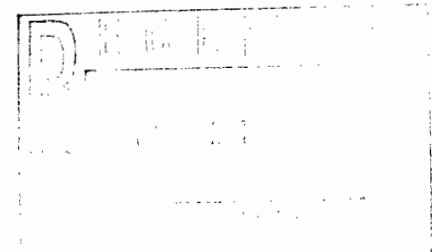


Post Remediation Groundwater Monitoring Report
Operable Unit – 1 (OU-1)
Utility Manufacturing Company
700 Main Street
Westbury, New York
07/03

July 2003

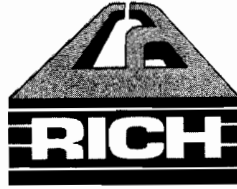
Prepared for:

Utility Manufacturing Company
700 Main Street
Westbury, New York



Prepared by:

CA RICH CONSULTANTS, INC.
17 Dupont Street
Plainview, New York 11803



CA RICH CONSULTANTS, INC.

CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

July 16, 2003

NYSDEC

Division of Hazardous Waste Remediation
625 Broadway
Albany, New York 12233-7015

Attention: Jeff Dyber, P.E.

Re: **Post-Remediation Groundwater Monitoring Report
Operable Unit – 1 (OU-1)
Utility Manufacturing Company
700 Main Street
Westbury, New York
Site Number: 130043H**

Dear Mr. Dyber:

CA RICH Consultants, Inc. (CA RICH) is pleased to provide you with the following Post-Remediation Groundwater Monitoring Report for OU-1 of the Utility Manufacturing site. This Report was prepared by CA RICH on behalf of the Utility Manufacturing Company (Utility) in accordance with an Order on Consent, Index Number W1-0795-97-06. For the purposes of this document, the contaminants of concern were perchloroethene (a.k.a. PCE or tetrachloroethene); trichloroethene (TCE); 1,1,1-trichloroethane (TCA) and their degradation products.

This Report includes the following items:

- Background;
- Post-Remediation Groundwater Monitoring Procedures;
- Post-Remediation Groundwater Monitoring Reporting; and
- Schedule;
- Summary and Conclusions.

1.0 Background

An Interim Remedial Measure (IRM) was performed at the Utility site from September 2001 through December 2002. This consisted of the installation of two air sparge points, two clustered soil vapor extraction wells and a multi-depth clustered monitoring well. An air compressor, regenerative blower and carbon units were installed in an equipment container located on the property. The air sparging/soil vapor extraction system operated from November 15, 2001 to December 19, 2002. In accordance with the IRM Work Plan, operation of the air sparging/soil vapor extraction system ceased after collection of the Fourth Quarter 2002 round of groundwater monitoring.

A series of previous reports were generated for this site by both the NYSDEC and Utility. The following is a partial list of these previous documents.

<u>Investigation</u>	<u>Date</u>
NYS Superfund Contract, Site Investigation Report New Cassel Industrial Area (Ref. 1)	February 1995
NYS Superfund Contract, Multisite PSA Report New Cassel Industrial Area (Ref. 2)	March 1996
NYS Superfund Contract, Multisite PSA Report New Cassel Industrial Area (Ref. 3)	March 1997
Focused Remedial Investigation, Utility Manufacturing/ Wonder King, Anson Environmental, Ltd. (Ref. 4)	January 1999
On-Site Groundwater Investigation, Utility Manufacturing/ Wonder King, Anson Environmental, Ltd. (Ref. 5)	December 2000
Interim Remedial Measures Work Plan Utility Manufacturing Company 700 Main Street, Westbury, New York (Ref. 6)	August 2001
Interim Remedial Measures Report and Operation and Maintenance (O&M) Manual Utility Manufacturing Company 700 Main Street, Westbury, New York (Ref. 7)	December 2001
Quarterly Monitoring Report, Fourth Quarter 2002 Utility Manufacturing Company 700 Main Street, Westbury, New York (Ref. 8)	January 2003

2.0 Post-Remediation Groundwater Monitoring Procedures

A program of post-remediation groundwater monitoring was performed on the monitoring wells installed at this site. These wells include MW-1, MW-2, MW-3, MW-4, MW-5R, MW-6, MDCW-7S, MDCW-7I and MDCW-7D. The locations of the wells are presented on the attached Figure. The testing included halogenated volatile organic compounds using EPA Method 8021 or its equivalent.

A volume of at least three casing volumes of groundwater was purged from each monitoring well and collected in a container using a submersible pump. The samples were then collected directly from the pump discharge.

As the goal of this Plan was to obtain post-remedial confirmation of the air sparging/soil vapor extraction effort, the Quality Assurance/Quality Control (QA/QC) procedures were similar to those used during the operation of the remediation system. One sample from each well was collected and placed into laboratory issued bottles. These were in turn placed in an ice-filled cooler and delivered to an ELAP-Certified laboratory under Chain-Of-Custody documentation. Trip blanks, field blanks, duplicates and matrix spikes were not performed.

3.0 Post-Remediation Groundwater Monitoring Reporting

When the sampling was completed and the results were received from the laboratory, a report was prepared. The report included the following.

- A description of the work performed;
- The results of the laboratory analysis; and
- Graphs of the concentration of perchloroethene versus time.

The graphs were updated after each sampling round and a report was submitted to the NYSDEC.

4.0 Schedule

The groundwater monitoring program began five months from the time the air sparging and soil vapor extraction system was turned off, which corresponds to June 2003. Monitoring will be performed annually thereafter for a period of two years (i.e.: June 2003 to June 2005).

Graphs of the concentration of perchloroethene versus time were compiled after each round of monitoring. *The post-remediation groundwater monitoring program will be deemed completed after the June 2003, June 2004 and June 2005 samples are analyzed and the VOC concentrations in site wells MW-4, MW-5R, MW-6 and MW-7S, 7I & 7D do not exceed all four of the following criteria:*

- *the concentration in the upgradient well or wells as determined by the NYSDEC;*
- *the highest concentration measured in any of the project wells during the third quarter 2002;*
- *the highest concentration measured in any of the project wells during the fourth quarter 2002;*
- *the NYSDEC groundwater standards.*

If any analyte exceeds all four criteria in wells MW-4, MW-5R, MW-6 and MDCW-7S, 7I & 7D, the NYSDEC will determine if additional monitoring and/or remediation is necessary.

5.0 Summary and Conclusions

The concentration of tetrachloroethene in the up gradient wells (MW-1&3) were greater than those in the down gradient wells. The highest concentration measured during the fourth quarter of 2002 (when operation of the remediation equipment was terminated) was 13 ug/L in MW-3. Six months later during the second quarter of 2003, the concentration of tetrachloroethene in this well decreased to 8.8 ug/L.

The concentration of tetrachloroethene in the remaining site wells were less than the regulatory level of 5.0 ug/L. This supports the effectiveness of the SVE/AS effort performed during the IRM. Another round of Post-Remediation sampling will be performed in June 2004.

If there are any questions regarding this Report, please do not hesitate to call our office.

Sincerely,

CA RICH CONSULTANTS, INC.



Eric A. Weinstock
Associate

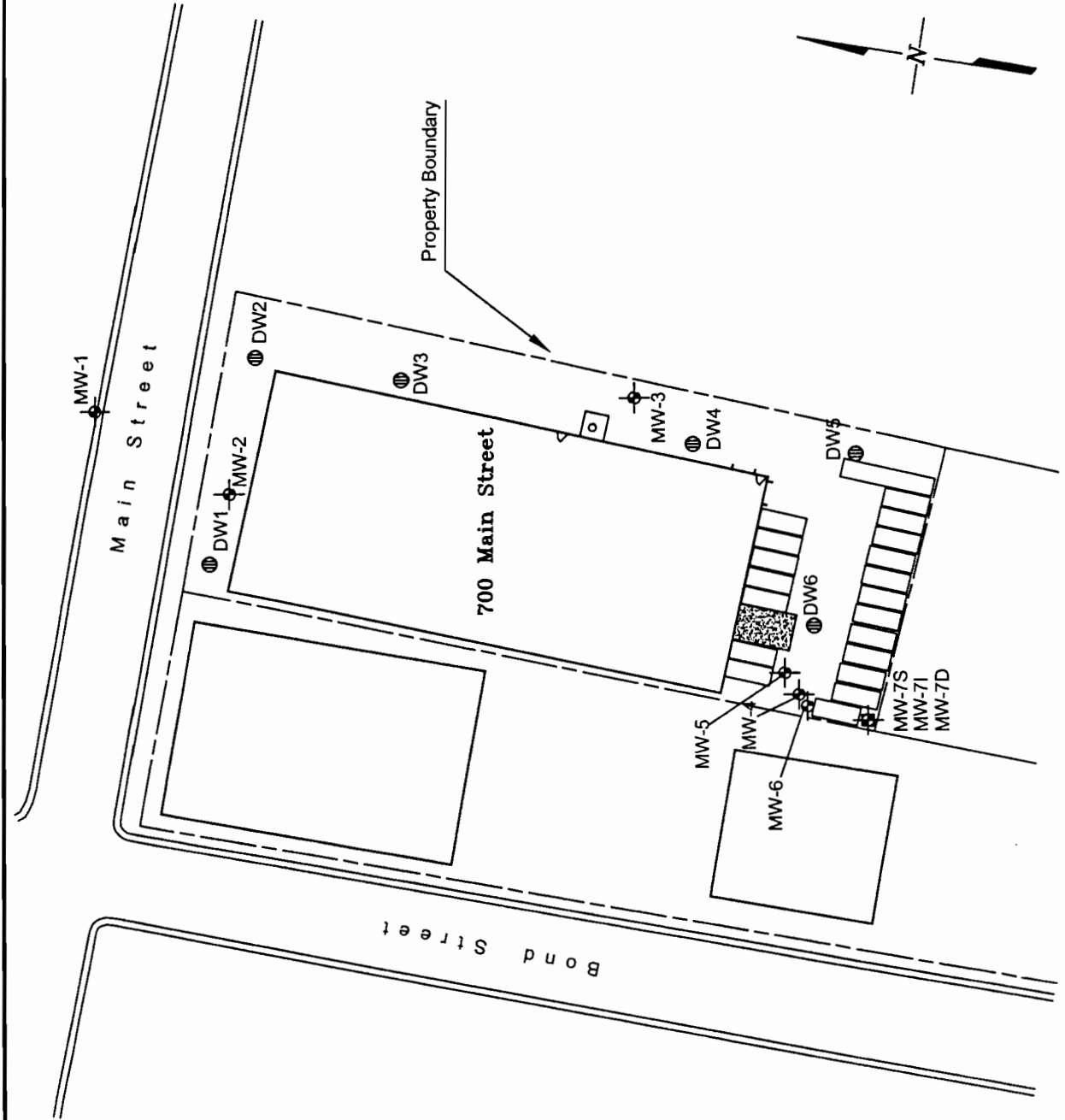
att.
EW:dw

cc: Audie Kranz
Miriam Villani, Esq.
Alali Tamuno, Esq.
Jacqueline Nealson

References

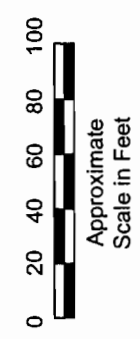
1. NYSDEC (February 1995), NYS Superfund Contract, Site Investigation Report, New Cassel Industrial Area.
2. NYSDEC, (March 1996), NYS Superfund Contract, Multisite PSA Report, New Cassel Industrial Area.
3. NYSDEC, (March 1997), NYS Superfund Contract, Multisite PSA Report, New Cassel Industrial Area.
4. Anson Environmental, Ltd., (January 1999), Focused Remedial Investigation, Utility Manufacturing/Wonder King,
5. Anson Environmental, Ltd , (December 2000), On-Site Groundwater Investigation, Utility Manufacturing/Wonder King.
6. CA RICH, August 2001, Interim Remedial Measures Work Plan, Utility Manufacturing Company, 700 Main Street, Westbury, New York
7. CA RICH, December 2001, Interim Remedial Measures Report, Utility Manufacturing Company, 700 Main Street, Westbury, New York
8. CA RICH, January 2003, Quarterly Monitoring Report, Fourth Quarter 2002, Utility Manufacturing Company, 700 Main Street, Westbury, New York
9. CA RICH, April 2003, Post Remediation Monitoring Plan, Utility Manufacturing Company, 700 Main Street, Westbury, New York

FIGURES

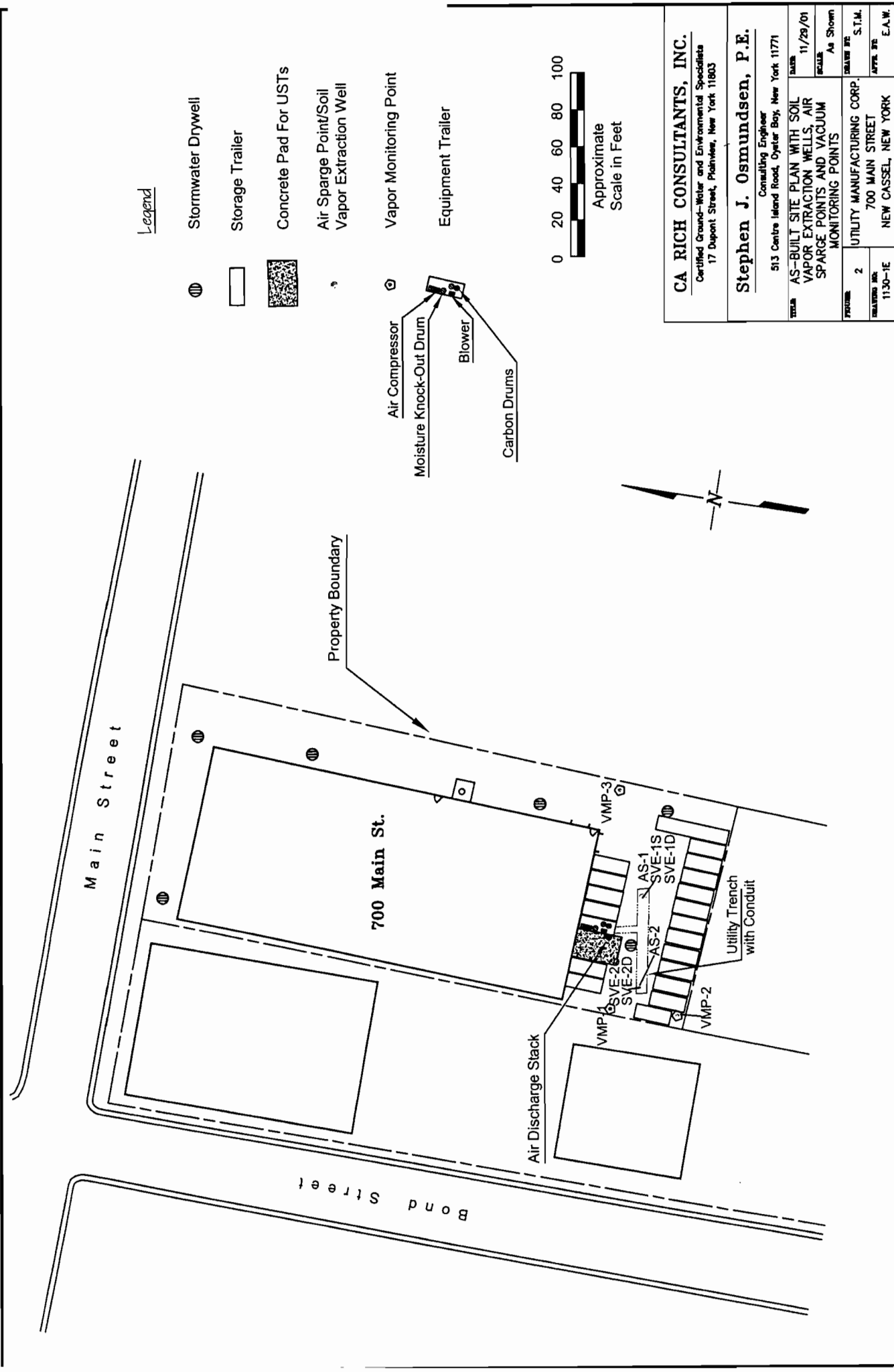


Legend

- Drywell
- Monitoring Well
- Storage Trailer
- Concrete Pad For USTs
- Multi-Depth Cluster Well

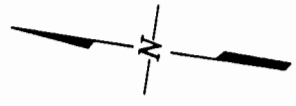
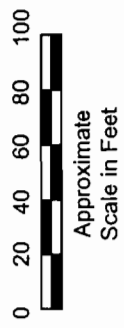
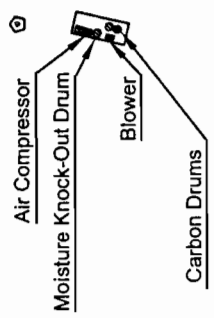


CA RICH CONSULTANTS, INC. Certified Ground-Water and Environmental Specialists 17 Dupont Street, Plainville, New York 11803	
Stephen J. Osmundsen, P.E. Consulting Engineer 513 Centre Island Road, Oyster Bay, New York 11771	
TITLE	11/29/01
SCALE	As Shown
DATE	11/29/01
PROJECT	UTILITY MANUFACTURING CORP.
DRAWING NO.	1130-1A
LOCATION	700 MAIN STREET NEW CASSEL, NEW YORK
SCALE	S.T.M.
DATE	E.A.W.



Legend

- ⊗ Stormwater Drywell
- ▭ Storage Trailer
- ▨ Concrete Pad For USTs
- ⊙ Air Sparge Point/Soil Vapor Extraction Well
- ⊗ Vapor Monitoring Point
- ⊞ Equipment Trailer



CA RICH CONSULTANTS, INC. Certified Ground-Water and Environmental Specialists 17 Dupont Street, Plainville, New York 11803	
Stephen J. Osmundsen, P.E. Consulting Engineer 513 Centre Island Road, Oyster Bay, New York 11771	
DATE	11/29/01
SCALE	As Shown
FIGURE NO.	2
PROJECT NO.	1130-1E
CLIENT	UTILITY MANUFACTURING CORP. 700 MAIN STREET NEW CASSEL, NEW YORK
DATE	11/29/01
SCALE	As Shown
FIGURE NO.	2
PROJECT NO.	1130-1E
CLIENT	UTILITY MANUFACTURING CORP. 700 MAIN STREET NEW CASSEL, NEW YORK
DATE	11/29/01
SCALE	As Shown
FIGURE NO.	2
PROJECT NO.	1130-1E
CLIENT	UTILITY MANUFACTURING CORP. 700 MAIN STREET NEW CASSEL, NEW YORK

TABLES

Table 1
 Summary of Analytical Detections in Well MW-1
 Utility Manufacturing, Westbury, NY

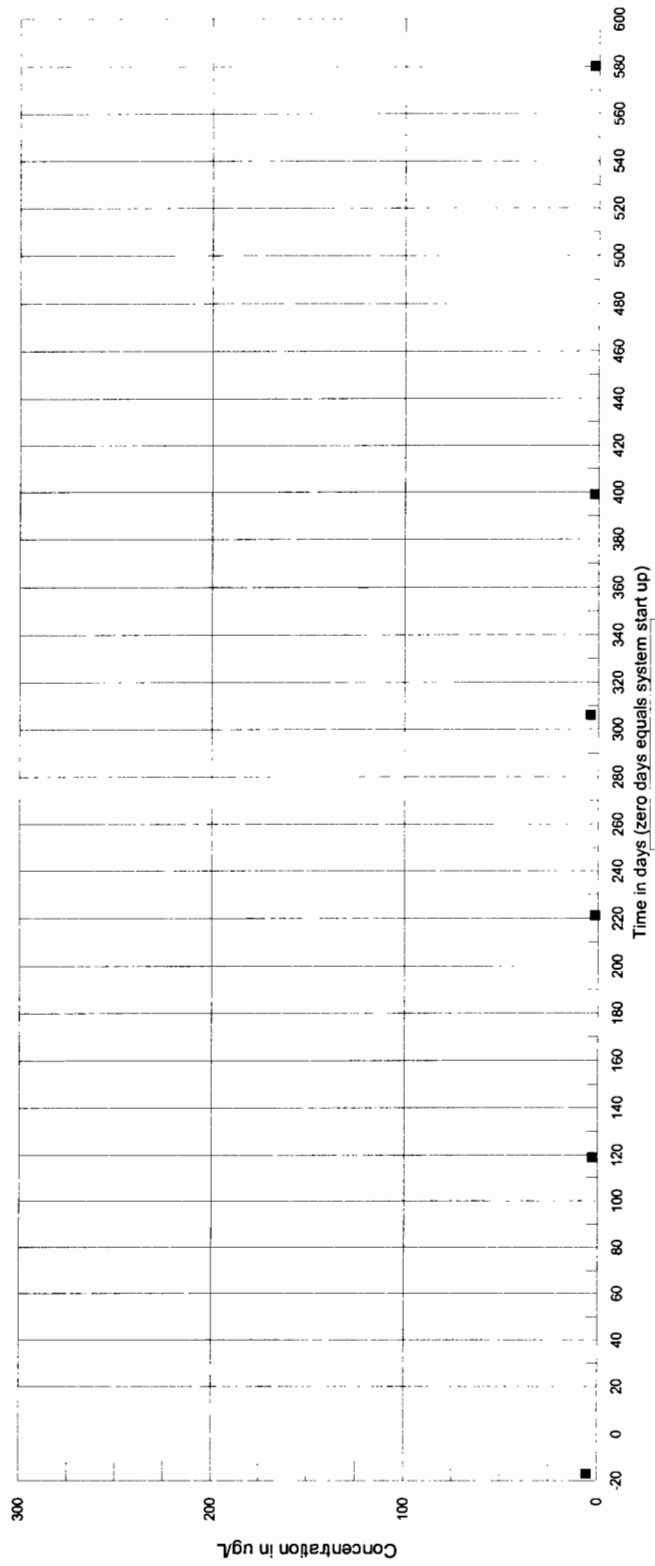
Well ID	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	NYSDEC TOGS* values					
Comments/Calendar Quarter	Baseline Data	1 Qtr 2002	2 Qtr 2002	3 Qtr 2002	4 Qtr 2002	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003				
Sample depth in feet	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60	55 to 60				
Date Sampled	10/29/2001	03/14/2002	06/24/2002	09/17/2002	12/19/2002	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003			
Days since system start up	-17	119	221	306	399	580	580	580	580	580	580	580	580	580	580	580	580	580	580	580		
Days since initial sample	0	136	238	323	416	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597		
Volatile Organics (EPA METHOD 8021) Units																						
Tetrachloroethene	ug/L	5.4	2.8	1.7	3.9	2.0	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Trichloroethene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 Trichloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
 ND: Indicates compound analyzed but not detected at laboratory detection level.
 ug/L: micrograms per liter or parts per billion.
 Date of system start up: 11/15/2001

*NYSDEC Technical and Operational Guidance Series (1,1,1)
 Ambient Water Quality Standards and Guidance Values; June 1998

Prepared by CA Rich Consultants Inc.

MW-1
Tetrachloroethene versus time



Concentration in ug/L

Table 2
Summary of Analytical Detections in Well MW-2
for Volatile Organics Compounds in Groundwater
Utility Manufacturing, Westbury, NY

Well ID	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	NYSDEC TOGS* values
Comments/Calendar Quarter	Baseline Data	1 Qtr 2002	2 Qtr 2002	3 Qtr 2002	4 Qtr 2002	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	
Sample depth in feet	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	
Date Sampled	10/29/2001	03/14/2002	06/24/2002	09/17/2002	12/19/2002	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	
Days since system start up	-17	119	221	306	399	580	580	580	580	580	580	
Days since initial sample	0	136	238	323	416	597	597	597	597	597	597	
Volatile Organics (EPA METHOD 8021) Units												
Tetrachloroethene	ug/L	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	ug/L
Trichloroethene	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	5.00
cis-1,2-Dichloroethene	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	5.00
trans-1,2-Dichloroethene	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	5.00
Vinyl Chloride	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	2.00
1,1,1 Trichloroethane	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	5.00
1,1 Dichloroethane	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	5.00
Chloroethane	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	5.00

Notes:

ND: Indicates compound analyzed but not detected at laboratory detection level.

ug/L: micrograms per liter or parts per billion.

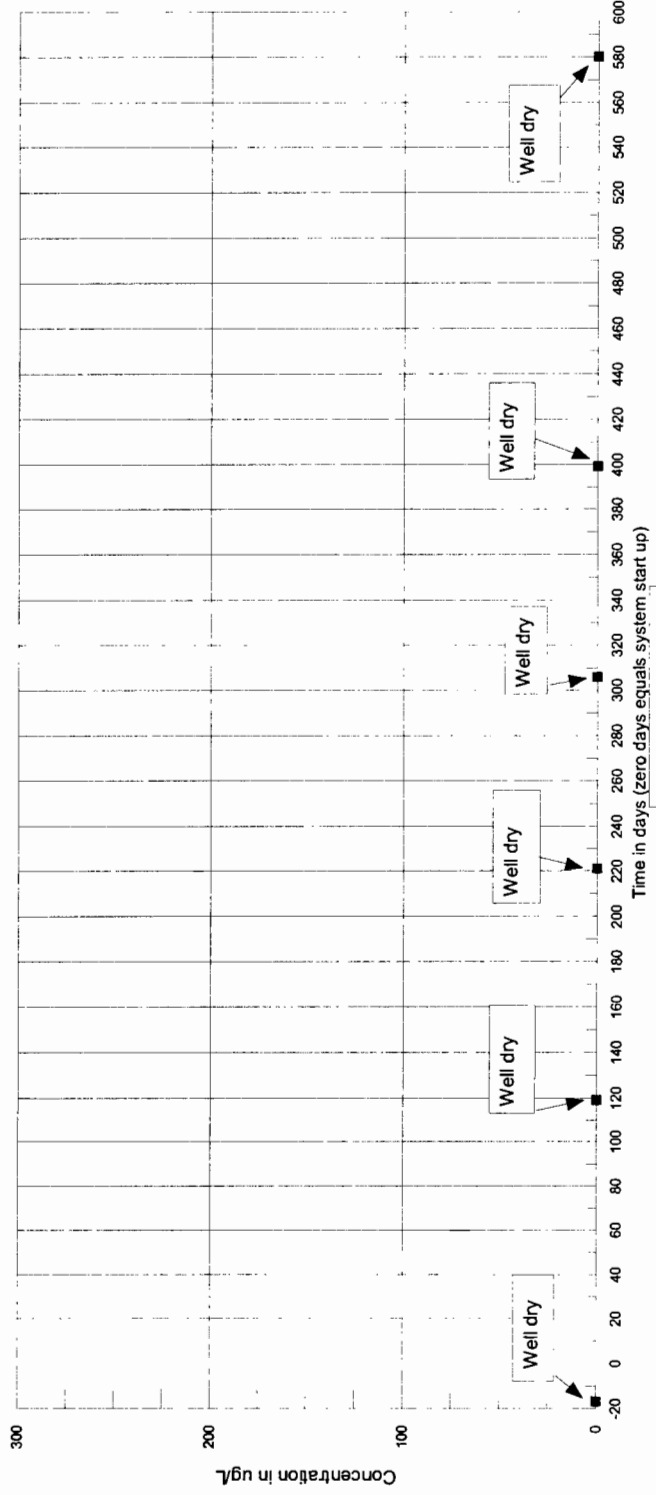
Date of system start up: 11/15/2001

*NYSDEC Technical and Operational Guidance Series (1.1.1)

Ambient Water Quality Standards and Guidance Values; June 1998

Prepared by CA Rich Consultants Inc.

MW-2
Tetrachloroethene versus time



There is no data for dates when the well is dry

Concentration in ug/L

Table 3
Summary of Analytical Detections in Well MW-3
for Volatile Organics Compounds in Groundwater
Utility Manufacturing, Westbury, NY

Well ID	Comments/Calendar Quarter	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	NYSDEC TOGS* values
		Baseline Data	1 Qtr 2002	2 Qtr 2002	3 Qtr 2002	4 Qtr 2002	2 Qtr 2003	3 Qtr 2003	4 Qtr 2003	2 Qtr 2003	
	Sample depth in feet	55 to 70	55 to 70	55 to 70	55 to 70	55 to 70	55 to 70	55 to 70	55 to 70	55 to 70	
	Date Sampled	10/29/2001	03/14/2002	06/24/2002	09/17/2002	12/19/2002	06/18/2003	06/18/2003	06/18/2003	06/18/2003	
	Days since system start up	-17	119	221	306	399	580	580	580	580	
	Days since initial sample	0	136	238	323	416	597	597	597	597	
Volatile Organics (EPA METHOD 8021) Units											
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Tetrachloroethene	49	14	15	20	13	8.8	5.00	5.00	5.00	5.00
	Trichloroethene	2.9	ND	ND	ND	ND	ND	5.00	5.00	5.00	5.00
	cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	5.00	5.00	5.00	5.00
	trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	5.00	5.00	5.00	5.00
	Vinyl Chloride	ND	ND	ND	ND	ND	ND	2.00	2.00	2.00	2.00
	1,1,1 Trichloroethane	3.1	ND	ND	ND	ND	ND	5.00	5.00	5.00	5.00
	1,1 Dichloroethane	ND	ND	ND	ND	ND	ND	5.00	5.00	5.00	5.00
	Chloroethane	ND	ND	ND	ND	ND	ND	5.00	5.00	5.00	5.00

Notes:
 ND: Indicates compound analyzed but not detected at laboratory detection level.
 ug/L: micrograms per liter or parts per billion.
 Date of system start up: 11/15/2001

*NYSDEC Technical and Operational Guidance Series (1.1.1)
 Ambient Water Quality Standards and Guidance Values; June 1998

Prepared by CA Rich Consultants Inc.

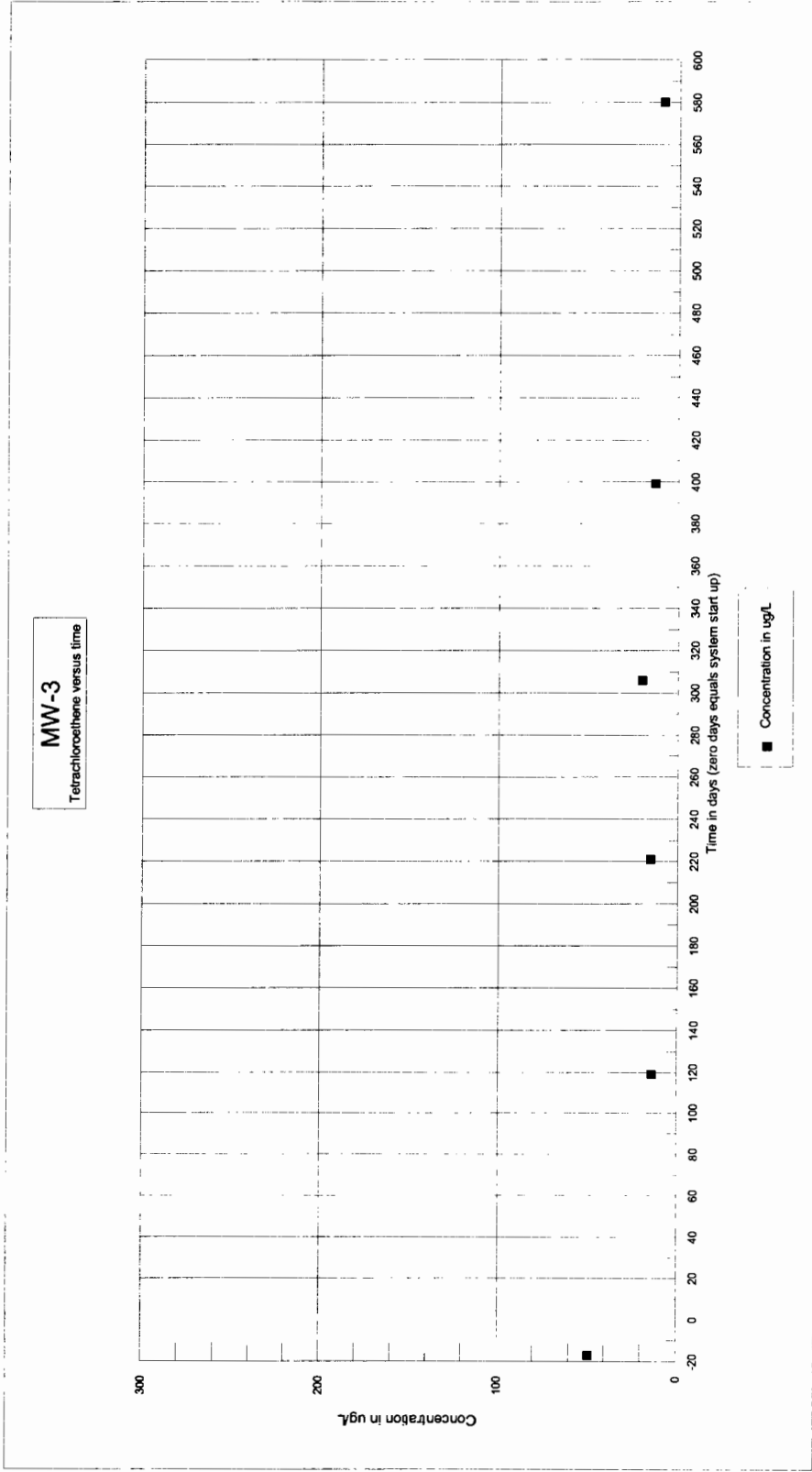


Table 4
 Summary of Analytical Detections in Well MW-4
 for Volatile Organics Compounds in Groundwater
 Utility Manufacturing, Westbury, NY

Well ID	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	NYSDEC TOGS* values	
Comments/Calendar Quarter	Baseline Data	1 Qtr 2002	2 Qtr 2002	3 Qtr 2002	4 Qtr 2002	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003
Sample depth in feet	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
Date Sampled	10/29/2001	03/14/2002	06/24/2002	09/17/2002	12/19/2002	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003
Days since system start up	-17	119	221	306	399	580	580	580	580	580	580	580	580	580	580	580	580	580	580	580	580
Days since initial sample	0	136	238	323	416	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597
Volatile Organics (EPA METHOD 8021)																					
Units																					
Tetrachloroethene	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Trichloroethene	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
cis-1,2-Dichloroethene	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
trans-1,2-Dichloroethene	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
Vinyl Chloride	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
1,1,1 Trichloroethane	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
1,1 Dichloroethane	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
Chloroethane	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry

Notes:

ND: Indicates compound analyzed but not detected at laboratory detection level.
 ug/L: micrograms per liter or parts per billion.
 Date of system start up: 11/15/2001

Prepared by CA Rich Consultants Inc.

*NYSDEC Technical and Operational Guidance Series (1.1.1)
 Ambient Water Quality Standards and Guidance Values; June 1998

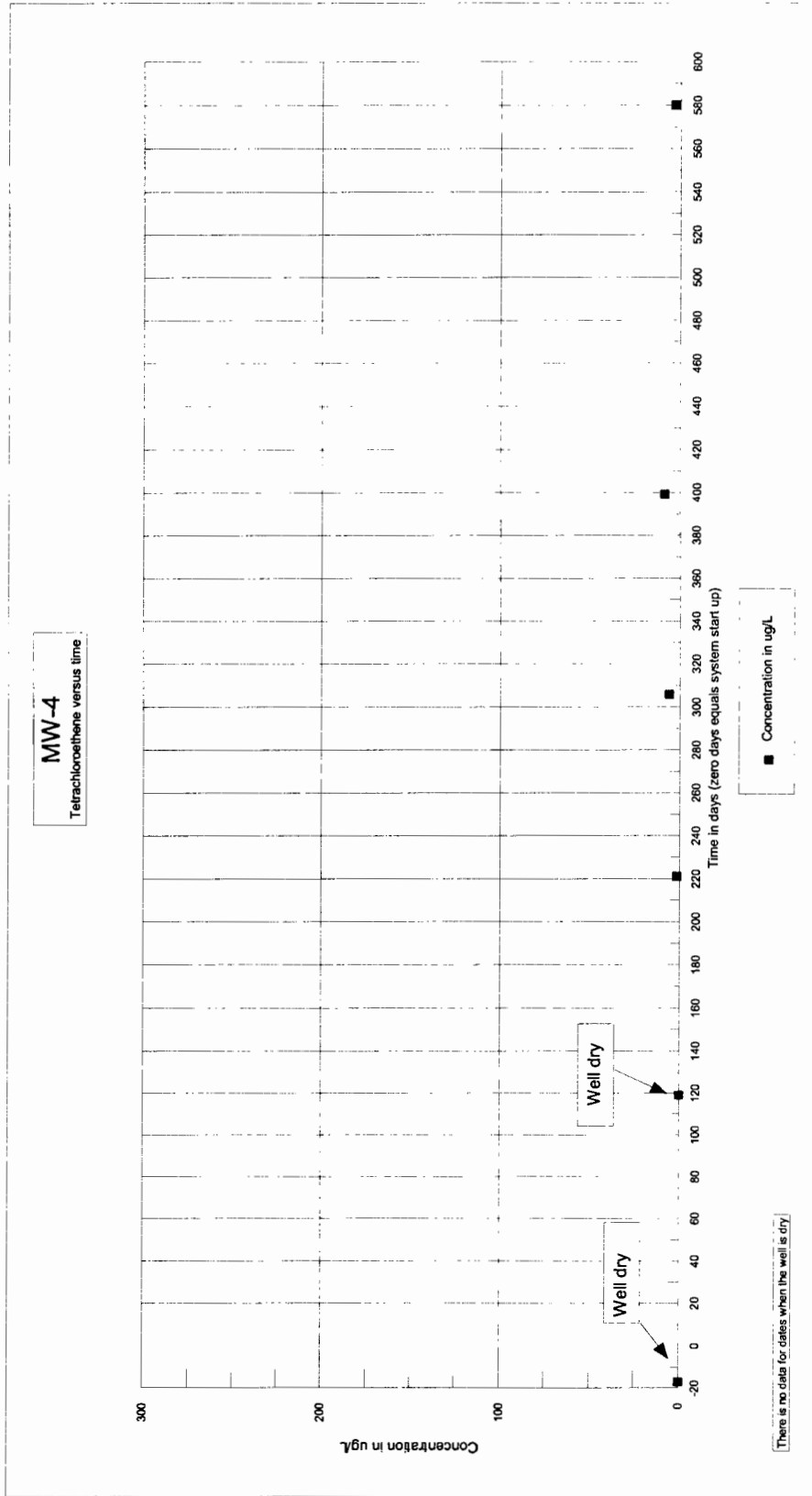


Table 5
Summary of Analytical Detections in Well MW-5 (MW-5R)
for Volatile Organics Compounds in Groundwater
Utility Manufacturing, Westbury, NY

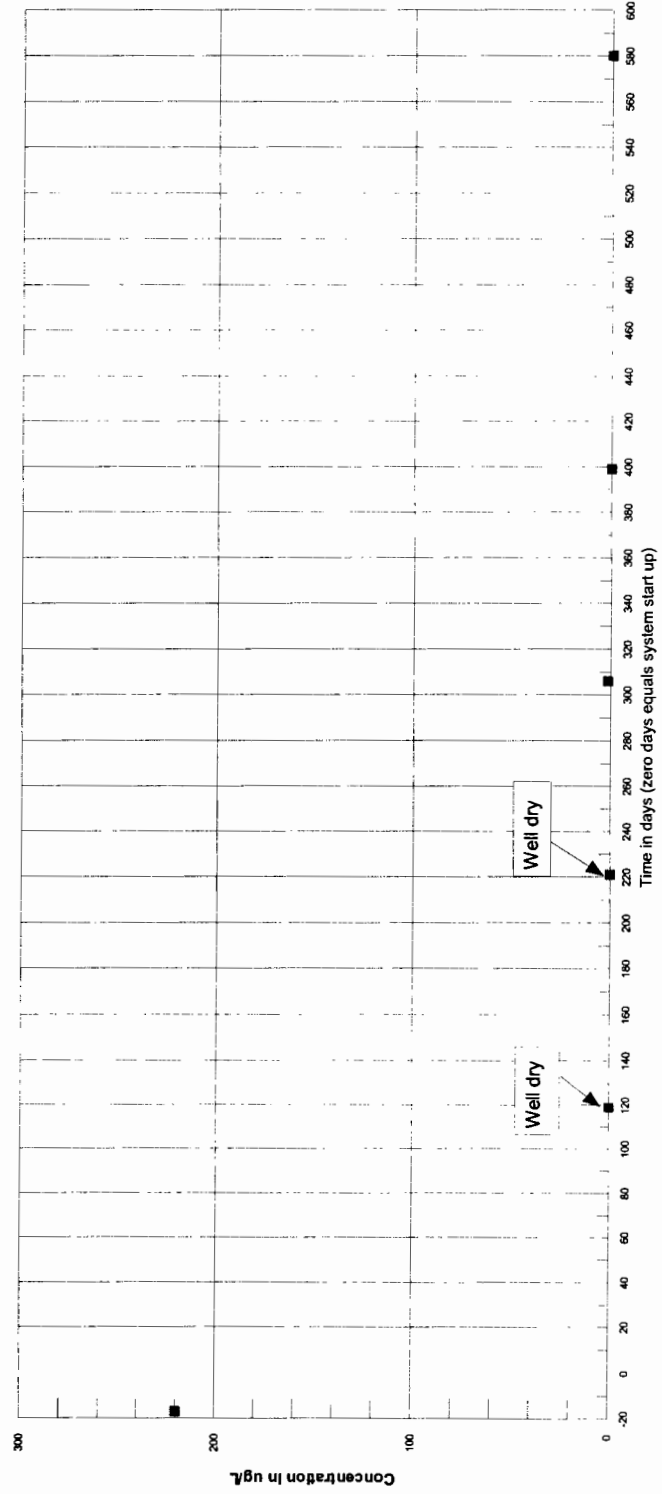
Well ID	MW-5	MW-5	MW-5	MW-5R	MW-5R	MW-5R	MW-5R	MW-5R	MW-5R	MW-5R	NYSDEC TOGS* values
Comments/Calendar Quarter	Baseline Data	1 Qtr 2002	2 Qtr 2002	3 Qtr 2002	4 Qtr 2002	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	
Sample depth in feet	55 to 61.5	dry	dry	59 to 70	59 to 70	59 to 70	59 to 70	59 to 70	59 to 70	59 to 70	
Date Sampled	10/29/2001	03/14/2002	06/24/2002	09/17/2002	12/19/2002	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	
Days since system start up	-17	119	221	306	399	580	580	580	580	580	
Days since initial sample	0	136	238	323	416	597	597	597	597	597	
Volatile Organics (EPA METHOD 8021)											
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Tetrachloroethene	220	dry	dry	1.6	ND	ND	ND	ND	ND	ND	5.00
Trichloroethene	24	dry	dry	ND	ND	ND	ND	ND	ND	ND	5.00
cis-1,2-Dichloroethene	25	dry	dry	ND	ND	ND	ND	ND	ND	ND	5.00
trans-1,2-Dichloroethene	ND	dry	dry	ND	ND	ND	ND	ND	ND	ND	5.00
Vinyl Chloride	ND	dry	dry	ND	ND	ND	ND	ND	ND	ND	2.00
1,1,1 Trichloroethane	10	dry	dry	ND	ND	ND	ND	ND	ND	ND	5.00
1,1 Dichloroethane	ND	dry	dry	ND	ND	ND	ND	ND	ND	ND	5.00
Chloroethane	ND	dry	dry	ND	ND	ND	ND	ND	ND	ND	5.00

Notes:
 ND: Indicates compound analyzed but not detected at laboratory detection level.
 ug/L: micrograms per liter or parts per billion.
 Date of system start up: 11/15/2001

*NYSDEC Technical and Operational Guidance Series (1.1.1)
 Ambient Water Quality Standards and Guidance Values; June 1998

Prepared by CA Rich Consultants Inc.

MW-5 (MW-5R)
Tetrachloroethene versus time



There is no data for dates when the well is dry

Table 6
Summary of Analytical Detections in Well MW-6
for Volatile Organics Compounds In Groundwater
Utility Manufacturing, Westbury, NY

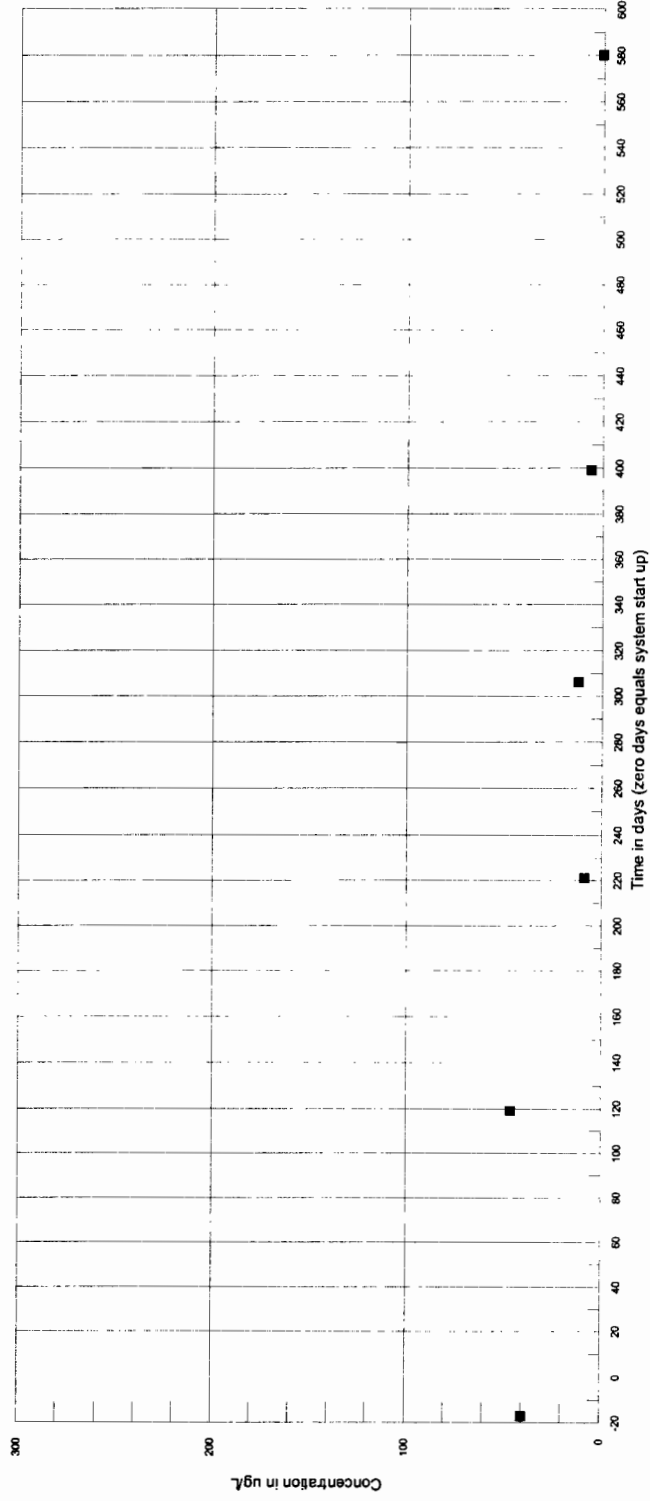
Well ID	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	NYSDEC TOGS* values	
Comments/Calendar Quarter	Baseline Data	1 Qtr 2002	2 Qtr 2002	3 Qtr 2002	4 Qtr 2002	2 Qtr 2003	3 Qtr 2003	4 Qtr 2003	1 Qtr 2004	2 Qtr 2004	3 Qtr 2004	4 Qtr 2004	1 Qtr 2005	2 Qtr 2005	3 Qtr 2005	4 Qtr 2005	1 Qtr 2006	2 Qtr 2006	3 Qtr 2006	4 Qtr 2006
Sample depth in feet	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95	55 to 95
Date Sampled	10/29/2001	03/14/2002	06/24/2002	09/17/2002	12/19/2002	06/18/2003	09/17/2003	12/19/2003	03/14/2004	06/18/2004	09/17/2004	12/19/2004	03/14/2005	06/18/2005	09/17/2005	12/19/2005	03/14/2006	06/18/2006	09/17/2006	12/19/2006
Days since system start up	-17	119	221	306	399	580	673	766	859	952	1045	1138	1231	1324	1417	1510	1603	1696	1789	1882
Days since initial sample	0	136	238	323	416	509	602	695	788	881	974	1067	1160	1253	1346	1439	1532	1625	1718	1811
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Volatile Organics (EPA METHOD 8021) Units																				
Tetrachloroethene	40	46	8.6	12	5.9	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	4	3.7	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	8.9	13	4.1	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 Trichloroethane	1.5	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
 ND: Indicates compound analyzed but not detected at laboratory detection level.
 ug/L: micrograms per liter or parts per billion.
 Date of system start up: 11/15/2001

*NYSDEC Technical and Operational Guidance Series (1.1.1)
 Ambient Water Quality Standards and Guidance Values; June 1998

Prepared by CA Rich Consultants Inc.

MW-6
Tetrachloroethene versus time



■ Concentration in ug/L

Table 7
 Summary of Analytical Detections in Well MW-7S
 for Volatile Organics Compounds in Groundwater
 Utility Manufacturing, Westbury, NY

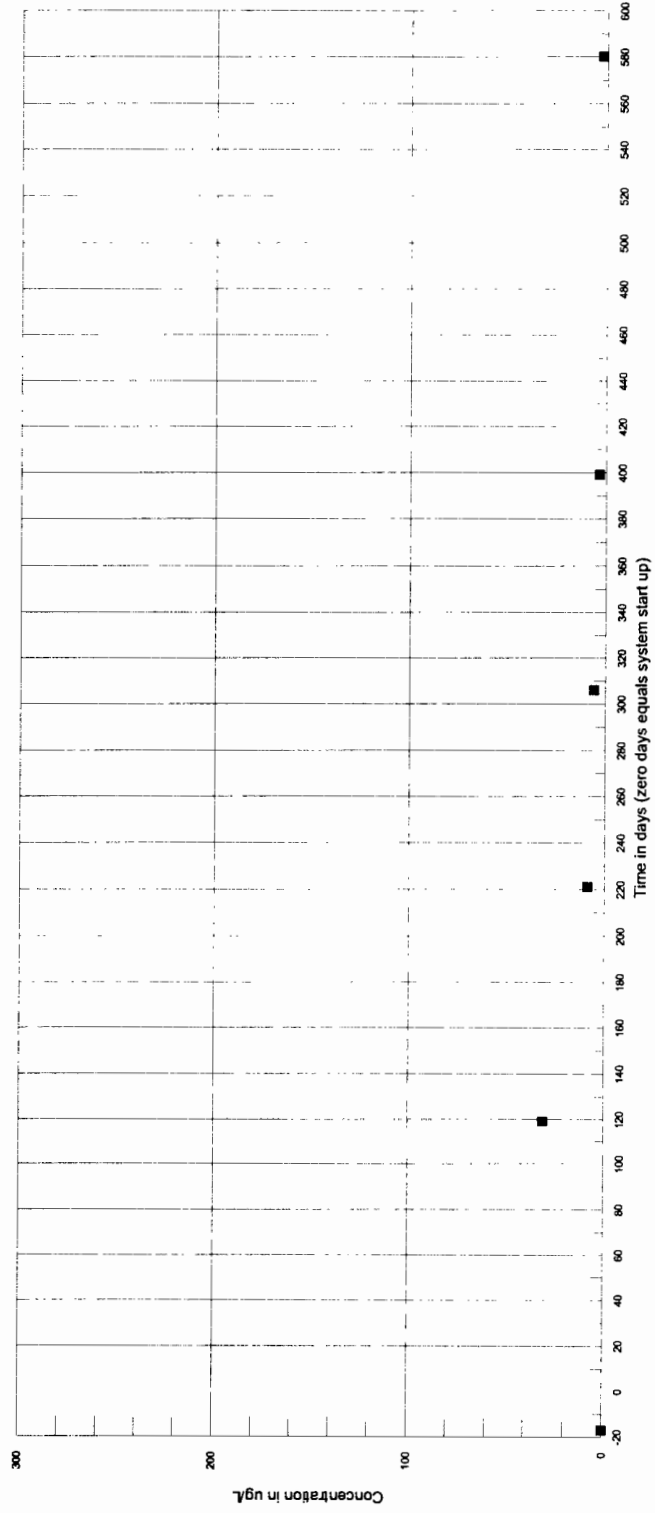
Well ID	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	NYSDEC TOGS* values
Comments/Calendar Quarter	Baseline Data	1 Qtr 2002	2 Qtr 2002	3 Qtr 2002	4 Qtr 2002	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	2 Qtr 2003	
Sample depth in feet	55 to70	55 to70	55 to70	55 to70	55 to70	55 to70	55 to70	55 to70	55 to70	55 to70	55 to70	
Date Sampled	10/29/2001	03/14/2002	06/24/2002	09/17/2002	12/19/2002	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	06/18/2003	
Days since system start up	-17	119	221	306	399	580	580	580	580	580	580	
Days since initial sample	0	136	238	323	416	597	597	597	597	597	597	
Volatile Organics (EPA METHOD 8021) Units												
Tetrachloroethene	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	ND	31	8.6	5.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	5.00
Trichloroethene	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
cis-1,2-Dichloroethene	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	ND	7.1	2.9	ND	ND	ND	ND	ND	ND	ND	ND	5.00
trans-1,2-Dichloroethene	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
Vinyl Chloride	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.00
1,1,1 Trichloroethane	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
1,1 Dichloroethane	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
Chloroethane	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00

Notes:
 ND: Indicates compound analyzed but not detected at laboratory detection level.
 ug/L: micrograms per liter or parts per billion.
 Date of system start up: 11/15/2001

*NYSDEC Technical and Operational Guidance Series (1,1,1)
 Ambient Water Quality Standards and Guidance Values; June 1998

Prepared by CA Rich Consultants Inc.

MW-7S
Tetrachloroethene versus time



■ Concentration in ug/L

Table 8
Summary of Analytical Detections in Well MW-71
for Volatile Organics Compounds in Groundwater
Utility Manufacturing, Westbury, NY

Well ID Comments/Calendar Quarter Sample depth in feet Date Sampled Days since system start up Days since initial sample	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	NYSDEC TOGS* values
	Baseline Data 78 to 88 10/29/2001	1 Qtr 2002 78 to 88 03/14/2002	2 Qtr 2002 78 to 88 06/24/2002	3 Qtr 2002 78 to 88 09/17/2002	4 Qtr 2002 78 to 88 12/19/2002	MW-71 78 to 88 06/18/2003	MW-71 78 to 88 06/18/2003	MW-71 78 to 88 06/18/2003	MW-71 78 to 88 06/18/2003	MW-71 78 to 88 06/18/2003	MW-71 78 to 88 06/18/2003	MW-71 78 to 88 06/18/2003
	-17	119	221	306	399	580	580	580	580	580	580	
	0	136	238	323	416	597	597	597	597	597	597	
Volatile Organics (EPA METHOD 8021) Units												
Tetrachloroethene	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
Trichloroethene	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
cis-1,2-Dichloroethene	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.00
1,1,1 Trichloroethane	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
1,1 Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00

Notes:
 ND: Indicates compound analyzed but not detected at laboratory detection level.
 ug/L: micrograms per liter or parts per billion.
 Date of system start up: 11/15/2001

*NYSDEC Technical and Operational Guidance Series (1.1.1)
 Ambient Water Quality Standards and Guidance Values; June 1998

Prepared by CA Rich Consultants Inc.

MW-71

Tetrachloroethene versus time

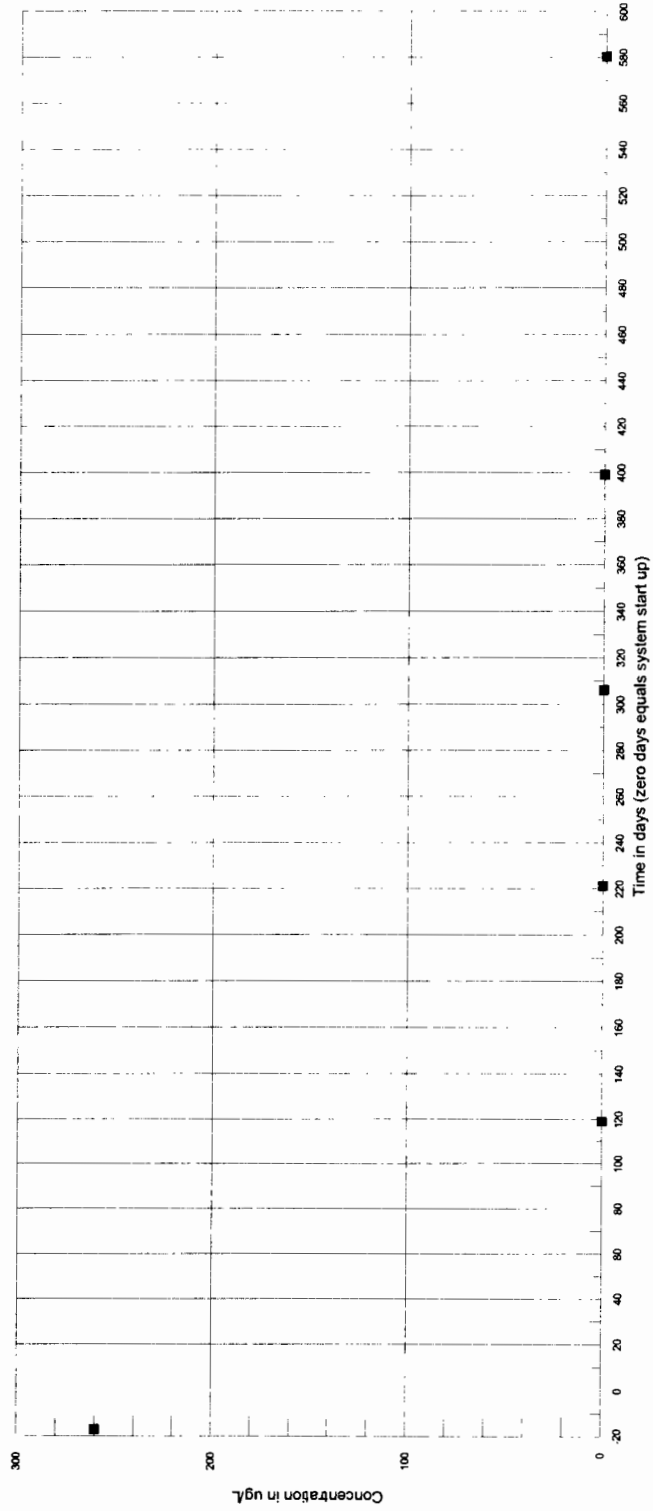


Table 9
Summary of Analytical Detections in Well MW-7D
for Volatile Organics Compounds in Groundwater
Utility Manufacturing, Westbury, NY

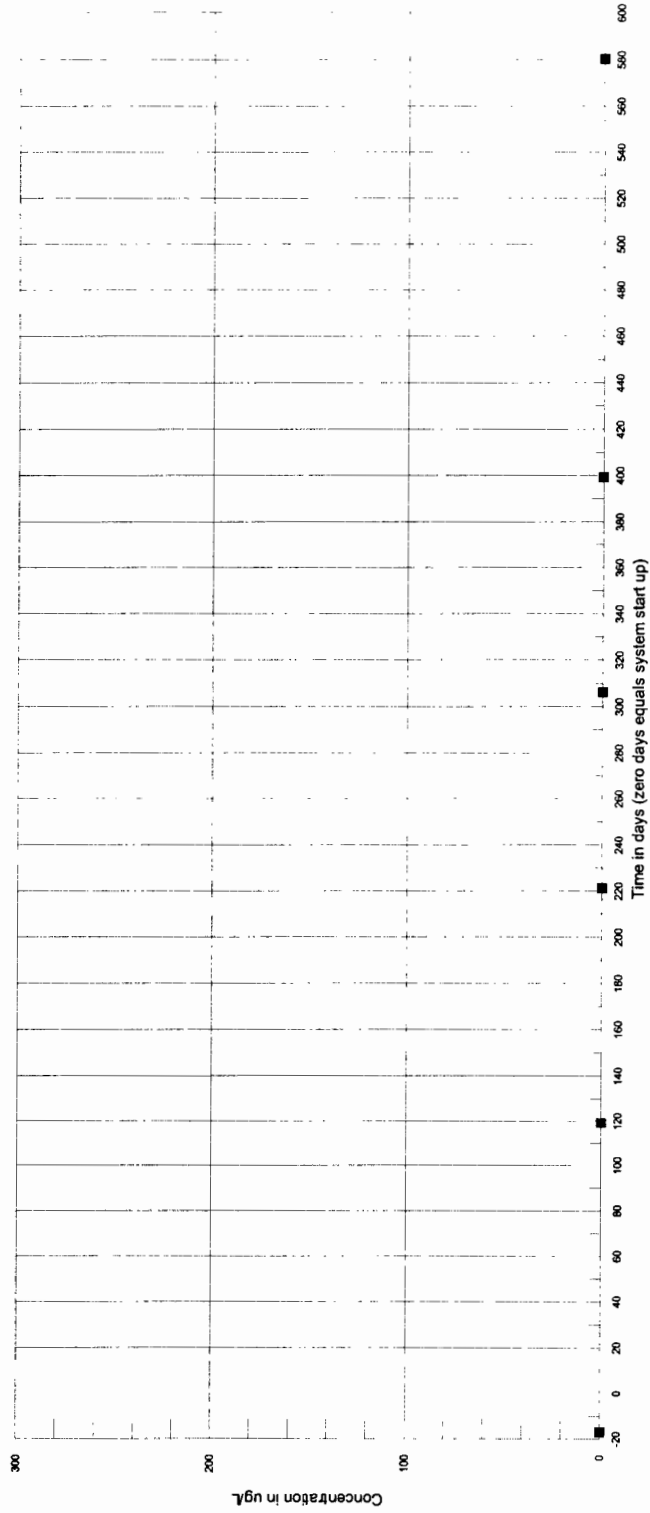
Well ID	Comments/Calendar Quarter	MW-7D Baseline Data 95 to 105 10/29/2001	MW-7D 1 Qtr 2002 95 to 105 03/14/2002	MW-7D 2 Qtr 2002 95 to 105 06/24/2002	MW-7D 3 Qtr 2002 95 to 105 09/17/2002	MW-7D 4 Qtr 2002 95 to 105 12/19/2002	MW-7D 2 Qtr 2003 95 to 105 06/18/2003	MW-7D MW-7D	MW-7D MW-7D	NYSDEC TOGS* values
	Depth in feet									
	Date Sampled									
	Days since system start up	-17	119	221	306	399	580			
	Days since initial sample	0	136	238	323	416	597			
Volatile Organics (EPA METHOD 8021) Units										
	Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	5.00
	Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	5.00
	cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	5.00
	trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	5.00
	Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	2.00
	1,1,1 Trichloroethane	2.6	1.2	1.6	2.5	ND	ND	ND	ND	5.00
	1,1 Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	5.00
	Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	5.00

Notes:
 ND: Indicates compound analyzed but not detected at laboratory detection level.
 ug/L: micrograms per liter or parts per billion.
 Date of system start up: 11/15/2001

*NYSDEC Technical and Operational Guidance Series (1,1,1)
 Ambient Water Quality Standards and Guidance Values; June 1998

Prepared by CA Rich Consultants Inc.

MW-7D
Tetrachloroethene versus time



■ Concentration in ug/L

APPENDIX A

**ANALYTICAL RESULTS
SUMMARY**

PROJECT NAME: utility

**RICH CONSULTANTS
17 DUPONT STREET
PLAINVIEW, NY 11803
5165768844**

**CHEMTECH PROJECT NO.
ATTENTION:**

**R2979
Mike Yager**

Hit Summary Report

SDG No.: R2979

Order ID: R2979

Client: Rich Consultants

Project ID: utility

Test: VOCCG Group 1

Sample ID	Client ID	Matrix	Parameter	Concentration	C	RDL	MDL	Units
Client ID: R2979-01	MW-1 MW-1	WATER	Tetrachloroethene	2.1	J	5.0	0.4	ug/L
			Total VOC's:	2.10				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	2.10				
Client ID: R2979-02	MW-3 MW-3	WATER	Tetrachloroethene	8.8		5.0	0.4	ug/L
			Total VOC's:	8.80				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	8.80				
Client ID: R2979-03	MW-4 MW-4	WATER	22DCPRPA+CI12DC	4.5	J	5.0	0.6	ug/L
R2979-03	MW-4	WATER	Tetrachloroethene	2.9	J	5.0	0.4	ug/L
			Total VOC's:	7.40				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	7.40				
Client ID: R2979-05	MW-6 MW-6	WATER	Tetrachloroethene	0.4	J	5.0	0.4	ug/L
			Total VOC's:	0.40				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	0.40				
Client ID: R2979-06	MW-7S MW-7S	WATER	Tetrachloroethene	2.2	J	5.0	0.4	ug/L
			Total VOC's:	2.20				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	2.20				

Note: The asterisk "*" flag next to a parameter signifies a TIC parameter.

**DATA PACKAGE FOR
VOLATILE ORGANICS****PROJECT NAME: utility****RICH CONSULTANTS
17 DUPONT STREET
PLAINVIEW, NY 11803
5165768844****CHEMTECH PROJECT NO.
ATTENTION:****R2979
Mike Yager**

CHEMTECH

284 Sheffield Street Mountainside NJ 07092
Tel. 908-789-8900

COVER PAGE

COVER PAGE

Order R2979 ProjectID: utility
CustomerName Rich Consultants

LAB SAMPLE NO.	CLIENT SAMPLE NO
R2979-07	MW-7I
R2979-08	MW-7D
R2979-04	MW-5
R2979-05	MW-6
R2979-06	MW-7S
R2979-01	MW-1
R2979-02	MW-3
R2979-03	MW-4

I certify that the 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.

Signature: *[Handwritten Signature]* Name: *Keypa Dubey*
Date: *7/11/03* Title: *SAPC*

CHEMTECH

QA/QC DELIVERABLES CHECKLIST

Project Number: R2979

THIS FORM HAS BEEN COMPLETED BY CHEMTECH LABORATORY AND ACCOMPANIES ALL DATA DELIVERABLES PACKAGES.

The following laboratory deliverables are included in this analytical report. Any deviations from the accepted methodology and procedures, or performance values outside acceptable ranges are summarized in the Non-Conformance Summary.

	Yes	NA
I. Report Cover Page, Laboratory Certification and Field Sample to Lab Sample ID Cross Reference	<input checked="" type="checkbox"/>	
II. Table of Contents	<input checked="" type="checkbox"/>	
III. Chain of Custody Documents	<input checked="" type="checkbox"/>	
IV. Methodology Summaries	<input checked="" type="checkbox"/>	
V. Laboratory Chronicle and Hold Time Checks	<input checked="" type="checkbox"/>	
VI. Non-Conformance Summary	<input checked="" type="checkbox"/>	
VII. Tabulated Analytical Results	<input checked="" type="checkbox"/>	
VIII. Initial and Continuing Calibration Information	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IX. Tune and Internal Standard Area Summaries (GC/MS)		<input checked="" type="checkbox"/>
X. Quality Control Summary Reports	<input checked="" type="checkbox"/>	
XI. Surrogate Recovery Summary	<input checked="" type="checkbox"/>	
XII. Raw Data Chromatogram, Blank, Samples and QC when applicable		<input checked="" type="checkbox"/>
XIII. Subcontract Data		<input checked="" type="checkbox"/>

M. J. Guerra
QA/QC Data Reviewer

7/01/03
Date

110 Route 4
Englewood, NJ 07631
Phone: 201.568.7400 Fax: 201.567.3131

284 Sheffield Street
Mountainside, NJ 07092
Tel: 908.759.8900 Fax: 908.759.8922

**TABLE OF CONTENTS
PROJECT NUMBER: R2979RQ**

	PAGE
COVER PAGE	02
CHAIN OF CUSTODY	06
METHODOLOGY REVIEW & LABORATORY CHRONICLE	10
CONFORMANCE / NON - CONFORMANCE SUMMARY	12
GC/ MS VOLATILE ORGANIC DATA	
TABULATED ANALYTICAL RESULTS SUMMARY	15
QUALITY CONTROL SUMMARY REPORTS	32
TOTAL NUMBER OF PAGES	41

CHEMTECH

284 Sheffield Street Mountainside NJ 07092

Tel. 908-789-8900

**CHAIN OF
CUSTODY
RECORD**



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH JOB NO.: 22079
CHEMTECH QUOTE NO.:

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: EA RICH CONSULTANTS INC
ADDRESS: 17 DUPONT STREET
CITY: PLAINVIEW STATE: NY ZIP: 11803
ATTENTION: MICHAEL YAUZER
PHONE: 516.576.8444 FAX: 516.576.2089

PROJECT INFORMATION

PROJECT NAME: UTILITY MANUFACTURING
PROJECT NO.: UTILITY LOCATION
PROJECT MANAGER: ERIC WEINSTEIN
E-MAIL:
PHONE: 516.576.8444 FAX: 516.576.2089

BILLING INFORMATION

BILL TO: EA RICH CONSULTANTS
ADDRESS: 17 DUPONT STREET
CITY: PLAINVIEW STATE: NY ZIP: 11803
ATTENTION: MICHAEL YAUZER
PHONE: 516.576.8444

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
E-MAIL: _____ DAYS *
* TO BE APPROVED BY CHEMTECH
** NORMAL TURNAROUND TIME - 14 DAYS

DATA DELIVERABLE INFORMATION

RESULTS ONLY USEPA CLP
 RESULTS + QC NYS ASP "B"
 NJ REDUCED NYS ASP "A"
 NJ CLP EDD
 EDD FORMAT: _____

ANALYSIS

1	2	3	4	5	6	7	8	9

CHEMTECH SAMPLE ID
PROJECT IDENTIFICATION

1. MW-1
2. MW-3
3. MW-4
4. MW-5
5. MW-6
6. MW-7I
7. MW-7I
8. MW-7D

SAMPLE TYPE
SAMPLE COLLECTION DATE TIME

WATER
11/22 1122
11/22 1138
12/05 1205
11/26 1156
11/15 1115
12/25 1225
12/25 1225
12/20 1220

PRESERVATIVES

1 2 3 4 5 6 7 8 9

COMMENTS

← Specify Preservatives
A - HCl B - HNO₃
C - H₂SO₄ D - NaOH
E - ICE F - Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. CHRIS BOWE DATE/TIME: 6/18/03
RELINQUISHED BY: 2. DATE/TIME:
RELINQUISHED BY: 3. DATE/TIME: 6/20/03

Conditions of bottles or coolers at receipt: Compliant Non-Compliant Temp. of Cooler
MeOH extractions requires an additional 4oz. jar for percent solid.
Comments:

RECEIVED FOR LAB BY: 3. CW
RECEIVED BY: 1. DATE/TIME: 6/18/03
RECEIVED BY: 2. DATE/TIME:

Shipped Via: Client Chemtech
Hand Delivered Picked Up
Overnight Overnight

Page 1 of 1

Shipment Complete Yes No

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >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".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.

QA REVIEW GENERAL DOCUMENTATION

Project #: R 2910

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page)

Check chain-of-custody for proper relinquish/return of samples

Is the chain of custody signed and complete

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

Collect information for each project id from server. Were all requirements followed

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody and on login page

Do lab numbers and client Ids on cover page agree with the Chain of Custody

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

Do requested analyses on Chain of Custody agree with the log-in page

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

Were the samples received within hold time

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

Non - Conformance /Comments:

1st Level QA Review Signature:

Martha Suarez

Date:

7/1/03

2nd Level QA Review Signature:

[Signature]

Date:

7/1/03

CHEMTECH

284 Sheffield Street Mountainside, NJ 07092
Tel: 908-789-8900

**METHODOLOGY
REVIEW
&
LABORATORY
CHRONICLE**

CHEMTECH**Lab Chronicle**

Order ID: R2979
 Client: Rich Consultants
 Contact: Mike Yager

Order Date: 6/21/03 12:12:53 PM
 Project: utility

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnalDate	Received
R2979-01	MW-1	WATER	VOCGC Group 1	8021	6/18/03		6/24/03	6/20/03
R2979-02	MW-3	WATER	VOCGC Group 1	8021	6/18/03		6/25/03	6/20/03
R2979-03	MW-4	WATER	VOCGC Group 1	8021	6/18/03		6/25/03	6/20/03
R2979-04	MW-5	WATER	VOCGC Group 1	8021	6/18/03		6/25/03	6/20/03
R2979-05	MW-6	WATER	VOCGC Group 1	8021	6/18/03		6/25/03	6/20/03
R2979-06	MW-7S	WATER	VOCGC Group 1	8021	6/18/03		6/25/03	6/20/03
R2979-07	MW-7I	WATER	VOCGC Group 1	8021	6/18/03		6/25/03	6/20/03
R2979-08	MW-7D	WATER	VOCGC Group 1	8021	6/18/03		6/25/03	6/20/03

CHEMTECH

284 Sheffield Street Mountainside NJ 07092

Tel. 908-789-8900

**CONFORMANCE/
NON-
CONFORMANCE
SUMMARY**

CHEMTECH 284 Sheffield Street. Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 12013 : NEW YORK LAB ID#: 11376

GC VOA ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT LAB NUMBER: R2979 MATRIX: R2979-wooden
METHOD: 8010 8021
msf-1/10/03

	<u>YES</u>	<u>NA</u>	<u>NO</u>
1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Standards Summary Submitted	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Blank Contamination - If yes, list compounds and concentrations in each blank:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VOA Fraction _____
Other _____

5. Surrogate Recoveries Meet Criteria

If not met, list those compounds and their recoveries which fall outside the acceptable ranges

VOA Fraction _____
Other _____

6. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria.

If not met, list those compounds and their recoveries which fall outside the acceptable range.

VOA
Fraction _____
Other _____

CHEMTECH 284 Sheffield Street. Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 12013 : NEW YORK LAB ID#: 11376

GC VOA ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY(CONTINUED)

YES NA NO

7. Extraction Holding Time Met

_____ _____

If not met, list number of days exceeded for each sample:

8. Analysis Holding Time Met

If not met, list number of days exceeded for each sample:

Additional

Comments: _____

Paulei Marguerite
Analyst

6-30-03
Date

Martha Herrera
QA REVIEW

7/10/03
Date

TABULATED ANALYTICAL RESULTS

GC VOLATILE ORGANICS

Volatiles

SDG No.: R2979
 Client: Rich Consultants

Sample ID:	R2979-01	Client ID:	MW-1
Date Collected:	6/18/03	Date Received:	6/20/03
Date Analyzed:	6/24/03	Matrix:	WATER
File ID:	U062416.RAW	Analytical Run ID:	VA062403
Dilution:	1	Instrument ID:	GCVOA1
Analytical Method:	8021	Associated Blank:	VBA0624W2
Sample Wt/Wol:	5.0	Units:	mL
Soil Aliquot Vol:		Soil Extract Vol:	
		% Moisture:	100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-Dichloropropane		< 0.6	U	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
Ethylene Chloride	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
1,1-Dibromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,3-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
1,1-Dibromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,1-Trichloroethene	127-18-4	2.1	J	5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.6	U	5.0	0.6	ug/L
1,1,1-Trichloroethane	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,1,2-Tetrachloroethane	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
1,2,4-Trichlorobenzene	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979
 Client: Rich Consultants

Sample ID:	R2979-01	Client ID:	MW-1
Date Collected:	6/18/03	Date Received:	6/20/03
Date Analyzed:	6/24/03	Matrix:	WATER
File ID:	U062416.RAW	Analytical Run ID:	VA062403
Dilution:	1	Instrument ID:	GCVOA1
Analytical Method:	8021	Associated Blank:	VBA0624W2
Sample Wt/Wol:	5.0	Units:	mL
Soil Aliquot Vol:		Soil Extract Vol:	
		% Moisture:	100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
hexachlorobutadiene	87-68-3	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
URROGATES						
1,4 Dichlorobutane	75-25-2	25.861	86 %	40 - 160		SPK: 30
Bromochlorobenzene		15.218	51 %	40 - 160		SPK: 30

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: R2979-02

Client ID: MW-3

Date Collected: 6/18/03

Date Received: 6/20/03

Date Analyzed: 6/25/03

Matrix: WATER

File ID: U062417.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank: VBA0624W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-DCPRPA+CI12DC		< 0.6	U	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
Methylene Chloride	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
1,1-Dibromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,3-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
1,1-Dibromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,1,2-Tetrachloroethane	127-18-4	8.8		5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.6	U	5.0	0.6	ug/L
Chloroform	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
1,4-Dioxobenzene	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979
 Client: Rich Consultants

Sample ID:	R2979-02	Client ID:	MW-3
Date Collected:	6/18/03	Date Received:	6/20/03
Date Analyzed:	6/25/03	Matrix:	WATER
File ID:	U062417.RAW	Analytical Run ID:	VA062403
Dilution:	1	Instrument ID:	GCVOA1
Analytical Method:	8021	Associated Blank:	VBA0624W2
Sample Wt/Wol:	5.0	Units:	mL
Soil Aliquot Vol:		Soil Extract Vol:	
		% Moisture:	100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
4-Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
Hexachlorobutadiene	87-68-3	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
URROGATES						
1,4 Dichlorobutane	75-25-2	25.751	86 %	40 - 160		SPK: 30
Bromochlorobenzene		15.874	53 %	40 - 160		SPK: 30

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: R2979-03

Client ID: MW-4

Date Collected: 6/18/03

Date Received: 6/20/03

Date Analyzed: 6/25/03

Matrix: WATER

File ID: U062418.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank: VBA0624W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-DCPRPA+CI12DC		4.5	J	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
Dibromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,3-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
1,1-Dibromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,1,2-Tetrachloroethene	127-18-4	2.9	J	5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.6	U	5.0	0.6	ug/L
1,1,1-Trichloroethane	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,1,2-Tetrachloroethane	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
1,2,4-Trichlorobenzene	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: R2979-03

Client ID: MW-4

Date Collected: 6/18/03

Date Received: 6/20/03

Date Analyzed: 6/25/03

Matrix: WATER

File ID: U062418.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank: VBA0624W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
Hexachlorobutadiene	87-68-3	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
URROGATES						
1,4-Dichlorobutane	75-25-2	24.661	82 %	40 - 160		SPK: 30
Bromochlorobenzene		16.712	56 %	40 - 160		SPK: 30

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: R2979-04

Client ID: MW-5

Date Collected: 6/18/03

Date Received: 6/20/03

Date Analyzed: 6/25/03

Matrix: WATER

File ID: U062419.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank: VBA0624W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
PARAMETERS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-Dichloropropane		< 0.6	U	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
Ethylene Chloride	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
Bromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,3-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
Bromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,2-Trichloroethene	127-18-4	< 0.4	U	5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.6	U	5.0	0.6	ug/L
Formoform	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
1,2,4-Trichlorobenzene	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID:	<u>R2979-04</u>	Client ID:	<u>MW-5</u>
Date Collected:	<u>6/18/03</u>	Date Received:	<u>6/20/03</u>
Date Analyzed:	<u>6/25/03</u>	Matrix:	<u>WATER</u>
File ID:	<u>U062419.RAW</u>	Analytical Run ID:	<u>VA062403</u>
Dilution:	<u>1</u>	Instrument ID:	<u>GCVOA1</u>
Analytical Method:	<u>8021</u>	Associated Blank:	<u>VBA0624W2</u>
Sample Wt/Wol:	<u>5.0</u> Units: <u>mL</u>	Soil Extract Vol:	<u> </u>
Soil Aliquot Vol:	<u> </u>	% Moisture:	<u>100</u>

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
hexachlorobutadiene	87-68-3	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
URROGATES						
1,4 Dichlorobutane	75-25-2	23.818	79 %	40 - 160		SPK: 30
Bromochlorobenzene		14.093	47 %	40 - 160		SPK: 30

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: R2979-05

Client ID: MW-6

Date Collected: 6/18/03

Date Received: 6/20/03

Date Analyzed: 6/25/03

Matrix: WATER

File ID: U062420.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank: VBA0624W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-DCPRPA+CI12DC		< 0.6	U	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
1,2-Dichloroethane	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
1,1-Dibromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,3-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
1,1-Dibromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,1-Trichloroethene	127-18-4	0.4	J	5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.6	U	5.0	0.6	ug/L
1,1,1,2-Tetrachloroethane	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,1,2-Tetrachloroethane	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979
 Client: Rich Consultants

Sample ID:	R2979-05	Client ID:	MW-6
Date Collected:	6/18/03	Date Received:	6/20/03
Date Analyzed:	6/25/03	Matrix:	WATER
File ID:	U062420.RAW	Analytical Run ID:	VA062403
Dilution:	1	Instrument ID:	GCVOA1
Analytical Method:	8021	Associated Blank:	VBA0624W2
Sample Wt/Wol:	5.0	Units:	mL
Soil Aliquot Vol:		Soil Extract Vol:	
		% Moisture:	100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
Hexachlorobutadiene	87-68-3	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
URROGATES						
1,4 Dichlorobutane	75-25-2	21.575	72 %	40 - 160		SPK: 30
Bromochlorobenzene		12.684	42 %	40 - 160		SPK: 30

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: R2979-06

Client ID: MW-7S

Date Collected: 6/18/03

Date Received: 6/20/03

Date Analyzed: 6/25/03

Matrix: WATER

File ID: U062421.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank: VBA0624W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-DCPRPA+CI12DC		< 0.6	U	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
1,1-Dibromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,3-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
1,1-Dibromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,2-Trichloroethene	127-18-4	2.2	J	5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.6	U	5.0	0.6	ug/L
1,1,1,1-Tetrafluoroethane	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,1,2-Tetrachloroethane	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
1,1,2,2-Tetrachloroethane	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID:	R2979-06	Client ID:	MW-7S
Date Collected:	6/18/03	Date Received:	6/20/03
Date Analyzed:	6/25/03	Matrix:	WATER
File ID:	U062421.RAW	Analytical Run ID:	VA062403
Dilution:	1	Instrument ID:	GCVOA1
Analytical Method:	8021	Associated Blank:	VBA0624W2
Sample Wt/Wol:	5.0	Units:	mL
Soil Aliquot Vol:		Soil Extract Vol:	
		% Moisture:	100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
Hexachlorobutadiene	87-68-3	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
SURROGATES						
1,4-Dichlorobutane	75-25-2	23.877	80 %	40 - 160		SPK: 30
Bromochlorobenzene		15.555	52 %	40 - 160		SPK: 30

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: R2979-07

Client ID: MW-71

Date Collected: 6/18/03

Date Received: 6/20/03

Date Analyzed: 6/25/03

Matrix: WATER

File ID: U062422.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank: VBA0624W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-DCPRPA+CI12DC		< 0.6	U	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
1,1,2-Dichloroethane	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
1,1-Dibromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,3-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
1,1-Dibromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,1,2-Tetrachloroethane	127-18-4	< 0.4	U	5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroeth	630-20-6	< 0.6	U	5.0	0.6	ug/L
1,1,1,2-Tetrachloroeth	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,2,2-Tetrachloroeth	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
1,1,1-Trichloroethane	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979
 Client: Rich Consultants

Sample ID: R2979-07	Client ID: MW-7I
Date Collected: 6/18/03	Date Received: 6/20/03
Date Analyzed: 6/25/03	Matrix: WATER
File ID: U062422.RAW	Analytical Run ID: VA062403
Dilution: .1	Instrument ID: GCVOA1
Analytical Method: 8021	Associated Blank: VBA0624W2
Sample Wt/Wol: 5.0 Units: mL	Soil Extract Vol:
Soil Aliquot Vol:	% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
1-Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
4-Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
1,1-Dichloroethane	75-35-4	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
UNROGATES						
1,1,1-Trichloroethane	75-35-4	28.412	95 %	40 - 160		SPK: 30
Bromochlorobenzene		17.489	58 %	40 - 160		SPK: 30

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: R2979-08

Client ID: MW-7D

Date Collected: 6/18/03

Date Received: 6/20/03

Date Analyzed: 6/25/03

Matrix: WATER

File ID: U062423.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank: VBA0624W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
PARAMETERS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Dichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-Dichloropropane		< 0.6	U	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
Ethylene Chloride	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
1,1-Bromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,1-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
1,1-Bromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,2-Trichloroethene	127-18-4	< 0.4	U	5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.6	U	5.0	0.6	ug/L
Ethyl bromide	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
Bromobenzene	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979
 Client: Rich Consultants

Sample ID:	<u>R2979-08</u>	Client ID:	<u>MW-7D</u>
Date Collected:	<u>6/18/03</u>	Date Received:	<u>6/20/03</u>
Date Analyzed:	<u>6/25/03</u>	Matrix:	<u>WATER</u>
File ID:	<u>U062423.RAW</u>	Analytical Run ID:	<u>VA062403</u>
Dilution:	<u>1</u>	Instrument ID:	<u>GCVOA1</u>
Analytical Method:	<u>8021</u>	Associated Blank:	<u>VBA0624W2</u>
Sample Wt/Wol:	<u>5.0</u> Units: <u>mL</u>	Soil Extract Vol:	<u> </u>
Soil Aliquot Vol:	<u> </u>	% Moisture:	<u>100</u>

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
Hexachlorobutadiene	87-68-3	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
SURROGATES						
1,4-Dichlorobutane	75-25-2	23.341	78 %	40 - 160		SPK: 30
Bromochlorobenzene		15.139	50 %	40 - 160		SPK: 30

CHEMTECH

QUALITY CONTROL SUMMARY REPORTS

GC VOLATILE ORGANICS

Surrogate Summary
SW-846

SDG No.: R2979

Client: Rich Consultants

Analytical Method: EPA SW846 8021

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits	
							Low	High
SB0626W1	LCS	1,4 Dichlorobutane	30	34.545	115		40.00	160.00
		Bromochlorobenzene	30	35.345	118		40.00	160.00
2979-01	MW-1	1,4 Dichlorobutane	30	25.861	86		40.00	160.00
		Bromochlorobenzene	30	15.218	51		40.00	160.00
R2979-02	MW-3	1,4 Dichlorobutane	30	25.751	86		40.00	160.00
		Bromochlorobenzene	30	15.874	53		40.00	160.00
R2979-03	MW-4	1,4 Dichlorobutane	30	24.661	82		40.00	160.00
		Bromochlorobenzene	30	16.712	56		40.00	160.00
2979-04	MW-5	1,4 Dichlorobutane	30	23.818	79		40.00	160.00
		Bromochlorobenzene	30	14.093	47		40.00	160.00
R2979-05	MW-6	1,4 Dichlorobutane	30	21.575	72		40.00	160.00
		Bromochlorobenzene	30	12.684	42		40.00	160.00
R2979-06	MW-7S	1,4 Dichlorobutane	30	23.877	80		40.00	160.00
		Bromochlorobenzene	30	15.555	52		40.00	160.00
2979-07	MW-7I	1,4 Dichlorobutane	30	28.412	95		40.00	160.00
		Bromochlorobenzene	30	17.489	58		40.00	160.00
2979-08	MW-7D	1,4 Dichlorobutane	30	23.341	78		40.00	160.00
		Bromochlorobenzene	30	15.139	50		40.00	160.00
R3020-02MS	R3020-02MS	1,4 Dichlorobutane	30	28.758	96		40.00	160.00
		Bromochlorobenzene	30	35.254	118		40.00	160.00
R3020-02MSD	R3020-02MSD	1,4 Dichlorobutane	30	29.42	98		40.00	160.00
		Bromochlorobenzene	30	34.993	117		40.00	160.00
BA0624W2	VBLK01	1,4 Dichlorobutane	30	24.994	83		40.00	160.00
		Bromochlorobenzene	30	17.069	57		40.00	160.00
VBA0626W1	VBLK02	1,4 Dichlorobutane	30	32.66	109		40.00	160.00
		Bromochlorobenzene	30	21.198	71		40.00	160.00

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: VBA0624W2

Client ID: VBLK01

Date Collected:

Date Received:

Date Analyzed: 6/24/03

Matrix: WATER

File ID: U062415.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank:

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-DCPRPA+CI12DC		< 0.6	U	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
Methylene Chloride	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
1,1-Dibromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,3-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
1,1-Dibromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,1-Trichloroethene	127-18-4	< 0.4	U	5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.6	U	5.0	0.6	ug/L
1,1,1-Trichloroethane	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,1,2,2-Pentachloroethane	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,1,2,3-Tetrachloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
1,1-Dibromobenzene	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: VBA0624W2

Client ID: VBLK01

Date Collected:

Date Received:

Date Analyzed: 6/24/03

Matrix: WATER

File ID: U062415.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank:

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
-Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
-Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
hexachlorobutadiene	87-68-3	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
URROGATES						
4 Dichlorobutane	75-25-2	24.994	83 %	40 - 160		SPK: 30
Bromochlorobenzene		17.069	57 %	40 - 160		SPK: 30

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: VBA0626W1

Client ID: VBLK02

Date Collected:

Date Received:

Date Analyzed: 6/26/03

Matrix: WATER

File ID: U062604.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank:

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.7	U	5.0	0.7	ug/L
Chloromethane	74-87-3	< 0.4	U	5.0	0.4	ug/L
Vinyl Chloride	75-01-4	< 0.7	U	5.0	0.7	ug/L
Bromomethane	74-83-9	< 0.1	U	5.0	0.1	ug/L
Chloroethane	75-00-3	< 0.4	U	5.0	0.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.7	U	5.0	0.7	ug/L
2,2-Dichloropropane		< 0.6	U	5.0	0.6	ug/L
1,1-Dichloroethene	75-35-4	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-09-2	< 0.8	U	5.0	0.8	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.5	U	5.0	0.5	ug/L
1,1-Dichloroethane	75-34-3	< 0.3	U	5.0	0.3	ug/L
Carbon Tetrachloride	56-23-5	< 0.5	U	5.0	0.5	ug/L
Bromochloromethane	74-97-5	< 0.6	U	5.0	0.6	ug/L
Chloroform	67-66-3	< 0.4	U	5.0	0.4	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.4	U	5.0	0.4	ug/L
1,1-Dichloropropene	563-43-2	< 0.3	U	5.0	0.3	ug/L
1,2-Dichloroethane	107-06-2	< 0.8	U	5.0	0.8	ug/L
Trichloroethene	79-01-6	< 0.4	U	5.0	0.4	ug/L
1,2-Dichloropropane	78-87-5	< 0.4	U	5.0	0.4	ug/L
1,1-Dibromomethane	74-95-3	< 0.4	U	5.0	0.4	ug/L
Bromodichloromethane	75-27-4	< 0.6	U	5.0	0.6	ug/L
trans-1,3-dichloropropene	10061-02-6	< 0.2	U	5.0	0.2	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.3	U	5.0	0.3	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.6	U	5.0	0.6	ug/L
1,3-Dichloropropane	142-28-9	< 0.2	U	5.0	0.2	ug/L
1,1-Dibromochloromethane	124-48-1	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromoethane	106-93-4	< 0.8	U	5.0	0.8	ug/L
1,1,1-Trichloroethene	127-18-4	< 0.4	U	5.0	0.4	ug/L
Chlorobenzene	108-90-7	< 0.4	U	5.0	0.4	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.6	U	5.0	0.6	ug/L
1,1,1-Trichloroethane	75-25-2	< 0.1	U	5.0	0.1	ug/L
1,1,1,2-Tetrachloroethane	79-34-5	< 0.7	U	5.0	0.7	ug/L
1,2,3-Trichloropropane	96-18-4	< 0.7	U	5.0	0.7	ug/L
1,1,2-Trichloroethane	108-86-1	< 0.6	U	5.0	0.6	ug/L

Volatiles

SDG No.: R2979

Client: Rich Consultants

Sample ID: VBA0626W1

Client ID: VBLK02

Date Collected:

Date Received:

Date Analyzed: 6/26/03

Matrix: WATER

File ID: U062604.RAW

Analytical Run ID: VA062403

Dilution: 1

Instrument ID: GCVOA1

Analytical Method: 8021

Associated Blank:

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chlorotoluene	95-49-8	< 0.5	U	5.0	0.5	ug/L
Chlorotoluene	106-43-4	< 0.9	U	5.0	0.9	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.8	U	5.0	0.8	ug/L
Hexachlorobutadiene	87-68-3	< 0.5	U	5.0	0.5	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 0.7	U	5.0	0.7	ug/L
URROGATES						
1,4 Dichlorobutane	75-25-2	32.66	109 %	40 - 160		SPK: 30
Bromochlorobenzene		21.198	71 %	40 - 160		SPK: 30

Chemtech Consulting Group

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: R2979

Client: Rich Consultants

Analytical Method: EPA SW846 8021

Lab Sample ID	Parameter	Spike	Sample Result	Result	Rec	RPD	Qual	Limits	
								Low	High RPD
Client Sample ID: R3020-02MS									
R3020-02MS	Dichlorodifluoromethane	50	0.0	46	92			50	150
	Chloromethane	50	0.0	49	98			50	150
	Vinyl Chloride	50	0.0	50	100			50	150
	Bromomethane	50	0.0	52	104			50	150
	Chloroethane	50	0.0	55	110			50	150
	Trichlorofluoromethane	50	0.0	48	96			50	150
	2,2-Dichloropropane	100	0.0	110	110			50	150
	1,1-Dichloroethene	50	0.0	56	112			50	150
	Methylene Chloride	50	0.0	52	104			50	150
	trans-1,2-Dichloroethene	50	0.0	56	112			50	150
	1,1-Dichloroethane	50	0.0	61	122			50	150
	Carbon Tetrachloride	50	0.0	55	110			50	150
	Bromochloromethane	50	0.0	55	110			50	150
	Chloroform	50	0.0	55	110			50	150
	1,1,1-Trichloroethane	50	0.0	56	112			50	150
	1,1-Dichloropropene	50	0.0	58	116			50	150
	1,2-Dichloroethane	50	0.0	56	112			50	150
	Trichloroethene	50	0.0	59	118			50	150
	1,2-Dichloropropane	50	0.0	59	118			50	150
	Dibromomethane	50	0.0	62	124			50	150
	Bromodichloromethane	50	0.0	60	120			50	150
	Trans-1,3-dichloropropene	50	0.0	60	120			50	150
	cis-1,3-Dichloropropene	50	0.0	57	114			50	150
	1,1,2-Trichloroethane	50	0.0	54	108			50	150
	1,3-Dichloropropane	50	0.0	63	126			50	150
	Dibromochloromethane	50	0.0	56	112			50	150
	1,2-Dibromoethane	50	0.0	57	114			50	150
	Tetrachloroethene	50	0.0	52	104			50	150
	Chlorobenzene	50	0.0	55	110			50	150
	1,1,1,2 Tetrachloroeth	50	0.0	57	114			50	150
	Bromoform	50	0.0	55	110			50	150
	1,1,1,2 Tetrachloroeth	50	0.0	45	90			50	150
	1,2,3-Trichloropropane	50	0.0	50	100			50	150
	Bromobenzene	50	0.0	47	94			50	150
	2-Chlorotoluene	50	0.0	57	114			50	150
	4-Chlorotoluene	50	0.0	47	94			50	150
	1,2-Dibromo-3-Chloropropane	50	0.0	63	126			50	150
	Hexachlorobutadiene	50	0.0	57	114			50	150
	1,2,3-Trichlorobenzene	50	0.0	54	108			50	150

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: R2979

Client: Rich Consultants

Analytical Method: EPA SW846 8021

Lab Sample ID	Parameter	Spike	Sample Result	Result	Rec	RPD	Qual	Limits		
								Low	High	RPD
Client Sample ID: R3020-02MSD										
R3020-02MSD	Dichlorodifluoromethane	50	0.0	47	94	4		50	150	20
	Chloromethane	50	0.0	49	98	0		50	150	20
	Vinyl Chloride	50	0.0	44	88	13		50	150	20
	Bromomethane	50	0.0	52	104	0		50	150	20
	Chloroethane	50	0.0	52	104	6		50	150	20
	Trichlorofluoromethane	50	0.0	49	98	2		50	150	20
	2,2-Dichloropropane+1,1,1,2,2,2-Tetrachloroethane	100	0.0	110	110	0		50	150	20
	1,1-Dichloroethene	50	0.0	55	110	2		50	150	20
	Methylene Chloride	50	0.0	51	102	2		50	150	20
	trans-1,2-Dichloroethene	50	0.0	53	106	6		50	150	20
	1,1-Dichloroethane	50	0.0	56	112	9		50	150	20
	Carbon Tetrachloride	50	0.0	51	102	8		50	150	20
	Bromochloromethane	50	0.0	54	108	2		50	150	20
	Chloroform	50	0.0	54	108	2		50	150	20
	1,1,1-Trichloroethane	50	0.0	53	106	6		50	150	20
	1,1-Dichloropropene	50	0.0	55	110	5		50	150	20
	1,2-Dichloroethane	50	0.0	54	108	4		50	150	20
	Trichloroethene	50	0.0	55	110	7		50	150	20
	1,2-Dichloropropane	50	0.0	55	110	7		50	150	20
	Dibromomethane	50	0.0	56	112	10		50	150	20
	Bromodichloromethane	50	0.0	57	114	5		50	150	20
	Trans-1,3-dichloropropene	50	0.0	56	112	7		50	150	20
	cis-1,3-Dichloropropene	50	0.0	52	104	9		50	150	20
	1,1,2-Trichloroethane	50	0.0	53	106	2		50	150	20
	1,3-Dichloropropane	50	0.0	60	120	5		50	150	20
	Dibromochloromethane	50	0.0	53	106	6		50	150	20
	1,2-Dibromoethane	50	0.0	54	108	5		50	150	20
	Tetrachloroethene	50	0.0	47	94	10		50	150	20
	Chlorobenzene	50	0.0	54	108	2		50	150	20
	1,1,1,2-Tetrachloroethane	50	0.0	54	108	5		50	150	20
	Bromoform	50	0.0	55	110	0		50	150	20
	1,1,1,2,2-Pentachloroethane	50	0.0	45	90	0		50	150	20
	1,2,3-Trichloropropane	50	0.0	51	102	2		50	150	20
	Bromobenzene	50	0.0	46	92	2		50	150	20
	2-Chlorotoluene	50	0.0	55	110	4		50	150	20
	4-Chlorotoluene	50	0.0	45	90	4		50	150	20
	1,2-Dibromo-3-Chloropropane	50	0.0	59	118	7		50	150	20
	Hexachlorobutadiene	50	0.0	48	96	17		50	150	20
	1,2,3-Trichlorobenzene	50	0.0	50	100	8		50	150	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

IDG No.: R2979

Client: Rich Consultants

Analytical Method: EPA SW846 8021

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Low	Limits	
								High	RPD
SB0626W1	Dichlorodifluoromethane	50	55	110			50	150	
	Chloromethane	50	53	106			50	150	
	Vinyl Chloride	50	54	108			50	150	
	Bromomethane	50	59	118			50	150	
	Chloroethane	50	59	118			50	150	
	Trichlorofluoromethane	50	53	106			50	150	
	2,2-Dichloropropane	100	110	110			50	150	
	1,1-Dichloroethene	50	59	118			50	150	
	Methylene Chloride	50	54	108			50	150	
	trans-1,2-Dichloroethene	50	57	114			50	150	
	1,1-Dichloroethane	50	60	120			50	150	
	Carbon Tetrachloride	50	55	110			50	150	
	Bromochloromethane	50	55	110			50	150	
	Chloroform	50	56	112			50	150	
	1,1,1-Trichloroethane	50	57	114			50	150	
	1,1-Dichloropropene	50	58	116			50	150	
	1,2-Dichloroethane	50	55	110			50	150	
	Trichloroethene	50	57	114			50	150	
	1,2-Dichloropropane	50	56	112			50	150	
	Dibromomethane	50	57	114			50	150	
	Bromodichloromethane	50	56	112			50	150	
	Trans-1,3-dichloropropene	50	58	116			50	150	
	cis-1,3-Dichloropropene	50	55	110			50	150	
	1,1,2-Trichloroethane	50	56	112			50	150	
	1,3-Dichloropropane	50	62	124			50	150	
	Dibromochloromethane	50	57	114			50	150	
	1,2-Dibromoethane	50	56	112			50	150	
	Tetrachloroethene	50	50	100			50	150	
	Chlorobenzene	50	61	122			50	150	
	1,1,1,2 Tetrachloroeth	50	57	114			50	150	
Bromoform	50	60	120			50	150		
1,1,2,2 Tetrachloroeth	50	51	102			50	150		
1,2,3-Trichloropropane	50	57	114			50	150		
Bromobenzene	50	53	106			50	150		
2-Chlorotoluene	50	65	130			50	150		
4-Chlorotoluene	50	49	98			50	150		
1,2-Dibromo-3-Chloropropane	50	64	128			50	150		
Hexachlorobutadiene	50	54	108			50	150		
1,2,3-Trichlorobenzene	50	51	102			50	150		

CHEMTECH

284 Sheffield ST. Mountainside, NJ 07092
Tel: 908-789-8900

END OF ANALYTICAL RESULTS