



Holzmacher, McLendon & Murrell, P.C. ▶ H2M Associates, Inc.  
H2M Labs, Inc. ▶ H2M Construction Management, Inc.

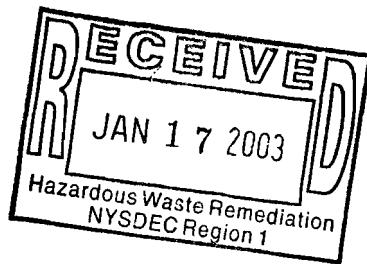
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January 15, 2003

Robert Stewart  
NYSDEC Region 1  
Division of Environmental Remediation  
Building 40, SUNY  
Stony Brook, NY 11790-2356

Re: Third Round Groundwater Monitoring Report  
333 Smith Street, Farmingdale, New York  
NYSDEC Index # W1-0819-98-07



Dear Mr. Stewart:

Holzmacher, McLendon & Murrell, P.C. (H2M) has completed the third round of quarterly groundwater monitoring at 333 Smith Street in Farmingdale, New York. This letter report summarizes the field methods for the collection and analysis of eight groundwater samples and provides recommendations based on field observations and laboratory analytical results.

## Background

H2M was retained by Reckson Associates Realty Corp. (Reckson) to conduct groundwater monitoring activities at the subject property in accordance with a November 28, 2001 Work Plan prepared by Environmental Resource Management (ERM) as part of a Voluntary Investigation Agreement (VIA) (Index No. W1-0819-98-07) between Reckson and the New York State Department of Environmental Conservation (NYSDEC). Six groundwater monitoring wells were installed at the site in April and May 2002 to facilitate groundwater monitoring activities. A site location map and a site plan depicting monitoring well locations are provided as Figures 1 and 2, respectively. First round monitoring results were presented to NYSDEC in an October 30, 2002 report titled

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“Groundwater Monitoring Program Report Including Initial Sampling Event”. A subsequent letter report presenting second round monitoring results was submitted to your office on November 25, 2002. This report documents the third round of quarterly groundwater monitoring.

### **Methods and Field Observations**

On November 13, 2002, H2M personnel collected samples from eight groundwater monitoring wells at the subject property. Prior to sampling the wells, groundwater elevation measurements were gauged using a water level meter in order to determine groundwater gradient and flow direction. Groundwater gauging data from the monitoring event is summarized in Table 1, and associated groundwater elevation contours are represented in Figure 3. Groundwater elevation contours in Figure 3 and contaminant isopleths in Figures 4 and 5 were linearly interpolated and then plotted on AutoCAD LT 2000.

To ensure representative groundwater samples, wells were purged of three well volumes of water using a decontaminated in-line submersible pump with dedicated polyethylene tubing. During purging, purge water was analyzed for several water quality parameters using a Horiba U-22 water quality meter. These parameters included dissolved oxygen (DO), temperature in degrees Celsius (Temp), pH, specific conductivity in micro-Siemens ( $\mu\text{S}$ ), and turbidity in nephelometric turbidity units (NTUs). This was done to ensure that the purged groundwater would meet NYSDEC sampling protocol before samples were collected from the wells. Groundwater samples were collected using new, dedicated disposable polyethylene bailers. Groundwater samples were placed in laboratory-supplied glassware and stored immediately in an ice-filled cooler for transport to Long Island Analytical Laboratories, Inc. (LIAL), of Holbrook, New York [New York State Department of Health (NYSDOH) Environmental Lab Accreditation Program (ELAP) No. 11693] for VOC analysis by EPA Method 624.

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## **Results**

Tetrachloroethylene (PCE) was detected above the 5 parts per billion (ppb) NYSDEC water quality standard set forth in 6 NYCRR Part 703 in all eight sampled wells, at concentrations ranging from 8 ppb (MW-10R) to 75 ppb (MW-16). Furthermore, trichloroethylene (TCE) was detected above the 5 ppb NYSDEC water quality standard in five of the eight wells, at concentrations ranging from 6 ppb (MW-8R) to 25 ppb (MW-16). TCE was not detected above practical quantitation limits (PQLs) in MW-9R, MW-10R, and MW-17. The VOC constituents 1,1-dichloroethene and 1,1,1-trichloroethane (TCA) were detected above NYSDEC water quality standards in MW-16 at concentrations of 6 ppb and 7 ppb, respectively. No other VOC constituents were detected in the sampled wells. A summary of the groundwater analytical results is presented in Table 2. A summary of additional groundwater parameter sampling data is presented in Table 3. PCE and total VOC concentrations are represented as concentration isopleth maps in Figures 4 and 5, respectively. Laboratory analytical reports and chain-of-custody documentation are included as attachments.

## **Conclusions and Recommendations**

Analytical results from the third round quarterly groundwater monitoring event indicate that elevated levels of PCE and TCE are present in the site groundwater. The area of greatest impact is in the apparent prior source area represented by MW-16. Well-defined aqueous PCE and total VOC concentration maps were extrapolated from the analytical data. The map indicates that elevated PCE concentrations extend significantly upgradient of the prior source area. Total VOC concentrations on the downgradient end of the property are equal to or less than background concentrations as measured at the upgradient wells, indicating that residual VOC impacts to groundwater are being attenuated in transport, down to background levels, prior to leaving the site. Therefore, since the total chlorinated solvent concentrations leaving the site are less than or equal to background levels, the measured contamination is likely attributable to an upgradient off-site source.



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Furthermore, total VOC concentrations have decreased in comparison to the initial monitoring event conducted in May of this year.

Considering the above, H2M recommends that further monitoring in accordance with the approved Work Plan be conducted at the site to confirm the continuation of the decreasing trend in VOC concentrations.

If you should have any questions or concerns, please feel free to contact any of the undersigned at (631) 756-8000.

Very truly yours,

**HOLZMACHER, McLENDON & MURRELL, P.C.**

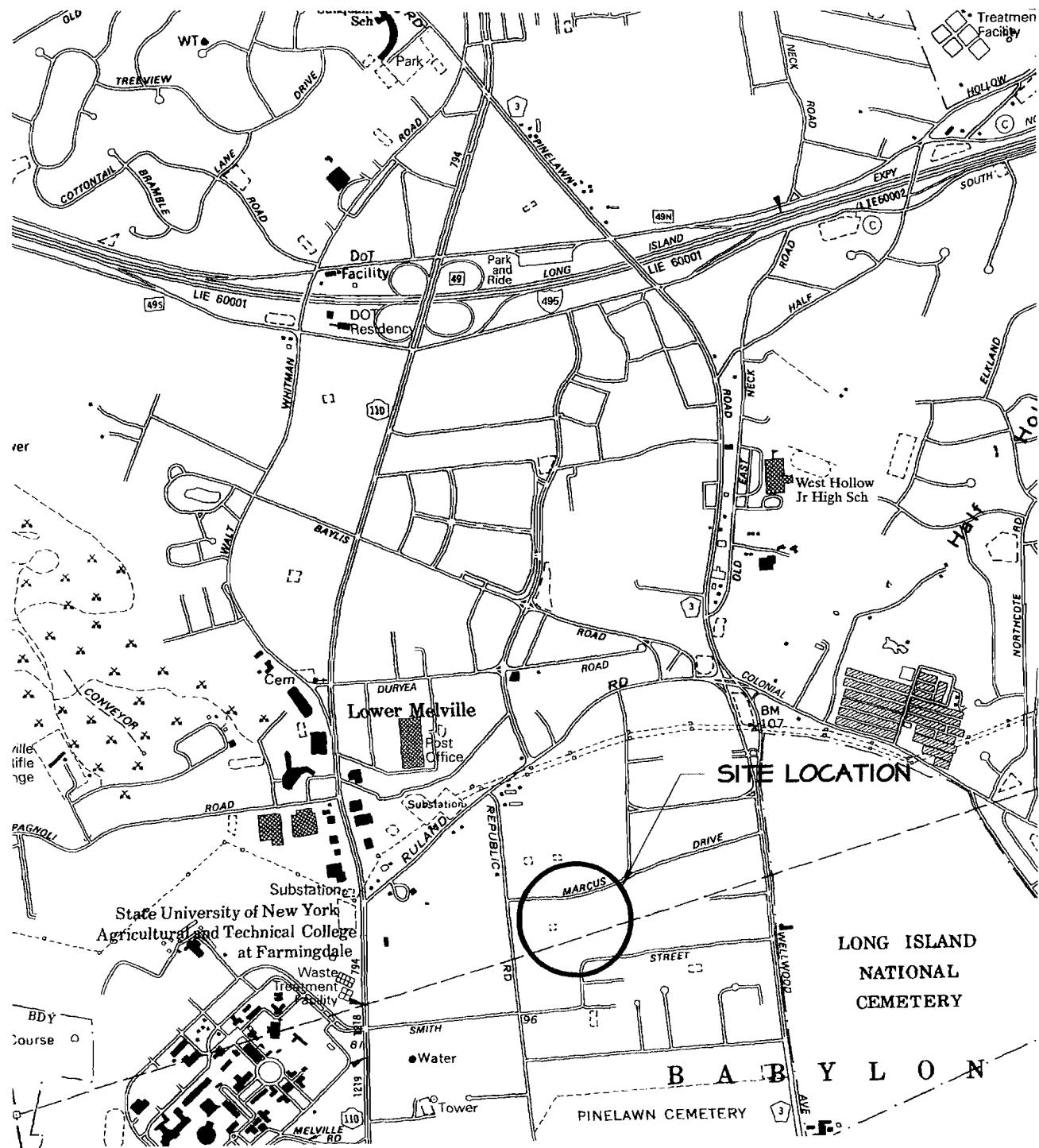
A handwritten signature in black ink, appearing to read "PJS".

Philip J. Schade, P.E.  
Department Manager

A handwritten signature in black ink, appearing to read "MWB".

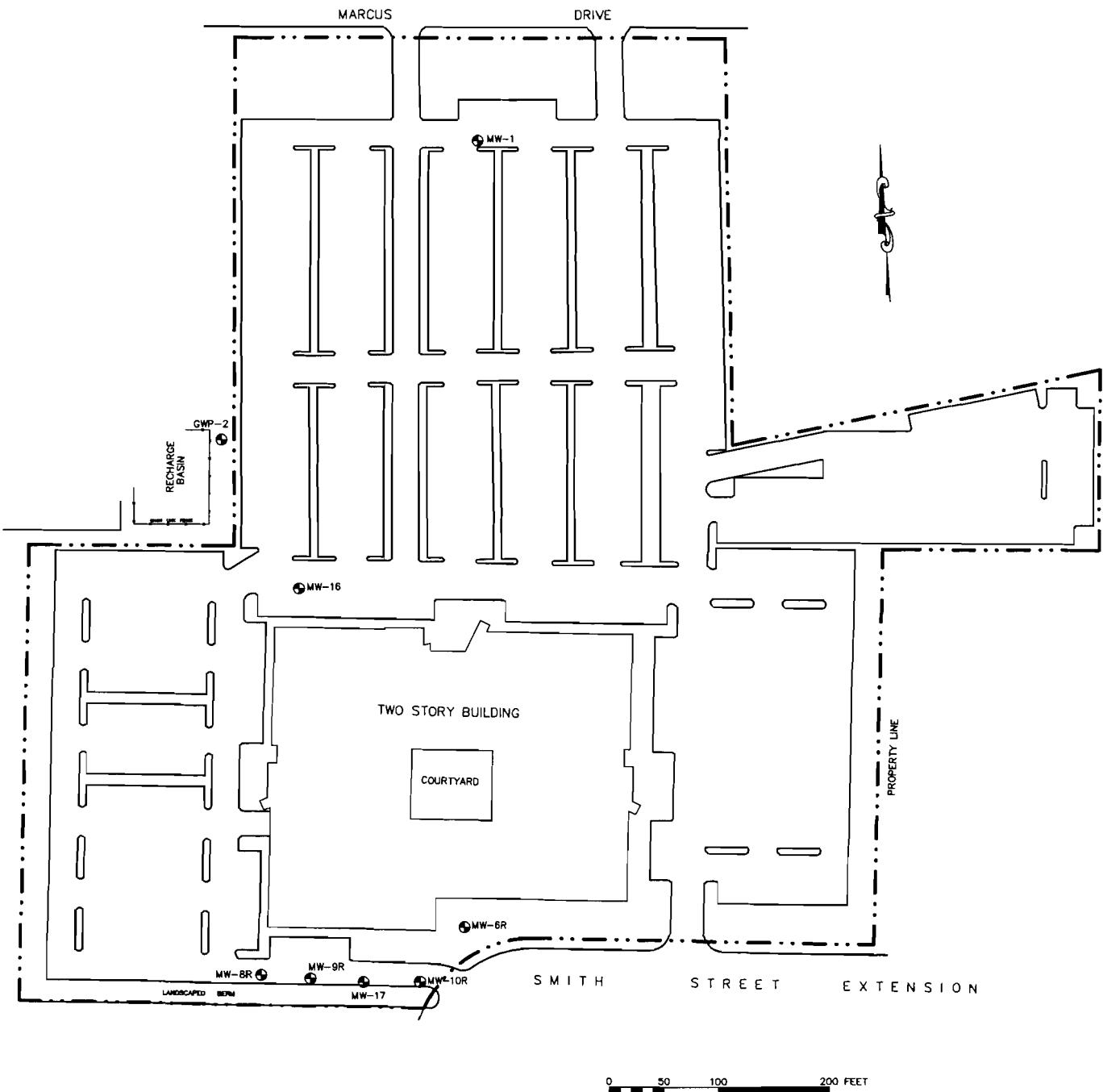
Manfred W. Bohms  
Project Manager

cc:    P. Fallon (Reckson)  
         L. Evans, Esq. (Sidley Austin Brown & Wood)  
         S. Shaw (NYSDEC)  
         R. Mitchell (NYSDOH)  
         R. Seyfarth (SCDHS)  
         G. Rosser (SCDHS)



**FIGURE I**  
**SITE LOCATION MAP**  
**333 SMITH STREET FARMINGDALE, NY**

SCALE: 1 = 20'



LEGEND  
● MW-1 MONITORING WELL LOCATION

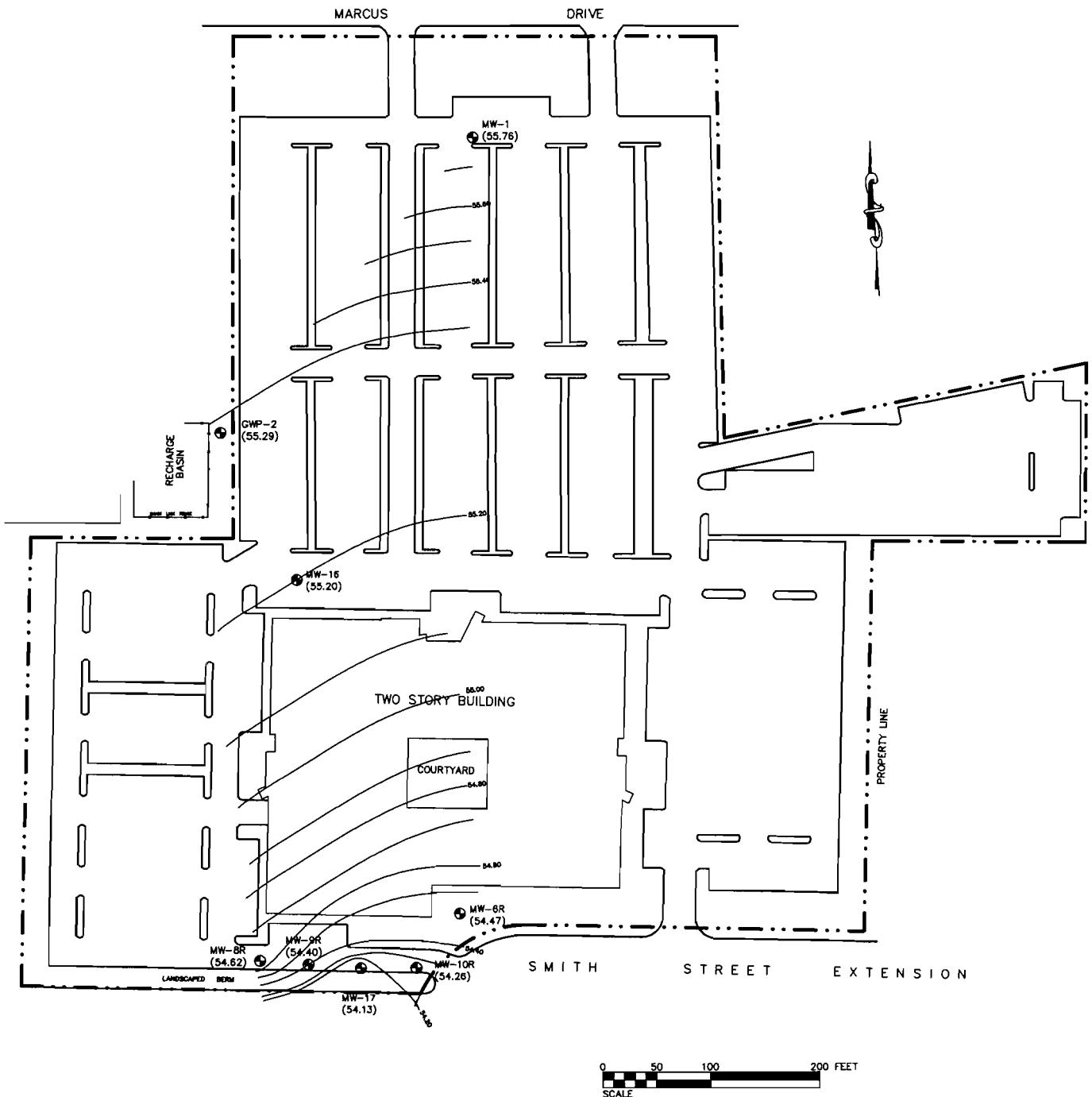
FIGURE 2: SITE PLAN

333 SMITH STREET  
FARMINGDALE, NEW YORK

BASE MAP SOURCE: SCHNEPF & MURRELL, P.C.

**H2M GROUP**

ENGINEERS · ARCHITECTS · PLANNERS · SCIENTISTS · SURVEYORS  
MELVILLE, N.Y. · TOTOWA, N.J.



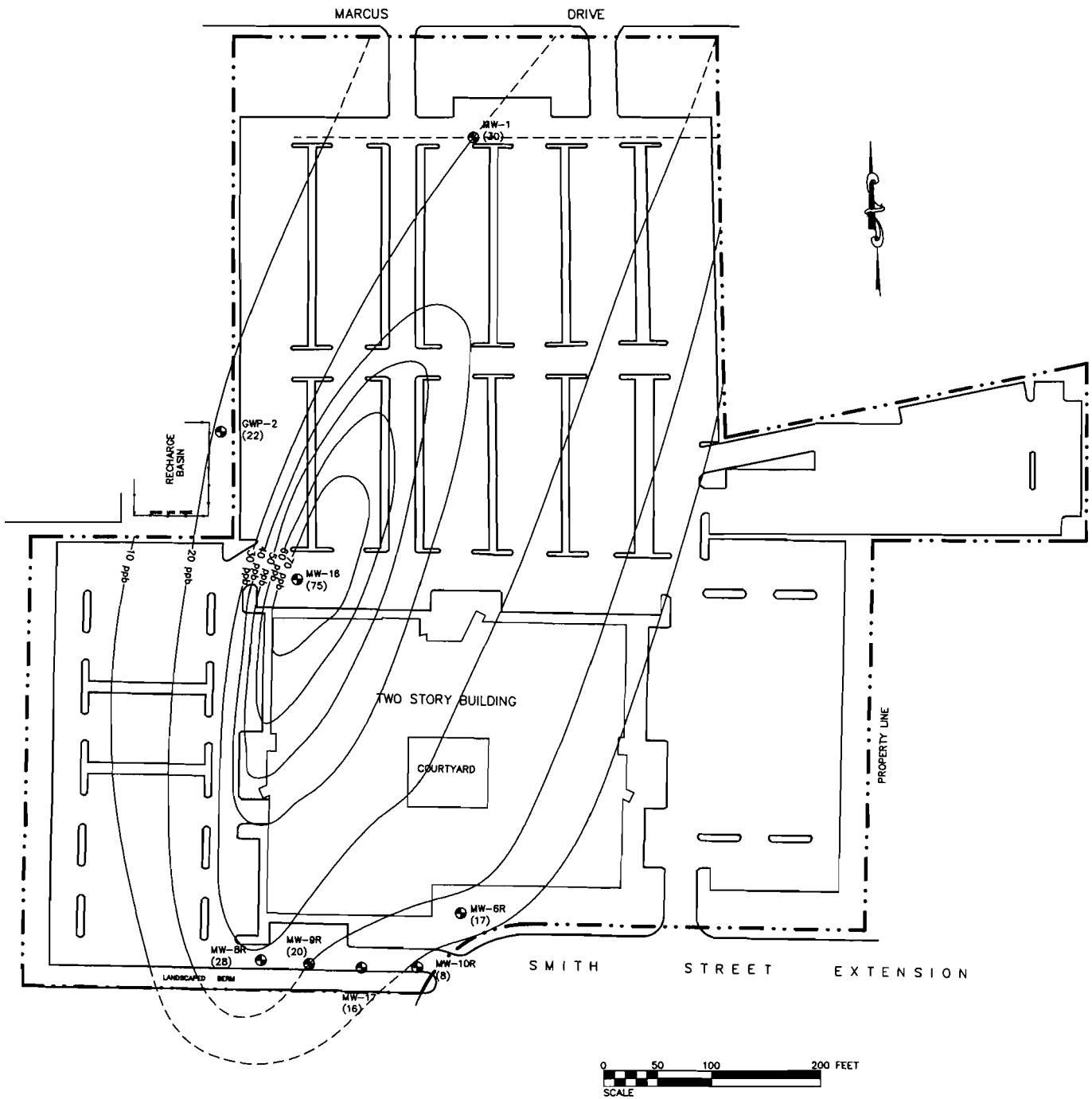
**LEGEND**

● MW-1 MONITORING WELL LOCATION
(55.76) GROUNDWATER ELEVATION (IN FEET)

**FIGURE 3:**  
**GROUNDWATER**  
**ELEVATION CONTOUR**  
**MAP**

333 SMITH STREET  
FARMINGDALE, NEW YORK

BASE MAP SOURCE: SCHNEPF & MURRELL, P.C.



**LEGEND**

	MONITORING WELL LOCATION
(30)	PCE CONCENTRATION (IN PPB)

FIGURE 4:  
PCE CONCENTRATION  
ISOPLETH MAP

333 SMITH STREET  
FARMINGDALE, NEW YORK

BASE MAP SOURCE: SCHNEPF & MURRELL, P.C.

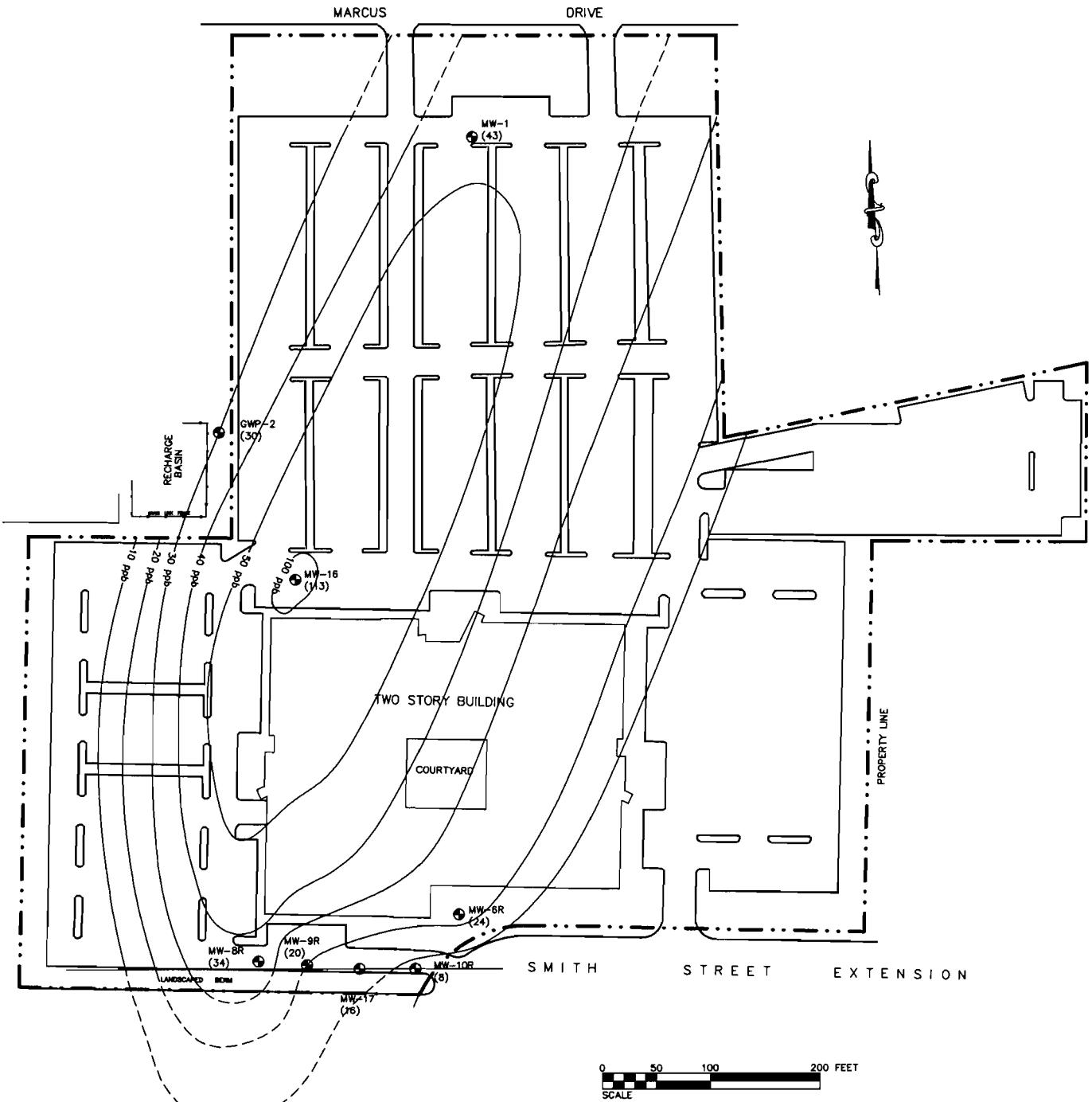


FIGURE 5:  
VOC CONCENTRATION  
ISOPLETH MAP

333 SMITH STREET  
FARMINGDALE, NEW YORK

BASE MAP SOURCE: SCHNEPF & MURRELL, P.C.

**TABLE 1**

**MONITORING WELL CONSTRUCTION DETAILS AND  
GROUNDWATER ELEVATION DATA**

**333 SMITH STREET  
FARMINGDALE, NEW YORK**

<b>Well No.</b>	<b>Well Diameter (in.)</b>	<b>Depth of Well From TOC (Ft.)</b>	<b>Screen Length (Ft.)</b>	<b>DTW From TOC (Ft.)*</b>	<b>Ground Surface Elevation (Ft.)</b>	<b>TOC Elevation (Ft.)</b>	<b>Groundwater Elevation (Ft.)</b>
GWP-2	4	55.0	unknown	46.50	98.18	101.79	55.29
MW-1	2	49.0	unknown	42.60	99.15	98.36	55.76
MW-6R	2	52.0	15	44.60	99.54	99.07	54.47
MW-8R	2	54.0	20	43.60	98.51	98.22	54.62
MW-9R	2	51.0	10	44.00	98.81	98.40	54.40
MW-10R	2	50.0	10	43.00	97.84	97.26	54.26
MW-16	2	60.0	5	43.60	99.05	98.80	55.20
MW-17	2	54.0	20	44.50	99.00	98.63	54.13

\* Depth to Water measurements collected on 11-13-02.

Elevations surveyed relative to an on-site benchmark arbitrarily set at 100 feet by H2M personnel on 6-5-02.

DTW = Depth to Water

TOC = Top of PVC Casing

**TABLE 2**  
**SUMMARY OF SECOND GROUNDWATER MONITORING EVENT ANALYTICAL RESULTS**

**333 SMITH STREET  
FARMINGDALE, NEW YORK  
Collected on November 13, 2002**

Analytical Parameters (ppb)	NYSDEC Water Quality Standards	MW-6R	MW-10R	MW-17	MW-9R	MW-8R	MW-16	GWP-2	MW-1
<b>VOCS (ppb) - EPA method 624</b>									
MTBE	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Benzene	0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Bromodichloromethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Bromoform	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Carbon Tetrachloride	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
2-Chloroethylvinyl Ether	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	4.7	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	5.0	<5	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	4.7	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	5.0	<5	<5	<5	<5	<5	6	<5	<5
trans-1,2-Dichloroethene	5.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	5.0	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Ethyl Benzene	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5.0	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5.0	17	8	16	20	28	75	22	30
Toluene	5.0	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	5.0	<5	<5	<5	<5	<5	7	<5	<5
1,1,2-Trichloroethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5.0	7	<5	<5	<5	6	25	8	13
Trichlorofluoromethane	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	2.0	<5	<5	<5	<5	<5	<5	<5	<5
p & m - Xylenes	5.0	<10	<10	<10	<10	<10	<10	<10	<10
o - Xylene	5.0	<5	<5	<5	<5	<5	<5	<5	<5
Total VOCS	--	24	8	16	20	34	113	30	43

NOTES:

**Bold** values represent values that exceed the NYSDEC Guidance Values

Samples submitted for analysis to Long Island Analytical Laboratories, of Holbrook, NY.

MTBE

Methyl tertiary-butyl ether.

VOCs

Volatile organic compounds by EPA Method 624

ppb

Parts per billion ( $\mu\text{g/L}$ )

**TABLE 3**  
**SUMMARY OF WELL SAMPLING PARAMETER LOGS**  
**Collected November 13, 2002**

**333 SMITH STREET  
FARMINGDALE, NEW YORK**

Well	DO	Temperature	pH	Specific Conductivity	Turbidity
GWP-2	9.19	14.8	6.12	0.193	999.0
	5.95	15.2	4.81	0.192	140.0
	5.86	15.3	4.61	0.193	89.3
	5.88	15.3	4.36	0.192	78.0
	5.88	15.3	4.21	0.191	49.9
	5.93	15.3	4.17	0.191	48.6
	5.91	15.3	4.18	0.191	48.4
MW-1	8.09	15.3	4.43	0.231	295.0
	6.77	15.3	4.19	0.234	230.0
	6.37	15.3	4.12	0.233	149.0
	6.31	15.4	4.07	0.234	89.1
	6.25	15.4	4.02	0.234	47.1
	6.28	15.4	4.01	0.234	40.0
	6.29	15.4	4.01	0.234	39.4
MW-6R	9.67	14.3	4.20	0.193	205.0
	7.47	15.0	4.01	0.184	186.0
	7.02	15.0	3.96	0.181	62.3
	6.99	15.1	3.94	0.181	50.0
	6.95	15.1	3.90	0.181	40.3
	6.96	15.1	3.90	0.181	39.5
	9.15	14.5	4.82	0.193	850.0
MW-8R	7.83	15.1	4.63	0.189	744.0
	7.07	15.2	4.59	0.191	455.0
	6.97	15.3	4.52	0.190	217.0
	6.90	15.3	4.39	0.191	55.0
	6.87	15.3	4.21	0.192	41.7
	6.85	15.4	4.21	0.192	48.9
	6.86	15.3	4.21	0.192	48.3
MW-9R	9.30	15.2	4.24	0.085	293.0
	8.22	15.7	4.92	0.109	176.0
	8.00	15.8	4.86	0.117	131.0
	7.80	15.8	4.83	0.120	81.3
	7.80	15.8	4.83	0.124	46.2
	7.70	15.8	4.80	0.125	46.3
	7.73	15.8	4.82	0.126	43.1
MW-10R	8.89	14.9	4.11	0.184	740.0
	8.68	15.2	3.63	0.191	169.0
	8.47	15.3	3.65	0.186	120.0
	8.31	15.2	3.64	0.186	41.3
	8.33	15.2	3.63	0.186	39.6
	8.33	15.2	3.64	0.186	39.5
	7.09	15.2	5.33	0.224	652.0
MW-16	1.80	15.4	6.42	0.223	608.0
	1.22	15.4	6.45	0.223	251.0
	1.08	15.3	6.51	0.222	74.0
	1.08	15.4	6.54	0.222	49.7
	1.12	15.3	6.55	0.221	48.9
	1.17	15.4	6.55	0.221	47.0
	9.61	13.3	4.02	0.194	150.0
MW-17	7.33	14.9	3.87	0.199	353.0
	5.61	15.2	3.87	0.192	238.0
	5.32	15.3	3.85	0.182	111.0
	5.34	15.3	3.83	0.177	52.1
	6.37	15.5	3.82	0.176	50.1
	6.26	15.4	4.49	0.138	49.6
	6.20	15.4	4.54	0.137	46.0

NOTES:

All additional groundwater parameters were field analyzed using a Horiba U-22 water quality meter.

Dissolved oxygen measured in grams per liter (g/L).

Temperature measured in degrees Celsius.

Specific Conductivity measured in micro-Siemens ( $\mu\text{S}$ ).

Turbidity measured in Nephelometric Turbidity Units.

## CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS  H2A Group	CONTACT: <i>Mario Batin</i>	SAMPLER (SIGNATURE) <i>R. Wenskus</i>	DATE 1/13/02	TIME 15:15	SAMPLE(S) SEALED YES / NO	LABORATORY CHAIN ID # (FOR LAB USE ONLY)
	PHONE: 631 756-8000	SAMPLER NAME (PRINT)	DATE	TIME	CORRECT CONTAINER(S)	
	FAX:				YES / NO	

PROJECT LOCATION:

*Rackson - 333 Smith St AKSN002 F3*

TERMS & CONDITIONS: Accounts are payable in full within thirty days, outstanding balances accrue service charges of 1.5% per month.

LABORATORY ID # For Laboratory Use Only	MATRIX	TYPE	PRES.	SAMPLE # - LOCATION	DATE	TURNAROUND REQUIRED 10:15 11:10 11:30 11:55 13:30 14:05 14:45 15:15	# OF CONTAINERS
10229233	GW	G	ICE	MW-6 R	1/13/02	10:30	20
20229234				MW-10 R		11:10	
30229235				MW-17		11:30	
40229236				MW-9 R		11:55	
50229237				MW-8 R		13:30	
60229238				MW-16		14:05	
70229239				GWP-2		14:45	
80229240	↓	↓	↓	MW-1	↓	15:15	↓
9.							
10.							
11.							
12.							
13.							
14.							

MATRIX S=SOIL; L=LIQUID; SL=SLUDGE; A=AIR; W=WIPE; P=PAINT CHIPS; B=BULK MATERIAL

TYPE G=GRAB; C=COMPOSITE, SS=SPLIT SPOON PRES ICE, HCL, H<sub>2</sub>SO<sub>4</sub>, NAOH

TURNAROUND REQUIRED:

NORMAL  STAT  BY / /

COMMENTS / INSTRUCTIONS

RELINQUISHED BY (SIGNATURE) <i>R. Wenskus</i>	DATE 1/13/02	PRINTED NAME R. Wenskus H2M	RECEIVED BY LAB (SIGNATURE) <i>D. Kins</i>	DATE 1/13/02	PRINTED NAME D. Kins
RELINQUISHED BY (SIGNATURE)	DATE	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE	PRINTED NAME
	TIME			TIME	

Client: H2M	Client ID: Reckson-333 Smith Street (MW-6R)
Date received: 11/13/02	Laboratory ID: 0229233
Date extracted: 11/16/02	Matrix: Liquid
Date analyzed: 11/16/02	ELAP #: 11693

**EPA METHOD 624**

Parameter	CAS No.	Results ug/L
MTBE	1634-04-4	<5
BENZENE	71-43-2	<0.7
BROMODICHLOROMETHANE	75-27-4	<5
BROMOFORM	75-25-2	<5
BROMOMETHANE	74-83-9	<5
CARBON TETRACHLORIDE	56-23-5	<5
CHLOROBENZENE	108-90-7	<5
CHLOROETHANE	75-00-3	<5
2-CHLOROETHYL VINYL ETHER	110-75-8	<5
CHLOROFORM	67-66-3	<5
CHLOROMETHANE	74-87-3	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,2-DICHLOROBENZENE	95-50-1	<5
1,3-DICHLOROBENZENE	541-73-1	<5
1,4-DICHLOROBENZENE	106-46-7	<5
1,1-DICHLOROETHANE	75-34-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1-DICHLOROETHENE	75-35-4	<5
trans-1,2-DICHLOROETHENE	156-60-5	<5
1,2-DICHLOROPROPANE	78-87-5	<5
cis-1,3-DICHLOROPROPENE	10061-01-5	<5
trans-1,3-DICHLOROPROPENE	10061-02-6	<5
ETHYL BENZENE	100-41-4	<5
METHYLENE CHLORIDE	75-09-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34-5	<5
TETRACHLOROETHENE	127-18-4	17
TOLUENE	108-88-3	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
TRICHLOROETHENE	79-01-6	7
TRICHLOROFLUOROMETHANE	75-69-4	<5
VINYL CHLORIDE	75-01-4	<5
p & m -XYLEMES	1330-20-7	<10
o-XYLENE	1330-20-7	<5




Laboratory Director

Client: H2M	Client ID: Reckson-333 Smith Street (MW-10R)
Date received: 11/13/02	Laboratory ID: 0229234
Date extracted: 11/16/02	Matrix: Liquid
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MTBE	1634-04-4	<5
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BROMODICHLOROMETHANE	75-27-4	<5
BROMOFORM	75-25-2	<5
BROMOMETHANE	74-83-9	<5
CARBON TETRACHLORIDE	56-23-5	<5
CHLOROBENZENE	108-90-7	<5
CHLOROETHANE	75-00-3	<5
2-CHLOROETHYL VINYL ETHER	110-75-8	<5
CHLOROFORM	67-66-3	<5
CHLOROMETHANE	74-87-3	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,2-DICHLOROBENZENE	95-50-1	<5
1,3-DICHLOROBENZENE	541-73-1	<5
1,4-DICHLOROBENZENE	106-46-7	<5
1,1-DICHLOROETHANE	75-34-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1-DICHLOROETHENE	75-35-4	<5
trans-1,2-DICHLOROETHENE	156-60-5	<5
1,2-DICHLOROPROPANE	78-87-5	<5
cis-1,3-DICHLOROPROPENE	10061-01-5	<5
trans-1,3-DICHLOROPROPENE	10061-02-6	<5
ETHYL BENZENE	100-41-4	<5
METHYLENE CHLORIDE	75-09-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34-5	<5
TETRACHLOROETHENE	127-18-4	8
TOLUENE	108-88-3	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
TRICHLOROETHENE	79-01-6	<5
TRICHLOROFLUOROMETHANE	75-69-4	<5
VINYL CHLORIDE	75-01-4	<5
p & m -XYLEMES	1330-20-7	<10
o-XYLENE	1330-20-7	<5

*Michael Verschil*

Laboratory Director

Client: H2M	Client ID: Reckson-333 Smith Street (MW-17)
Date received: 11/13/02	Laboratory ID: 0229235
Date extracted: 11/16/02	Matrix: Liquid
Date analyzed: 11/16/02	ELAP #: 11693

**EPA METHOD 624**

Parameter	CAS No.	Results ug/L
MTBE	1634-04-4	<5
BENZENE	71-43-2	<0.7
BROMODICHLOROMETHANE	75-27-4	<5
BROMOFORM	75-25-2	<5
BROMOMETHANE	74-83-9	<5
CARBON TETRACHLORIDE	56-23-5	<5
CHLOROBENZENE	108-90-7	<5
CHLOROETHANE	75-00-3	<5
2-CHLOROETHYL VINYL ETHER	110-75-8	<5
CHLOROFORM	67-66-3	<5
CHLOROMETHANE	74-87-3	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,2-DICHLOROBENZENE	95-50-1	<5
1,3-DICHLOROBENZENE	541-73-1	<5
1,4-DICHLOROBENZENE	106-46-7	<5
1,1-DICHLOROETHANE	75-34-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1-DICHLOROETHENE	75-35-4	<5
trans-1,2-DICHLOROETHENE	156-60-5	<5
1,2-DICHLOROPROPANE	78-87-5	<5
cis-1,3-DICHLOROPROPENE	10061-01-5	<5
trans-1,3-DICHLOROPROPENE	10061-02-6	<5
ETHYL BENZENE	100-41-4	<5
METHYLENE CHLORIDE	75-09-2	<5
1,1,2,2,-TETRACHLOROETHANE	79-34-5	<5
TETRACHLOROETHENE	127-18-4	16
TOLUENE	108-88-3	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
TRICHLOROETHENE	79-01-6	<5
TRICHLOROFLUOROMETHANE	75-69-4	<5
VINYL CHLORIDE	75-01-4	<5
p & m -XYLEMES	1330-20-7	<10
o-XYLENE	1330-20-7	<5

*Michael Verrell*

Laboratory Director

Client: H2M	Client ID: Reckson-333 Smith Street (MW-9R)
Date received: 11/13/02	Laboratory ID: 0229236
Date extracted: 11/16/02	Matrix: Liquid
Date analyzed: 11/16/02	ELAP #: 11693

**EPA METHOD 624**

Parameter	CAS No.	Results ug/L
MTBE	1634-04-4	<5
BENZENE	71-43-2	<0.7
BROMODICHLOROMETHANE	75-27-4	<5
BROMOFORM	75-25-2	<5
BROMOMETHANE	74-83-9	<5
CARBON TETRACHLORIDE	56-23-5	<5
CHLOROBENZENE	108-90-7	<5
CHLOROETHANE	75-00-3	<5
2-CHLOROETHYLVINYL ETHER	110-75-8	<5
CHLOROFORM	67-66-3	<5
CHLOROMETHANE	74-87-3	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,2-DICHLOROBENZENE	95-50-1	<5
1,3-DICHLOROBENZENE	541-73-1	<5
1,4-DICHLOROBENZENE	106-46-7	<5
1,1-DICHLOROETHANE	75-34-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1-DICHLOROETHENE	75-35-4	<5
trans-1,2-DICHLOROETHENE	156-60-5	<5
1,2-DICHLOROPROPANE	78-87-5	<5
cis-1,3-DICHLOROPROPENE	10061-01-5	<5
trans-1,3-DICHLOROPROPENE	10061-02-6	<5
ETHYL BENZENE	100-41-4	<5
METHYLENE CHLORIDE	75-09-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34-5	<5
TETRACHLOROETHENE	127-18-4	20
TOLUENE	108-88-3	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
TRICHLOROETHENE	79-01-6	<5
TRICHLOROFLUOROMETHANE	75-69-4	<5
VINYL CHLORIDE	75-01-4	<5
p & m -XYLEMES	1330-20-7	<10
o-XYLENE	1330-20-7	<5



Laboratory Director



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Client: H2M	Client ID: Reckson-333 Smith Street (MW-8R)
Date received: 11/13/02	Laboratory ID: 0229237
Date extracted: 11/16/02	Matrix: Liquid
Date analyzed: 11/16/02	ELAP #: 11693

**EPA METHOD 624**

Parameter	CAS No.	Results ug/L
MTBE	1634-04-4	<5
BENZENE	71-43-2	<0.7
BROMODICHLOROMETHANE	75-27-4	<5
BROMOFORM	75-25-2	<5
BROMOMETHANE	74-83-9	<5
CARBON TETRACHLORIDE	56-23-5	<5
CHLOROBENZENE	108-90-7	<5
CHLOROETHANE	75-00-3	<5
2-CHLOROETHYLVINYL ETHER	110-75-8	<5
CHLOROFORM	67-66-3	<5
CHLOROMETHANE	74-87-3	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,2-DICHLOROBENZENE	95-50-1	<5
1,3-DICHLOROBENZENE	541-73-1	<5
1,4-DICHLOROBENZENE	106-46-7	<5
1,1-DICHLOROETHANE	75-34-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1-DICHLOROETHENE	75-35-4	<5
trans-1,2-DICHLOROETHENE	156-60-5	<5
1,2-DICHLOROPROPANE	78-87-5	<5
cis-1,3-DICHLOROPROPENE	10061-01-5	<5
trans-1,3-DICHLOROPROPENE	10061-02-6	<5
ETHYL BENZENE	100-41-4	<5
METHYLENE CHLORIDE	75-09-2	<5
1,1,2,2,-TETRACHLOROETHANE	79-34-5	<5
TETRACHLOROETHENE	127-18-4	28
TOLUENE	108-88-3	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
TRICHLOROETHENE	79-01-6	6
TRICHLOROFLUOROMETHANE	75-69-4	<5
VINYL CHLORIDE	75-01-4	<5
p & m -XYLEMES	1330-20-7	<10
o-XYLENE	1330-20-7	<5



Laboratory Director

Client: H2M	Client ID: Reckson-333 Smith Street (MW-16)
Date received: 11/13/02	Laboratory ID: 0229238
Date extracted: 11/16/02	Matrix: Liquid
Date analyzed: 11/16/02	ELAP #: 11693

**EPA METHOD 624**

Parameter	CAS No.	Results ug/L
MTBE	1634-04-4	<5
BENZENE	71-43-2	<0.7
BROMODICHLOROMETHANE	75-27-4	<5
BROMOFORM	75-25-2	<5
BROMOMETHANE	74-83-9	<5
CARBON TETRACHLORIDE	56-23-5	<5
CHLOROBENZENE	108-90-7	<5
CHLOROETHANE	75-00-3	<5
2-CHLOROETHYL VINYL ETHER	110-75-8	<5
CHLOROFORM	67-66-3	<5
CHLOROMETHANE	74-87-3	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,2-DICHLOROBENZENE	95-50-1	<5
1,3-DICHLOROBENZENE	541-73-1	<5
1,4-DICHLOROBENZENE	106-46-7	<5
1,1-DICHLOROETHANE	75-34-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1-DICHLOROETHENE	75-35-4	6
trans-1,2-DICHLOROETHENE	156-60-5	<5
1,2-DICHLOROPROPANE	78-87-5	<5
cis-1,3-DICHLOROPROPENE	10061-01-5	<5
trans-1,3-DICHLOROPROPENE	10061-02-6	<5
ETHYL BENZENE	100-41-4	<5
METHYLENE CHLORIDE	75-09-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34-5	<5
TETRACHLOROETHENE	127-18-4	75
TOLUENE	108-88-3	<5
1,1,1-TRICHLOROETHANE	71-55-6	7
1,1,2-TRICHLOROETHANE	79-00-5	<5
TRICHLOROETHENE	79-01-6	25
TRICHLOROFLUOROMETHANE	75-69-4	<5
VINYL CHLORIDE	75-01-4	<5
p & m -XYLEMES	1330-20-7	<10
o-XYLENE	1330-20-7	<5



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Client: H2M	Client ID: Reckson-333 Smith Street (GWP-2)
Date received: 11/13/02	Laboratory ID: 0229239
Date extracted: 11/17/02	Matrix: Liquid
Date analyzed: 11/17/02	ELAP #: 11693

**EPA METHOD 624**

Parameter	CAS No.	Results ug/L
MTBE	1634-04-4	<5
BENZENE	71-43-2	<0.7
BROMODICHLOROMETHANE	75-27-4	<5
BROMOFORM	75-25-2	<5
BROMOMETHANE	74-83-9	<5
CARBON TETRACHLORIDE	56-23-5	<5
CHLOROBENZENE	108-90-7	<5
CHLOROETHANE	75-00-3	<5
2-CHLOROETHYL VINYL ETHER	110-75-8	<5
CHLOROFORM	67-66-3	<5
CHLOROMETHANE	74-87-3	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,2-DICHLOROBENZENE	95-50-1	<5
1,3-DICHLOROBENZENE	541-73-1	<5
1,4-DICHLOROBENZENE	106-46-7	<5
1,1-DICHLOROETHANE	75-34-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1-DICHLOROETHENE	75-35-4	<5
trans-1,2-DICHLOROETHENE	156-60-5	<5
1,2-DICHLOROPROPANE	78-87-5	<5
cis-1,3-DICHLOROPROPENE	10061-01-5	<5
trans-1,3-DICHLOROPROPENE	10061-02-6	<5
ETHYL BENZENE	100-41-4	<5
METHYLENE CHLORIDE	75-09-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34-5	<5
TETRACHLOROETHENE	127-18-4	22
TOLUENE	108-88-3	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
TRICHLOROETHENE	79-01-6	8
TRICHLOROFLUOROMETHANE	75-69-4	<5
VINYL CHLORIDE	75-01-4	<5
p & m -XYLEMES	1330-20-7	<10
o-XYLENE	1330-20-7	<5

*Michael Venable*  
Laboratory Director



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Client: H2M	Client ID: Reckson-333 Smith Street (MW-1)
Date received: 11/13/02	Laboratory ID: 0229240
Date extracted: 11/17/02	Matrix: Liquid
Date analyzed: 11/17/02	ELAP #: 11693

**EPA METHOD 624**

Parameter	CAS No.	Results ug/L
MTBE	1634-04-4	<5
BENZENE	71-43-2	<0.7
BROMODICHLOROMETHANE	75-27-4	<5
BROMOFORM	75-25-2	<5
BROMOMETHANE	74-83-9	<5
CARBON TETRACHLORIDE	56-23-5	<5
CHLOROBENZENE	108-90-7	<5
CHLOROETHANE	75-00-3	<5
2-CHLOROETHYL VINYL ETHER	110-75-8	<5
CHLOROFORM	67-66-3	<5
CHLOROMETHANE	74-87-3	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,2-DICHLOROBENZENE	95-50-1	<5
1,3-DICHLOROBENZENE	541-73-1	<5
1,4-DICHLOROBENZENE	106-46-7	<5
1,1-DICHLOROETHANE	75-34-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1-DICHLOROETHENE	75-35-4	<5
trans-1,2-DICHLOROETHENE	156-60-5	<5
1,2-DICHLOROPROPANE	78-87-5	<5
cis-1,3-DICHLOROPROPENE	10061-01-5	<5
trans-1,3-DICHLOROPROPENE	10061-02-6	<5
ETHYL BENZENE	100-41-4	<5
METHYLENE CHLORIDE	75-09-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34-5	<5
TETRACHLOROETHENE	127-18-4	30
TOLUENE	108-88-3	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
TRICHLOROETHENE	79-01-6	13
TRICHLOROFLUOROMETHANE	75-69-4	<5
VINYL CHLORIDE	75-01-4	<5
p & m -XYLEMES	1330-20-7	<10
o-XYLENE	1330-20-7	<5



Laboratory Director

