

DAHL

& ASSOCIATES, INC.

Environmental Consultants, Contractors & Engineers

July 23, 1993

Mr. David Scheer
MPCA Hazardous Waste Division
Tanks and Spills Section
520 Lafayette Road
St. Paul, MN 55155

RECEIVED

JUL 26 1993

MPCA, HAZARDOUS
WASTE DIVISION

Dear Mr. Scheer:

RE: Fact Sheet, Former Conoco Store #23034, 1126 South Robert Street, West St. Paul, Minnesota. LEAK #00000858

Enclosed is Fact Sheet #7, Site Monitoring Worksheet, for the above referenced site. Since the remediation system is not in operation at this time, Fact Sheet #11, CAD Monitoring Worksheet, is not enclosed. Fact Sheet #11 will be completed once the entire remediation system is operating.

If you have any questions concerning this information or related to the project in general please contact me.

Sincerely,
DAHL & ASSOCIATES, INC.



Mike Watson
Assistant Project Manager

MPW/rl

enclosures

cc: Ms. Cindy Mueller, Conoco Inc.

SITE MONITORING WORKSHEET
Fact Sheet #7
Minnesota Pollution Control Agency
LUST Cleanup Program
April 1993

The Minnesota Pollution Control Agency (MPCA) staff expect this worksheet to simplify the required post-investigation site monitoring reports. Submit this worksheet:

- * quarterly, after the remedial investigation (RI) is complete but before corrective action is taken;
- * quarterly, during corrective action design (CAD) installation; and
- * quarterly, after CAD is operational, along with "CAD System Monitoring Worksheet," (fact sheet #11).

Completion and submittal according to the above schedule fulfills your quarterly site monitoring report requirements. You may include a short cover letter whenever circumstances require. However, you must still submit an annual progress report as described in "Petroleum Tank Release Reports" (fact sheet #3). [NOTE: MPCA staff may reduce the frequency of progress reporting on a site specific basis.]

Where attachments are requested (tables, maps, graphs, etc.), please check off those items attached. The only table not mandatory is that for dissolved oxygen.

MPCA Leak Number: 858

RECEIVED

JUL 26 1993

MPCA, HAZARDOUS
WASTE DIVISION

I. Ground Water Monitoring

Please attach the following:

- X Cumulative table of ground water monitoring results, including all sample blanks.
- X Copies of most recent laboratory reports for ground water analyses, including a copy of the Chain of Custody.
- X Cumulative table of ground water elevation and product thickness results.
- X Hydrograph for all monitoring and recovery wells.
- X Graph(s) showing contaminant concentrations over time for **all** monitoring and recovery wells.
- X Ground water contour map based on the most recent ground water elevation data.
- X Table of dissolved oxygen sample results (if collected)

Please describe unusual circumstances that may have influenced the sampling results:

NONE

Please detail significant observations made at the site:

NONE

II. Vapor Impact Monitoring

If vapor impacts were detected during the remedial investigation, please attach:

a cumulative table of vapor monitoring results. The table should identify the location of all vapor monitoring points (i.e., sewer manholes, basements, etc.)
a map of vapor monitoring locations.

Sampling instrument used:

Sampling method:

NOTE: If vapor concentrations exceed 10 percent of the lower explosive limit, exit the building and contact the local fire department immediately. Then contact the MPCA spills unit at voice 612/297-8610, TDD 612/297-5353 or Greater Minnesota TDD 1-800-627-3529.

Vapor mitigation is required.

III. Recommendations

Use this space to detail any recommendations for modifying the current monitoring schedule:

DAHL will continue to monitor the site quarterly until the remediation system is in operation.

Upon request, this document can be made available in other formats, including Braille, large print and audio tape. TDD Users, call the Minnesota State Relay Service, 612/297-5353 or Greater Minnesota TDD 1-800-627-3529.

Printed on recycled paper containing at least 10 percent fibers from paper recycled by consumers.

TABLE 1
WATER TABLE ELEVATION

Conoco Store #23034
Conoco-South Robert, W. St. Paul, Minnesota (VEMN0601)

WELL #	ELEVATION	DATE	D.T.P	D.T.W	P.T.	W.T.E.
MW-1	100.47	10/23/89	0.00	17.99	0.00	82.48
	100.47	12/15/89	0.00	18.89	0.00	81.58
	100.47	01/08/90	0.00	19.15	0.00	81.32
	100.47	02/05/90	0.00	19.61	0.00	80.86
	100.47	03/13/90	0.00	20.12	0.00	80.35
	100.47	03/29/90	0.00	19.81	0.00	80.66
	100.47	04/24/90	0.00	19.94	0.00	80.53
*Resurvey	100.45	05/03/90	0.00	20.07	0.00	80.38
	100.45	05/15/90	0.00	19.66	0.00	80.79
	100.45	06/06/90	0.00	19.40	0.00	81.05
	100.45	06/12/90	0.00	18.75	0.00	81.70
	100.45	06/15/90	0.00	18.66	0.00	81.79
	100.45	06/29/90	0.00	17.82	0.00	82.63
	100.45	07/06/90	0.00	17.52	0.00	82.93
	100.45	07/13/90	0.00	17.30	0.00	83.15
	100.45	07/20/90	0.00	17.04	0.00	83.41
	100.45	08/22/90	0.00	15.90	0.00	84.55
	100.45	09/10/90	0.00	15.90	0.00	84.55
	100.45	10/10/90	0.00	15.90	0.00	84.55
	100.45	11/06/90	0.00	16.64	0.00	83.81
	100.45	01/14/91	0.00	17.77	0.00	82.68
	100.45	02/05/91	0.00	18.29	0.00	82.16
	100.45	03/13/91	0.00	18.76	0.00	81.69
	100.45	04/04/91	0.00	18.51	0.00	81.94
	100.45	05/10/91	0.00	17.81	0.00	82.64
	100.45	06/16/91	0.00	16.32	0.00	84.13
	100.45	07/03/91	0.00	15.56	0.00	84.89
	100.45	08/06/91	0.00	15.22	0.00	85.23
	100.45	09/09/91	0.00	15.15	0.00	85.30
	100.45	09/10/91	0.00	15.30	0.00	85.15
	100.45	10/08/91	0.00	14.68	0.00	85.77
	100.45	11/19/91	0.00	15.32	0.00	85.13
	100.45	12/26/91	0.00	14.93	0.00	85.52
	100.45	01/13/92	0.00	14.79	0.00	85.66
	100.45	02/10/92	0.00	15.02	0.00	85.43
	100.45	03/13/92	0.00	14.56	0.00	85.89
	100.45	04/20/92	0.00	14.27	0.00	86.18
	100.45	05/11/92	0.00	13.94	0.00	86.51
	100.45	06/12/92	0.00	14.11	0.00	86.34
100.45	09/10/92	0.00	13.72	0.00	86.73	
*Resurvey	100.45	12/23/92	0.00	14.30	0.00	86.15
	100.45	03/09/93	0.00	15.87	0.00	84.58
	100.45	06/10/93	0.00	13.90	0.00	86.55
MW-2	100.77	10/23/89	0.00	19.23	0.00	81.54
	100.77	12/15/89	0.00	20.14	0.00	80.63
	100.77	01/08/90	0.00	20.40	0.00	80.37
	100.77	02/05/90	0.00	20.93	0.00	79.84

	100.77	03/13/90	0.00	21.30	0.00	79.47
	100.77	03/29/90	0.00	20.87	0.00	79.90
*Resurvey	100.77	04/24/90	0.00	21.18	0.00	79.59
	100.74	05/03/90	0.00	21.48	0.00	79.26
	100.74	05/15/90	0.00	20.89	0.00	79.85
	100.74	06/06/90	0.00	20.62	0.00	80.12
	100.74	06/12/90	0.00	19.92	0.00	80.82
	100.74	06/15/90	0.00	19.85	0.00	80.89
	100.74	06/29/90	0.00	18.93	0.00	81.81
	100.74	07/06/90	0.00	18.63	0.00	82.11
	100.74	07/13/90	0.00	18.39	0.00	82.35
	100.74	07/20/90	0.00	18.15	0.00	82.59
	100.74	08/22/90	0.00	16.93	0.00	83.81
	100.74	09/10/90	0.00	17.00	0.00	83.74
	100.74	10/10/90	0.00	17.13	0.00	83.61
	100.74	11/06/90	0.00	17.81	0.00	82.93
	100.74	01/14/91	0.00	19.00	0.00	81.74
	100.74	02/05/91	0.00	19.50	0.00	81.24
	100.74	03/13/91	0.00	19.92	0.00	80.82
	100.74	04/04/91	0.00	19.51	0.00	81.23
	100.74	05/10/91	0.00	19.30	0.00	81.44
	100.74	06/16/91	0.00	17.38	0.00	83.36
	100.74	07/03/91	0.00	16.55	0.00	84.19
	100.74	08/06/91	0.00	16.29	0.00	84.45
	100.74	09/09/91	0.00	16.23	0.00	84.51
	100.74	09/10/91	0.00	16.36	0.00	84.38
	100.74	10/08/91	0.00	15.68	0.00	85.06
	100.74	11/19/91	0.00	16.30	0.00	84.44
	100.74	12/26/91	0.00	16.03	0.00	84.71
	100.74	01/13/92	0.00	15.94	0.00	84.80
	100.74	02/10/92	0.00	16.20	0.00	84.54
	100.74	03/13/92	0.00	15.65	0.00	85.09
	100.74	04/20/92	0.00	15.30	0.00	85.44
	100.74	05/11/92	0.00	14.85	0.00	85.89
	100.74	06/12/92	0.00	15.00	0.00	85.74
*Resurvey	100.74	09/10/92	0.00	14.70	0.00	86.04
	100.77	12/23/92	0.00	15.40	0.00	85.37
	100.77	03/09/93	0.00	16.96	0.00	83.81
	100.77	06/10/93	0.00	14.90	0.00	85.87
MW-3	101.05	10/23/89	0.00	20.77	0.00	80.28
	101.05	12/15/89	21.54	22.35	0.81	78.70
	101.05	01/08/90	22.07	22.47	0.40	78.58
	101.05	02/05/90	22.53	22.91	0.38	78.14
	101.05	03/13/90	22.91	23.37	0.46	77.68
	101.05	03/29/90	22.82	23.14	0.32	77.91
	101.05	04/24/90	22.99	23.39	0.40	77.66
*Resurvey	101.05	05/03/90	22.99	23.30	0.31	77.75
	101.05	05/15/90	22.71	22.92	0.21	78.13
	101.05	06/06/90	21.33	22.60	1.27	78.45
	101.05	06/12/90 ^	22.22	23.00	0.78	78.05
	101.05	06/15/90 ^	21.20	21.74	0.54	79.31
	101.05	06/29/90 ^	19.39	20.08	0.69	80.97
	101.05	07/06/90	19.67	19.70	0.03	81.35
	101.05	07/13/90	0.00	19.41	0.00	81.64
	101.05	07/20/90	0.00	19.22	0.00	81.83
	101.05	08/22/90	0.00	18.04	0.00	83.01

	101.05	09/10/90	0.00	18.27	0.00	82.78
	101.05	10/10/90	0.00	18.49	0.00	82.56
	101.05	11/06/90	0.00	19.24	0.00	81.81
	101.05	01/14/91	20.50	20.58	0.08	80.47
	101.05	02/05/91	21.00	21.05	0.05	80.00
	101.05	03/13/91	21.66	21.68	0.02	79.37
	101.05	04/04/91	0.00	21.28	0.00	79.77
	101.05	05/10/91	0.00	20.42	0.00	80.63
	101.05	06/16/91	0.00	18.26	0.00	82.79
	101.05	07/03/91	0.00	17.62	0.00	83.43
	101.05	08/06/91	0.00	17.36	0.00	83.69
	101.05	09/09/91	0.00	17.51	0.00	83.54
	101.05	09/10/91	0.00	17.67	0.00	83.38
	101.05	10/08/91	0.00	16.96	0.00	84.09
	101.05	11/19/91	0.00	17.81	0.00	83.24
	101.05	12/26/91	0.00	17.38	0.00	83.67
	101.05	01/13/92	0.00	17.39	0.00	83.66
	101.05	02/10/92	0.00	17.65	0.00	83.40
	101.05	03/13/92	0.00	17.28	0.00	83.77
	101.05	04/20/92	0.00	16.57	0.00	84.48
	101.05	05/11/92	0.00	16.04	0.00	85.01
	101.05	06/12/92	0.00	16.42	0.00	84.63
	101.05	09/10/92	0.00	16.00	0.00	85.05
*Resurvey	101.04	12/23/92	0.00	16.61	0.00	84.43
	101.04	03/09/93	0.00	18.38	0.00	82.66
	101.04	06/10/93	0.00	16.02	0.00	85.02
MW-4	100.68	05/03/90	0.00	23.93	0.00	76.75
	100.68	07/13/90	0.00	19.82	0.00	80.86
	100.68	07/20/90	0.00	19.65	0.00	81.03
	100.68	08/22/90	0.00	18.60	0.00	82.08
	100.68	09/10/90	0.00	18.94	0.00	81.74
	100.68	10/10/90	0.00	19.22	0.00	81.46
	100.68	11/06/90	0.00	19.99	0.00	80.69
	100.68	01/14/91	0.00	21.30	0.00	79.38
	100.68	02/05/91	0.00	21.83	0.00	78.85
	100.68	03/13/91	0.00	22.35	0.00	78.33
	100.68	04/04/91	0.00	22.21	0.00	78.47
	100.68	05/10/91	0.00	21.14	0.00	79.54
	100.68	06/16/91	0.00	18.53	0.00	82.15
	100.68	07/03/91	0.00	18.14	0.00	82.54
	100.68	08/06/91	0.00	18.10	0.00	82.58
	100.68	09/09/91	0.00	18.35	0.00	82.33
	100.68	09/10/91	0.00	18.40	0.00	82.28
	100.68	10/08/91	0.00	17.76	0.00	82.92
	100.68	11/19/91	0.00	17.70	0.00	82.98
	100.68	12/26/91	0.00	18.10	0.00	82.58
	100.68	01/13/92	0.00	18.18	0.00	82.50
	100.68	02/10/92	0.00	18.50	0.00	82.18
	100.68	03/13/92	0.00	17.88	0.00	82.80
	100.68	04/20/92	0.00	17.22	0.00	83.46
	100.68	05/11/92	0.00	16.63	0.00	84.05
	100.68	06/12/92	0.00	17.19	0.00	83.49
	100.68	09/10/92	0.00	16.84	0.00	83.84
*Resurvey	100.66	12/23/92	0.00	17.42	0.00	83.24
	100.66	03/09/93	0.00	19.19	0.00	81.47
	100.66	06/10/93	0.00	16.20	0.00	84.46

MW-5	102.13	12/23/92	0.00	17.03	0.00	85.10
	102.13	03/09/93	0.00	18.73	0.00	83.40
	102.13	06/10/93	0.00	16.53	0.00	85.60
RW-1	100.61	12/23/92	0.00	16.00	0.00	84.61
	100.61	03/09/93	0.00	17.92	0.00	82.69
	100.61	06/10/93	0.00	15.54	0.00	85.07

Explanation:

All measurements are in feet (ft).

D.T.P - Depth-to-Product

D.T.W - Depth-to-Water

P.T. - Product Thickness

W.T.E - Water-Table-Elevation

^ - Data corrected for possible base measurement error.

TABLE 2
GROUNDWATER ANALYSIS SUMMARY
Conoco Store #23034
Conoco-South Robert, W. St. Paul, Minnesota (VEMN0601)

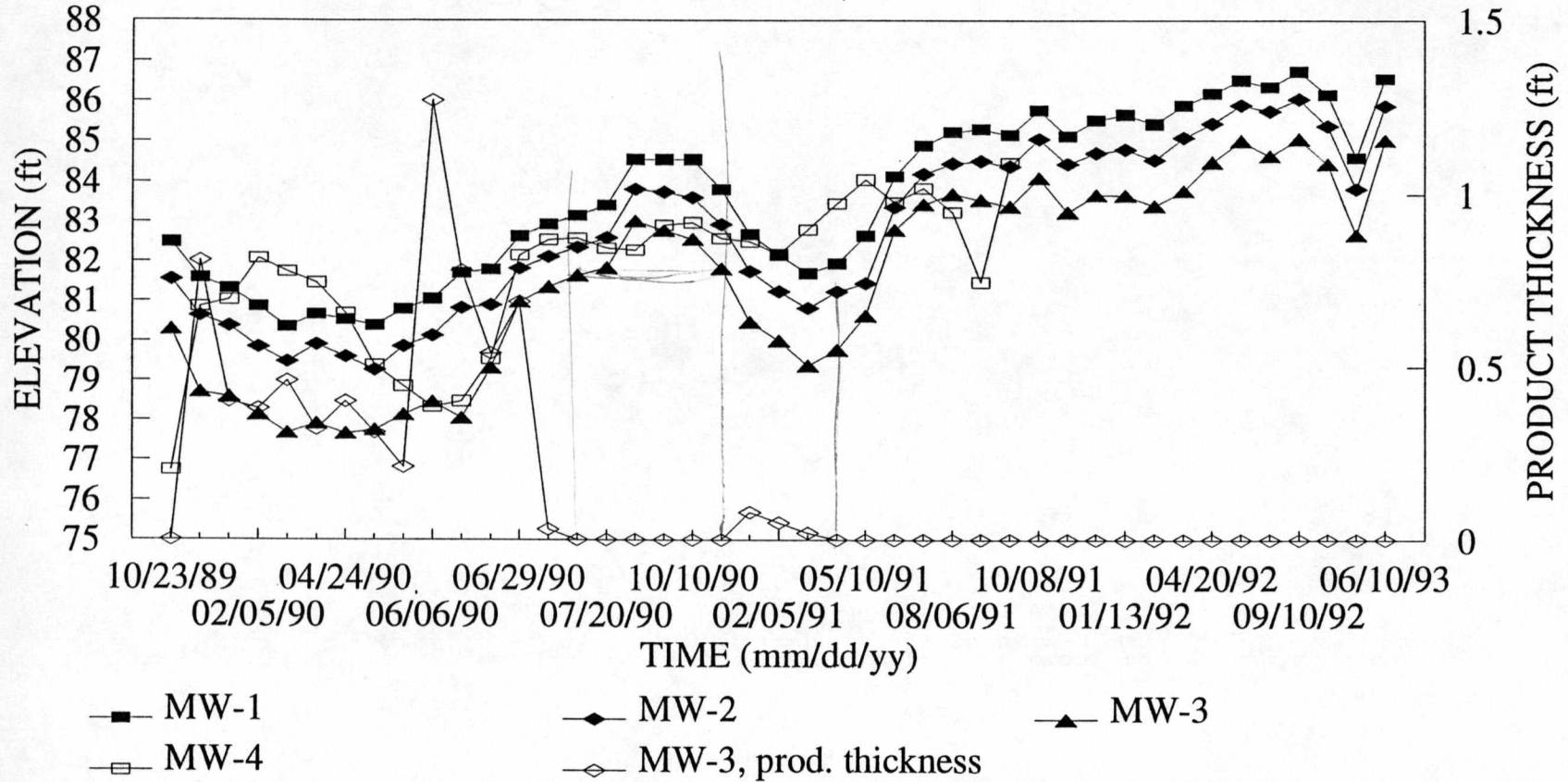
WELL #	DATE	B	E	T	X	THG/GRO	MTBE
MW-1	05/03/90	ND	ND	ND	ND	ND	ND
	09/10/90	ND	ND	ND	ND	ND	ND
	03/13/91	ND	ND	ND	ND	ND	ND
	09/09/91	ND	ND	ND	ND	ND	ND
	12/26/91	ND	ND	ND	ND	ND	ND
	03/13/92	ND	ND	ND	ND	ND	ND
	06/12/92	ND	ND	ND	ND	ND	ND
	09/10/92	ND	ND	ND	ND	ND	ND
	12/23/92 *	ND	ND	ND	ND	ND	ND
	03/09/93	ND	ND	ND	ND	ND	ND
	06/10/93	ND	ND	ND	ND	ND	ND
MW-2	05/03/90	6600	4	12	6900	27000	1600
	09/10/90	7300	950	17000	9600	48000	1600
	03/13/91	8200	1200	13000	10000	68000	3000
	09/09/91	8500	1300	9300	10000	48000	3000
	12/26/91	3800	1200	1100	4400	23000	ND
	03/13/92	2100	800	1200	2300	11000	ND
	06/12/92	2500	1100	1000	2600	17000	220
	09/10/92	4200	1300	1400	3100	19000	ND
	12/23/92 *	5800	1500	2800	4000	27000	ND
	03/09/93	5300	1300	3800	4500	21000	ND
	06/10/93	240	ND	120	230	1200	ND
MW-3	05/03/90						
	09/10/90	9700	2000	23000	16000	82000	1500
	03/13/91	9200	3900	23000	26000	110000	2600
	09/09/91	11000	3000	22000	20000	79000	4900
	12/26/91	7700	2300	10000	14000	77000	1600
	03/13/92	10000	2800	17000	15000	64000	ND
	06/12/92	8100	2500	16000	14000	72000	290
	09/10/92	9800	ND	22000	17000	75000	ND
	12/23/92 *	8100	2700	16000	15000	82000	ND
	03/09/93	6500	3000	20000	17000	74000	ND
	06/10/93	6400	2700	11000	13000	52000	ND
MW-4	05/03/90	ND	ND	ND	2	41	ND
	09/10/90	ND	ND	ND	ND	19	ND
	03/13/91	ND	ND	ND	1	40	ND
	09/09/91	ND	ND	ND	ND	ND	16
	12/26/91	ND	ND	ND	ND	ND	ND
	03/13/92	ND	ND	ND	ND	ND	ND
	06/12/92	ND	ND	ND	ND	ND	ND
	09/10/92	ND	ND	ND	ND	ND	ND
	12/23/92 *	ND	ND	ND	ND	ND	ND
	03/09/93	ND	ND	ND	ND	ND	ND
	06/10/93	ND	ND	ND	ND	ND	ND

MW-5	12/23/92 *	ND	ND	ND	ND	ND	ND
	03/09/93	ND	ND	ND	ND	ND	ND
	06/10/93	ND	ND	ND	ND	ND	ND

Explanation: B=benzene
E=ethyl benzene
T=toluene
X=total xylenes
THG=total hydrocarbons as gasoline
MTBE=methyl-tert-butyl-ether
Pb=lead
THFO=total hydrocarbons as #2 fuel oil
GRO=gasoline range organics
*=denotes GRO replaces THG per MPCA guidelines as of October 1, 1992

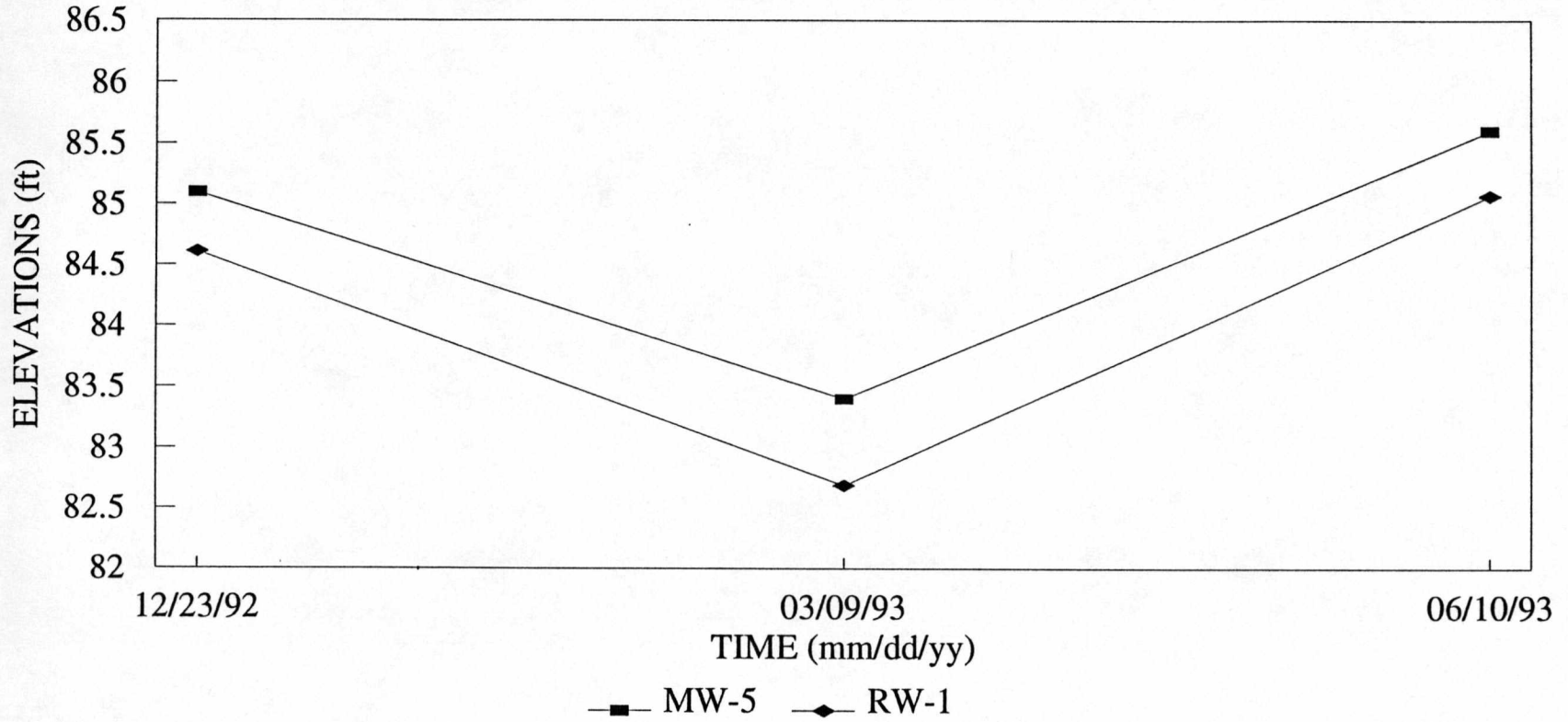
GROUND-WATER ELEVATIONS/PRODUCT THICKNESS

Conoco South Robert, VEMN0601



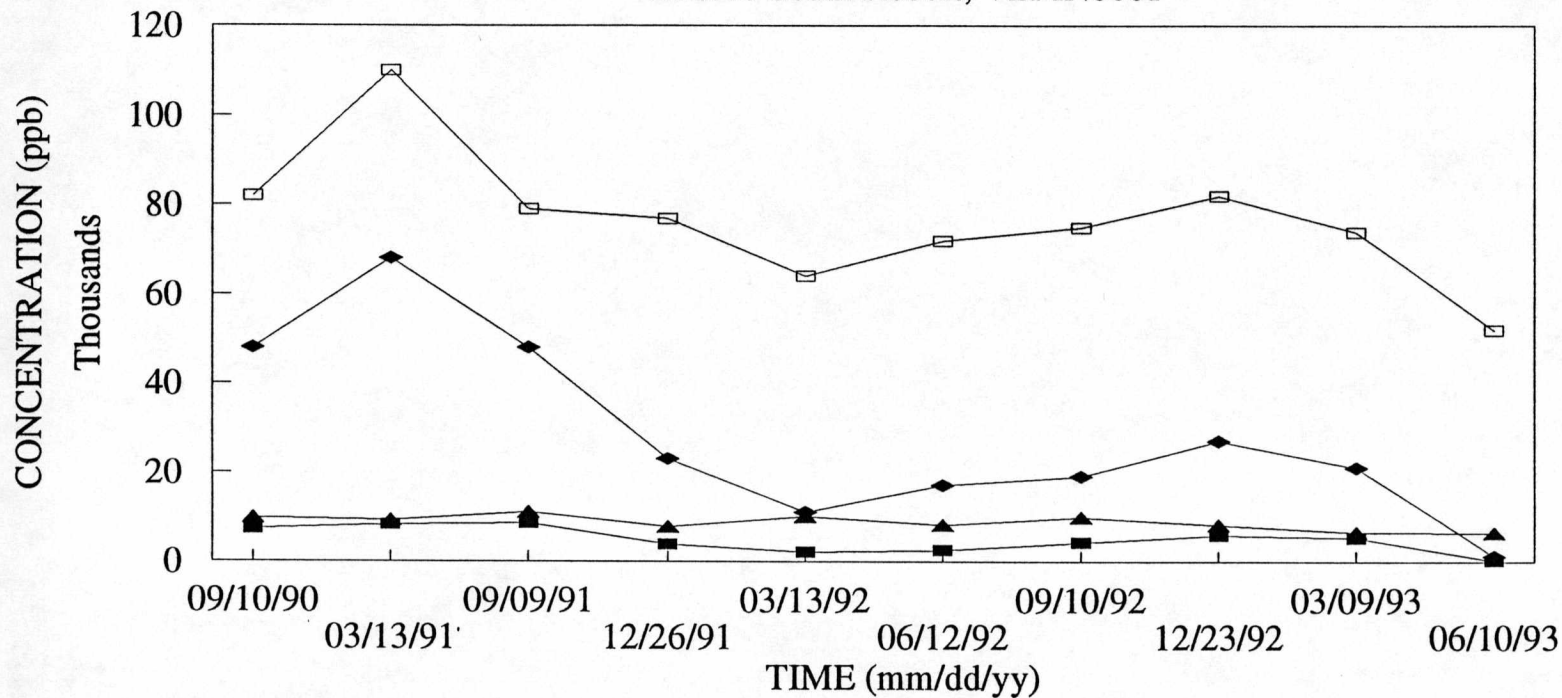
GROUND-WATER ELEVATIONS, MW-5 & RW-1

Conoco South Robert, VEMN0601



CONCENTRATIONS vs. TIME, MW-2 & MW-3

Conoco South Robert, VEMN0601



■ MW-2, BENZENE ◆ MW-2, GRO ▲ MW-3, BENZENE □ MW-3, GRO



twin city testing
corporation

REPORT OF: CHEMICAL ANALYSES

662 CROMWELL AVENUE
ST. PAUL, MN 55114
PHONE 612/645-3601

PROJECT: VEMN 601

DATE: June 25, 1993

REPORTED TO: Dahl & Associates
Attn: Dan Wiberg
4390 McMenemy Drive
St. Paul, MN 55127

Conoco-So. Robert

LABORATORY NO: 4410 93-1828

INTRODUCTION

This report presents the results of the analyses of five samples received on June 11, 1993, from a representative of Dahl & Associates. The scope of our services was limited to the parameters listed in the attached tables.

METHODOLOGY

Analyses are performed according to Twin City Testing Standard Operating Procedures. The procedures are based on the references stated in the analytical results tables.

RESULTS

The results are listed in the attached tables.

REMARKS

The samples were collected on June 10, 1993. If samples are not consumed in the analysis, they are held for two months from the date of sample receipt and then disposed, unless written instructions to the contrary are received.

TWIN CITY TESTING CORPORATION

Deneen Walker
Project Manager

DW/SK/lml

Stephanie Kidder
Laboratory Manager

PETROLEUM VOLATILE ORGANIC COMPOUND RESULTS
EPA METHOD 8020

(All values are in µg/L which is equivalent to parts-per-billion)

Client ID:	Method Blank	MW-1	MW-4	MW-5	
TCT ID:		320181	320184	320185	
<u>Parameter:</u>					<u>PQL</u>
Benzene	ND	ND	ND	ND	5
Toluene	ND	ND	ND	ND	5
Ethyl benzene	ND	ND	ND	ND	5
Total xylenes	ND	ND	ND	ND	5
Methyl-tert-Butyl Ether	ND	ND	ND	ND	5
Surrogate Recovery:					
α,α,α-Trifluorotoluene	116%	65% ¹	111%	110%	
Gasoline Range Organics	ND	ND	ND	ND	30
Surrogate Recovery:					
α,α,α-Trifluorotoluene	114%	85%	104%	104%	
Date Collected:		6/10/93	6/10/93	6/10/93	
Date Analyzed:	6/21/93	6/18/93	6/18/93	6/18-19/93	

¹ Surrogate recovery outside recommended quality control limits, see reanalysis.

PQL = Practical Quantitation Limit

ND = Not Detected

Reference: EPA Test Methods for Evaluating Solid Waste, SW-846, November 1986, 3rd Edition.

Wisconsin Department of Natural Resources, PUBL-SW-140, April 1992.

LABORATORY NO: 4410 93-1828

PETROLEUM VOLATILE ORGANIC COMPOUND RESULTS
EPA METHOD 8020

(All values are in $\mu\text{g/L}$ which is equivalent to parts-per-billion)

Client ID: MW-1

TCT ID: 320181

<u>Parameter:</u>		<u>PQL</u>
Benzene	ND	5
Toluene	ND	5
Ethyl benzene	ND	5
Total xylenes	ND	5
Methyl-tert-Butyl Ether	ND	5
Surrogate Recovery:		
α, α, α -Trifluorotoluene	111%	
Gasoline Range Organics	ND	30
Surrogate Recovery:		
α, α, α -Trifluorotoluene	104%	
Date Analyzed:	6/28/93	

PQL = Practical Quantitation Limit
ND = Not Detected

Reference: EPA Test Methods for Evaluating Solid Waste, SW-846, November 1986, 3rd Edition.
Wisconsin Department of Natural Resources, PUBL-SW-140, April 1992.

LABORATORY NO: 4410 93-1828

PETROLEUM VOLATILE ORGANIC COMPOUND RESULTS
EPA METHOD 8020

(All values are in $\mu\text{g/L}$ which is equivalent to parts-per-billion)

Client ID: MW-2

TCT ID: 320182

<u>Parameter:</u>		<u>PQL</u>
Benzene	240	120
Toluene	120	120
Ethyl benzene	ND	120
Total xylenes	230	120
Methyl-tert-Butyl Ether	ND	120
Surrogate Recovery:		
α, α, α -Trifluorotoluene	106%	
Gasoline Range Organics	1,200	750
Surrogate Recovery:		
α, α, α -Trifluorotoluene	98%	
Date Collected:	6/10/93	
Date Analyzed:	6/18/93	

PQL = Practical Quantitation Limit

ND = Not Detected

Reference: EPA Test Methods for Evaluating Solid Waste, SW-846, November 1986, 3rd Edition.

Wisconsin Department of Natural Resources, PUBL-SW-140, April 1992.

LABORATORY NO: 4410 93-1828

PETROLEUM VOLATILE ORGANIC COMPOUND RESULTS
EPA METHOD 8020

(All values are in $\mu\text{g/L}$ which is equivalent to parts-per-billion)

Client ID: MW-3

TCT ID: 320183

<u>Parameter:</u>		<u>PQL</u>
Benzene	6,400	250
Toluene	11,000	250
Ethyl benzene	2,700	250
Total xylenes	13,000	250
Methyl-tert-Butyl Ether	ND	250
Surrogate Recovery:		
α, α, α -Trifluorotoluene	117%	
Gasoline Range Organics	52,000	1,500
Surrogate Recovery:		
α, α, α -Trifluorotoluene	113%	
Date Collected:	6/10/93	
Date Analyzed:	6/21/93	

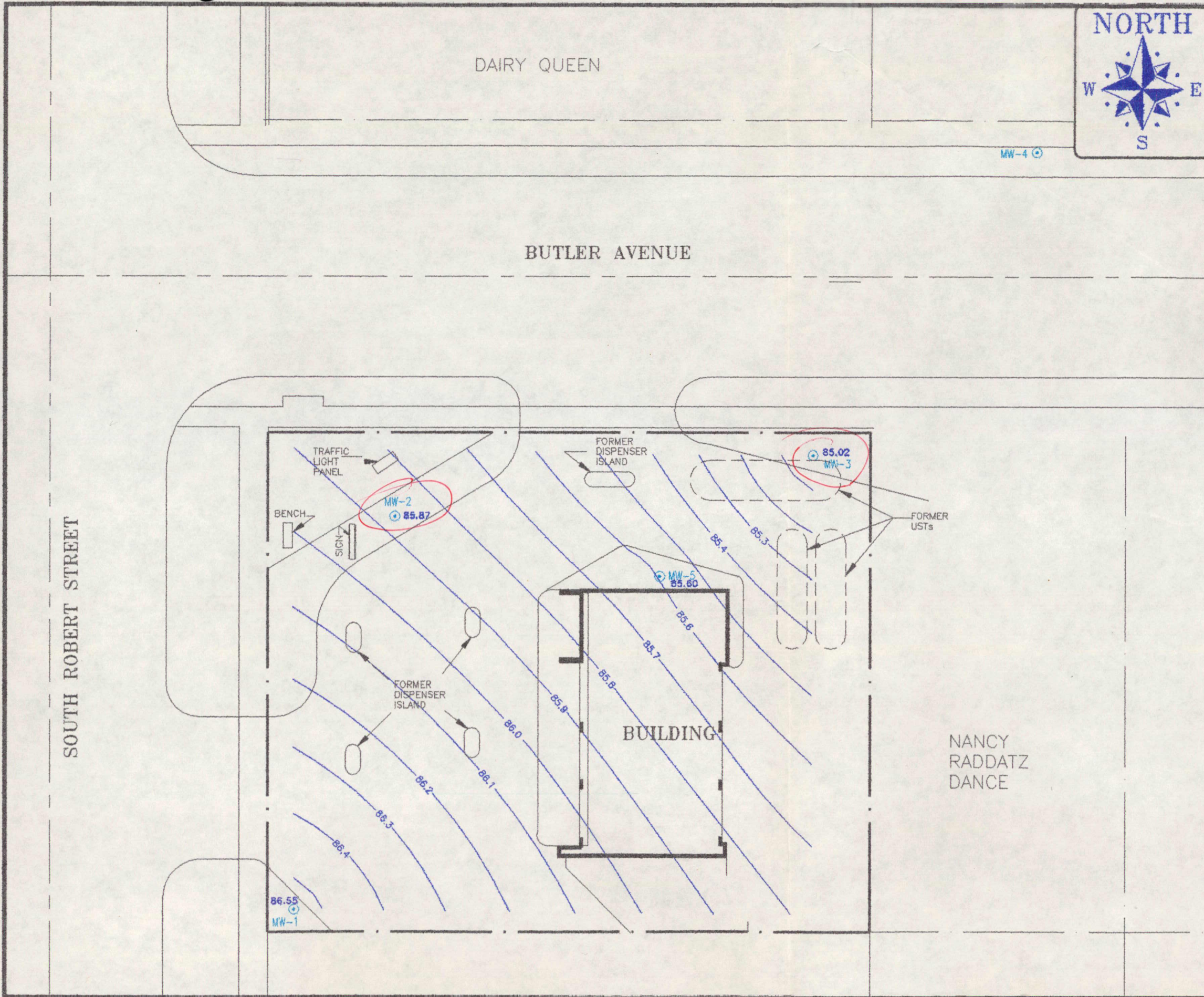
PQL = Practical Quantitation Limit

ND = Not Detected

Reference: EPA Test Methods for Evaluating Solid Waste, SW-846, November 1986, 3rd Edition.

Wisconsin Department of Natural Resources, PUBL-SW-140, April 1992.

LABORATORY NO: 4410 93-1828

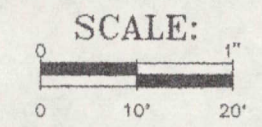


EXPLANATION

NOTE :
 This drawing (including property lines, structures, and locations of buried utilities) is not exact. For precise locations, consult a registered land surveyor and appropriate utility company.

⊙ MW- MONITORING WELL

GROUND-WATER GRADIENT DATA:
 * BASED ON DATA COLLECTED ON 6/10/93



4390 McMenamy Road
 Saint Paul, MN. 55127
 Phone (612)490-2905
 FAX (612)490-3777

DAHL
 & ASSOCIATES, INC.
 Environmental Consultants, Contractors & Engineers

DAHL STD NO: VEMN0601-B-00-B

GROUND-WATER GRADIENT

S. ROBERT STREET
 WEST ST. PAUL, MINNESOTA

STOFFEL'S CHIRO

NANCY RADDATZ DANCE

PLOT DATE 07/21/93
 AutoCAD FILE NAME 0601-15A
 PLOT SCALE 1" = 20'

DATE DRAWN	07/21/93
DRAWN BY	Jim N.
APPROVED BY	
DRAWING NUMBER	B-15-A
PROJECT NUMBER	VEMN0601
FIGURE NUMBER	