34 263	16 651	17 612
Lewis County	26 475	9 253	7 056	5 985	744	2 197	1 889	964	728	2.86	3.32	321	309	12
Livingston County	56 722	21 197	15 178	12 558	1 896	6 019	4 643	2 043	1 610	2.68	3.16	5 595	2 212	3 383
Madison County	64 006	23 567	17 162	14 137	2 176	6 405	5 050	2 326	1 808	2.72	3.17	5 114	776	4 338
Monroe County	691 387	271 944	182 813	140 622	34 008	89 131	73 166	25 702	20 400	2.54	3.11	22 581	8 405	14 176
Montgomery County	50 956	20 185	14 028	11 058	2 202	6 157	5 432	3 081	2 408	2.52	3.06	1 025	960	65
Nassau County	1 266 740	431 515	344 502	286 638	43 950	87 013	73 804	35 564	28 221	2.94	3.30	20 608	9 799	10 809
New York County	1 428 973	716 422	301 041	187 016	92 055	415 381	348 136	87 139	64 439	1.99	2.99	58 563	13 988	44 575
Niagara County	216 912	84 809	59 732	47 221	9 822	25 077	22 119	10 080	7 797	2.56	3.10	3 844	2 358	1 486
Oneida County	236 328	92 562	63 735	50 430	10 385	28 827	24 950	11 640	9 110	2.55	3.12	14 508	9 522	4 986
Onondaga County	453 012	177 898	118 575	91 978	21 081	59 323	47 047	18 082	14 374	2.55	3.12	15 961	5 859	10 102
Ontario County	92 094	34 929	25 143	20 792	3 210	9 786	7 716	3 414	2 675	2.64	3.10	3 007	1 497	1 510
Orange County	293 491	101 506	77 777	63 207	10 401	24 393	19 975	8 604	6 611	2.89	3.35	14 136	6 271	7 865
Orleans County	39 588	14 428	10 685	8 608	1 484	3 743	3 119	1 482	1 146	2.76	3.20	2 258	2 053	205
Oswego County	116 928	42 434	30 905	25 013	4 231	11 529	9 150	4 027	3 158	2.76	3.22	4 843	899	3 944
Otsego County	55 592	21 725	14 768	12 258	1 795	6 957	5 414	2 679	2 056	2.56	3.06	4 925	746	4 179
Putnam County	82 838	28 094	22 549	19 675	2 028	5 545	4 610	1 596	1 202	2.95	3.32	1 103	299	804
Queens County	1 926 375	720 149	490 915	351 675	102 674	229 234	196 008	82 433	65 305	2.67	3.25	27 223	18 938	8 285
Rensselaer County	148 566	57 612	39 356	30 925	6 666	18 256	14 715	6 231	4 881	2.58	3.13	5 883	1 538	4 327
Richmond County	371 574	130 539	99 059	78 198	16 249	31 460	27 314	10 516	8 205	2.85	3.33	7 403	5 222	2 181
Rockland County	257 325	84 874	66 583	55 520	8 357	18 291	15 067	6 028	4 838	3.03	3.46	8 150	4 994	3 156
St. Lawrence County	101 384	37 964	26 784	21 809	3 663	11 180	8 926	4 223	3 320	2.67	3.16	10 590	3 232	7 358
Saratoga County	177 151	66 625	48 363	40 835	5 597	18 262	14 204	5 283	4 073	2.67	3.14	4 125	2 224	1 901
Schenectady County	144 989	59 181	39 702	31 284	6 556	19 479	16 611	7 649	6 063	2.45	3.01	4 804	2 201	2 103
Schoharie County	29 759	11 257	8 127	6 705	1 016	3 130	2 523	1 249	916	2.64	3.10	2 100	450	1 650
Schuyler County	18 176	6 818	5 025	4 140	618	1 793	1 471	753	571	2.67	3.11	486	474	12
Seneca County	32 452	12 285	8 998	7 421	1 156	3 287	2 708	1 296	981	2.64	3.09	1 231	670	561
Steuben County	97 128	37 299	26 447	21 446	3 615	10 852	9 194	4 286	3 374	2.60	3.11	1 960	1 690	270
Suffolk County	1 292 470	424 719	340 593	282 081	44 183	84 126	67 834	29 961	23 650	3.04	3.40	29 394	16 882	12 512
Sullivan County	63 858	24 576	17 090	13 848	2 344	7 486	6 216	2 916	2 095	2.60	3.13	5 419	2 829	2 590
Tioga County	51 974	18 838	14 670	12 192	1 640	4 368	3 670	1 594	1 252	2.76	3.17	363	318	45
Tompkins County	82 093	33 338	19 049	15 488	2 661	14 289	9 066	2 608	2 105	2.46	2.98	12 004	848	11 156
Ulster County	156 774	60 807	42 213	33 839	6 186	18 594	14 799	5 988	4 628	2.58	3.09	8 530	3 653	4 877
Warren County	58 122	22 559	15 788	12 740	2 254	6 771	5 519	2 591	2 070	2.58	3.09	1 087	513	574
Washington County	55 682	20 256	15 023	12 218	2 032	5 233	4 295	2 180	1 649	2.75	3.21	3 648	3 519	129
Wayne County	87 841	31 977	23 961	19 787	3 048	8 016	6 643	2 948	2 254	2.75	3.17	1 282	962	320
Westchester County	845 770	320 030	227 827	180 205	37 133	92 203	79 330	33 272	26 725	2.64	3.16	29 096	16 022	13 074
Wyoming County	38 731	13 897	10 528	8 857	1 375	3 369	2 847	1 391	1 088	2.79	3.23	3 778	3 709	67
Yates County	22 158	8 419	6 100	5 111	698	2 319	1 909	996	782	2.63	3.09	652	269	383
PLACE AND COUNTY SUBDIVISION														
Adams village, Jefferson County	1 742	726	469	379	78	257	231	131	112	2.40	3.04	11	11	-
Adams town, Jefferson County	4 966	1 839	1 335	1 115	177	504	424	220	183	2.70	3.20	11	11	-
Adams Center CDP, Jefferson County	1 675	591	455	378	64	136	102	43	36	2.83	3.22	-	-	-
Adams Village, Jefferson County	1 842	731	505	378	94	206	171	106	87	2.59	3.05	-	-	-
Addison town, Steuben County	2 665	995	730	556	127	265	215	118	97	2.66	3.08	-	-	-
Afton village, Chenango County	838	337	238	207	26	99	86	52	38	2.49	3.07	-	-	-
Afton town, Chenango County	2 972	1 092	814	670	98	278	219	108	81	2.72	3.13	-	-	-
Airmont CDP, Rockland County	7 540	2 282	2 042	1 817	169	240	196	92	77	3.30	3.51	295	216	79
Akron village, Erie County	2 895	1 185	790	621	137	395	350	226	176	2.44	3.06	11	-	11
Alabama town, Genesee County	1 998	678	565	468	68	133	118	59	42	2.95	3.30	-	-	-
Albany city, Albany County	91 458	42 121	20 308	12 695	6 193	21 813	16 239	5 659	4 481	2.17	2.94	9 624	2 338	7 286
Albertson CDP, Nassau County	5 166	1 808	1 484	1 261	153	324	293	177	150	2.86	3.21	-	-	-
Albion village, Orleans County	5 710	2 337	1 506	1 061	247	813	704	350	284	2.46	3.06	153	121	32
Albion town, Orleans County	6 259	2 394	1 625	1 219	316	769	659	319	249	2.61	3.19	1 919	1 887	32
Albion town, Oswego County	2 028	638	528	442	54	110	81	26	12	3.18	3.45	15	15	-
Alden village, Erie County	2 443	955	667	558	77	288	251	134	103	2.56	3.13	14	-	14
Alden town, Erie County	8 587	2 991	2 411	2 100	226	580	491	259	200	2.87	3.25	1 785	1 771	14
Alexander village, Genesee County	445	150	123	102	12	27	23	14	13	2.97	3.28	-	-	-
Alexander town, Genesee County	2 233	742	621	543	47	121	99	41	33	3.01	3.28	-	-	-
Alexandria town, Jefferson County	3 899	1 505	1 091	878	133	414	345	186	139	2.59	3.05	50	21	29
Alexandria Bay village, Jefferson County	1 154	504	309	222	66	195	131	95	76	2.29	2.96	40	21	19
Alfred village, Allegany County	1 055	687	191	177	12	296	192	59	52	2.17	2.81	3 504	-	3 504
Alfred town, Allegany County	2 287	958	517	460	36	441	308	87	76	2.39	3.02	3 504	-	3 504
Allegany village, Cattaraugus County	1 944	754	459	383	57	295	193	116	91	2.58	3.06	36	36	-
Allegany town, Cattaraugus County	6 410	2 399	1 920	1 484	196	479	320	246	209	2.67	3.12	1 917	36	1 881
Allegheny observation, Cattaraugus County	1 139	619	289	187	82	130	107	44	31	2.22	3.30	4	-	4
Almond town, Allegany County	606	727	109	99	6	28	26	14	8	2.96	3.40	-	-	-
Alma town, Allegany County	838	293	240	210	17	53	45	28	15	2.86	3.16	8	8	-
Almond village	458	185	133	108	22	52	47	27	21	2.48	3.00	-	-	-
Almond town, Allegany County	442	175	128	103	22	47	43	25	20	2.53	3.04	-	-	-
Altamont village, Albany County	16	10	5	5	-	5	4	2	1	1.60	2.00	-	-	-

REFERENCE NO. 39

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-355

Date: February 14, 1995 Time: 2:15 AM ☐ PM ☑

Incoming Call

From: Gardiner Cross (518) 457-3373
Telephone No.

Affiliation: NYSDEC

Malcolm Pirnie Staff: Warren K. Parry WKP (609) 860-0100
Telephone No.

Summary of Conversation:

I will be able to obtain a copy of the RI/FS work plan from Mr. Cross. He will send it out today. In addition, he is going to send me some recent correspondence on the direction they feel the remediation is headed. Mr. Cross indicated that the state's position is that there should be some sort of pump and treat system at the Enarc-O site. Additionally, Mr. Cross feels that there is going to be a soil vapor extraction system installed on the Enarc-O property.

REFERENCE NO. 40

MALCOLM PIRNIE, INC.		PROJECT NOTE	
TO:	Project File	**DATE:**	January 6, 1995
FROM:	Warren K. Parry	**PROJECT #:**	8003-355
SUBJECT:	Wetlands Acreage	**SITE NAME:**	North Bloomfield

The following table summarizes the acreage for each ring of the North Bloomfield site.

Distance From Site	Wetlands Acreage
0 - ¼ mile	0
¼ - ½ mile	3
½ - 1 mile	4
1 - 2 mile	31
2 - 3 mile	115
3 - 4 mile	532

Acreage was obtained using the National Wetlands Inventory maps. Map quads used include:

Honeoye Falls, NY
Rush, NY
Victor, NY

Only wetlands with the following System, Subsystem, and Class were counted for acreage:

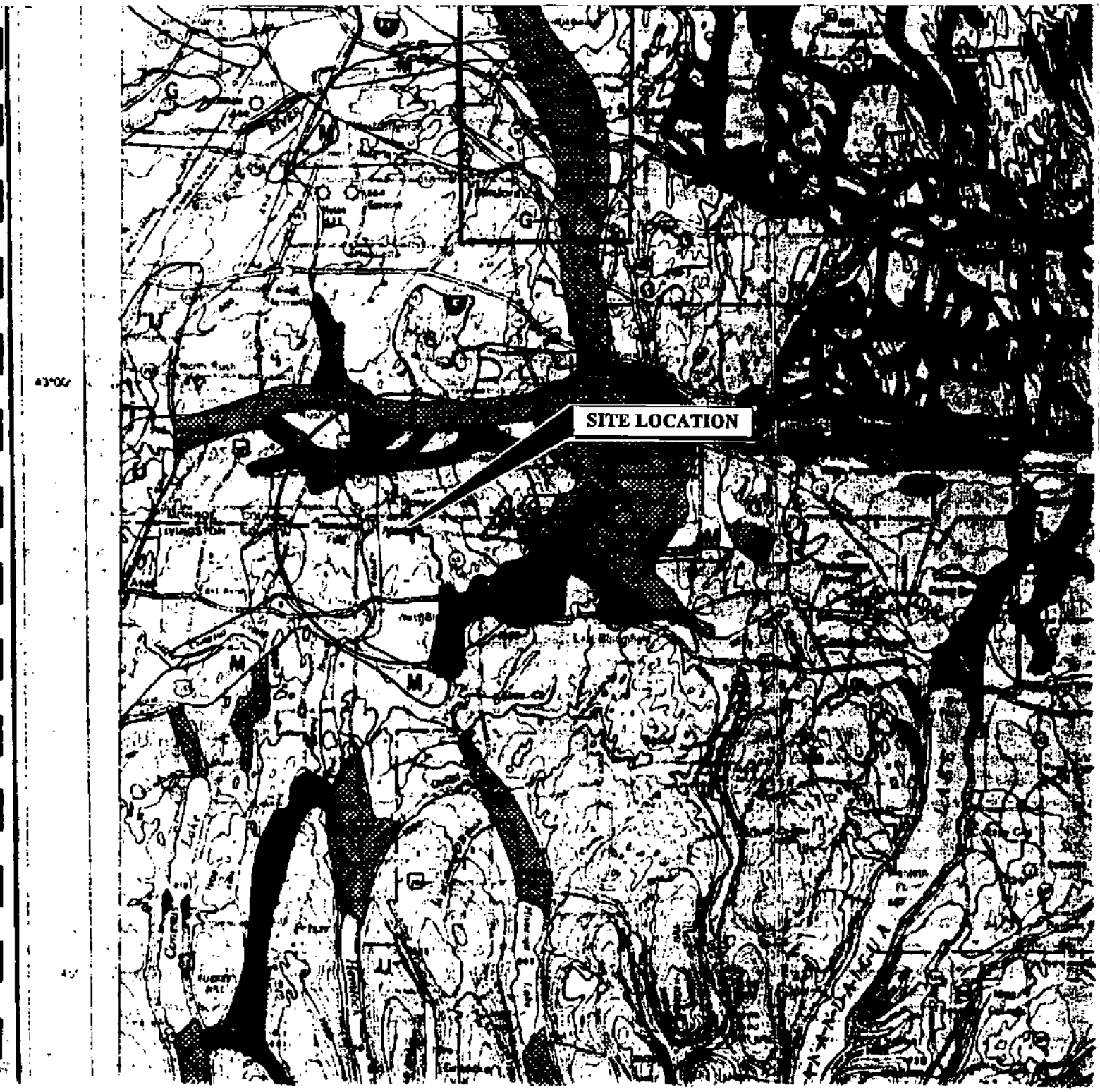
E2EM
E2FO
E2SS
L2EM
PEM
PFO
PML
PSS
R1EM
R2EM

REFERENCE NO. 41

MAP SOURCE:

UNCONSOLIDATED AQUIFERS IN UPSTATE NEW YORK
FINGER LAKES SHEET, 1987

United States Geological Survey



EXPLANATION

POTENTIAL YIELD OF WATER FROM WELLS THAT TAP UNCONSOLIDATED AQUIFERS

UNCONFINED AQUIFER, 10 TO 100 GALLONS PER MINUTE—Sand and gravel with saturated zone generally less than 10 ft thick, or thicker but with less permeable silty sand and gravel. Yields in areas adjacent to streams may exceed 100 gal/min through pumping-induced infiltration, but these areas are too small to show at this scale.

UNCONFINED AQUIFER, MORE THAN 100 GALLONS PER MINUTE—Sand and gravel of high transmissivity and with saturated thickness greater than 10 ft. Many such areas are associated with a surface-water source that can provide pumping-induced recharge.

CONFINED AQUIFER, 5 TO MORE THAN 500 GALLONS PER MINUTE—Areas where a relatively impermeable till, very fine sand, silt, or clay layer separates the buried sand and gravel aquifer from an overlying surficial aquifer.

CONFINED AQUIFER, 5 TO MORE THAN 500 GALLONS PER MINUTE—Sand and gravel overlain by till, very fine sand, silt, or clay, but without a surficial aquifer.

AQUIFERS OF UNKNOWN POTENTIAL—Areas of sand or sand and gravel for which little or no well data are on file to determine yield potential. Letter symbols, explained below, indicate the type of deposit.

Lacustrine or eolian deposit—Fine to medium sand that probably yields less than 10 gal/min.

Kame, kame terrace, outwash, or alluvium.—Sand and gravel of unknown thickness or saturation. Yield potential is greater where streams are present.

Moraine.—Mostly till and lacustrine deposits (fine sand, silt, and clay) capped in some places with unsaturated sand and gravel. Thin, scattered confined aquifers of sand and gravel in some places.

Confined aquifer.—Areas of lake deposits or till possibly underlain by sand and gravel aquifers. Depth and saturated thickness of aquifer not investigated.

PRIMARY WATER-SUPPLY AQUIFER—A highly productive aquifer that is being used as a source of water supply by major public-supply systems. Number indicates name of aquifer area (see key below) and report number in list of references. Reports and maps cited in the list of references describe these aquifers in detail.

Reference number	Aquifer area	Reference number	Aquifer area
16	Baldwinsville	4	Endicott-Johnson City
15	Bath		
18	Cohocton	1	Fulton
11	Corning	19	Irondequoit-Genesee
12	Cortland-Homer-Preble	21	Otego
		22	Waverly
13	Elmira-Horseheads-Big Flats		

REFERENCE NO. 42

12-14-90
Vol. 55 No. 241

federal register

Friday
December 14, 1990

Book 2

United States
Government
Printing Office
SUPERINTENDENT
OF DOCUMENTS
Washington, DC 20402

SECOND CLASS NEWSPAPER
Postage and Fees Paid
U.S. Government Printing Office
(ISSN 0097-6326)

Federal Register

Friday
December 14, 1990

Part II

Environmental Protection Agency

40 CFR Part 300

Hazard Ranking System; Final Rule

TABLE 3-6.—HYDRAULIC CONDUCTIVITY OF GEOLOGIC MATERIALS

Type of material	Assigned hydraulic conductivity [a] (cm/sec)
Clay; low permeability till (compact unfractured till); shale; unfractured metamorphic and igneous rocks	10^{-6}
Silt; loesses; silty clays; sediments that are predominantly silts; moderately permeable till (fine-grained, unconsolidated till, or compact till with some fractures); low permeability limestones and dolomites (no karst); low permeability sandstone; low permeability fractured igneous and metamorphic rocks	10^{-4}
Sands; sandy silts; sediments that are predominantly sand; highly permeable till (coarse-grained, unconsolidated or compact and highly fractured); peat; moderately permeable limestones and dolomites (no karst); moderately permeable sandstone; moderately permeable fractured igneous and metamorphic rocks	10^{-2}
Gravel; clean sand; highly permeable fractured igneous and metamorphic rocks; permeable basalt; karst limestones and dolomites	10^{-1}

[a] Do not round to nearest integer.

TABLE 3-7.—TRAVEL TIME FACTOR VALUES [a]

Hydraulic conductivity (cm/sec)	Thickness of lowest hydraulic conductivity layer(s) [b] (feet)			
	Greater than 3 to 5	Greater than 5 to 100	Greater than 100 to 500	Greater than 500
Greater than or equal to 10^{-3}	35	35	35	25
Less than 10^{-3} to 10^{-5}	35	25	15	15
Less than 10^{-5} to 10^{-7}	15	15	5	5
Less than 10^{-7}	5	5	1	1

[a] If depth to aquifer is 10 feet or less or if, for the interval being evaluated, all layers that underlie a portion of the sources at the site are karst, assign a value of 35.

[b] Consider only layers at least 3 feet thick. Do not consider layers or portions of layers within the first 10 feet of the depth to the aquifer.

Determine travel time only at locations within 2 miles of the sources at the site, except: if observed ground water contamination attributable to sources at the site extends more than 2 miles beyond these sources, use any location within the limits of this observed ground water contamination when evaluating the travel time factor for any aquifer that does not have an observed release. If the necessary subsurface geologic information is available at multiple locations, evaluate the travel time factor at each location. Use the location having the highest travel time factor value to assign the factor value for the aquifer. Enter this value in Table 3-1.

3.1.2.5 *Calculation of potential to release factor value.* Sum the factor values for net precipitation, depth to aquifer, and travel time, and multiply this sum by the factor value for containment. Assign this product as the potential to release factor value for the aquifer. Enter this value in Table 3-1.

3.1.3 *Calculation of likelihood of release factor category value.* If an observed release is established for an aquifer, assign the observed release factor value of 550 as the likelihood of release factor category value for that aquifer. Otherwise, assign the potential to release factor value for that aquifer as the likelihood of release value. Enter the value assigned in Table 3-1.

3.2 *Waste characteristics.* Evaluate the waste characteristics factor category for an aquifer based on two factors: toxicity/mobility and hazardous waste quantity. Evaluate only those hazardous substances available to migrate from the sources at the site to ground water. Such hazardous substances include:

- Hazardous substances that meet the criteria for an observed release to ground water.
- All hazardous substances associated with a source that has a ground water containment factor value greater than 0 (see sections 2.2.2, 2.2.3, and 3.1.2.1).

3.2.1 *Toxicity/mobility.* For each hazardous substance, assign a toxicity factor value, a mobility factor value, and a combined toxicity/mobility factor value as specified in the following sections. Select the toxicity/mobility factor value for the aquifer being evaluated as specified in section 3.2.1.3.

3.2.1.1 *Toxicity.* Assign a toxicity factor value to each hazardous substance as specified in Section 2.4.1.1.

3.2.1.2 *Mobility.* Assign a mobility factor value to each hazardous substance for the aquifer being evaluated as follows:

- For any hazardous substance that meets the criteria for an observed release by chemical analysis to one or more aquifers underlying the sources at the site, regardless of the aquifer being evaluated, assign a mobility factor value of 1.
- For any hazardous substance that does not meet the criteria for an observed release by chemical analysis to at least one of the aquifers, assign that hazardous substance a mobility factor value from Table 3-8 for the aquifer being evaluated, based on its water solubility and distribution coefficient (K_d).
- If the hazardous substance cannot be assigned a mobility factor value because data on its water solubility or distribution coefficient are not available, use other hazardous substances for which information is available in evaluating the pathway.

TABLE 3-8.—GROUND WATER MOBILITY FACTOR VALUES [a]

Water solubility (mg/l)	Distribution coefficient (K_d) (ml/g)			
	Karst [c]	≤ 10	> 10 to 1,000	> 1,000
Present as liquid [b]	1	1	0.01	0.0001
Greater than 100	1	1	0.01	0.0001
Greater than 1 to 100	0.2	0.2	0.002	2×10^{-5}
Greater than 0.01 to 1	0.002	0.002	2×10^{-5}	2×10^{-7}
Less than or equal to 0.01	2×10^{-5}	2×10^{-5}	2×10^{-7}	2×10^{-9}

[a] Do not round to nearest integer.
[b] Use if the hazardous substance is present or deposited as a liquid.
[c] Use if the entire interval from the source to the aquifer being evaluated is karst.

REFERENCE NO. 43

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-355

Date: February 27, 1995 Time: 9:30 AM ☑ PM ☐

Outgoing Call

To: Marilyn (716) 624-6120
Telephone No.

Affiliation: Lima Township Tax Assessor's Office

Malcolm Pirnie Staff: Warren K. Parry (WKP) (609) 860-0100
Telephone No.

Summary of Conversation:

I called to obtain the Lot and Block number for the Enarc-O-Machine Products site. The site is on Map 28, Section 1, Lot 20. The owner is listed as Country Lane Associates, 1171 Bragg Street. I also asked Marilyn what Congressional District they are in. They are in District 136.

REFERENCE NO. 44

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-355

Date: March 10, 1995 Time: 9:25 AM ☑ PM ☐

Outgoing Call

To: Amanda Hayes (716) 582-1130
Telephone No.

Affiliation: Lima Town Clerk

Malcolm Pirnie Staff: Warren K. Parry (WKP) (609) 860-0100
Telephone No.

Summary of Conversation:

I called Ms. Hayes to find out what floodplain North Bloomfield is located in. According to Ms. Hayes, Map #1 - Community Panel #361286A dated December 23, 1983 indicates that Enarc-O is outside of the 500 year floodplain. She also confirmed to me that Enarc-O is 1171 Bragg Street. There is no 1175 Bragg Street.

REFERENCE NO. 45

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-355

Date: March 14, 1995 Time: 9:22 AM [x] PM []

Outgoing Call

To: Marilyn (716) 624-6120
Telephone No.

Affiliation: Lima Township Tax Assessor's Office

Malcolm Pirnie Staff: Warren K. Parry (WKP) (609) 860-0100
Telephone No.

Summary of Conversation:

I called Marilyn to confirm the address information for Enarc-O, because of the confusion between the numbers 1175 and 1171. According to her records, everything they have has the number 1171. However, Enarc-O recently submitted a document to them with the address 1175. She said the address is not important. If they are using 1175, she said they would change their number if it was officially requested. Therefore, to be consistent with previous reports and documents, I will use the address 1175, but will use the Lot and Block information given to me by the Tax Assessor's office.

REFERENCE NO. 46

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

USGS/OFR/81-197

CHEMICAL ANALYSES OF SOILS AND OTHER SURFICIAL MATERIALS OF THE CONTERMINOUS UNITED STATES

By

Josephine G. Boerngen and Hansford T. Shacklette

Open-File Report 81-197

1981

This report is preliminary and has not been
edited or review
Geological Surve

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Collected	Site and Soil Descriptions
GC052550	NV	NYE	36 45	116 15	63 6	SITE AND SOIL DESCRIPTION NOT RECORDED
GC072250	NV	NYE	36 36	116 0	73 2	US 95 5 MI NW OF CO LINE NEAR MERCURY EXIT; GRAY DESERT ALKALI SOIL
GC262450	NV	NYE	38 40	116 15	68 7	DIRT RD IN HOT CREEK VALLEY ABOUT 45 MI NE WARM SPRINGS; LIGHT ROCKY
GC262650	NV	NYE	36 52	116 45	68 7	US 95 2 MI S BEATTY; ALLUVIUM BELOW DESERT PAVEMENT
GC262850	NV	NYE	38 45	117 7	68 7	RT 8A 3 MI S JCT RT 92 TO ROUND MOUNTAIN; HEAVY ALLUVIUM
GC241750	NV	PERSHING	40 40	118 4	66 7	I-80 AT MILL CITY; SOIL NOT DESCRIBED
GC241850	NV	PERSHING	40 21	118 19	66 7	I-80 AT RT 50 EXIT 14 MI N LOVELOCK; SOIL NOT DESCRIBED
GC060150	NV	WASHOE	39 56	119 22	70 10	RT 34 40 MI S GERLACH; GRAY DESERT OVER OLD PLAYA
GC062750	NV	WASHOE	40 39	119 23	70 10	RT 81 8 MI N GERLACH; GRAY DESERT IN PLAYA
GC242550	NV	WASHOE	39 31	119 52	66 7	US 395 5 MI E PURDY; SOIL NOT DESCRIBED
GC015450	NV	WHITE PINE	39 1	114 32	62 8	US 6 29 MI SE ELY; B IN. ON PEDIMENT SURFACE
GC065650	NV	WHITE PINE	39 24	115 28	72 9	US 50 AT LITTLE ANTELOPE SUMMIT; BROWN SOIL WITH ANDESITE FLOAT
GC065750	NV	WHITE PINE	39 10	114 40	72 9	US 50, 6, & 93 AT SCHELL CREEK TURNOFF; LGHT BRWN SOIL ON GRAVEL TILL
GC065850	NV	WHITE PINE	39 5	114 8	72 9	US 50 AT SCHELL CREEK TURNOFF; LIGHT BROWN SILT IN TERT/QUAT ALLUVIUM
GC078850	NV	WHITE PINE	39 4	114 30	73 9	RT 50 4 MI E JCT RT 93; LIGHT BROWN SILT UNDER DESERT PAVEMENT
GC263050	NV	WHITE PINE	39 40	114 15	68 7	US 93-US ALT 50,5 MI S JCT OF THESE HIGHWAYS; ALLUVIUM HIGH IN CLAY
GC003850	NY	ALBANY	42 45	73 56	62 5	I-90 AT INTERCHANGE 25; SANDY B HORIZON
GC003150	NY	CHAUTAUQUA	42 15	79 45	62 5	I-90 1 MI E NY STATE LINE; WELL DEVELOPED YELLOWISH-ORANGE SOIL
GC031050	NY	CHAUTAUQUA	42 32	79 10	72 9	I-90 2 MI S SILVER CREEK; LIGHT BROWN CLAY
GC031250	NY	CHENANGO	42 41	75 28	72 9	RT 80 2.5 MI E SHERBOURNE; LIGHT BROWN SILT
GC184350	NY	CHENANGO	42 17	75 29	76 11	RT 7 1 MI S BAINBRIDGE; SOIL NOT DESCRIBED
GC040250	NY	CLINTON	44 58	73 40	66 10	US 11 3.5 MI W MOOERS; B HORIZON IN SANDY DRIFT
GC003250	NY	ERIE	42 39	78 58	62 5	I-90 9 MI E INTERCHANGE 58; CLAYEY B HORIZON
GC040350	NY	FRANKLIN	44 45	74 35	66 10	US 11 .8 MI W MOIRA; GRAY CLAYEY SAND DEVELOPED ON OUTWASH
GC003350	NY	GENESEE	43 0	78 21	62 5	I-90 7 MI W INTERCHANGE 48; ORANGE-BROWN TO BROWN SANDY LOAM
GC040750	NY	HAMILTON	43 45	74 20	66 10	RT 28 3 MI W INDIAN LAKE; B HORIZON ON SANDY TILL
GC003750	NY	HERKIMER	43 2	74 37	62 5	I-90 AT INDIAN CASTLE SERVICE AREA; ORANGE-BROWN SANDY B HORIZON
GC040550	NY	JEFFERSON	43 58	75 50	66 10	RT 12 1 MI S RT 3 JCT NEAR WATERTOWN; BLACK SANDY LOAM
GC040650	NY	LEWIS	43 35	75 10	66 10	CO RD 3 MI NE PORTER; SANDY ORANGE-BROWN B HORIZON
GC003650	NY	ONEIDA	43 7	75 25	62 5	I-90 1 MI W INTERCHANGE 32; BROWN SAND
GC003550	NY	ONONDAGA	43 6	76 3	62 5	I-90 AT INTERCHANGE 35; SANDY LOAM
GC003450	NY	ONTARIO	43 0	77 9	62 5	I-90 3 MI E INTERCHANGE 43; B HORIZON IN PEBBLY SAND
GC031350	NY	SCHOHARIE	42 25	74 35	72 9	RT 23 2 MI E STAMFORD; LIGHT BROWN SANDY SOIL
GC040450	NY	ST LAWRENCE	44 30	75 20	66 10	US 11 2.5 MI W DEKALB JCT; POORLY DEVELOPED B HORIZON IN CLAYEY SAND
GC061550	NY	STEUBEN	42 10	77 8	70 9	RT 415 .7 MI N US 15 INTERCHANGE; SOIL NOT DESCRIBED
GC031550	NY	SULLIVAN	41 34	74 30	72 9	US 209 2 MI SW WURTSBORO; SILTY LOAM, ROCKY
GC184150	NY	TIOGA	42 0	76 30	67 11	RT 17 NEAR WAVERLY; LITHOSOL DERIVED FROM SHALE
GC184250	NY	TOMPKINS	42 25	76 30	67 11	RT 34 NEAR ITHACA; SOIL FROM DEVONIAN SHALE
GC031450	NY	ULSTER	41 55	74 11	72 9	RT 213 2 MI S OLIVEBRIDGE; LIGHT BROWN SANDY LOAM
GC040850	NY	WASHINGTON	43 25	73 37	66 10	RT 149 .3 MI E US 9-L JCT SE LAKE GEORGE; B HORIZON ON SANDY DRIFT
GC031150	NY	WAYNE	43 16	77 0	72 9	LAKE RD 1 MI W SODUS POINT; YELLOW-BROWN SANDY LOAM
GC006950	OH	ATHENS	39 17	82 8	62 10	US 50 5 MI SW ATHENS; YELLOW-ORANGE SILT SUBSOIL
GC042250	OH	AUGLAIZE	40 30	83 55	66 10	US 33 1 MI NW LAKE VIEW; BROWN SILTY LOAM CULTIVATED
GC002850	OH	CUYAHOGA	41 18	81 42	62 5	OHIO TPK 2 MI W INTERCHANGE 11; YELLOW-BROWN CLAY
GC007150	OH	FAYETTE	39 35	83 35	62 10	US 35 8 MI NW WASHINGTON C.H.; ORANGE AND GRAY CLAY LOAM
GC042150	OH	FRANKLIN	40 7	83 7	66 10	US 33 .8 MI W JCT RT 161 AT DUBLIN; OLIVE-GRAY CLAY LOAM
GC002650	OH	FULTON	41 36	83 53	62 5	OHIO TPK FALLEN TIMBERS SERV AREA; SANDY YELLOW-BROWN SUBSOIL
GC041950	OH	GUERNSEY	40 3	81 15	66 10	US 40 17 MI W ST CLAIRSVILLE; SANDY LOAM
GC057450	OH	HENRY	41 11	84 3	70 6	RT 109 3 MI S HAMLER; BLACK CLAY LOAM
GC002950	OH	LAKE	41 40	81 17	62 5	I-90 4 MI E RT 306 INTERCHANGE; YELLOW CLAYEY SOIL

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC052550	7.00	--	30	1,000	1.5	--	--	2.10	N	7	50.0	15.0
GC072250	10.00	4.2	20	500	2.0	<.5	.8	2.68	200	5	50.0	10.0
GC262450	>10.00	7.9	30	1,500	2.0	--	--	.50	200	3	7.0	7.0
GC262650	>10.00	14.0	30	700	1.5	--	--	4.10	150	10	30.0	15.0
GC262850	>10.00	8.7	30	1,000	2.0	--	--	1.20	150	7	15.0	15.0
GC241750	7.00	8.7	30	700	N	--	--	2.96	150	10	30.0	30.0
GC241850	3.00	20.0	70	500	1.0	--	--	3.50	N	10	30.0	30.0
GC060150	7.00	11.0	N	1,000	N	--	--	15.44	N	7	30.0	70.0
GC062750	7.00	6.0	30	2,000	N	--	--	15.01	N	7	50.0	30.0
GC242550	7.00	5.7	70	700	N	--	--	2.69	N	15	70.0	30.0
GC015450	7.00	--	N	300	N	--	--	9.60	--	5	50.0	30.0
GC065650	>10.00	7.7	50	1,000	2.0	<.5	1.3	1.91	<150	20	100.0	70.0
GC065750	3.00	10.2	<20	300	N	3.1	5.4	15.60	N	5	30.0	20.0
GC065850	3.00	5.1	20	500	N	3.0	2.8	9.13	N	5	50.0	30.0
GC078850	5.00	8.0	<20	500	1.5	1.5	3.4	9.82	--	5	30.0	10.0
GC263050	>10.00	7.2	20	1,000	3.0	--	--	2.70	150	7	20.0	15.0
GC003850	2.00	2.6	30	300	N	--	--	.55	N	5	15.0	7.0
GC003150	3.00	9.2	70	300	N	--	--	.38	N	7	30.0	30.0
GC031050	10.00	8.8	50	500	N	2.1	5.4	.36	<150	5	70.0	50.0
GC031250	10.00	8.4	100	500	2.0	.9	2.9	.19	<150	10	100.0	20.0
GC184350	7.00	8.2	70	200	1.0	--	--	.20	N	10	30.0	15.0
GC040250	1.50	4.9	N	300	N	--	--	.10	N	3	15.0	7.0
GC003250	3.00	13.0	70	500	N	--	--	.28	N	15	30.0	20.0
GC040350	5.00	1.6	30	500	1.5	--	--	.90	150	10	30.0	7.0
GC003350	2.00	2.0	N	300	N	--	--	.71	N	3	15.0	7.0
GC040750	5.00	3.8	30	300	1.5	--	--	2.80	N	15	30.0	7.0
GC003750	2.00	9.6	30	200	N	--	--	.30	N	7	20.0	30.0
GC040550	3.00	2.6	50	300	1.5	--	--	1.00	N	7	30.0	15.0
GC040650	5.00	1.5	N	500	1.5	--	--	.85	N	3	7.0	3.0
GC003650	3.00	13.0	70	300	N	--	--	.41	N	15	30.0	70.0
GC003550	2.00	7.6	30	200	N	--	--	.36	N	3	15.0	30.0
GC003450	3.00	2.5	70	300	N	--	--	.59	N	15	30.0	70.0
GC031350	7.00	10.9	50	300	N	1.7	5.8	.13	<150	5	70.0	20.0
GC040450	3.00	5.9	150	500	1.5	--	--	.75	N	10	30.0	10.0
GC061550	7.00	7.2	50	300	1.0	--	--	.19	N	10	30.0	20.0
GC031550	10.00	7.1	30	300	N	1.1	3.9	.10	200	7	50.0	30.0
GC184150	7.00	16.0	70	300	1.5	--	--	.15	N	15	30.0	15.0
GC184250	7.00	16.0	70	300	N	--	--	.35	N	7	30.0	15.0
GC031450	5.00	5.3	50	200	N	2.4	3.1	.08	N	5	50.0	20.0
GC040850	1.50	2.7	30	300	N	--	--	.60	N	7	30.0	15.0
GC031150	5.00	4.1	50	300	N	.7	2.1	.68	<150	5	30.0	20.0
GC006950	7.00	9.8	30	500	N	--	--	.30	N	15	50.0	20.0
GC042250	7.00	13.0	70	700	2.0	--	--	1.00	150	15	100.0	70.0
GC002850	3.00	10.0	70	300	N	--	--	.21	N	15	30.0	15.0
GC007150	7.00	22.0	50	500	N	--	--	.42	N	15	50.0	30.0
GC042150	7.00	18.0	70	700	2.0	--	--	.50	150	20	70.0	30.0
GC002650	2.00	7.5	30	300	N	--	--	.61	N	7	15.0	7.0
GC041950	3.00	7.3	30	500	1.5	--	--	.25	N	10	70.0	20.0
GC057450	10.00	5.2	50	500	1.5	--	4.4	1.10	N	7	50.0	30.0
GC002950	3.00	27.0	70	300	N	--	--	.11	N	10	30.0	20.0

Table 1.--Locations, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC052550	--	3.00	30	--	--	--	2.90	70	--	1.500	700	N
GC072250	--	3.00	15	1.23	.02	1.0	1.92	150	25	1.000	300	N
GC262450	.038	1.00	30	--	.02	--	4.20	200	39	.300	700	5
GC262650	.056	2.00	30	--	.05	--	3.60	150	36	1.000	700	N
GC262850	.042	1.00	20	--	.06	--	3.80	70	37	.700	300	<3
GC241750	.035	3.00	30	--	.08	--	2.34	70	42	1.500	700	N
GC241850	.049	2.00	30	--	.16	--	2.34	30	46	1.500	500	N
GC060150	.074	5.00	20	--	.02	--	1.30	30	22	1.500	700	N
GC062750	.041	2.00	15	--	.01	--	1.48	30	45	2.000	500	N
GC242550	.006	3.00	30	--	.03	--	2.19	N	18	1.500	700	N
GC015450	--	1.50	20	--	--	--	1.80	30	--	1.000	300	N
GC065650	.060	7.00	20	1.62	.04	1.0	2.09	50	30	1.500	1,000	N
GC065750	.060	1.00	10	1.13	.04	3.8	1.15	N	23	1.500	300	N
GC065850	.050	2.00	10	1.12	.08	4.6	1.62	N	30	1.500	200	N
GC078850	--	1.50	10	1.47	.02	1.9	1.36	N	20	1.000	300	N
GC263050	.071	2.00	30	--	.03	--	4.30	70	30	.700	500	3
GC003850	.006	2.00	15	--	.05	--	1.39	N	15	.300	500	N
GC003150	.015	2.00	15	--	.06	--	1.21	N	31	.500	300	3
GC031050	.060	5.00	20	1.62	.07	1.6	1.22	50	30	.500	150	19
GC031250	--	5.00	15	1.64	.13	1.7	1.73	70	55	.500	300	N
GC184350	.018	1.50	15	--	.08	--	1.00	30	44	.300	700	N
GC040250	.018	1.00	7	--	.06	--	1.80	N	7	.150	150	N
GC003250	.037	3.00	30	--	.04	--	1.66	N	37	.700	300	3
GC040350	.041	3.00	20	--	.06	--	2.00	70	22	.700	300	N
GC003350	.015	1.50	15	--	.25	--	1.18	N	18	.300	300	N
GC040750	.095	7.00	30	--	.35	--	1.90	N	24	1.500	700	N
GC003750	.028	2.00	15	--	.08	--	1.47	N	29	.700	1,500	N
GC040550	.047	3.00	30	--	.48	--	1.80	30	18	.500	700	N
GC040650	.027	3.00	30	--	.06	--	3.70	30	13	.300	300	N
GC003650	.036	3.00	20	--	.38	--	1.20	30	49	.700	2,000	N
GC003550	.006	1.50	15	--	.60	--	1.08	N	22	.300	300	N
GC003450	.055	3.00	30	--	.09	--	1.92	30	57	1.500	700	N
GC031350	.050	3.00	20	1.83	.08	1.3	1.38	50	40	.300	700	N
GC040450	.043	3.00	30	--	.08	--	2.50	30	17	.700	700	N
GC061550	.032	3.00	15	--	.03	--	1.21	30	43	.300	700	N
GC031550	.080	5.00	15	1.59	.06	2.2	.71	150	32	.300	500	N
GC184150	.039	1.50	15	--	.08	--	2.10	30	64	.700	300	N
GC184250	.031	1.50	15	--	.37	--	1.60	30	40	.300	300	N
GC031450	--	2.00	10	1.81	.07	3.1	.44	N	27	.200	70	N
GC040850	.016	2.00	10	--	.05	--	1.00	N	11	.300	700	N
GC031150	.040	2.00	10	1.47	.06	1.4	1.53	<30	20	.500	200	N
GC006950	.015	3.00	20	--	.13	--	1.60	30	32	.300	500	N
GC042250	.081	5.00	30	--	.10	--	2.50	70	46	.700	300	7
GC002850	.079	2.00	20	--	.18	--	1.42	30	28	.700	700	3
GC007150	.061	3.00	20	--	.22	--	1.90	30	45	.500	300	5
GC042150	.018	5.00	30	--	.08	--	1.60	70	32	.300	1,000	7
GC002650	.005	1.50	15	--	.08	--	1.18	N	10	.300	700	N
GC041950	.024	3.00	20	--	.03	--	1.30	50	25	.300	500	N
GC057450	.034	2.00	20	--	.59	<.5	2.00	30	39	.700	150	N
GC002950	.030	2.00	20	--	.06	--	1.62	30	44	.300	300	5

Table 1.--Locations, descriptions, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC052550	2.00	10	--	15	.050	20	--	--	--	10	--	--
GC072250	.70	<10	150	10	--	10	90	<.08	<1	7	.5	31
GC262450	.70	15	100	7	.016	70	--	--	--	<5	.2	--
GC262650	3.00	20	70	20	.040	30	--	--	--	7	<.1	--
GC262850	1.00	10	70	10	.016	30	--	--	--	7	.2	--
GC241750	1.50	15	70	15	.135	30	--	--	--	15	.3	--
GC241850	1.00	15	N	15	.131	70	--	--	--	10	.8	--
GC060150	3.00	N	N	10	--	10	--	--	--	10	<.1	--
GC062750	2.00	N	N	15	--	15	--	--	--	15	.1	--
GC242550	1.50	N	N	30	.096	50	--	--	--	15	.6	--
GC015450	1.50	15	N	15	.044	15	--	--	--	7	--	--
GC065650	1.50	10	70	50	--	15	115	<.08	1	15	.5	27
GC065750	1.00	N	--	10	--	10	60	<.08	<1	5	.2	18
GC065850	1.00	N	--	15	--	15	75	.09	<1	5	<.1	24
GC078850	.70	<10	--	5	--	10	70	<.08	<1	5	.3	25
GC263050	.70	15	70	7	.050	20	--	--	--	7	.2	--
GC003850	.70	15	--	7	.057	N	--	--	--	7	.1	--
GC003150	.70	15	--	15	.035	15	--	--	--	10	.4	--
GC031050	.70	10	N	20	--	30	95	.31	<1	10	<.1	26
GC031250	.70	<10	70	20	--	20	120	<.08	<1	15	.2	29
GC184350	.70	10	70	20	.120	30	--	--	--	7	.6	--
GC040250	.30	<10	--	N	.016	10	--	--	--	N	<.1	--
GC003250	.70	15	--	15	--	30	--	--	--	15	.4	--
GC040350	1.00	10	70	15	.050	15	--	--	--	15	.4	--
GC003350	.70	15	--	7	.059	15	--	--	--	7	.4	--
GC040750	1.50	15	--	7	.090	15	--	--	--	15	<.1	--
GC003750	.70	15	--	15	.013	15	--	--	--	7	.2	--
GC040550	1.00	10	70	15	.100	30	--	--	--	7	.5	--
GC040650	1.50	15	N	N	.030	30	--	--	--	7	.4	--
GC003650	.70	15	N	20	.052	15	--	--	--	15	.5	--
GC003550	.70	15	--	7	.070	15	--	--	--	7	.6	--
GC003450	.70	15	70	15	.039	30	--	--	--	15	.5	--
GC031350	.50	10	N	15	.684	50	105	.08	1	7	<.1	27
GC040450	1.00	10	N	15	.040	15	--	--	--	7	.2	--
GC061550	.70	10	70	30	--	15	--	--	--	7	.3	--
GC031550	.50	<10	150	15	--	50	60	.09	1	5	<.1	32
GC184150	.70	15	70	30	.050	15	--	--	--	15	.4	--
GC184250	.70	15	N	20	.060	30	--	--	--	7	.5	--
GC031450	.50	10	--	5	--	20	30	<.08	1	5	<.1	36
GC040850	.50	10	--	15	.040	10	--	--	--	7	.1	--
GC031150	.70	<10	N	10	--	15	55	<.08	<1	7	.2	33
GC006950	.70	15	N	20	.020	20	--	--	--	10	1.1	--
GC042250	.70	15	70	30	.080	30	--	--	--	15	1.2	--
GC002850	.70	15	N	15	.022	30	--	--	--	10	.8	--
GC007150	.70	N	N	50	.020	20	--	--	--	10	.5	--
GC042150	.70	15	70	30	.030	30	--	--	--	15	.3	--
GC002650	.70	15	--	15	.035	15	--	--	--	7	<.1	--
GC041950	.70	15	70	20	.030	30	--	--	--	7	.1	--
GC057450	--	<10	<70	30	.109	15	--	--	--	15	1.0	29
GC002950	.50	15	N	15	.031	30	--	--	--	10	.3	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC052550	--	500	.200	--	--	70	20	3.0	50	300
GC072250	.81	200	.200	12.74	2.87	70	20	3.0	58	150
GC262450	--	200	.150	--	--	30	30	3.0	45	150
GC262650	--	500	.300	--	--	50	50	5.0	45	300
GC262850	--	500	.150	--	--	30	30	3.0	45	200
GC241750	--	300	.200	--	--	70	30	5.0	90	150
GC241850	--	150	.150	--	--	70	30	3.0	110	150
GC060150	--	1,500	.300	--	--	100	20	2.0	79	70
GC062750	--	1,500	.200	--	--	100	30	3.0	73	100
GC242550	--	300	.300	--	--	150	30	3.0	90	100
GC015450	--	300	.150	--	--	50	20	2.0	45	100
GC065650	1.35	300	.500	8.51	3.25	150	20	2.0	113	300
GC065750	1.14	100	.100	8.25	1.99	30	10	2.0	60	70
GC065850	1.14	500	.200	11.49	1.87	30	10	1.0	51	100
GC078850	.72	300	.100	10.42	2.01	50	15	2.0	55	50
GC263050	--	300	.300	--	--	50	30	5.0	55	200
GC003850	--	30	.300	--	--	30	30	3.0	39	300
GC003150	--	70	.300	--	--	50	30	5.0	93	300
GC031050	1.91	150	.500	--	4.91	150	20	3.0	95	200
GC031250	1.89	150	.500	12.37	3.85	150	30	5.0	101	200
GC184350	--	70	.300	--	--	50	30	5.0	80	300
GC040250	--	70	.100	--	--	20	10	1.5	25	200
GC003250	--	70	.300	--	--	70	30	7.0	63	300
GC040350	--	200	.300	--	--	70	70	7.0	50	300
GC003350	--	70	.150	--	--	30	15	1.5	49	150
GC040750	--	200	.700	--	--	150	50	7.0	40	200
GC003750	--	30	.300	--	--	30	20	5.0	81	300
GC040550	--	150	.300	--	--	50	30	5.0	50	300
GC040650	--	150	.300	--	--	30	30	5.0	30	200
GC003650	--	30	.150	--	--	70	30	7.0	100	300
GC003550	--	50	.150	--	--	30	20	3.0	41	300
GC003450	--	70	.300	--	--	70	30	7.0	120	300
GC031350	2.71	100	.200	7.62	2.59	100	30	3.0	88	150
GC040450	--	150	.300	--	--	50	30	5.0	30	200
GC061550	--	70	.500	--	--	50	30	3.0	77	500
GC031550	1.74	70	.300	9.70	2.05	70	20	3.0	76	150
GC184150	--	100	.300	--	--	70	30	5.0	75	200
GC184250	--	100	.300	--	--	50	30	3.0	85	150
GC031450	2.16	30	.200	9.65	2.28	70	20	3.0	38	200
GC040850	--	70	.300	--	--	30	30	3.0	20	200
GC031150	1.19	150	.300	6.05	1.94	70	15	2.0	47	300
GC006950	--	70	.300	--	--	70	20	3.0	50	200
GC042250	--	300	.300	--	--	150	30	5.0	90	150
GC002850	--	70	.300	--	--	70	30	7.0	81	200
GC007150	--	100	.200	--	--	100	30	5.0	110	150
GC042150	--	200	.300	--	--	100	70	7.0	80	200
GC002650	--	70	.150	--	--	20	15	1.5	25	200
GC041950	--	150	.300	--	--	70	30	3.0	30	200
GC057450	--	200	.300	--	--	150	20	2.0	96	100
GC002950	--	30	.300	--	--	70	30	7.0	76	200

REFERENCE NO. 47

ARCS II CONTRACT 68-W9-0051
MALCOLM PIRNIE, INC.
RECORD OF TELEPHONE CONVERSATION/AGREEMENT

File No. 8003-355

Date: March 7, 1995 Time: 11:34 AM [✓] PM []

Outgoing Call

To: Dave Kaiser (716) 226-2466
Telephone No.

Affiliation: NYSDEC - Avon, Division of Water

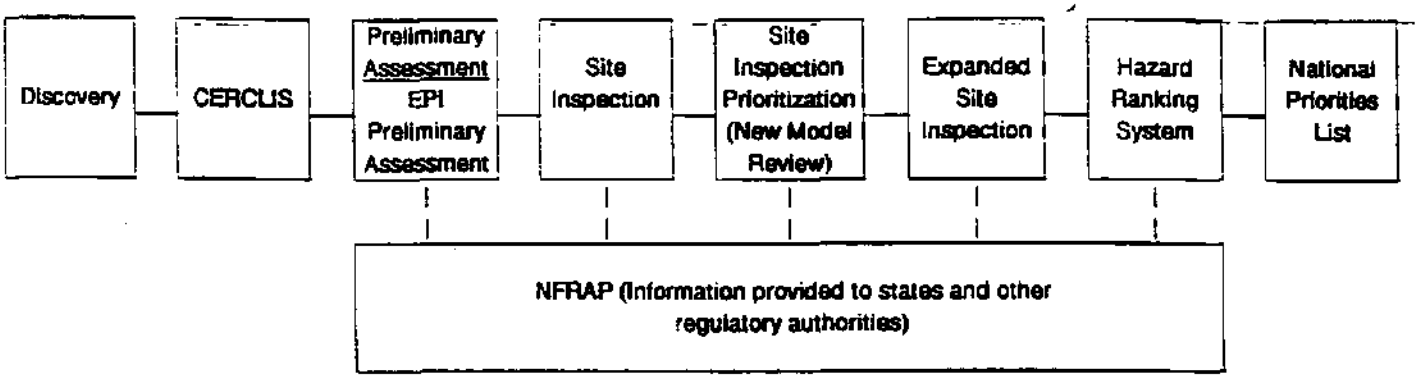
Malcolm Pirnie Staff: Warren K. Parry WKP (609) 860-0100
Telephone No.

Summary of Conversation:

Mr. Kaiser acts as administrator for the SPDES permit for the Enarc-O facility (Permit No. NY0003034). According to Mr. Kaiser the discharge operates in conjunction with a tumbler that cleans machined parts. Solids from the cleaning process go to a cone-shaped clarifier. Solids are collected, and the water is discharged to Honeoye Creek. According to Mr. Kaiser, there have been occasional exceedences of copper, lead, and zinc in the discharge. They are the only three metals sampled as required by the permit.

ATTACHMENT 2

SUPERFUND SITE ASSESSMENT PROGRAM



SITE ASSESSMENT REPORTS

1. PRELIMINARY ASSESSMENT
    - Quick Review of Readily Accessible Records and Reports
    - Undertaken to Determine the Existence of a Problem and the Need for Further Action at a Site by Characterizing:
        - Magnitude of the Hazard
        - Source and Nature of the Release or Potential Release
        - Identification of Targets
    - Does Not Include Sample Collection
2. SITE INSPECTION
    - The Purpose of the Site Inspection is to:
        - Further Define and Characterize the Problem
        - Provide Data for the Hazard Ranking System (HRS) Scoring and Compute Initial Score
        - Identification of Targets
        - Determine the Necessity of Further Action
    - The Site Inspection Involves an On-Site Visit and Sampling (10+/- Samples)
    - A Site Inspection is not an Extent of Contamination Study
3. SITE INSPECTION PRIORITIZATION
    - Quick Review of Readily Accessible Records and Reports
    - Undertaken to Determine the Validity and Update Background Conditions Under the New HRS Model, and the Need for Further Action at a Site by Characterizing:
        - Magnitude of the Hazard
        - Source and Nature of the Release or Potential Release
    - Included On-Site Visits or Sample Collection as needed
        - Analyze Samples/Limited Analytical Resources
        - Account for Significant Safety Hazards On-Site
4. EXPANDED SITE INSPECTION

    A Follow-Up Inspection May Be Recommended After the SI To:
    - Gather Additional Data Necessary to Strengthen or Substantiate the Initial HRS Score
        - Geophysical Surveys
        - Installation of Groundwater Monitoring Wells
        - Additional Sampling

Review of Analytical Data

If previous analytical data are available, they should be reviewed for information which supports the design of the sampling and analysis program, tests site hypotheses, and documents the site score. The SI investigator should review all previous analytical data. While analytical data collected for other purposes may not meet SI objectives, site-specific analytical data are generally helpful in better understanding the nature of the problem at the site, regardless of data sources or data quality. The depth of the review depends on the overall quality and quantity of data, the intended use of the data, and whether they are representative of current site conditions and comparable to SI data. Determining whether available data can be applied as SI-generated data requires the professional judgement of an experienced reviewer. Both validated and non-validated analytical data may be available. Previous SI data will be validated and of CLP-quality. Non-validated data may contain false positives and false negatives, as well as quantitation, transcription, and calculation errors. If data of unknown or questionable quality are used for decision-making, the investigator should review all available information to assess the level of certainty associated with the data. If these data are used for HRS documentation, data validation will be necessary. The investigator should be able to determine the general quality of the data set by reviewing QC data for evaluation under the Superfund Program.