Delta
Environmental
Consultants, Inc.

3900 Northwoods Drive
Suite 200
St. Paul, MN 55112
612/486-8022
FAX: 612/486-8021

RECEIVED
DEC 04 1996
MPCA, HAZARDOUS
WASTE DIVISION

December 2, 1996

Mr. Jim Joslyn
Minnesota Pollution Control Agency
Hazardous and Solid Waste Division
Tanks and Spills Section
520 North Lafayette Road
St. Paul, Minnesota 55155

Subject: Annual Monitoring Report/Request for Site Closure
Holiday Station Store No. 226
Hinckley, Minnesota
MPCA Leak No. 7487
Delta Project No. A094-158

Dear Mr. Joslyn:

Enclosed is an Annual Monitoring Report for ground water sampling conducted at the above-referenced site. Monitoring wells MW-2 and MW-3 did not exceed the Minnesota Department of Health (MDH) Health Risk Limits (HRLs) for benzene, toluene, ethylbenzene, or xylenes (BTEX), during the past two monitoring events. MW-1 did not exceed the HRLs for toluene or xylenes, but did exceed the HRLs for benzene and ethylbenzene on both sampling dates. BTEX concentrations in MW-1 are stable to decreasing.

The threat to potential receptors of the remaining petroleum hydrocarbons in the soil and ground water was evaluated during the remedial investigation conducted at this site (see Delta Environmental Consultants, Inc.'s (Delta) *Remedial Investigation/Corrective Action Design Report* dated April 7, 1995). No active water supply wells were identified within one mile downgradient of the site. Normal atmospheric conditions were detected in the storm and sanitary sewers adjacent to the site. Additionally, according to the Minnesota Pollution Control Agency's (MPCA) April 1996 guidance document, the saturated unit at this site is not a resource aquifer. The hydrocarbon plume is stable and located within 200 feet of the release area. Based on the above information, site closure is requested.

If you have any questions, please call me at (612) 486-5771.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Megan Tewinkel
Project Manager

MT/raw

Enclosure

cc: Mr. Bruce Anthony - Holiday Companies

Tanks and Emergency Response Section
Minnesota Pollution Control Agency
MPCA

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DEC 04 1996
MPCA, HAZARDOUS WASTE DIVISION

Annual Monitoring Report

Fact Sheet 3.26
April 1996

After the Corrective Action Design (CAD) has been approved, this worksheet should be submitted on an annual schedule. If an active remediation system has been installed, the " CAD System Monitoring Worksheet", fact sheet #3.31 should be submitted along with this worksheet. The "Corrective Action Design System Monitoring Worksheet" documents data collection of system emissions and operating parameters, as well as any changes to the system.

Under certain circumstances Minnesota Pollution Control Agency (MPCA) staff may request submittal of the monitoring information on a quarterly schedule. This should be conducted according to fact sheet 3.25, "Quarterly Monitoring Report."

Site name and address: Holiday Station Store No. 226

Hinckley, Minnesota

MPCA Leak Number: *LEAK #: 7487*

Date submitted: 12/02/96

Section I. DISCUSSION

Discuss the results of the monitoring performed since the remedial investigation (RI) report or the last progress report has been submitted. Include any notable trends in the discussion.

Two ground water monitoring events have been conducted since the last progress report was submitted in February 1996. MW-2 and MW-3 did not exceed the Minnesota Department of Health (MDH) Health Risk Limits (HRLs) for benzene, toluene, ethylbenzene, or xylenes (BTEX). MW-1 did not exceed the HRL for toluene or xylene, but did exceed the HRL for benzene and ethylbenzene on both sampling dates. BTEX concentrations in MW-1 have remained stable or decreased during the past three monitoring events.

The ground water flow pattern on April 22, 1996 was similar to historical flow patterns observed at the site.

MW-3 was abandoned in April 1996 with the permission of the MPCA.

If vapor impacts were reported during the RI , discuss the results of the vapor monitoring survey completed during this reporting period. Include in your discussion the sampling instrument and sampling method.

Vapor impacts were not detected during the RI.

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 Minnesota Duty Officer (24 hours) at 612/649-5451 (metro and outside Minnesota) or 1-800/422-0798 (Greater Minnesota). TTY users call 612/297-5353 (V/TTY) or 1-800/627-3529 (V/TTY). **Vapor mitigation is required.**

Section II. RECOMMENDATIONS

The recommendations section should present recommendations for additional corrective action, modifications to corrective action, additional monitoring or site closure. If cleanup goals have been achieved at the site, recommendations for termination of corrective actions may be presented.

The risk of petroleum impacts in the soil and ground water reaching potential receptors was evaluated during the RI conducted at the site. The results of the receptor survey indicated that the hydrocarbons detected at the site should not impact local utilities or area aquifers (see Delta's Remedial Investigation/Corrective Action Design Report dated April 7, 1995 for more information).

According to the MPCA's April 1996 guidance documents, the saturated unit at this site is not a resource aquifer. Also, the plume at this site is less than 200 feet and is not migrating.

Since potential receptors are not threatened and BTEX levels in MW-1 are stable or decreasing, site closure is recommended.

Section III: TABLES

Table 1. (Attached)

Water table summary.

Well Number	Date Sampled	Depth of Water from Top of Casing	Product Thickness	Depth of Water Below Grade	Relative Ground water Elevation

Notes: (ground water above/below screen, etc.)

Table 2. (Attached)

Indicate the laboratory analytical results for water samples collected from each well. All analytical results collected from each well should be included on this table.

Well #	Date	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	GRO	DRO
MW-1								
MW-2								
MW-3								
MW-								

Notes: show BTEX/MTBE in ppb and DRO/GRO in ppm (e.g., free product, dry well, etc.)

Table 3.

Indicate other notable contaminants (either petroleum or non-petroleum derived) detected in water samples.

Well #	Date Analyzed						

Notes: units

Section IV. FIGURES

Figures - (all maps must include a north arrow, scale and legend) *Approximate scales are not acceptable*.

1. Site location map. Adapt this map from a U.S. Geological Survey 7.5 minute quadrangle and identify the name of the 7.5 minute quadrangle.
2. Site map showing the locations of all ground water and vapor monitoring points.
3. Updated ground water contour map, using water level elevations from the most recent round of water level measurements. Show all wells at the site, and differentiate wells constructed in different aquifers. Label ground water contours and elevations at each data point used for contouring.
4. Copies of most recent laboratory reports for ground water analyses, including a copy of the Chain of Custody.
5. Hydrograph for all monitoring and recovery wells.
6. Graph(s) showing contaminant concentrations over time for all monitoring and recovery wells.
7. Table of dissolved oxygen sample results (if collected)

Section V. APPENDICES

The appendices section of the report contains sufficient information to document all activities completed since the last report. All reproduced data must be legible. In general this should include all applicable information required for the Appendices section of a RI report.

Upon request, this document can be made available in other formats, including Braille, large print and audio tape.
TTY users call 612/282-5332 or 1-800/657-3864 (voice/TTY).

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

TABLE 1 GROUND WATER ELEVATIONS

Holiday Station No. 226
Hinckley, Minnesota
DELTA NO. A094-158

Holiday Station Wells and Top of Casing Elevations						
	MW-1	1031.11	MW-2	1034.02	MW-3	1029.71
Date	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation
06-Dec-94	21.26	1009.85	24.91	1009.11	15.56	1014.15
20-Dec-94	21.20	1009.91	24.96	1009.06	15.90	1013.81
20-Jan-95	21.93	1009.18	25.41	1008.61	19.32	1010.39
20-Apr-95	21.00	1010.11	24.17	1009.85	19.69	1010.02
27-Oct-95	15.53	1015.58	18.63	1015.39	13.89	1015.82
22-Jan-96	19.02	1012.09	23.19	1010.83	15.68	1014.03
22-Apr-96	19.16	1011.95	18.99	1015.03	15.25	1014.46
23-Jul-96	16.01	1015.10	19.10	1014.92	Abandoned	

Tobies Service Station Wells and Top of Casing Elevations (reported by HTCT)												
MW-1	104.66	MW-2	106.78	MW-3	105.13	MW-4	97.65	MW-5	96.63	MW-6	101.13	MW-7A	102.48

Tobies Service Station Wells and Top of Casing Elevations (adjusted to Holiday elevations datum)													
	MW-1	1029.49	MW-2	1031.61	MW-3	1029.96	MW-4	1022.48	MW-5	1021.46	MW-6	1025.96	MW-7A	1027.31
Date	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation
20-Dec-94	15.40	1014.09	16.78	1014.83	16.71	1013.25	12.45	1010.03	7.83	1013.63	12.67	1013.29	17.64	1009.67
20-Jan-95			16.89	1014.72	16.57	1013.39					13.36	1012.60		
27-Oct-95	13.52	1015.97	15.12	1016.49	14.22	1015.74	10.63	1011.85	3.81	1017.65	9.92	1016.04	11.55	1015.76
22-Jan-96	14.88	1014.61	16.35	1015.26	15.49	1014.47					16.67	1009.29		
22-Apr-96	14.89	1014.60	15.28	1016.33	15.51	1014.45			5.15	1016.31			13.42	1013.89
23-Jul-96	13.74	1015.75	15.38	1016.23	14.54	1015.42			5.42	1016.04			11.85	1015.46

NOTE:

Elevations are reported in feet - NGVD (National Geodetic Vertical Datum)
TOC elevations for Holiday station wells are provided by Kemper & Associates, Inc.
TOC elevations for Tobies Service Station wells are normalized to Holiday wells.

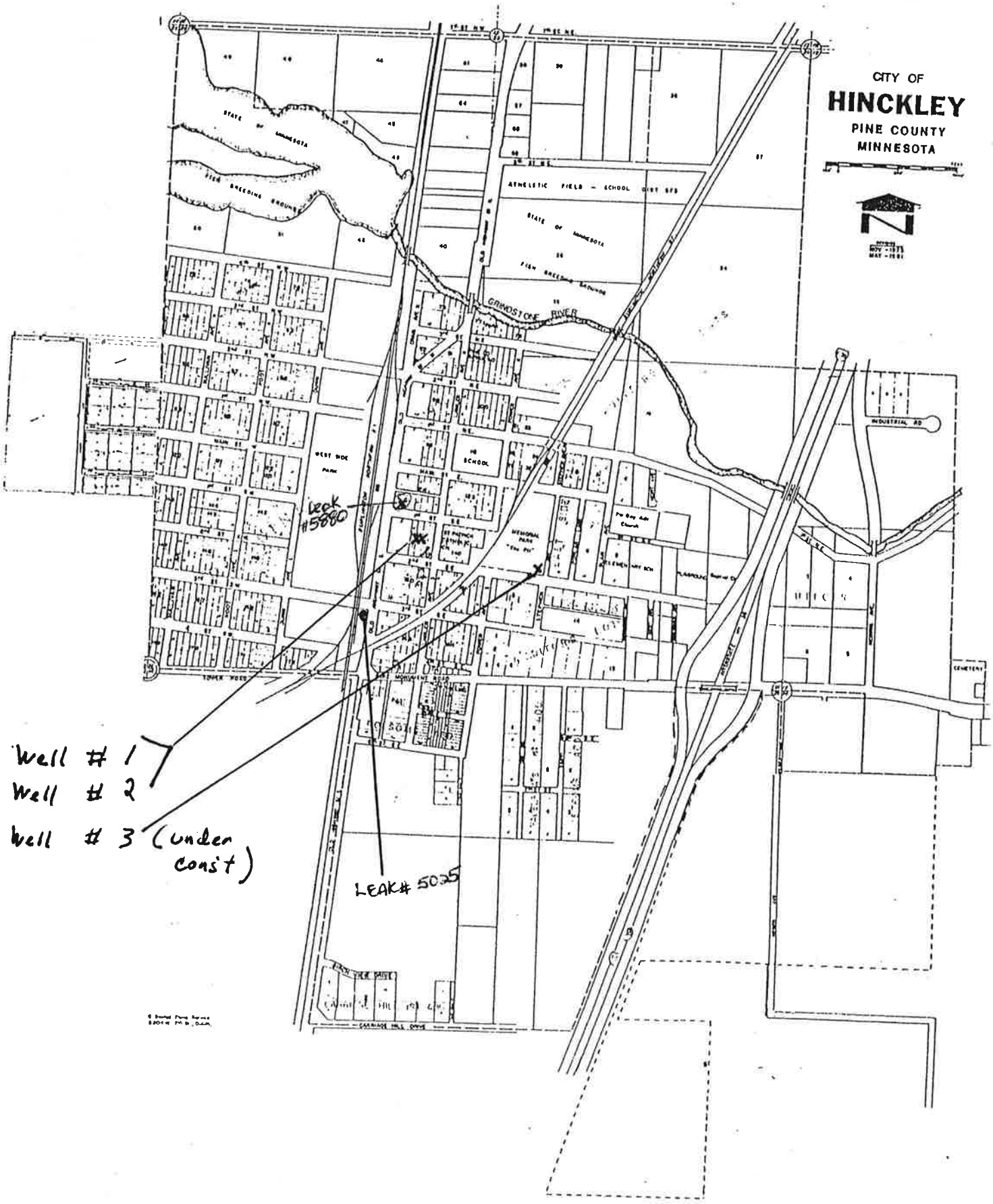
Stadia rod readings of Holiday well MW-2 and Tobies well MW-3 (surveyed on 12/20/94)
Holiday MW-2 = 2.96
Tobies MW-3 = 7.02
Tobies well MW-3 is 4.06 feet lower than Holiday well MW-2

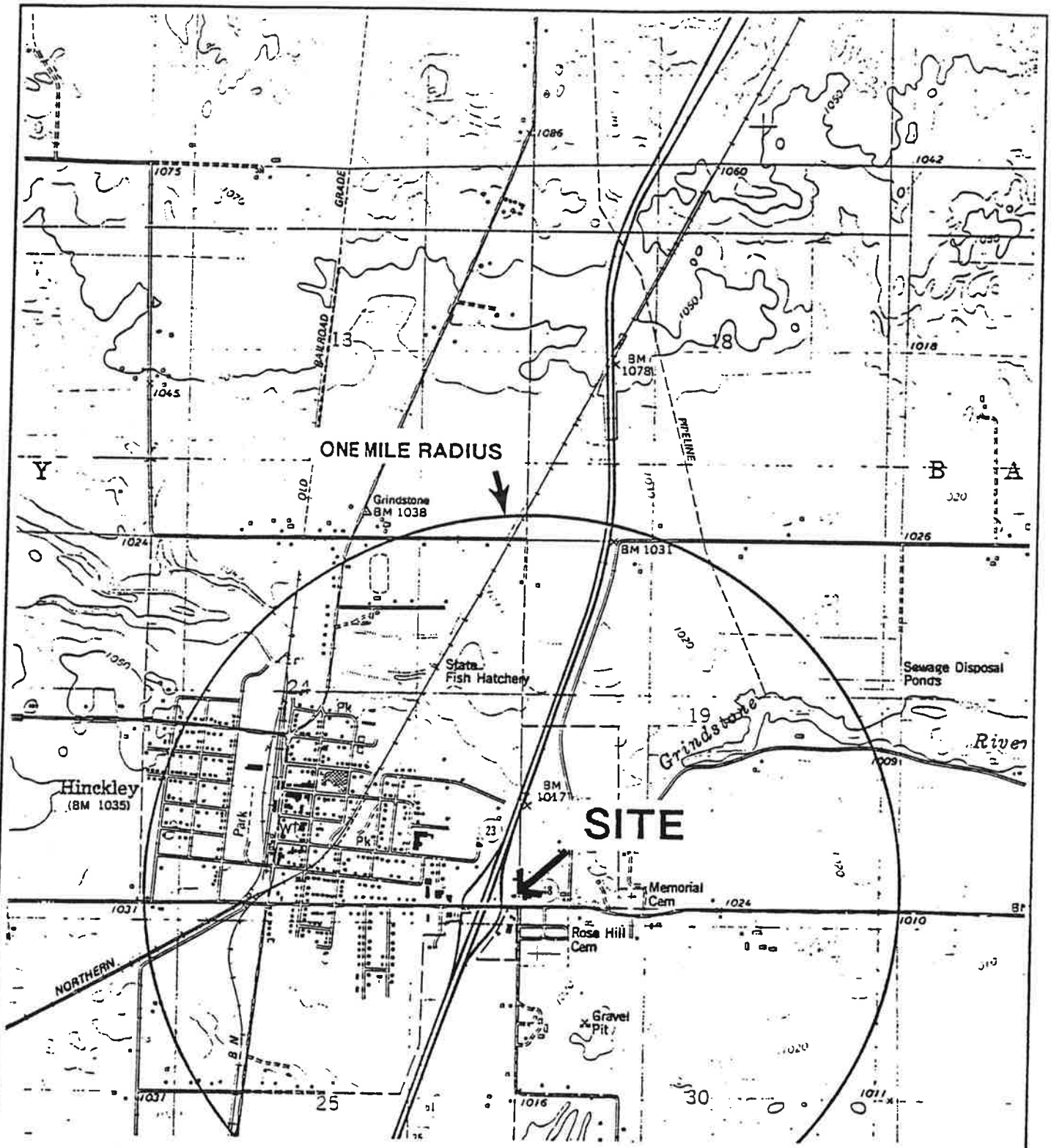
TABLE 2 GROUND WATER CHEMISTRY (ug/l)

Holiday Station No. 226
Hinckley, Minnesota
Delta No. A094-158-1

Sample I.D.	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO
MW-1	06-Dec-94	1400	230	1700	3300	13000	6000
	20-Jan-95	1100	360	1600	2900	12000	4300
	20-Apr-95	1200	310	1500	2800	10000	NA
	27-Oct-95	1000	280	1500	4600	18000	8600
	22-Jan-96	1800	310	2000	5800	23000	8900
	29-Apr-96	1300	160	1600	3400	17000	9000
	23-Jul-96	1000	280	1400	4700	18000	4700
MW-2	06-Dec-94	2.7	<0.6	<0.2	<0.5	35	<29
	20-Jan-95	<0.2	<0.5	<0.2	<0.8	<20	<31
	20-Apr-95	0.42	<0.5	<0.2	<0.8	<20	NA
	27-Oct-95	22	<0.65	<0.75	<1.8	240	NA
	22-Jan-96	19	<1.3	<0.55	<2.7	160	NA
	29-Apr-96	<0.60	<1.3	<0.55	<2.7	<22	NA
	23-Jul-96	<0.60	<1.3	<0.55	<2.7	<22	NA
MW-3	06-Dec-94	1.6	<0.6	<0.2	0.39	42	<29
	20-Jan-95	1.3	<0.5	<0.2	0.82	300	40
	20-Apr-95	3.4	<0.5	<0.2	<0.8	140	NA
	27-Oct-95	0.72	<0.65	<0.75	<1.8	49	NA
	29-Apr-96	<0.60	<1.3	<0.55	<2.7	64	NA
	22-Jan-96	0.85	<1.3	<0.55	<2.7	84	NA
		Abandoned 4-96					

DRO = Diesel-range organics
GRO = Gasoline-range organics
ug/l = micrograms per liter, which is equivalent to parts per billion (ppb)


CITY OF
HINCKLEY
PINE COUNTY
MINNESOTA
GRINDSTONE RIVER
ATHLETIC FIELD - SCHOOL DIST 573
STATE OF MINNESOTA
FISH BREEDING GROUNDS
WEST SIDE PARK
HS SCHOOL
MEMORIAL PARK
INDUSTRIAL RD
CEMETERY
Leak #5880
LEAK# 5035
Well # 1
Well # 2
Well # 3 (under consit)



QUADRANGLE LOCATION

HINCKLEY QUADRANGLE
MINNESOTA–PINE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

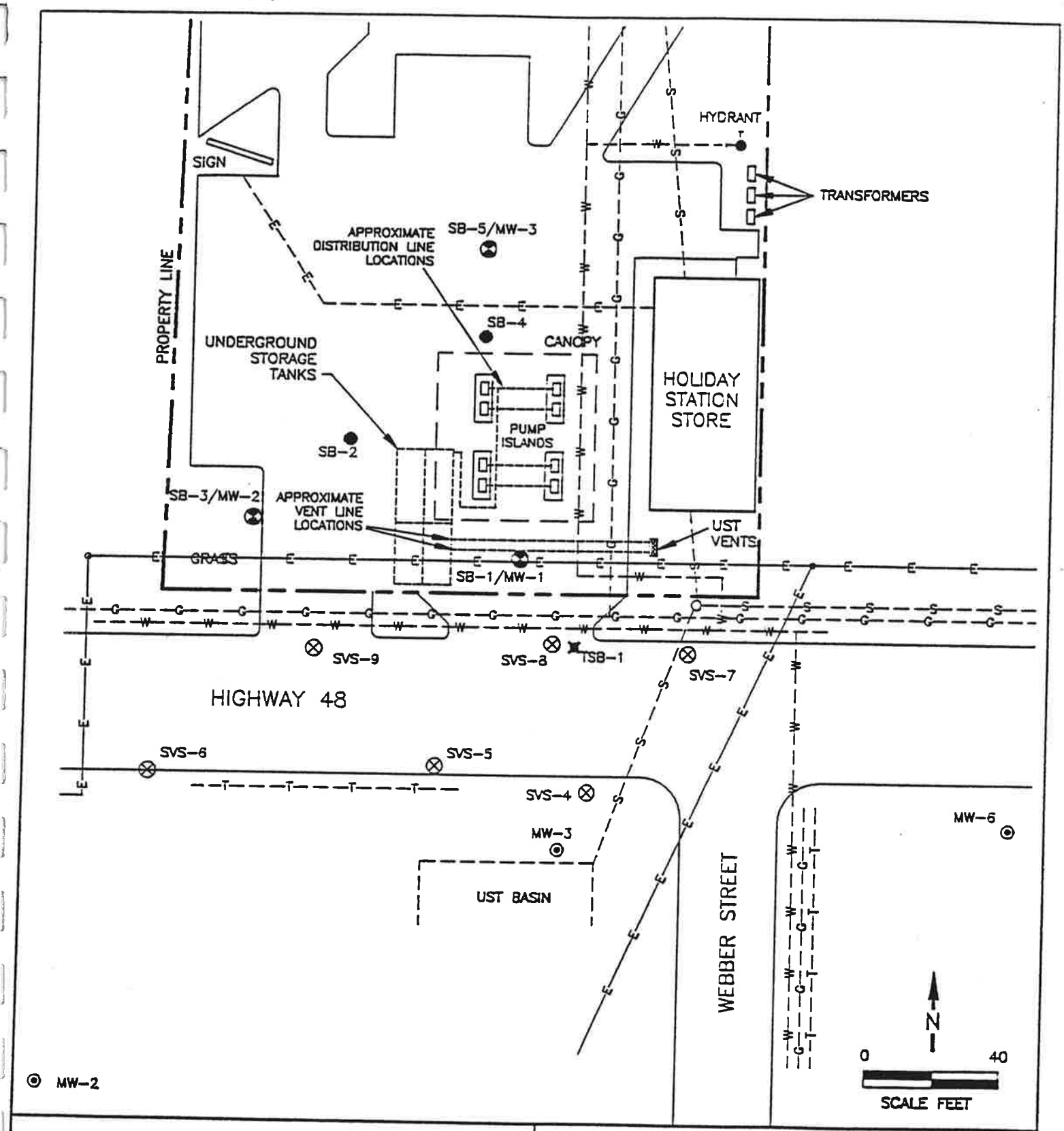
0 NORTH 2000

SCALE IN FEET

FIGURE 1
SITE LOCATION MAP
HOLIDAY STATION NO. 226
HINCKLEY, MINNESOTA

PROJECT NO.	PREPARED BY
A094–158	CI
DATE	REVIEWED BY
3/7/95	

Delta Environmental Consultants, Inc.



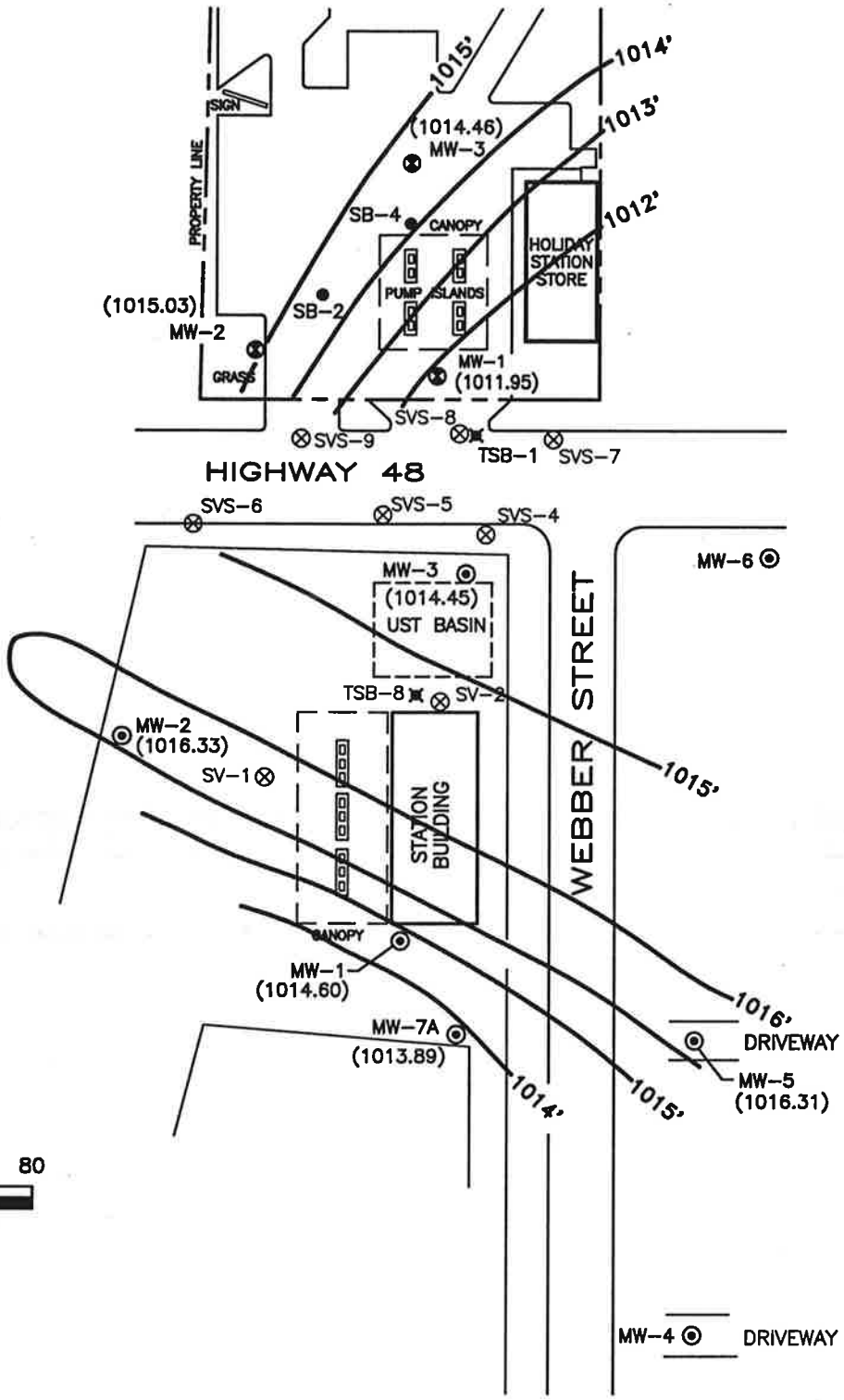
LEGEND:

- MONITORING WELL (HOLIDAY)
- SOIL BORING (HOLIDAY)
- MONITORING WELL (TOBIES)
- SOIL VAPOR SURVEY POINT (TOBIES)
- SOIL BORING (TOBIES)
- OVERHEAD POWER LINE
- SEWER LINE
- NATURAL GAS LINE
- TELEPHONE LINE
- WATER LINE

FIGURE 2
DETAILED SITE MAP
HOLIDAY STATION NO. 226
HINCKLEY, MINNESOTA

PROJECT NO.	PREPARED BY	DRAWN BY
A094-158	CI	DD
DATE	REVIEWED BY	FILE NAME
3/16/95		94158-2

Delta Environmental Consultants, Inc.



LEGEND:

- ⊗ MONITORING WELL (HOLIDAY)
- ● SOIL BORING (HOLIDAY)
- ⊙ MONITORING WELL (TOBIES)
- ⊗ SOIL VAPOR SURVEY POINT (TOBIES)
- ✖ SOIL BORING (TOBIES)
- (1014.72) GROUND WATER ELEVATION (IN FEET)
- —1012' GROUND WATER CONTOUR LINE

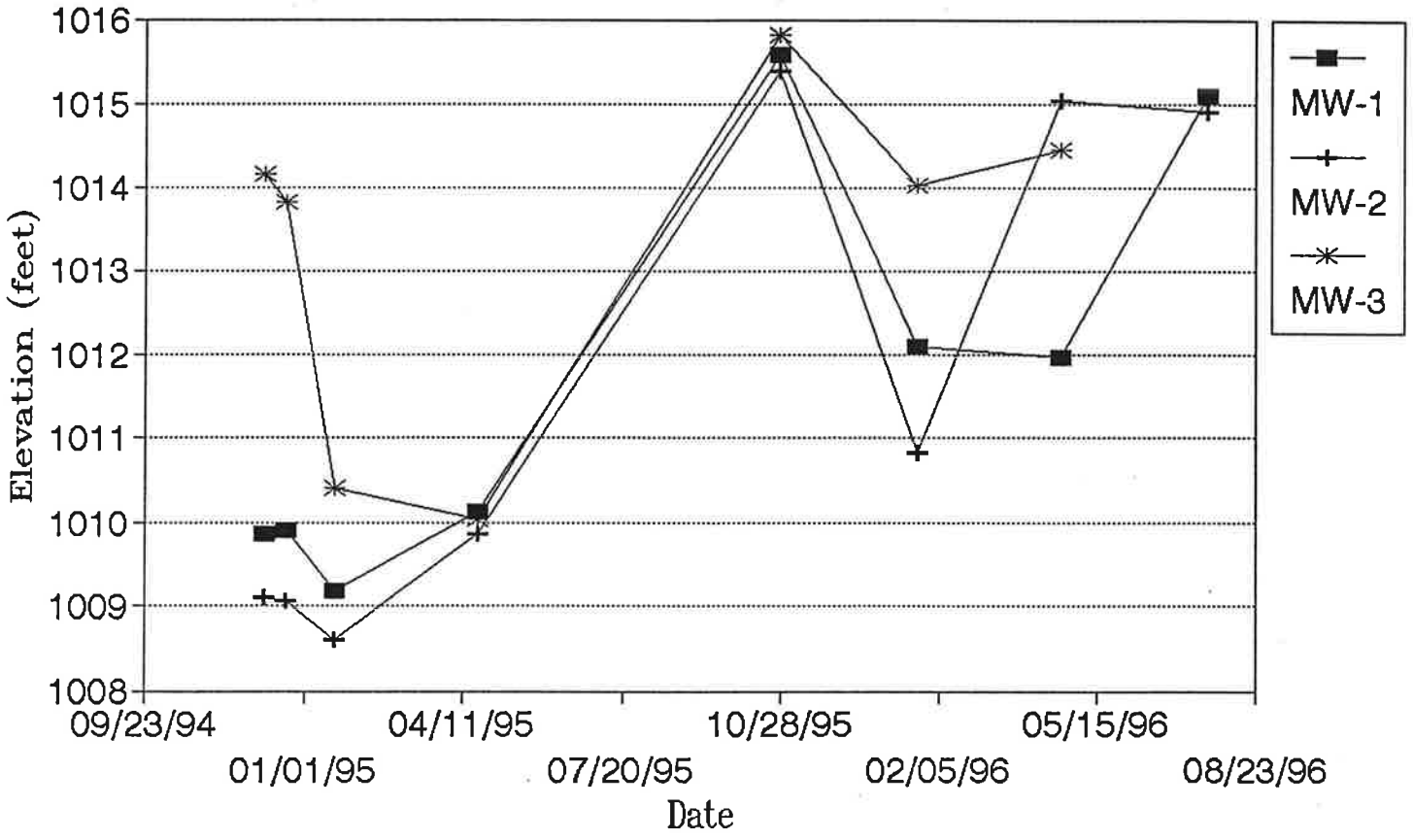
FIGURE 3
GROUND WATER CONTOUR MAP
APRIL 22, 1996
HOLIDAY STATION NO. 226
HINCKLEY, MINNESOTA

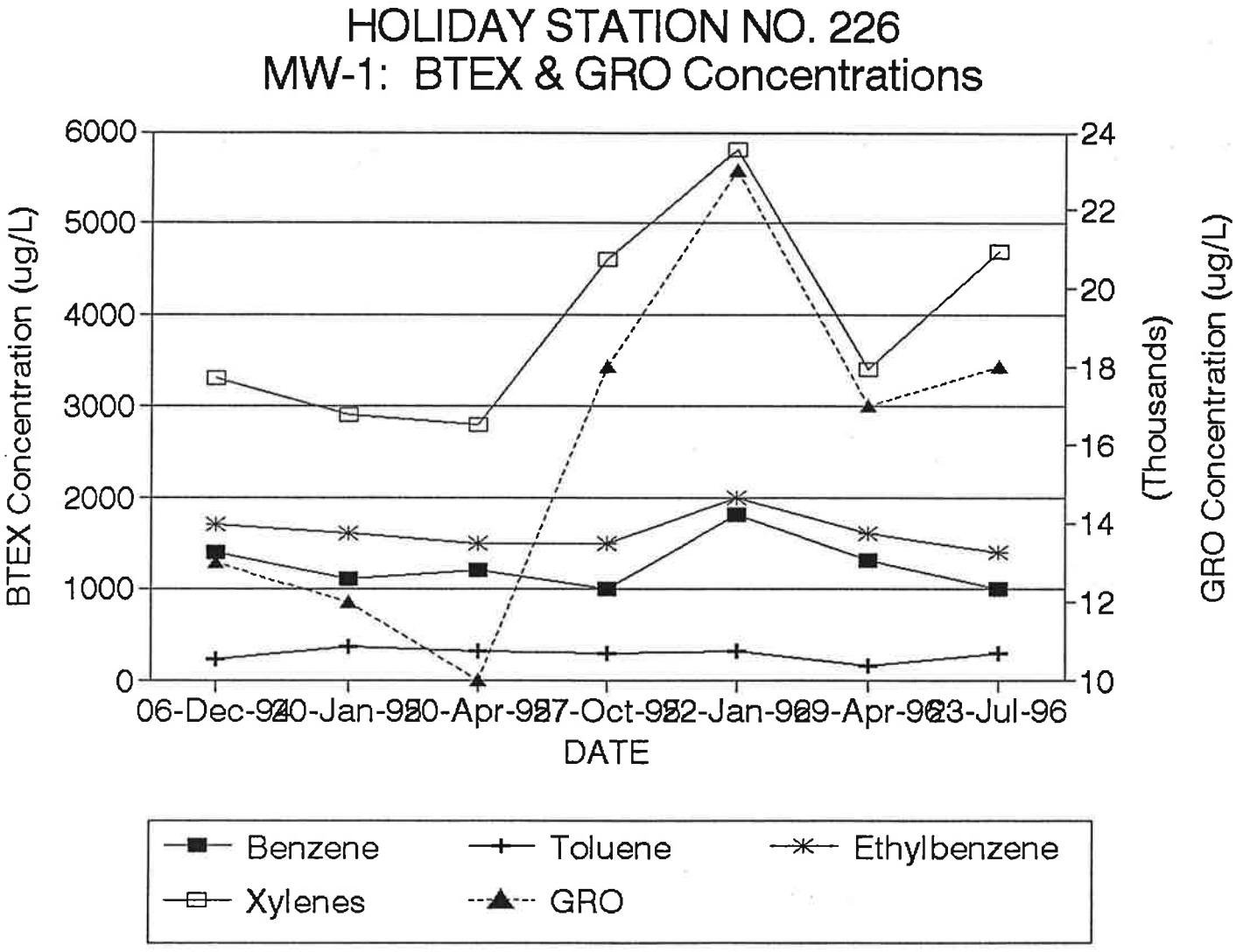
PROJECT NO.	PREPARED BY	DRAWN BY
A094-158	MT	DD
DATE	REVIEWED BY	FILE NAME
10/18/96		94158SM

Delta Environmental Consultants, Inc.

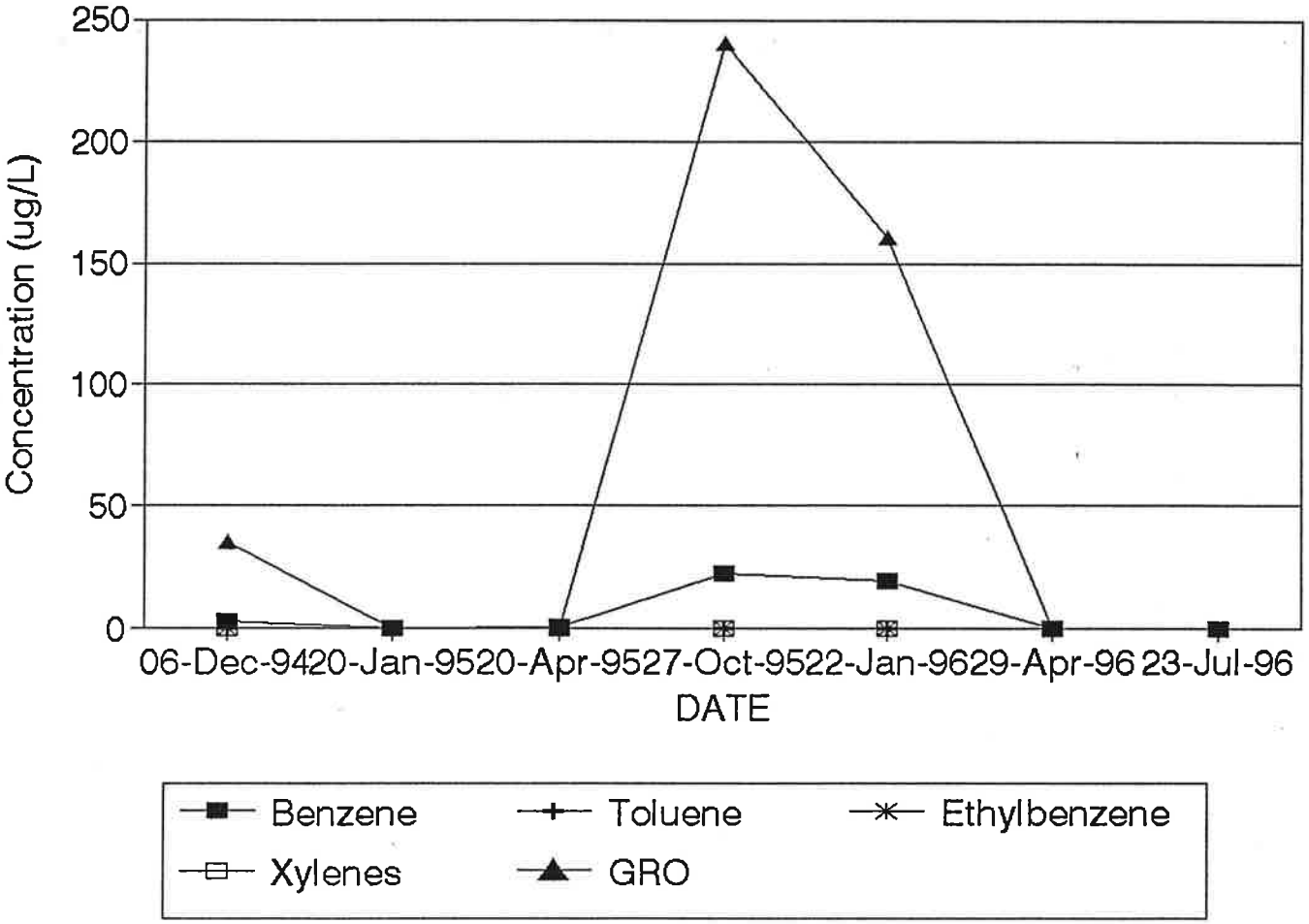
Holiday No. 226 Hinckley, MN

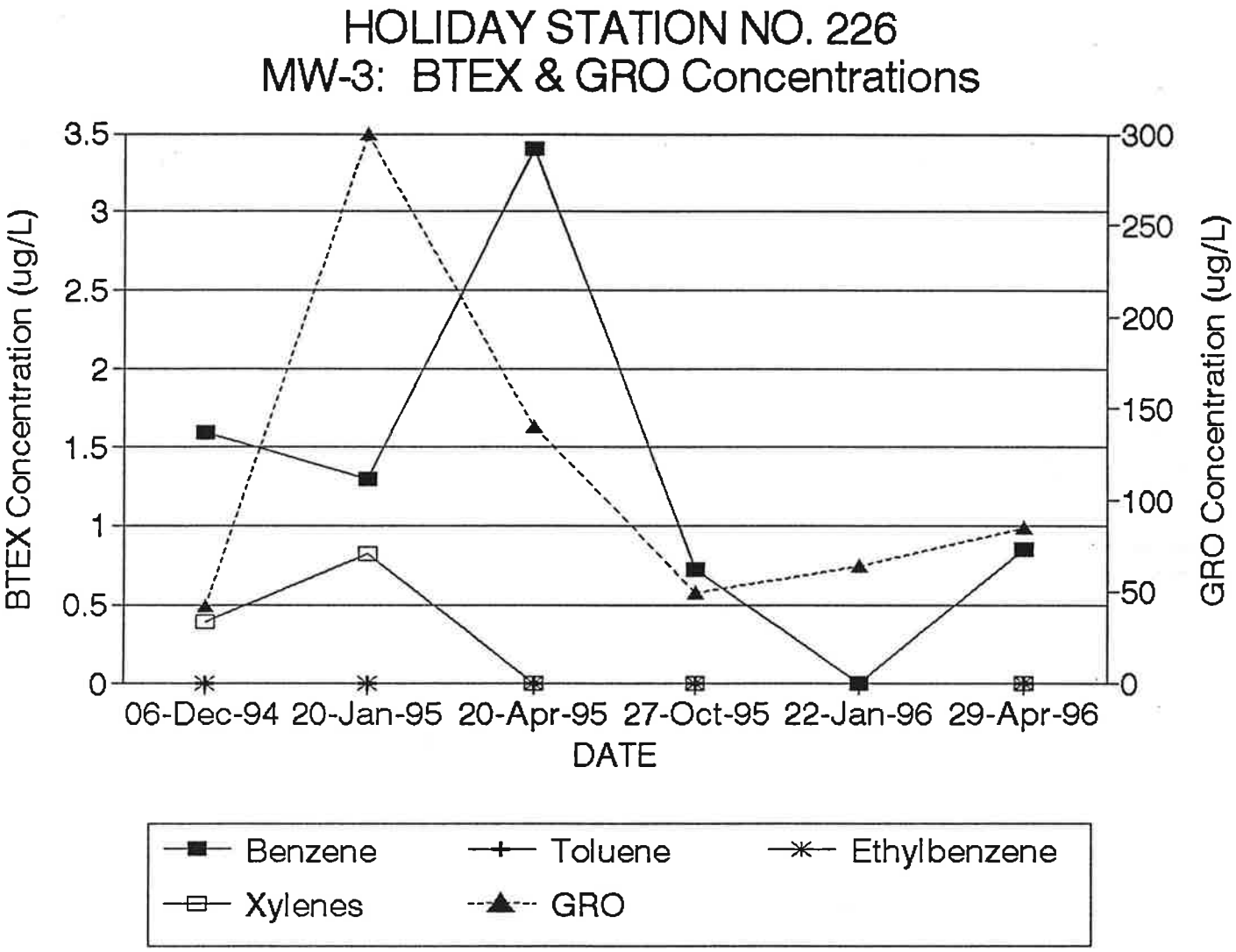
Monitoring Well Hydrographs




HOLIDAY STATION NO. 226
MW-1: BTEX & GRO Concentrations
BTEX Concentration (ug/L)
GRO Concentration (ug/L)
(Thousands)
6000
5000
4000
3000
2000
1000
0
24
22
20
18
16
14
12
10
06-Dec-92
20-Jan-93
20-Apr-93
27-Oct-95
22-Jan-96
29-Apr-96
23-Jul-96
DATE
Benzene
Toluene
Ethylbenzene
Xylenes
GRO

HOLIDAY STATION NO. 226
MW-2: BTEX & GRO Concentrations




HOLIDAY STATION NO. 226
MW-3: BTEX & GRO Concentrations
BTEX Concentration (ug/L)
GRO Concentration (ug/L)
3.5
3
2.5
2
1.5
1
0.5
0
300
250
200
150
100
50
0
06-Dec-94
20-Jan-95
20-Apr-95
27-Oct-95
22-Jan-96
29-Apr-96
DATE
Benzene
Toluene
Ethylbenzene
Xylenes
GRO

Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 *St. Paul, MN. 55110* *Tel. (612) 653-3471* *Fax (612) 653-3475*

LABORATORY RESULTS

Client: Delta Environmental Consultants, Inc
3900 Northwoods Drive, Suite 200
St. Paul, MN 55112
Attn: Chai Insook

Project: Holiday No. 226

Date Sampled: 04/22/96
Date Analyzed: 04/24/96 - 04/25/96
Physical State: Aqueous

Report Date: 04/29/96
Lab P.N.: 1000-324.5
Client P.N.: A094-158-1

Sample I.D.	Benzene µg/l EPA 8020	Toluene µg/l EPA 8020	Ethyl-benzene µg/l EPA 8020	Total, Xylenes µg/l EPA 8020	GRO µg/l Wis. DNR	DRO µg/l Wis. DNR
MW-3	< 0.60	< 1.3	< 0.55	< 2.7	64	---
MW-2	< 0.60	< 1.3	< 0.55	< 2.7	< 22	---
MW-1	1,300	160	1,600	3,400	17,000	9,000†
PQL, µg/l	0.60	1.3	0.55	2.7	22	65
MDL, µg/l	0.12	0.25	0.11	0.53	4.3	13

†; Compounds present outside of DRO range

PQL; Practical Quantitation Limit for undiluted samples.

MDL; Method Detection Limit for undiluted samples.

GRO; Gasoline Range Organics

DRO; Diesel Range Organics

All results are in µg/l which is equal to parts-per-billion (ppb).

The Laboratory Results are only a part of the Laboratory Report.

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Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 St. Paul, MN. 55110 Tel. (612) 653-3471 Fax (612) 653-3475

LABORATORY REPORT

Client:	Delta Environmental Consultants, Inc	Date Sampled:	04/22/96
	3900 Northwoods Drive, Suite 200	Date Received:	04/23/96
	St. Paul, MN 55112	Date Analyzed:	04/24/96 - 04/25/96
	Attn: Chai Insook	Physical State:	Aqueous
Project:	Holiday No. 226	Report Date:	04/29/96
		Lab P.N.:	1000-324.5
		Client P.N.:	A094-158-1

Quality Assurance / Quality Control Summary

Parameter (Method)	QC Type	Percent Recovery	Acceptable Range	Relative Percent Difference	Acceptable Range
Benzene (EPA 8020)	M	95	116 - 87	5.7	0 - 20
Toluene (EPA 8020)	M	95	115 - 87	6.0	0 - 20
Ethylbenzene (EPA 8020)	M	95	120 - 84	5.8	0 - 20
m,p-Xylenes (EPA 8020)	M	93	120 - 90	6.4	0 - 20
o-Xylenes (EPA 8020)	M	94	115 - 92	5.6	0 - 20
GRO (Wis. DNR)	M	101	120 - 80	5.9	0 - 20
DRO (Wis. DNR)	M	80	115 - 75	1.5	0 - 20

M = Matrix Spike / Matrix Spike Duplicate

L = Laboratory Control Sample

Reviewed

Approved

Compounds were identified by column retention time and quantified by peak area of known standards using a Hewlett Packard ChemStation Data System. The samples were received by HORIZON LABORATORIES, INC. and accompanied by the Chain-of-Custody record. The Laboratory Report is the sole property of the client to whom it is addressed. The Laboratory Results are only a part of the Laboratory Report.

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pace INCORPORATED
THE ASSURANCE OF QUALITY

77991

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MAY 2 1996

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client Delta

Address

Phone

Report To: Chai Insook

Bill To:

P.O. # / Billing Reference

Project Name / No. Holiday No: 226 94-158-1

Pace Client No.

Pace Project Manager

Horizon Pace Project No. 1000-324.5

*Requested Due Date:

Sampled By (PRINT): Terence St Borgerding

Sampler Signature: T St Borgerding

Date Sampled: 4/22/96

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA (HCl)	GL (HCl)	ANALYSES REQUEST: BTEX/GRO	DRO	REMARKS
1	MW-3	1040	H2O		3				3		/		22144
2	MW-2	1120	↓		3				3		/		22147
3	MW-1	1155	↓		4				3	1	/	/	22148
4													
5													
6													
7													
8													

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT / DATE	SHIPMENT METHOD RETURNED / DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
				1-3	T St Borg / PACE	Brian Hoshe Horizon	4/23/96	11:20

Additional Comments

received on ice

ORIGINAL

SEE REVERSE SIDE FOR INSTRUCTIONS

Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 St. Paul, MN. 55110 Tel. (612) 653-3471 Fax (612) 653-3475

LABORATORY RESULTS

Client: Delta Environmental Consultants, Inc
3900 Northwoods Drive, Suite 200
St. Paul, MN 55112
Attn: Chai Insook

Project: Holiday #226
Hinkley, MN

Date Sampled: 01/22/96
Date Analyzed: 01/29/96
Physical State: Aqueous

Report Date: 01/30/96
Lab P.N.: 1000-324.4
Client P.N.: A094-158.1

Sample I.D.	Benzene µg/l EPA 8020	Toluene µg/l EPA 8020	Ethyl-benzene µg/l EPA 8020	Total, Xylenes µg/l EPA 8020	GRO µg/l Wis. DNR	DRO µg/l Wis. DNR
MW-1	1,800	310	2,000	5,800	23,000	8,900†
MW-2	19	< 1.3	< 0.55	< 2.7	160	—
MW-3	0.85	< 1.3	< 0.55	< 2.7	84	—
PQL, µg/l	0.6	1.3	0.6	2.7	22	65
MDL, µg/l	0.1	0.3	0.1	0.5	4.3	13

†; Peaks present outside of DRO range

PQL; Practical Quantitation Limit for undiluted samples.

MDL; Method Detection Limit for undiluted samples.

GRO; Gasoline Range Organics

DRO; Diesel Range Organics

All results are in µg/l which is equal to parts-per-billion (ppb).

The Laboratory Results are only a part of the Laboratory Report.

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Laboratories, Inc.

4463 White Bear Parkway, Suite #105 St. Paul, MN. 55110 Tel. (612) 653-3471 Fax (612) 653-3475

LABORATORY REPORT

Client:	**Delta Environmental Consultants, Inc**	**Date Sampled:**	**01/22/96**
	3900 Northwoods Drive, Suite 200	**Date Received:**	**01/24/96**
	St. Paul, MN 55112	**Date Analyzed:**	**01/29/96**
	Attn: Chai Insook	**Physical State:**	**Aqueous**
Project:	**Holiday #226**	**Report Date:**	**01/30/96**
	Hinkley, MN	**Lab P.N.:**	**1000-324.4**
		Client P.N.:	**A094-158.1**

Quality Assurance / Quality Control Summary

Parameter (Method)	QC Type	Percent Recovery	Acceptable Range	Relative Percent Difference	Acceptable Range
Benzene (EPA 8020)	M	106	87 - 116	1.2	0 - 20
Toluene (EPA 8020)	M	108	87 - 115	0.63	0 - 20
Ethylbenzene (EPA 8020)	M	106	84 - 120	0.70	0 - 20
m,p-Xylenes (EPA 8020)	M	108	90 - 120	0.28	0 - 20
o-Xylenes (EPA 8020)	M	107	92 - 115	0.68	0 - 20
GRO (Wis. DNR)	M	118	80 - 120	0.23	0 - 20
DRO (Wis. DNR)	M	90	75 - 115	2.2	0 - 20

M = Matrix Spike / Matrix Spike Duplicate

L = Laboratory Control Sample

Reviewed

Approved

Compounds were identified by column retention time and quantified by peak area of known standards using a Hewlett Packard ChemStation Data System. The samples were received by HORIZON LABORATORIES, INC. and accompanied by the Chain-of-Custody record. The Laboratory Report is the sole property of the client the whom it is addressed. The Laboratory Results are only a part of the Laboratory Report.

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ENVIRONMENTAL LABORATORIES

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FEB 2 1996

324060

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client Delta

Address

Phone 612-486-5845

Report To: Chai Insook

Bill To:

P.O. # / Billing Reference

Project Name / No. Holiday No, 226, Hinckley Delta No, A0-94-158-1

Pace Client No.

Pace Project Manager
Horizon

~~Pace~~ Project No. 1000-324.4

*Requested Due Date:

Sampled By (PRINT):
David Anderson

Sampler Signature

Date Sampled
David Anderson 1-22-96

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA - HCl	Alt. Amber HCl	ANALYSES REQUEST: BTEX/GRO	DRO	REMARKS
1	MW-3	1140	H20		6				6		✓		20881
2	MW-2	1230			6				6		✓		20882
3	MW-1	1325	↓		7				6 1		✓ ✓		20883
4													
5													
6													
7													
8													

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	SHIPMENT METHOD RETURNED/DATE

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
1-3	David Anderson/Pace	"on ice"	1-24-96	11:30

Additional Comments

Samples go to Horizon for analysis

ORIGINAL

SEE REVERSE SIDE FOR INSTRUCTIONS

Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 *St. Paul, MN. 55110* *Tel. (612) 653-3471* *Fax (612) 653-3475*

LABORATORY RESULTS

Client:	**Delta Environmental Consultants, Inc** **3900 Northwoods Drive, Suite 200** **St. Paul, MN 55112** **Attn: Chai Insook**	**Date Sampled:** **Date Analyzed:** **Physical State:**	**10/27/95** **11/03/95** **Aqueous**
Project:	**Holiday Station #226** **Hinckley, MN**	**Report Date:** **Lab P.N.:** **Client P.N.:**	**11/07/95** **1000-324.3** **A094-158**

Sample I.D.	Benzene µg/l EPA 8020	Toluene µg/l EPA 8020	Ethyl-benzene µg/l EPA 8020	Total, Xylenes µg/l EPA 8020	GRO µg/l Wis. DNR	DRO µg/l Wis. DNR
MW-1	1,000	280	1,500	4,600	18,000	8,600†
MW-2	22	< 0.65	< 0.75	< 1.8	240	—
MW-3	0.72	< 0.65	< 0.75	< 1.8	49	—
PQL, µg/l	0.70	0.65	0.75	1.8	7.0	65
MDL, µg/l	0.14	0.13	0.15	0.36	1.4	13

PQL; Practical Quantitation Limit for undiluted samples.

MDL; Method Detection Limit for undiluted samples.

GRO; Gasoline Range Organics

DRO; Diesel Range Organics

†; Chromatogram contains peaks outside the DRO window

All results are in µg/l which is equal to parts-per-billion (ppb).

The Laboratory Results are only a part of the Laboratory Report.

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Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 St. Paul, MN. 55110 Tel. (612) 653-3471 Fax (612) 653-3475

LABORATORY REPORT

Client:	Delta Environmental Consultants, Inc	Date Sampled:	10/27/95
	3900 Northwoods Drive, Suite 200	Date Received:	10/27/95
	St. Paul, MN 55112	Date Analyzed:	11/03/95
	Attn: Chai Insook	Physical State:	Aqueous
Project:	Holiday Station #226	Report Date:	11/07/95
	Hinckley, MN	Lab P.N.:	1000-324.3
		Client P.N.:	A094-158

Quality Assurance / Quality Control Summary

Parameter (Method)	QC Type	Percent Recovery	Acceptable Range	Percent Reproducibility	Acceptable Range
Benzene (EPA 8020)	M	98	87 - 116	104	91 - 111
Toluene (EPA 8020)	M	98	87 - 115	104	90 - 112
Ethylbenzene (EPA 8020)	M	99	84 - 120	105	89 - 112
m,p-Xylenes (EPA 8020)	M	102	90 - 120	103	91 - 110
o-Xylenes (EPA 8020)	M	99	92 - 115	103	93 - 108
GRO (Wis. DNR)	M	100	85 - 117	104	84 - 115
DRO (Wis. DNR)	M	73	60 - 130	85	60 - 130

M = Matrix Spike / Matrix Spike Duplicate

L = Laboratory Control Sample

Reviewed

Approved

Compounds were identified by column retention time and quantified by peak area of known standards using a Hewlett Packard ChemStation Data System. The samples were received by HORIZON LABORATORIES, INC. and accompanied by the Chain-of-Custody record. The Laboratory Report is the sole property of the client the whom it is addressed. The Laboratory Results are only a part of the Laboratory Report.

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CHAIN–OF–CUSTODY RECORD

Delta
Environmental Consultants, Inc.
3900 Northwoods Dr., Suite 200
St. Paul, MN 55112

DELTA PROJECT NO. AO 94158 | INVOICE CODE | PAGE 1 OF 1

PROJECT MANAGER: Chai Insook

PROJECT NAME: Holiday Station #226

PROJECT LOCATION: Hinckley, MN

SAMPLER'S SIGNATURE: E S Bustillos

TURN AROUND REQUESTED:
- ☑ NORMAL
- ☐ RUSH _____
- ☐ OTHER _____

LAB NAME: Horizon

LAB USE ONLY

LABORATORY PROJECT NO. 1000-3243

SAMPLE ID	SAMPLE LOCATION/DESCRIPTION	DATE/TIME SAMPLED	SAMPLE MATRIX: SOIL(S): AIR(A): BULK(B): AQUEOUS(Q): SLUDGE(L): OTHER(O)	ANALYSIS REQUESTED: BTEX GRO	ANALYSIS REQUESTED: DRO	NUMBER OF CONTAINERS	ACCEPT (A) REJECT (R)	SAMPLE CONDITION AS RECEIVED: CHILLED YES/NO; SEALED YES/NO; SAMPLE CONDITION/ COMMENTS	LABORATORY SAMPLE NUMBER
	MW 1	10/27/95 10:15	Q	X	X	4			19622
	MW 2	10/27/95 10:38	Q	X		3			19623
	MW 3	10/27/95 10:56	Q	X		3			19624

RECEIVED NOV 1 4 1995

Send Report to: Angela Gowan

GENERAL COMMENTS: TRIP BLANK Supplied by Horizon - Client Requests not to Analyze.

10 ◀ TOTAL NUMBER OF CONTAINERS

1 RELINQUISHED BY (SIGNATURE): E S Bustillos	DATE: 10/27/95	3 RELINQUISHED BY (SIGNATURE):	DATE:	5 RELINQUISHED BY (SIGNATURE):	DATE:
COMPANY: Delta Envir Consltants.	TIME: 445	COMPANY:	TIME:	COMPANY:	TIME:
2 RECEIVED BY (SIGNATURE): Brian Hovelle	DATE: 10/27/95	4 RECEIVED BY (SIGNATURE):	DATE:	6 RECEIVED BY (SIGNATURE):	DATE:
COMPANY: Horizon	TIME: 4:45	COMPANY:	TIME:	COMPANY:	TIME:

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy

Delta
Environmental
Consultants, Inc.

3900 Northwoods Drive
Suite 200
St. Paul, MN 55112
612/486-8021
FAX: 612/486-8021

RECEIVED
FEB 22 1996
MPCA, HAZARDOUS
WASTE DIVISION

February 21, 1996

Ms. Jean Hanson
Minnesota Pollution Control Agency
Hazardous Waste Division
Tanks and Spills Section
520 Lafayette Road North
St. Paul, MN 55155-3898

Subject: QUARTERLY MONITORING WORKSHEET (Fact Sheet No. 7)
Holiday Station No. 226
Hinckley, Minnesota
MPCA Leak No. 7487
Delta No. A094-158

Dear Ms. Hanson:

On behalf of the Holiday Companies, Inc., Delta Environmental Consultants, Inc. (Delta), is submitting the quarterly ground water monitoring worksheet, completed for the above referenced site. This information supplements the Remedial Investigation/Corrective Action Design Report, dated April 7, 1995.

This quarterly monitoring worksheet is completed for the first quarter 1996 ground water sampling event, which was conducted at the site on January 22, 1996. Delta will continue the ground water monitoring program at the site through the remainder of 1996. Recommendations for future site activities will be discussed in the annual progress report, which will be submitted to the Minnesota Pollution Control Agency in August 1996.

If you have any questions regarding this information, please contact me at (612) 486-5845.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Chai Insook
Project Manager

CI/bjc

Enclosures

cc: Mr. Keith Yokom - Holiday Company Inc.
cc: Mr. Bruce Anthony - Holiday Company Inc. (no enclosures)

bcc: Angela Gowan - Delta Environmental Consultants, 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.
- 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: 7487
1st Quarter 1996
Holiday Station No. 226
Hinckley, MN
Delta No. A094-158

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.
N/A	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: _____
BTEX concentrations in MW-2 and MW-3 remain non-detectable or below the Health Risk Limits, except for benzene in MW-2, which has decreased to 19 ug/L, from 22 ug/L in October 1995. The GRO concentration in MW-2 also decreased (to 160 ug/L), but the GRO concentration increased in MW-3 (from 49 ug/L to 84 ug/L) from the previous sampling event. Petroleum hydrocarbons concentrations in MW-1 increased over the monitoring period.

II. Vapor Impact Monitoring *Not applicable.*

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:

No modifications, continue quarterly monitoring of BTEX, GRO, and DRO (MW-1).

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.

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TABLE 1 GROUND WATER ELEVATIONS

Holiday Station No. 226
Hinckley, Minnesota
DELTA NO. A094-158

Holiday Station Wells and Top of Casing Elevations						
	MW-1	1031.11	MW-2	1034.02	MW-3	1029.71
Date	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation
06-Dec-94	21.26	1009.85	24.91	1009.11	15.56	1014.15
20-Dec-94	21.20	1009.91	24.96	1009.06	15.90	1013.81
20-Jan-95	21.93	1009.18	25.41	1008.61	19.32	1010.39
20-Apr-95	21.00	1010.11	24.17	1009.85	19.69	1010.02
27-Oct-95	15.53	1015.58	18.63	1015.39	13.89	1015.82
22-Jan-96	19.02	1012.09	23.19	1010.83	15.68	1014.03

Tobies Service Station Wells and Top of Casing Elevations (reported by HTCT)												
MW-1	104.66	MW-2	106.78	MW-3	105.13	MW-4	97.65	MW-5	96.63	MW-6	101.13	MW-7A	102.48

Tobies Service Station Wells and Top of Casing Elevations (adjusted to Holiday elevations datum)														
	MW-1	1029.49	MW-2	1031.61	MW-3	1029.96	MW-4	1022.48	MW-5	1021.46	MW-6	1025.96	MW-7A	1027.31
Date	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation
20-Dec-94	15.40	1014.09	16.78	1014.83	16.71	1013.25	12.45	1010.03	7.83	1013.63	12.67	1013.29	17.64	1009.67
20-Jan-95			16.89	1014.72	16.57	1013.39					13.36	1012.60		
27-Oct-95	13.52	1015.97	15.12	1016.49	14.22	1015.74	10.63	1011.85	3.81	1017.65	9.92	1016.04	11.55	1015.76
22-Jan-96	14.88	1014.61	16.35	1015.26	15.49	1014.47			12.25	1009.21	16.67	1009.29		

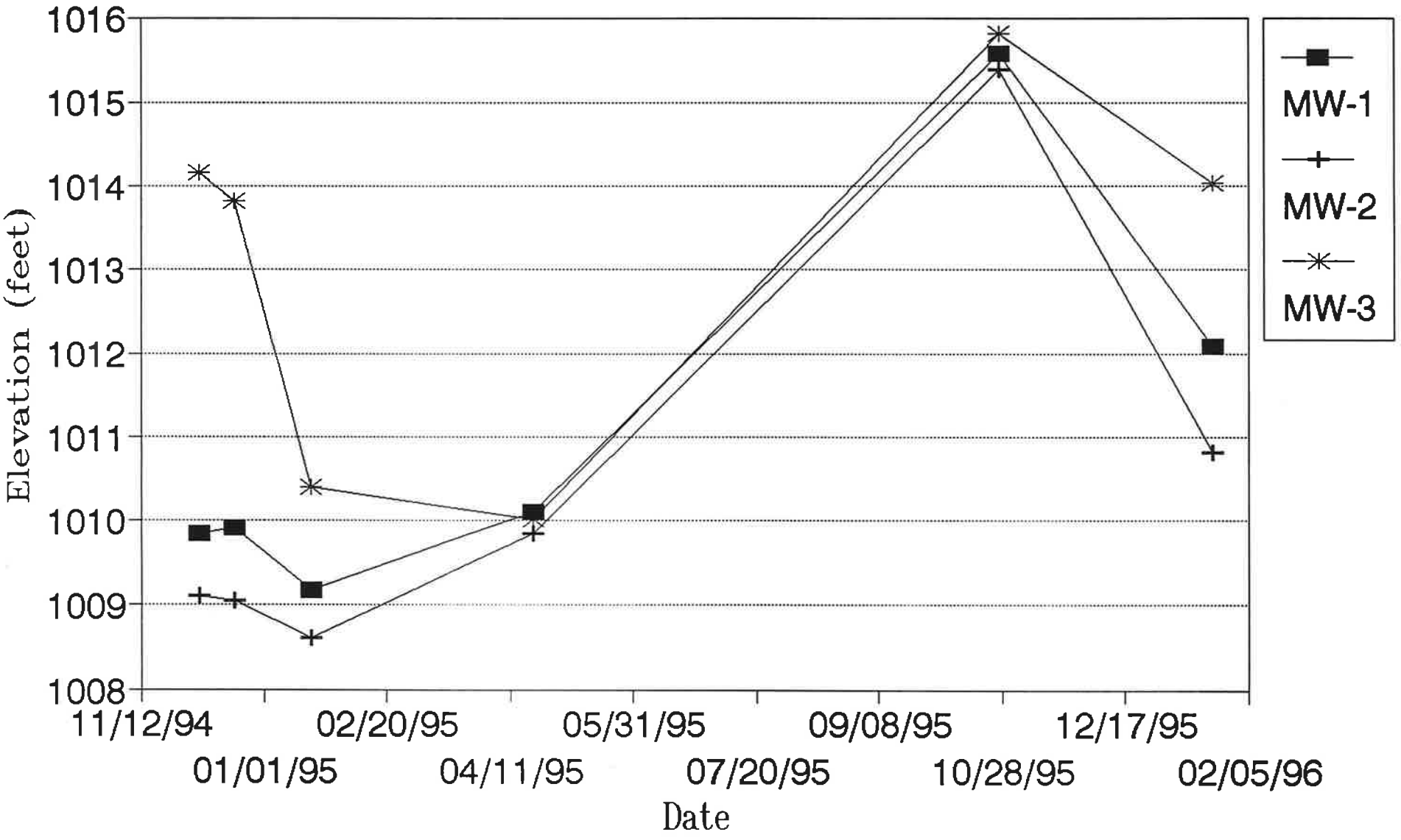
NOTE:

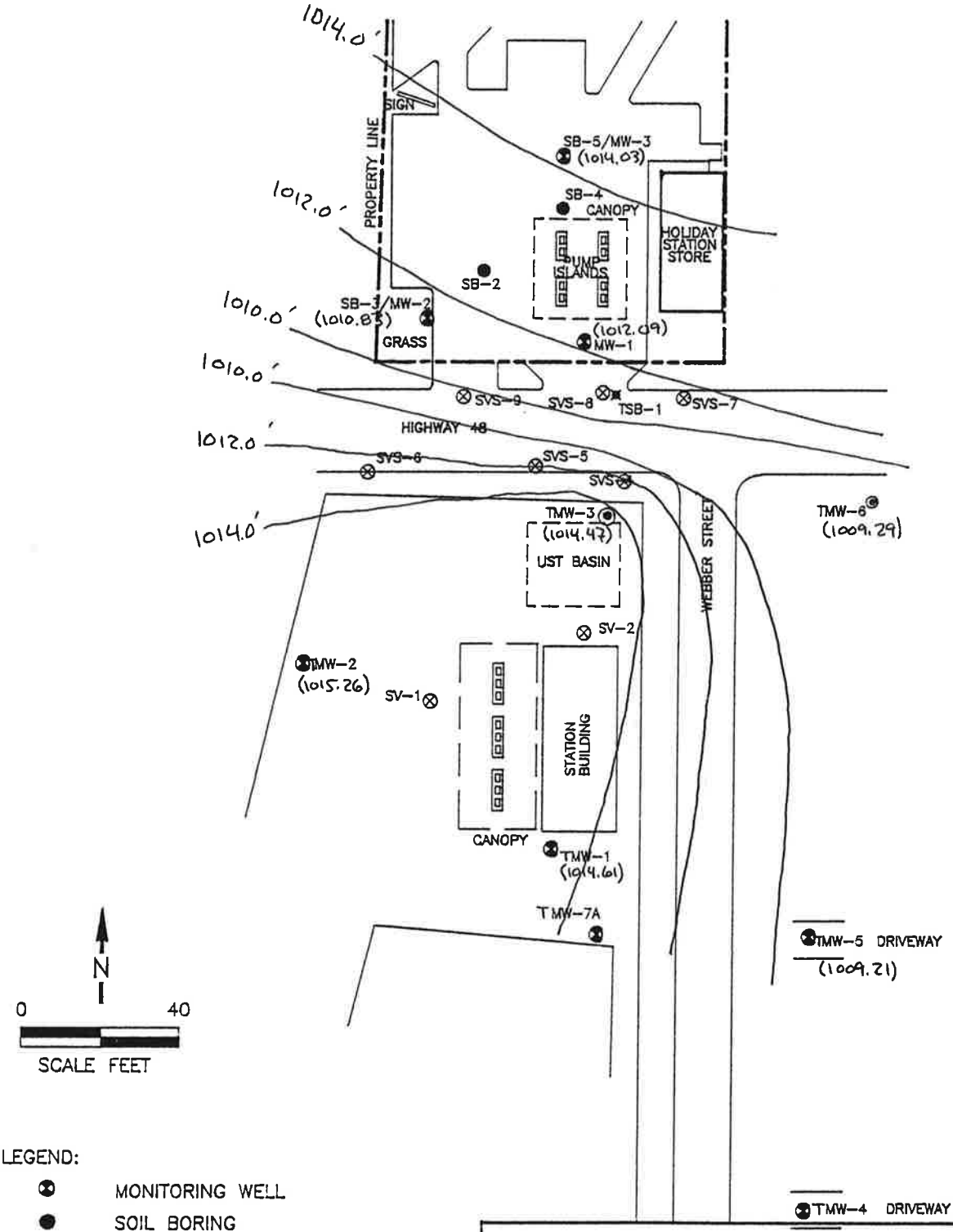
Elevations are reported in feet - NGVD (National Geodetic Vertical Datum)
TOC elevations for Holiday station wells are provided by Kemper & Associates, Inc.
TOC elevations for Tobies Service Station wells are normalized to Holiday wells.

Stadia rod readings of Holiday well MW-2 and Tobies well MW-3 (surveyed on 12/20/94)
Holiday MW-2 = 2.96
Tobies MW-3 = 7.02
Tobies well MW-3 is 4.06 feet lower than Holiday well MW-2

Holiday No. 226 Hinckley, MN

Delta No. A094-158-1





LEGEND:

- MONITORING WELL
- SOIL BORING
- MONITORING WELL (TOBIES)
- SOIL VAPOR SURVEY POINT (TOBIES)
- SOIL BORING (TOBIES)

(1015.26) Ground Water Elevation (feet)

—1014.0' Ground Water Contour Line

FIGURE 1

GROUND WATER CONTOUR MAP- 1/22/96

HOLIDAY STATION NO. 226

HINCKLEY, MINNESOTA

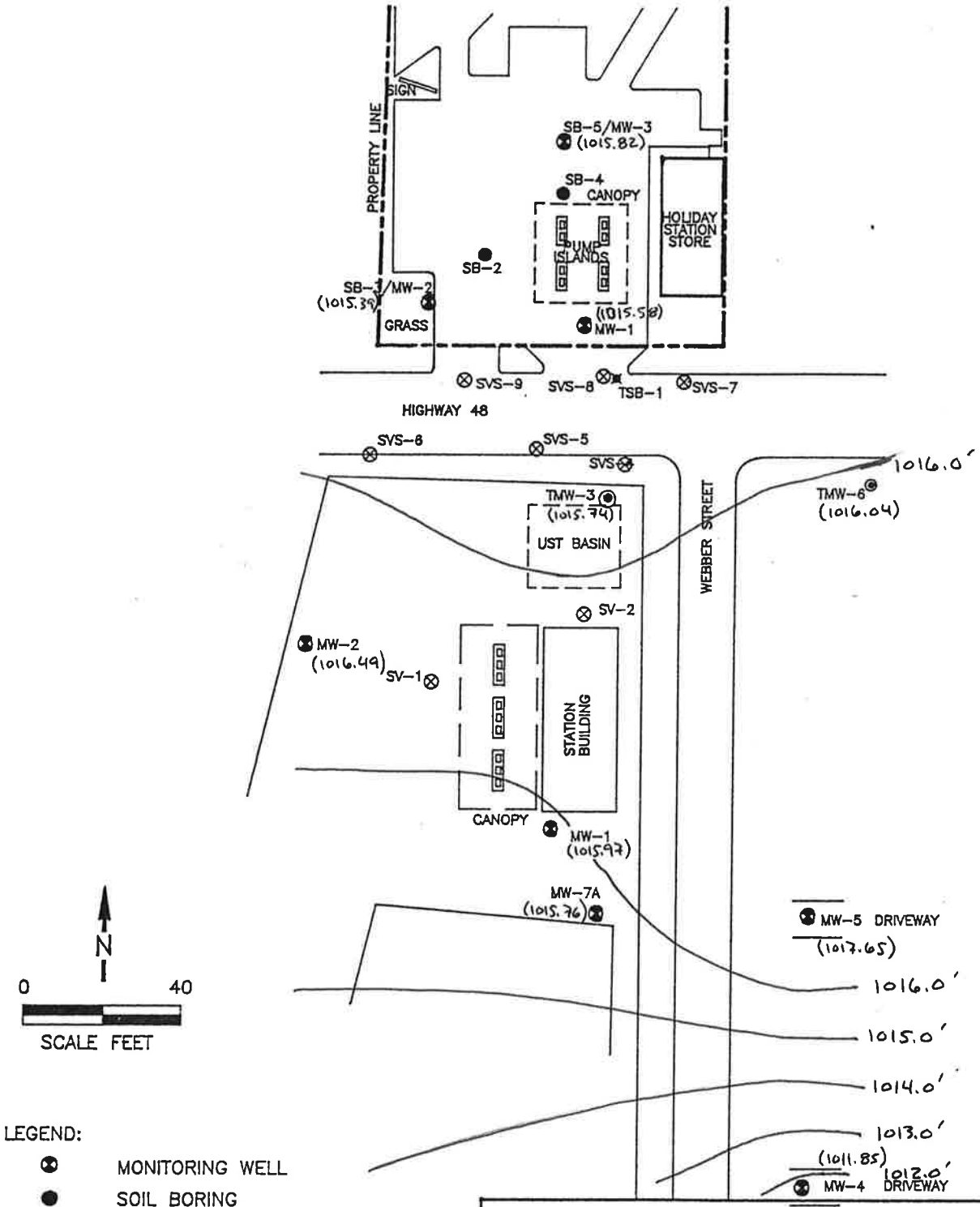
PROJECT NO.	PREPARED BY	DRAWN BY	
A094-158	PJC	DL	
DATE	REVIEWED BY	FILE NAME	
12/30/94		A094158	Delta Environmental Consultants, Inc.

TABLE 2 GROUND WATER CHEMISTRY (ug/l)

Holiday Station No. 226
Hinckley, Minnesota
Delta No. A094-158-1

Sample I.D.	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO
MW-1	06-Dec-94	1400	230	1700	3300	13000	6000
	20-Jan-95	1100	360	1600	2900	12000	4300
	20-Apr-95	1200	310	1500	2800	10000	NA
	27-Oct-95	1000	280	1500	4600	18000	8600
	22-Jan-96	1800	310	2000	5800	23000	8900
MW-2	06-Dec-94	2.7	<0.6	<0.2	<0.5	35	<29
	20-Jan-95	<0.2	<0.5	<0.2	<0.8	<20	<31
	20-Apr-95	0.42	<0.5	<0.2	<0.8	<20	NA
	27-Oct-95	22	<0.65	<0.75	<1.8	240	NA
	22-Jan-96	19	<1.3	<0.55	<2.7	160	NA
MW-3	06-Dec-94	1.6	<0.6	<0.2	0.39	42	<29
	20-Jan-95	1.3	<0.5	<0.2	0.82	300	40
	20-Apr-95	3.4	<0.5	<0.2	<0.8	140	NA
	27-Oct-95	0.72	<0.65	<0.75	<1.8	49	NA
	22-Jan-96	0.85	<1.3	<0.55	<2.7	84	na

DRO = Diesel-range organics
GRO = Gasoline-range organics
ug/l = micrograms per liter, which is equivalent to parts per billion (ppb)



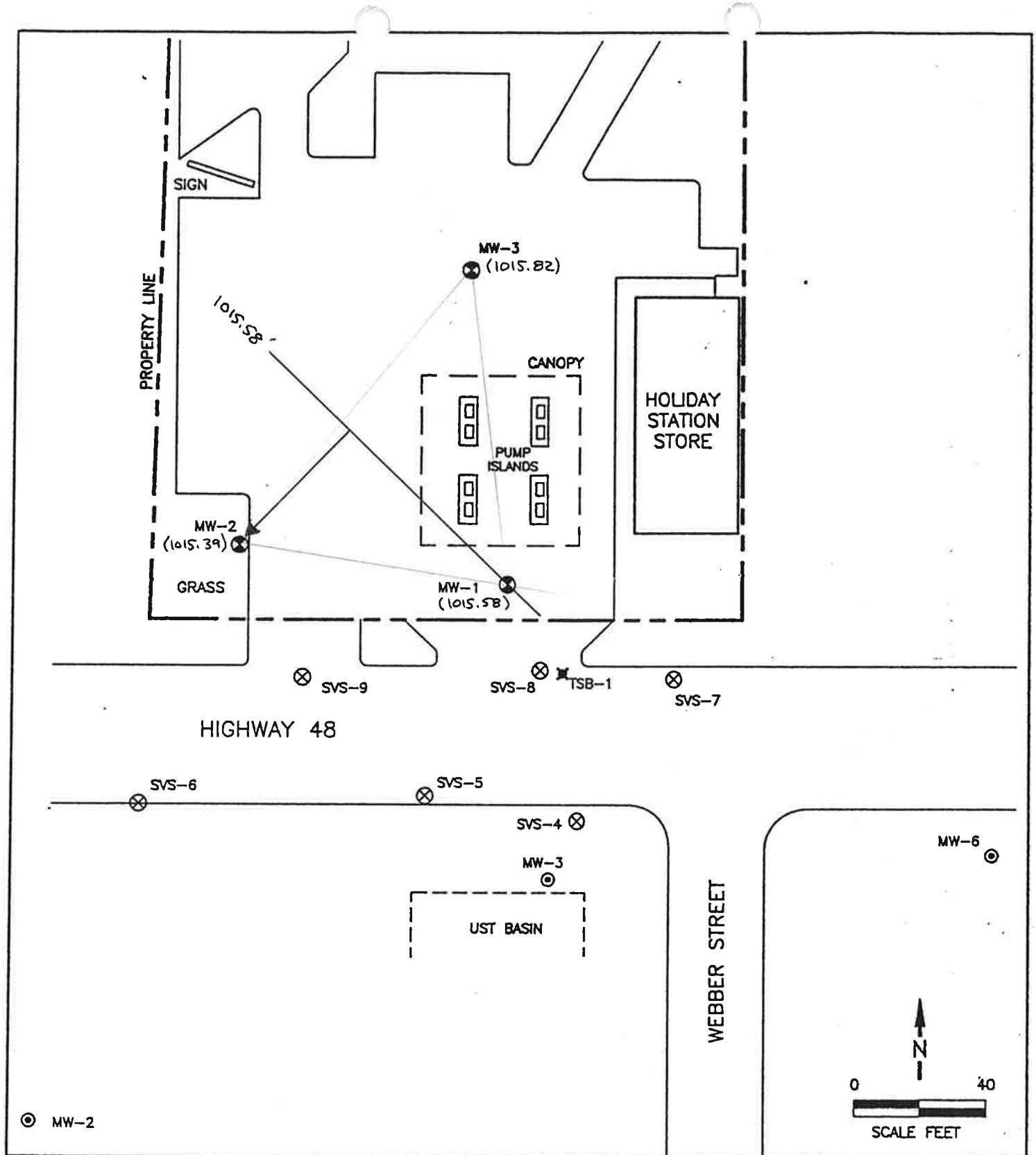
LEGEND:

- MONITORING WELL
- SOIL BORING
- MONITORING WELL (TOBIES)
- SOIL VAPOR SURVEY POINT (TOBIES)
- SOIL BORING (TOBIES)
- (1015.76) GROUND WATER ELEVATION (IN FEET ASL)
- 1014.0' WATER TABLE CONTOUR LINE CONTOUR INTERVAL = 1.0 FT

FIGURE 1
WATER TABLE CONTOUR MAP
OCTOBER 27, 1995
HOLIDAY STATION NO. 226
HINCKLEY, MINNESOTA

PROJECT NO.	PREPARED BY	DRAWN BY
A094-158	PJC	DL
DATE	REVIEWED BY	FILE NAME
12/30/94		A094158

Delta Environmental Consultants, Inc.



LEGEND:

- MONITORING WELL (HOLIDAY)
- MONITORING WELL (TOBIES)
- SOIL VAPOR SURVEY POINT (TOBIES)
- SOIL BORING (TOBIES)

(1015.58) Ground water elevation (in feet)

1015.58' Water Table contour Line

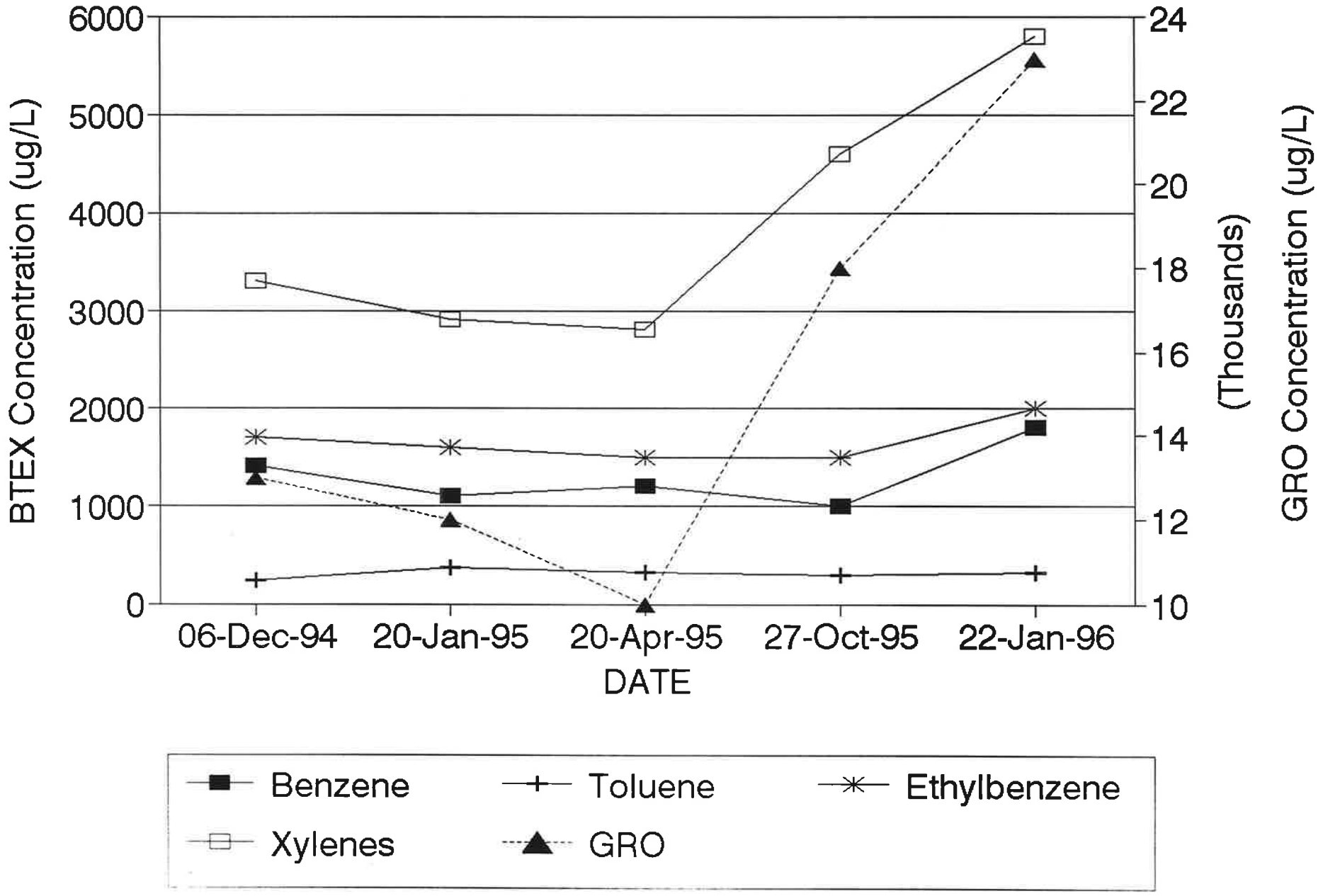
Inferred Ground Water Flow Direction

FIGURE 2
WATER TABLE FLOW MAP - 10/27/95
HOLIDAY STATION NO. 226
HINCKLEY, MINNESOTA

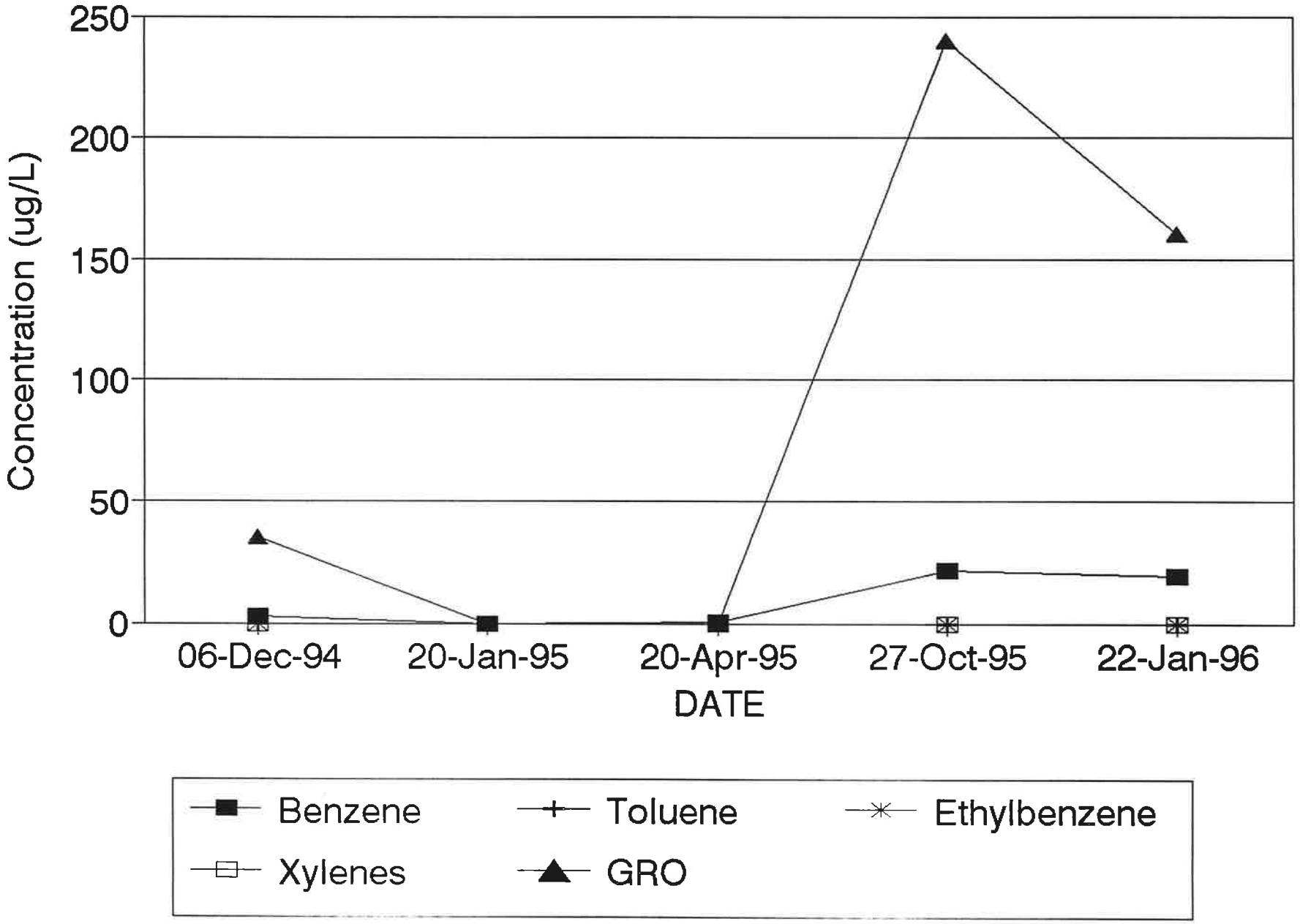
PROJECT NO.	PREPARED BY	DRAWN BY
A094-158	CI	DD
DATE	REVIEWED BY	FILE NAME
3/16/95		94158-2

Delta Environmental Consultants, Inc.

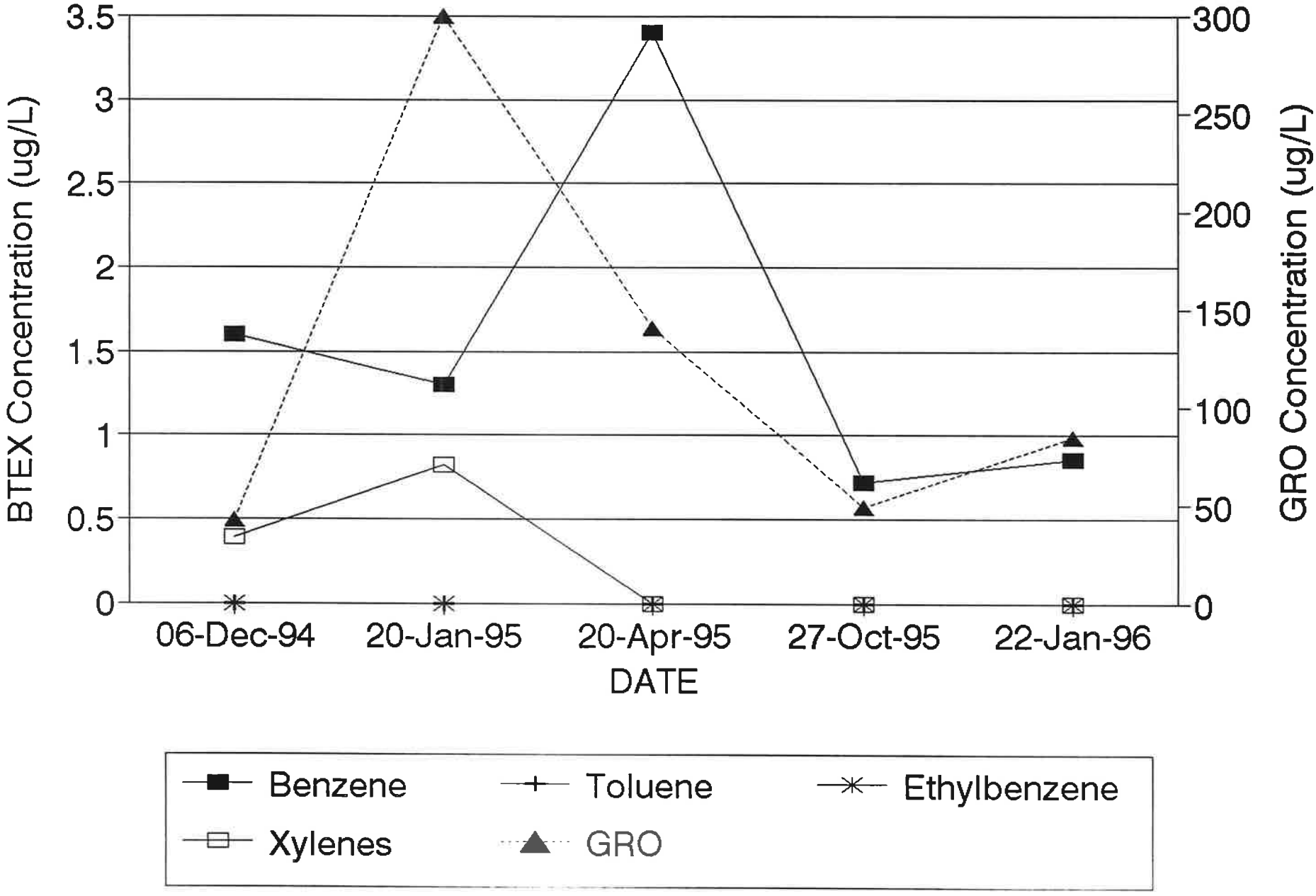
HOLIDAY STATION NO. 226
MW-1: BTEX & GRO Concentrations



HOLIDAY STATION NO. 226
MW-2: BTEX & GRO Concentrations



HOLIDAY STATION NO. 226
MW-3: BTEX & GRO Concentrations



Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 St. Paul, MN. 55110 Tel. (612) 653-3471 Fax (612) 653-3475

LABORATORY REPORT

Client:	Delta Environmental Consultants, Inc	Date Sampled:	01/22/96
	3900 Northwoods Drive, Suite 200	Date Received:	01/24/96
	St. Paul, MN 55112	Date Analyzed:	01/29/96
	Attn: Chai Insook	Physical State:	Aqueous
Project:	Holiday #226	Report Date:	01/30/96
	Hinkley, MN	Lab P.N.:	1000-324.4
		Client P.N.:	A094-158.1

Quality Assurance / Quality Control Summary

Parameter (Method)	QC Type	Percent Recovery	Acceptable Range	Relative Percent Difference	Acceptable Range
Benzene (EPA 8020)	M	106	87 - 116	1.2	0 - 20
Toluene (EPA 8020)	M	108	87 - 115	0.63	0 - 20
Ethylbenzene (EPA 8020)	M	106	84 - 120	0.70	0 - 20
m,p-Xylenes (EPA 8020)	M	108	90 - 120	0.28	0 - 20
o-Xylenes (EPA 8020)	M	107	92 - 115	0.68	0 - 20
GRO (Wis. DNR)	M	118	80 - 120	0.23	0 - 20
DRO (Wis. DNR)	M	90	75 - 115	2.2	0 - 20

M = Matrix Spike / Matrix Spike Duplicate L = Laboratory Control Sample

Reviewed

Approved

Compounds were identified by column retention time and quantified by peak area of known standards using a Hewlett Packard ChemStation Data System. The samples were received by HORIZON LABORATORIES, INC. and accompanied by the Chain-of-Custody record. The Laboratory Report is the sole property of the client the whom it is addressed. The Laboratory Results are only a part of the Laboratory Report.

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Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 *St. Paul, MN. 55110* *Tel. (612) 653-3471* *Fax (612) 653-3475*

LABORATORY RESULTS

Client: Delta Environmental Consultants, Inc
3900 Northwoods Drive, Suite 200
St. Paul, MN 55112
Attn: Chai Insook

Project: Holiday #226
Hinkley, MN

Date Sampled: 01/22/96
Date Analyzed: 01/29/96
Physical State: Aqueous

Report Date: 01/30/96
Lab P.N.: 1000-324.4
Client P.N.: A094-158.1

Sample I.D.	Benzene µg/l EPA 8020	Toluene µg/l EPA 8020	Ethyl-benzene µg/l EPA 8020	Total, Xylenes µg/l EPA 8020	GRO µg/l Wis. DNR	DRO µg/l Wis. DNR
MW-1	1,800	310	2,000	5,800	23,000	8,900†
MW-2	19	< 1.3	< 0.55	< 2.7	160	---
MW-3	0.85	< 1.3	< 0.55	< 2.7	84	---
PQL, µg/l	0.6	1.3	0.6	2.7	22	65
MDL, µg/l	0.1	0.3	0.1	0.5	4.3	13

†; Peaks present outside of DRO range

PQL; Practical Quantitation Limit for undiluted samples.

MDL; Method Detection Limit for undiluted samples.

GRO; Gasoline Range Organics

DRO; Diesel Range Organics

All results are in µg/l which is equal to parts-per-billion (ppb).

The Laboratory Results are only a part of the Laboratory Report.

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pace INCORPORATED
ENVIRONMENTAL LABORATORIES

RECEIVED
FEB 2 1996

324060

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client Delta
Address
Phone 612-486-5845

Report To: Chai Insook
Bill To:
P.O. # / Billing Reference
Project Name / No. Holiday No. 226, Hinckley Delta No. A0-94-158-1

Pace Client No.
Pace Project Manager
Horizon
~~Pace~~ Project No. 1000-324.4
*Requested Due Date:

Sampled By (PRINT): David Anderson
Sampler Signature: David Anderson
Date Sampled: 1-22-96

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA - HCl	Amber HCl	ANALYSES REQUEST: BTEX/GRO	DRO	REMARKS
1	MW-3	1140	H_2O		6				6		✓		20881
2	MW-2	1230	↓		6				6		✓		20882
3	MW-1	1325	↓		7				6	1	✓	✓	20883
4													
5													
6													
7													
8													

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	SHIPMENT METHOD RETURNED/DATE

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
1-3	David Anderson/Pace	"on ice"	1-24-96	11:30

Additional Comments

Samples go to Horizon for analysis

ORIGINAL

SEE REVERSE SIDE FOR INSTRUCTIONS

Delta
Environmental
Consultants, Inc.

3900 Northwoods Drive
Suite 200
St. Paul, MN 55112
612/486-8022
FAX: 612/486-8021

November 28, 1995

Ms. Jean Hanson
Minnesota Pollution Control Agency
Hazardous Waste Division
Tanks and Spills Section
520 Lafayette Road North
St. Paul, MN 55155-3898

Subject: QUARTERLY MONITORING WORKSHEET (Fact Sheet No. 7)
Holiday Station No. 226
Hinckley, Minnesota
MPCA Leak No. 7487
Delta No. A094-158

Dear Ms. Hanson:

On behalf of the Holiday Companies, Inc., Delta Environmental Consultants, Inc. (Delta), is submitting the quarterly ground water monitoring report, completed for the above referenced site. This report supplements the information provided in the Remedial Investigation/Corrective Action Design (RI/CAD) Report (dated April 7, 1995).

This quarterly monitoring worksheet is completed for the fourth quarter 1995 ground water sampling event, which was conducted at the site on October 27, 1995. The sampling and reporting requirements for the third quarter 1995 sampling event was waived by the Minnesota Pollution Control Agency (MPCA), during the review period of the RI/CAD report. Delta will continue the ground water monitoring program at the site in 1996. Recommendations for future site activities will be discussed in the annual progress report, which will be submitted to the MPCA in August 1996.

If you have any questions regarding this information, please contact me at (612) 486-5845.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Chai Insook
Project Manager

CI/bjc

Enclosures

cc: Mr. Keith Yokom - Holiday Company Inc.
cc: Mr. Bruce Anthony - Holiday Company Inc. (no enclosures)

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.
- 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: 7487
4th Quarter 1995
Holiday Station No. 226
Hinckley, MN
Delta No. A094-158

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.
N/A	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: _____
BTEX concentrations in MW-2 and MW-3 remain non-detectable or below the Health Risk Limits, except for benzene in MW-2, which has increased to 22 ug/L. The GRO concentration in MW-2 also increased (to 240 ug/L), but the GRO concentration again decreased in MW-3 (from 140 ug/L to 49 ug/L) from the previous sampling event. In general, petroleum hydrocarbons concentrations in MW-1 have remained relatively stable over the monitoring period, though the xylenes, GRO, and DRO concentrations did show significant increases this quarter.

II. Vapor Impact Monitoring *Not applicable.*

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:

No modifications, continue quarterly monitoring of BTEX, GRO, and DRO (MW-1).

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.

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TABLE 1 GROUND WATER ELEVATIONS

Holiday Station No. 226
Hinckley, Minnesota
DELTA NO. A094-158

Holiday Station Wells and Top of Casing Elevations						
	MW-1	1031.11	MW-2	1034.02	MW-3	1029.71
Date	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation
06-Dec-94	21.26	1009.85	24.91	1009.11	15.56	1014.15
20-Dec-94	21.20	1009.91	24.96	1009.06	15.90	1013.81
20-Jan-95	21.93	1009.18	25.41	1008.61	19.32	1010.39
20-Apr-95	21.00	1010.11	24.17	1009.85	19.69	1010.02
27-Oct-95	15.53	1015.58	18.63	1015.39	13.89	1015.82

Tobies Service Station Wells and Top of Casing Elevations (reported by HTCT)												
MW-1	104.66	MW-2	106.78	MW-3	105.13	MW-4	97.65	MW-5	96.63	MW-6	101.13	MW-7A	102.48

Tobies Service Station Wells and Top of Casing Elevations (adjusted to Holiday elevations datum)														
	MW-1	1029.49	MW-2	1031.61	MW-3	1029.96	MW-4	1022.48	MW-5	1021.46	MW-6	1025.96	MW-7A	1027.31
Date	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation
20-Dec-94	15.40	1014.09	16.78	1014.83	16.71	1013.25	12.45	1010.03	7.83	1013.63	12.67	1013.29	17.64	1009.67
20-Jan-95			16.89	1014.72	16.57	1013.39					13.36	1012.60		
27-Oct-95	13.52	1015.97	15.12	1016.49	14.22	1015.74	10.63	1011.85	3.81	1017.65	9.92	1016.04	11.55	1015.76

NOTE:

Elevations are reported in feet - NGVD (National Geodetic Vertical Datum)
TOC elevations for Holiday station wells are provided by Kemper & Associates, Inc.
TOC elevations for Tobies Service Station wells are normalized to Holiday wells.

Stadia rod readings of Holiday well MW-2 and Tobies well MW-3 (surveyed on 12/20/94)
Holiday MW-2 = 2.96
Tobies MW-3 = 7.02
Tobies well MW-3 is 4.06 feet lower than Holiday well MW-2

Holiday No. 226 Hinckley, MN

Delta No. A094-158-1

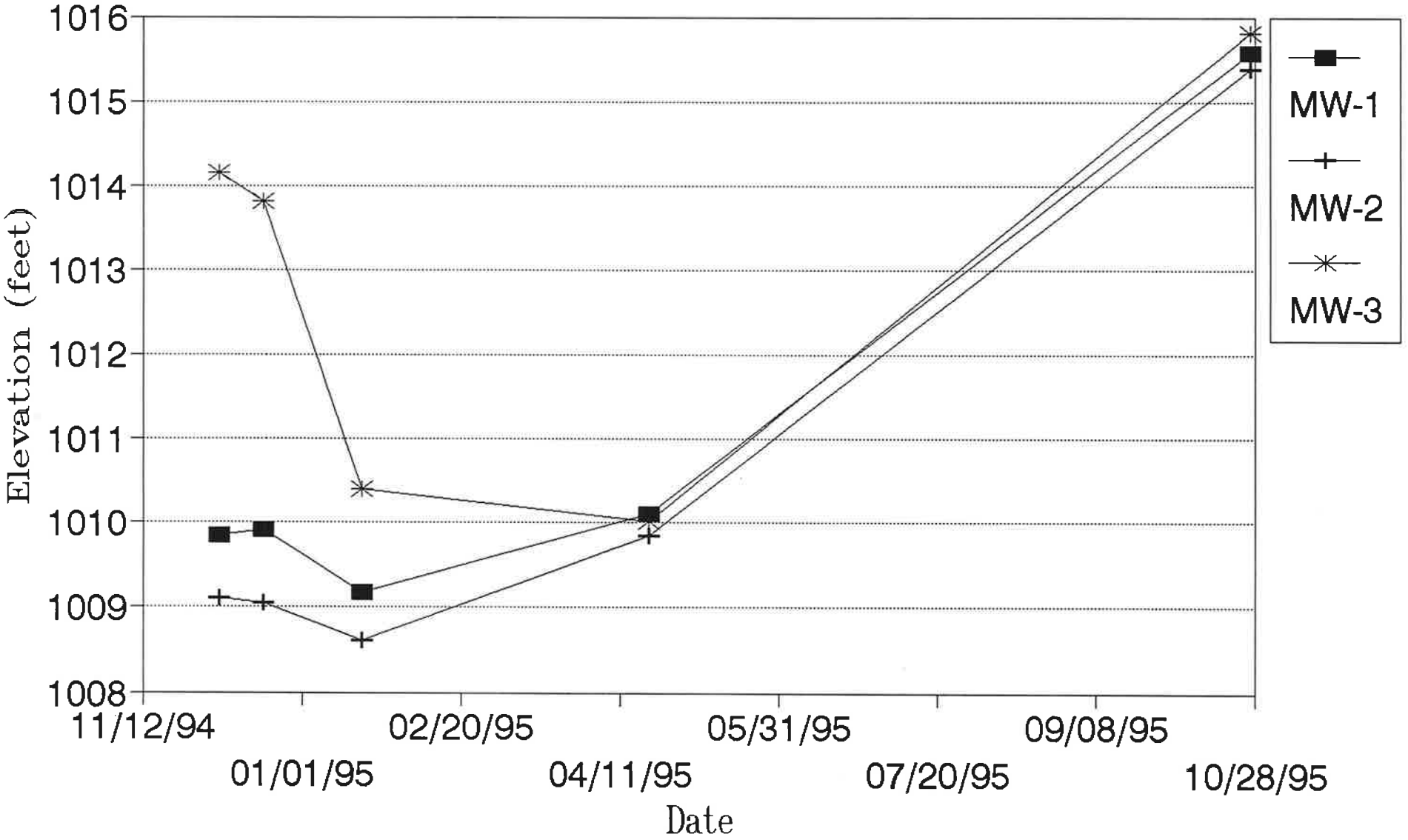


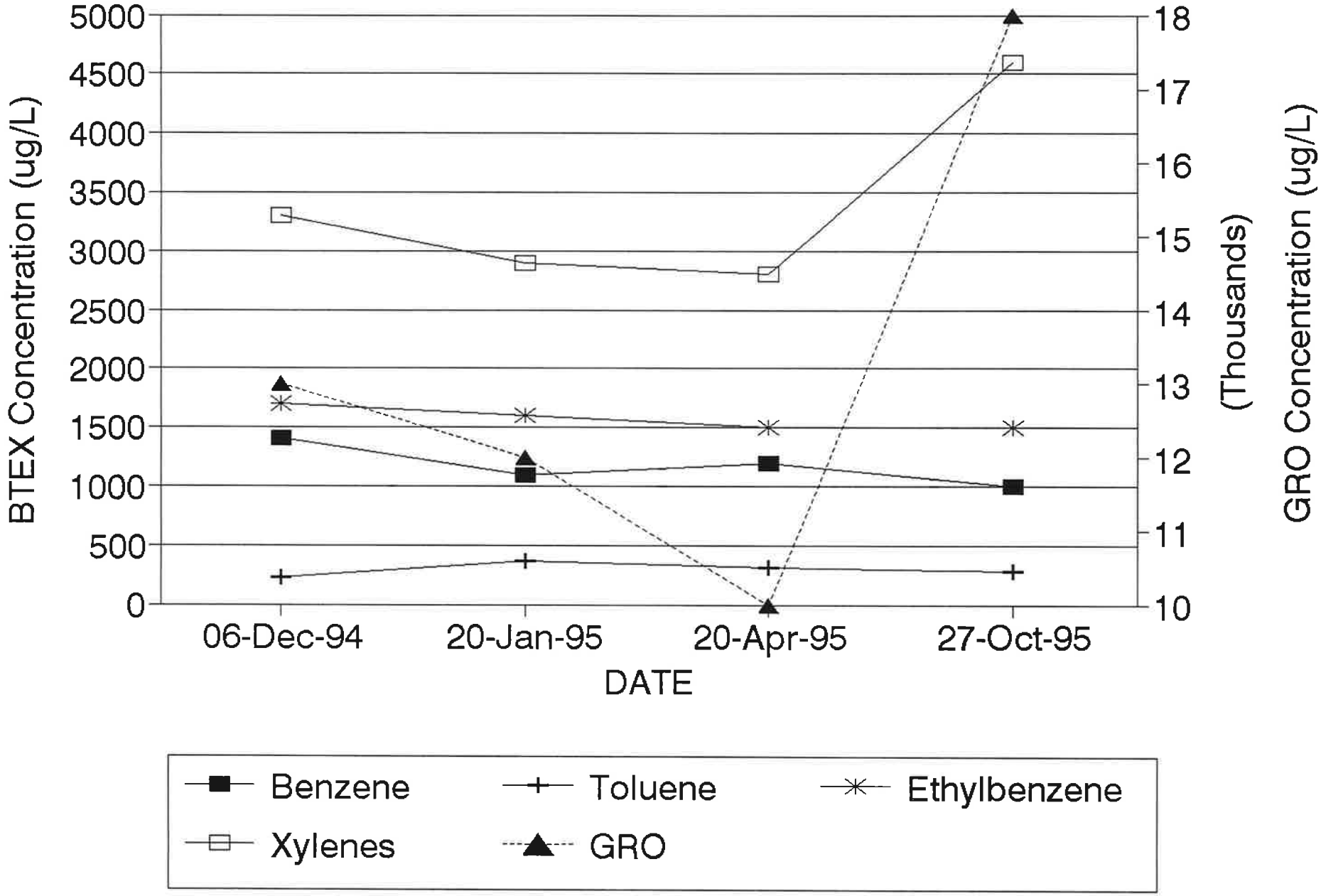
TABLE 2 GROUND WATER CHEMISTRY (ug/l)

Holiday Station No. 226
Hinckley, Minnesota
Delta No. A094-158-1

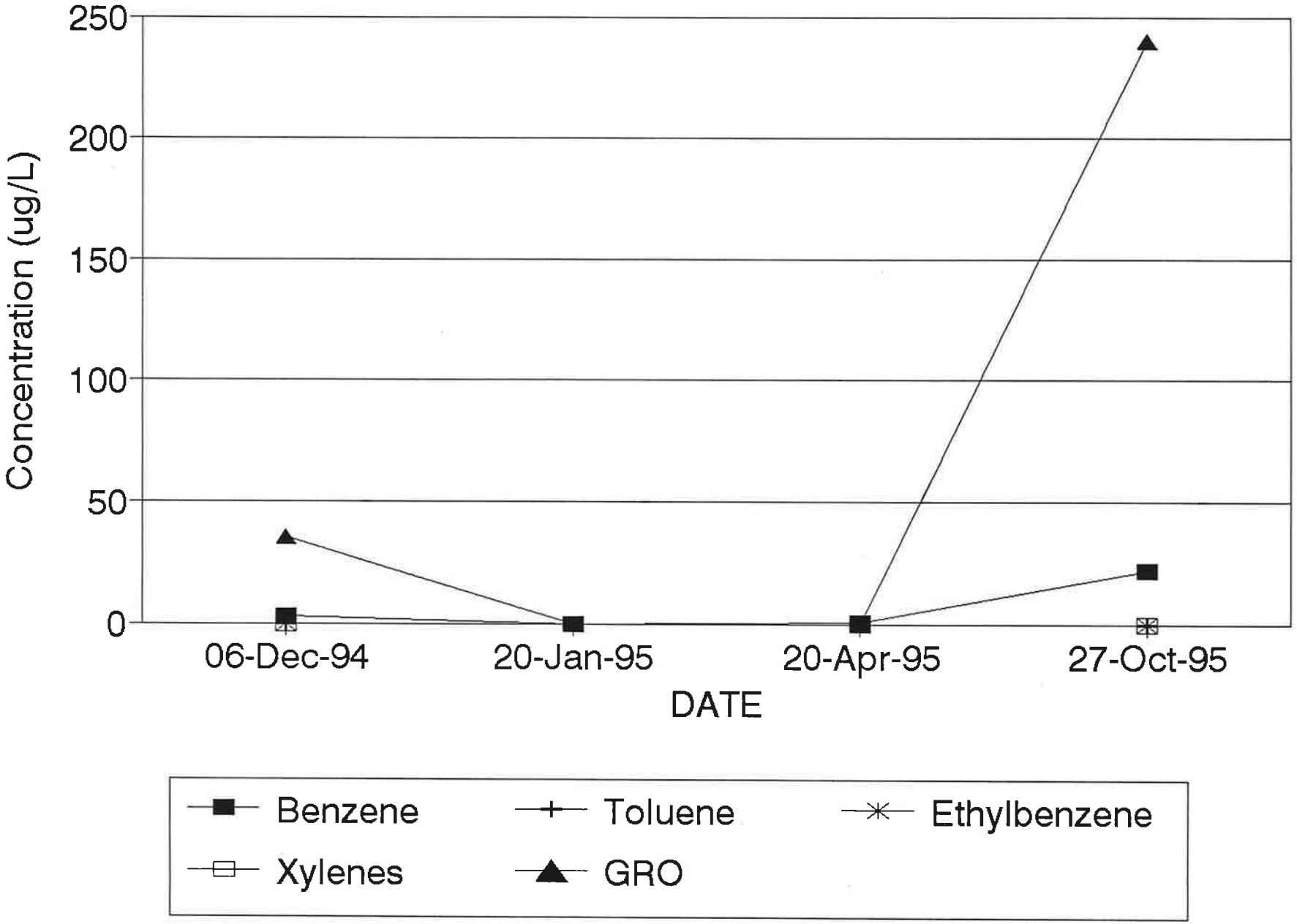
Sample I.D.	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO
MW-1	06-Dec-94	1400	230	1700	3300	13000	6000
	20-Jan-95	1100	360	1600	2900	12000	4300
	20-Apr-95	1200	310	1500	2800	10000	NA
	27-Oct-95	1000	280	1500	4600	18000	8600
MW-2	06-Dec-94	2.7	<0.6	<0.2	<0.5	35	<29
	20-Jan-95	<0.2	<0.5	<0.2	<0.8	<20	<31
	20-Apr-95	0.42	<0.5	<0.2	<0.8	<20	NA
	27-Oct-95	22	<0.65	<0.75	<1.8	240	NA
MW-3	06-Dec-94	1.6	<0.6	<0.2	0.39	42	<29
	20-Jan-95	1.3	<0.5	<0.2	0.82	300	40
	20-Apr-95	3.4	<0.5	<0.2	<0.8	140	NA
	27-Oct-95	0.72	<0.65	<0.75	<1.8	49	NA

DRO = Diesel-range organics
GRO = Gasoline-range organics
ug/l = micrograms per liter, which is equivalent to parts per billion (ppb)

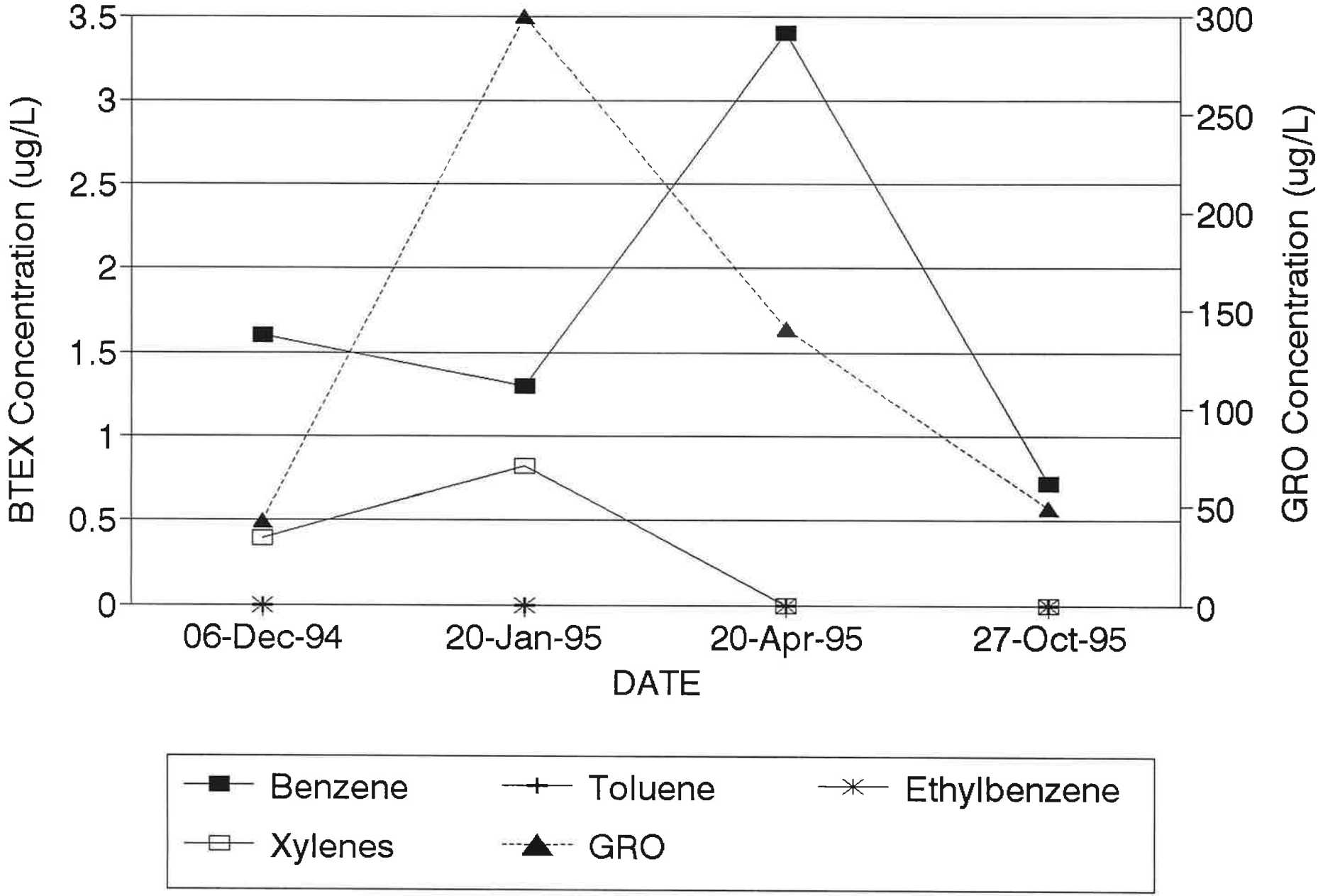
HOLIDAY STATION NO. 226
MW-1: BTEX & GRO Concentrations



HOLIDAY STATION NO. 226
MW-2: BTEX & GRO Concentrations



HOLIDAY STATION NO. 226
MW-3: BTEX & GRO Concentrations



Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 *St. Paul, MN. 55110* *Tel. (612) 653-3471* *Fax (612) 653-3475*

LABORATORY RESULTS

Client: Delta Environmental Consultants, Inc
3900 Northwoods Drive, Suite 200
St. Paul, MN 55112
Attn: Chai Insook

Project: Holiday Station #226
Hinckley, MN

Date Sampled: 10/27/95
Date Analyzed: 11/03/95
Physical State: Aqueous

Report Date: 11/07/95
Lab P.N.: 1000-324.3
Client P.N.: A094-158

Sample I.D.	Benzene µg/l EPA 8020	Toluene µg/l EPA 8020	Ethyl-benzene µg/l EPA 8020	Total, Xylenes µg/l EPA 8020	GRO µg/l Wis. DNR	DRO µg/l Wis. DNR
MW-1	1,000	280	1,500	4,600	18,000	8,600†
MW-2	22	< 0.65	< 0.75	< 1.8	240	—
MW-3	0.72	< 0.65	< 0.75	< 1.8	49	—
PQL, µg/l	0.70	0.65	0.75	1.8	7.0	65
MDL, µg/l	0.14	0.13	0.15	0.36	1.4	13

PQL; Practical Quantitation Limit for undiluted samples.
MDL; Method Detection Limit for undiluted samples.
GRO; Gasoline Range Organics
DRO; Diesel Range Organics
†; Chromatogram contains peaks outside the DRO window
All results are in µg/l which is equal to parts-per-billion (ppb).
The Laboratory Results are only a part of the Laboratory Report.

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Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 St. Paul, MN. 55110 Tel. (612) 653-3471 Fax (612) 653-3475

LABORATORY REPORT

Client:	Delta Environmental Consultants, Inc	Date Sampled:	10/27/95
	3900 Northwoods Drive, Suite 200	Date Received:	10/27/95
	St. Paul, MN 55112	Date Analyzed:	11/03/95
	Attn: Chai Insook	Physical State:	Aqueous
Project:	Holiday Station #226	Report Date:	11/07/95
	Hinckley, MN	Lab P.N.:	1000-324.3
		Client P.N.:	A094-158

Quality Assurance / Quality Control Summary

Parameter (Method)	QC Type	Percent Recovery	Acceptable Range	Percent Reproducibility	Acceptable Range
Benzene (EPA 8020)	M	98	87 - 116	104	91 - 111
Toluene (EPA 8020)	M	98	87 - 115	104	90 - 112
Ethylbenzene (EPA 8020)	M	99	84 - 120	105	89 - 112
m,p-Xylenes (EPA 8020)	M	102	90 - 120	103	91 - 110
o-Xylenes (EPA 8020)	M	99	92 - 115	103	93 - 108
GRO (Wis. DNR)	M	100	85 - 117	104	84 - 115
DRO (Wis. DNR)	M	73	60 - 130	85	60 - 130

M = Matrix Spike / Matrix Spike Duplicate

L = Laboratory Control Sample

Reviewed

Approved

Compounds were identified by column retention time and quantified by peak area of known standards using a Hewlett Packard ChemStation Data System. The samples were received by HORIZON LABORATORIES, INC. and accompanied by the Chain-of-Custody record. The Laboratory Report is the sole property of the client the whom it is addressed. The Laboratory Results are only a part of the Laboratory Report.

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CHAIN–OF–CUSTODY RECORD

Delta
Environmental Consultants, Inc.
3900 Northwoods Dr., Suite 200
St. Paul, MN 55112

DELTA PROJECT NO. AO 94158 | INVOICE CODE | PAGE 1 OF 1

PROJECT MANAGER: Chai Insook

PROJECT NAME: Holiday Station #226

PROJECT LOCATION: Hinckley, MN

SAMPLER'S SIGNATURE: E S Bustillos

TURN AROUND REQUESTED:
- ☑ NORMAL
- ☐ RUSH
- ☐ OTHER

LAB NAME: Horizon

LAB USE ONLY

LABORATORY PROJECT NO.: 1000 – 324.3

SAMPLE ID	SAMPLE LOCATION/DESCRIPTION	DATE/TIME SAMPLED	SAMPLE MATRIX: SOIL(S): AIR(A): BULK(B): AQUEOUS(Q): SLUDGE(L): OTHER(O)	ANALYSIS REQUESTED: BTEX GRO	ANALYSIS REQUESTED: DRO	NUMBER OF CONTAINERS	ACCEPT (A) REJECT (R)	SAMPLE CONDITION AS RECEIVED: CHILLED YES/NO, SEALED YES/NO; SAMPLE CONDITION/ COMMENTS	LABORATORY SAMPLE NUMBER
	MW 1	10/27/95 10:15	Q	X	X	4			19622
	MW 2	10/27/95 10:38	Q	X		3			19623
	MW 3	10/27/95 10:56	Q	X		3			19624
	Send Report to: Angela Gowan								

RECEIVED 1995

GENERAL COMMENTS: TRIP BLANK Supplied by Horizon - Client requests not to Analyze. 10 ◀ TOTAL NUMBER OF CONTAINERS

1 RELINQUISHED BY (SIGNATURE): E S Bustillos	DATE: 10/27/95	3 RELINQUISHED BY (SIGNATURE)	DATE	5 RELINQUISHED BY (SIGNATURE)	DATE
COMPANY: Delta Envir Consltnts.	TIME: 445	COMPANY	TIME	COMPANY	TIME
2 RECEIVED BY (SIGNATURE): Diane Rourke	DATE: 10/27/95	4 RECEIVED BY (SIGNATURE)	DATE	6 RECEIVED BY (SIGNATURE)	DATE
COMPANY: Horizon	TIME: 4:45	COMPANY	TIME	COMPANY	TIME

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy

bcc: Angela Gowan - Delta Environmental Consultants, Inc.

Delta
Environmental
Consultants, Inc.

3900 Northwoods Drive
Suite 200
St. Paul, MN 55112
612/486-8022
FAX: 612/486-8021

RECEIVED
JUN 09 1995
MPCA, HAZARDOUS
WASTE DIVISION

June 7, 1995

Ms. Jean Hanson
Minnesota Pollution Control Agency
Hazardous Waste Division
Tanks and Spills Section
520 Lafayette Road North
St. Paul, MN 55155-3898

Subject: QUARTERLY MONITORING WORKSHEET (Fact Sheet No. 7)
Holiday Station No. 226
Hinckley, Minnesota
MPCA Leak No. 7487
Delta No. A094-158

Dear Ms. Hanson:

On behalf of Holiday Companies, Inc., Delta Environmental Consultants, Inc. (Delta), is submitting the quarterly ground water monitoring report, completed for the above referenced site. The Remedial Investigation/Corrective Action Design Report was submitted to your attention on April 7, 1995.

This quarterly monitoring worksheet is completed for the second quarterly ground water sampling event, which was conducted at the site on April 20, 1995. The next two monitoring events for 1995 are scheduled for July and October. Delta will recommend site closure if analytical results for the next two sampling events do not change significantly.

If you have any questions regarding this information, please contact me at (612) 486-5845.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Chai Insook
Project Manager

CI/bjc

Enclosures

cc: Mr. Keith Yokom - Holiday Company Inc.
cc: Mr. Bruce Anthony - Holiday Company Inc. (no enclosures)

RECEIVED
JUN 09 1995
MPCA, HAZARDOUS WASTE DIVISION

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.
- 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: 7487
2nd Quarter 1995
Holiday Station No. 226
Hinckley, MN
Delta No. A094-158

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.
N/A	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: _____
BTEX concentrations in MW-2 and MW-3 remain non-detectable or below the Health Risk Limits. GRO concentration in MW-2 remained non-detectable, and GRO concentration decreased in MW-3 (from 300 ug/L to 140 ug/L) since the previous sampling event. In general, petroleum hydrocarbons concentrations in MW-1 remain relatively stable over the previous three sampling events.

II. Vapor Impact Monitoring *Not applicable.*

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:

No modifications, continue quarterly monitoring of BTEX, GRO, and DRO (which was omitted this quarter).

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.

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TABLE 1 GROUND WATER ELEVATIONS

Holiday Station No. 226
Hinckley, Minnesota
DELTA NO. A094-158

Holiday Station Wells and Top of Casing Elevations						
	MW-1	1031.11	MW-2	1034.02	MW-3	1029.71
Date	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation
06-Dec-94	21.26	1009.85	24.91	1009.11	15.56	1014.15
20-Dec-94	21.20	1009.91	24.96	1009.06	15.90	1013.81
20-Jan-95	21.93	1009.18	25.41	1008.61	19.32	1010.39
20-Apr-95	21.00	1010.11	24.17	1009.85	19.69	1010.02

Tobies Service Station Wells and Top of Casing Elevations (reported by HTCT)												
MW-1	104.66	MW-2	106.78	MW-3	105.13	MW-4	97.65	MW-5	96.63	MW-6	101.13	MW-7A	102.48

Tobies Service Station Wells and Top of Casing Elevations (adjusted to Holiday elevations datum)														
	MW-1	1029.49	MW-2	1031.61	MW-3	1029.96	MW-4	1022.48	MW-5	1021.46	MW-6	1025.96	MW-7A	1027.31
Date	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation	Water Level	GW Elevation
20-Dec-94	15.40	1014.09	16.78	1014.83	16.71	1013.25	12.45	1010.03	7.83	1013.63	12.67	1013.29	17.64	1009.67
20-Jan-95			16.89	1014.72	16.57	1013.39					13.36	1012.60		

NOTE:

Elevations are reported in feet - NGVD (National Geodetic Vertical Datum)
TOC elevations for Holiday station wells are provided by Kemper & Associates, Inc.
TOC elevations for Tobies Service Station wells are normalized to Holiday wells.

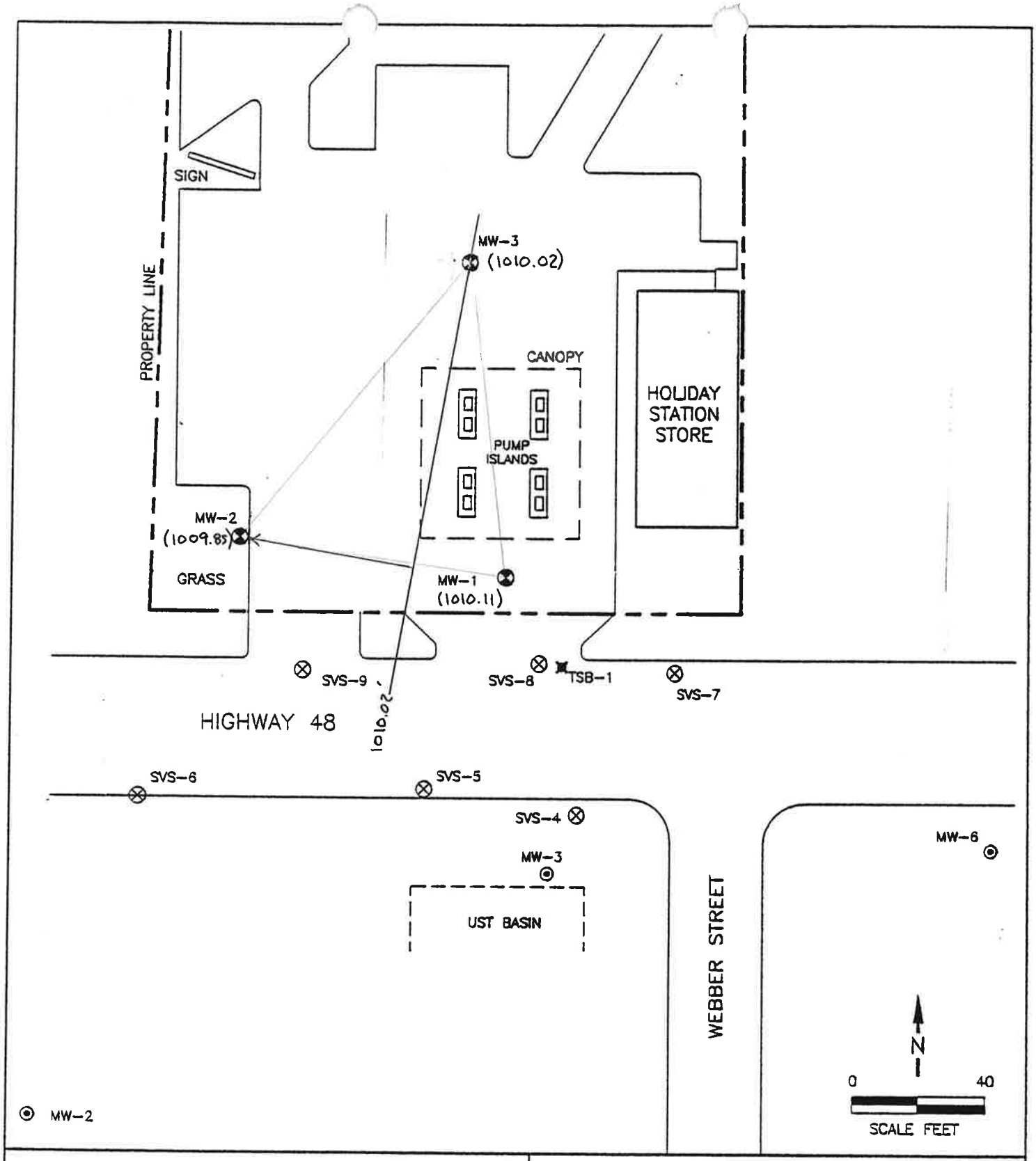
Stadia rod readings of Holiday well MW-2 and Tobies well MW-3 (surveyed on 12/20/94)
Holiday MW-2 = 2.96
Tobies MW-3 = 7.02
Tobies well MW-3 is 4.06 feet lower than Holiday well MW-2

TABLE 2 GROUND WATER CHEMISTRY (ug/l)

Holiday Station No. 226
Hinckley, Minnesota
Delta No. A094-158-1

Sample I.D.	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO
MW-1	06-Dec-94	1400	230	1700	3300	13000	6000
	20-Jan-95	1100	360	1600	2900	12000	4300
	20-Apr-95	1200	310	1500	2800	10000	NA
MW-2	06-Dec-94	2.7	<0.6	<0.2	<0.5	35	<29
	20-Jan-95	<0.2	<0.5	<0.2	<0.8	<20	<31
	20-Apr-95	0.42	<0.5	<0.2	<0.8	<20	NA
MW-3	06-Dec-94	1.6	<0.6	<0.2	0.39	42	<29
	20-Jan-95	1.3	<0.5	<0.2	0.82	300	40
	20-Apr-95	3.4	<0.5	<0.2	<0.8	140	NA

DRO = Diesel-range organics
GRO = Gasoline-range organics
ug/l = micrograms per liter, which is equivalent to parts per billion (ppb)



LEGEND:

- MONITORING WELL (HOLIDAY)
- MONITORING WELL (TOBIES)
- SOIL VAPOR SURVEY POINT (TOBIES)
- SOIL BORING (TOBIES)

(1009.85) GROUND WATER ELEVATION (IN FEET)

1010.02' GROUND WATER CONTOUR LINE

INFERRED GROUND WATER FLOW DIRECTION

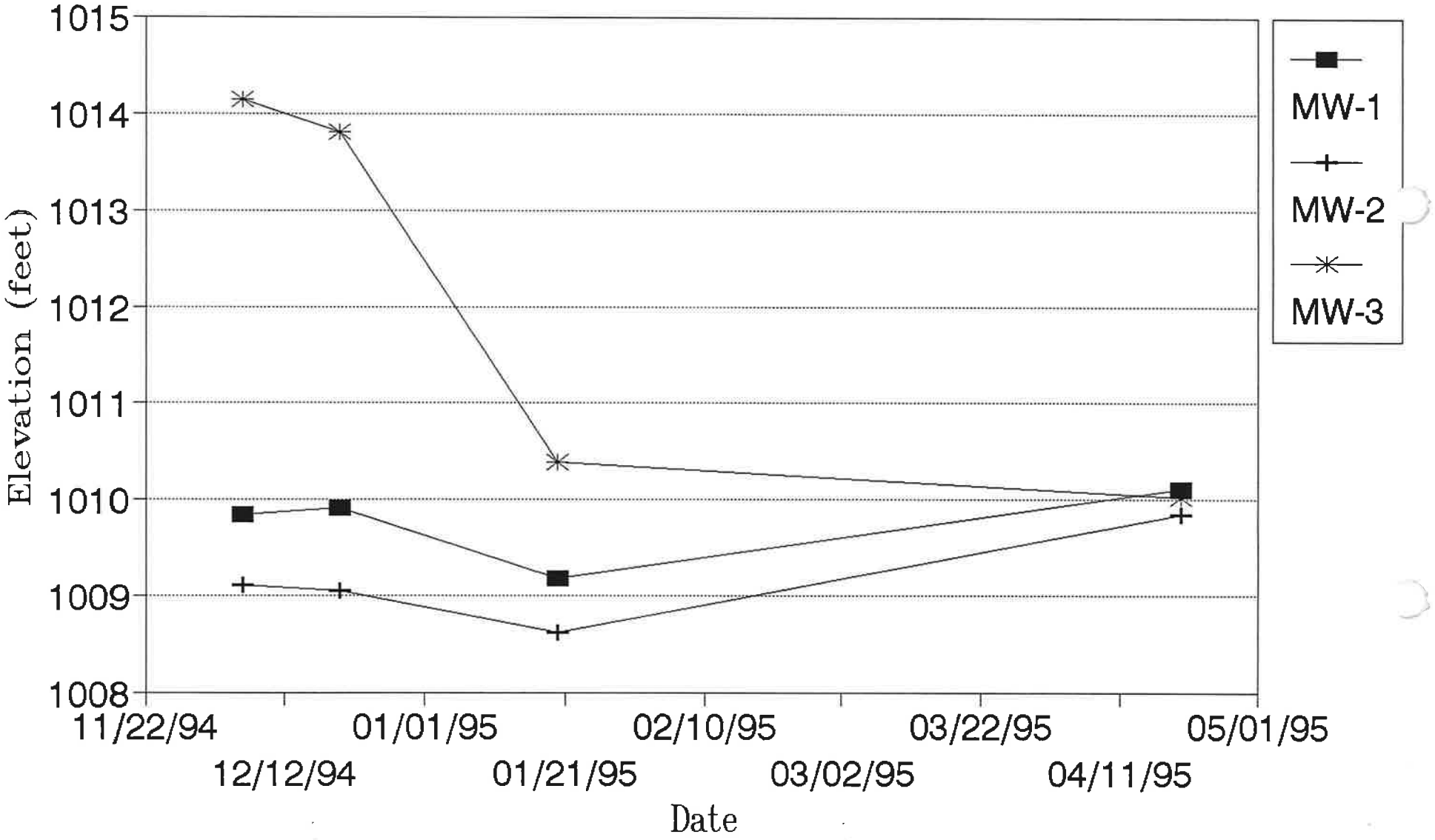
FIGURE 1
GROUND WATER FLOW MAP - 4/20/95
HOLIDAY STATION NO. 226
HINCKLEY, MINNESOTA

PROJECT NO.	PREPARED BY	DRAWN BY
A094-158	CI	DD
DATE	REVIEWED BY	FILE NAME
3/16/95		94158-2

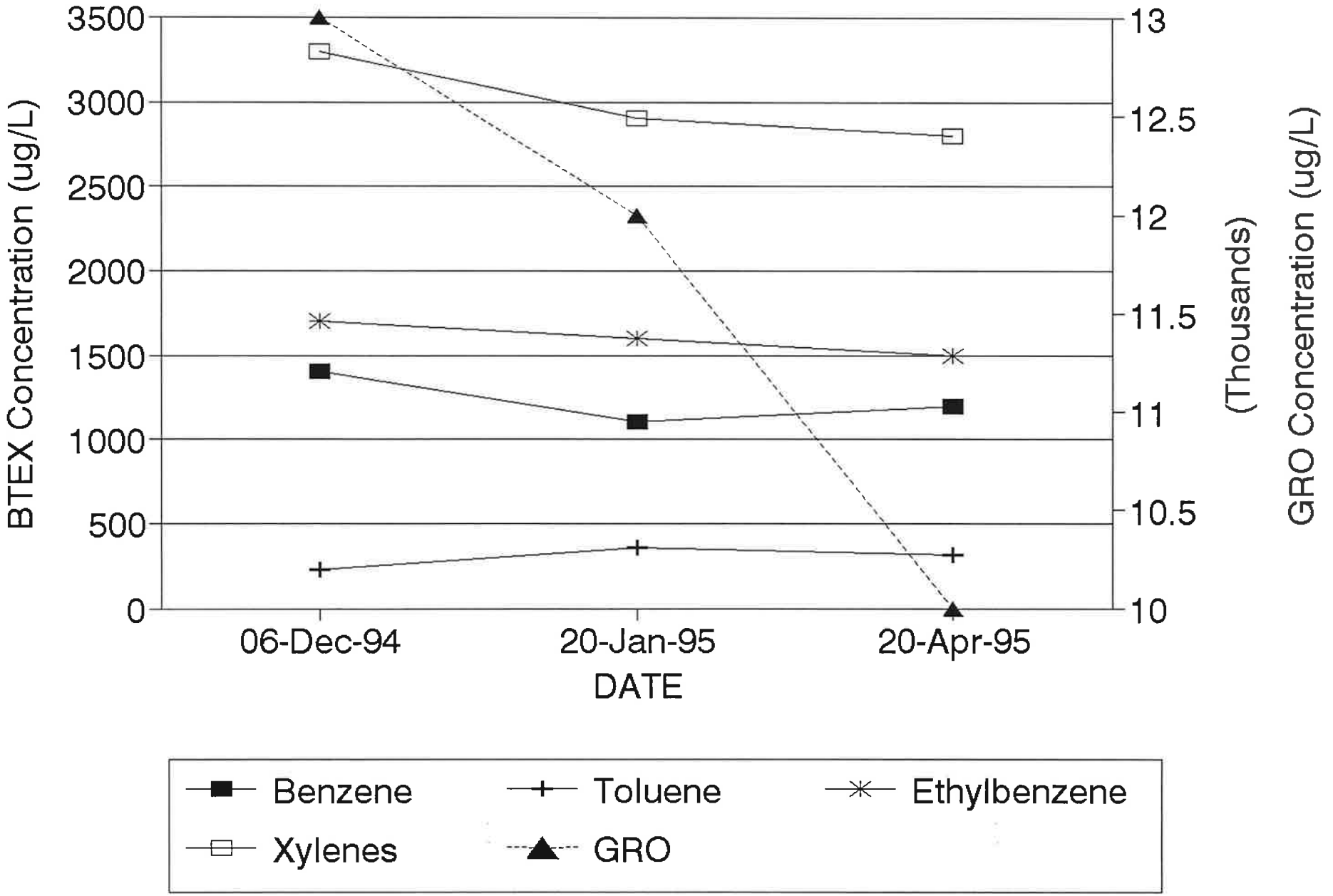
Delta Environmental Consultants, Inc.

Holiday No. 226 Hinckley, MN

Delta No. A094-158-1



HOLIDAY STATION NO. 226
MW-1: BTEX & GRO Concentrations



Horizon
Laboratories, Inc.

4463 White Bear Parkway, Suite #105 St. Paul, MN. 55110 Tel. (612) 653-3471 Fax (612) 653-3475

LABORATORY REPORT

Client:	Delta Environmental Consultants, Inc	Date Sampled:	04/20/95
	3900 Northwoods Drive, Suite 200	Date Received:	04/21/95
	St. Paul, MN 55112	Date Analyzed:	04/27/95 - 04/28/95
	Attn: Chai Insook	Physical State:	Aqueous
Project:	Holiday	Report Date:	05/01/95
	Hinckley, MN	Lab P.N.:	1000-324.4
		Client P.N.:	A094-158

Quality Assurance / Quality Control Summary

Parameter (Method)	QC Type	Percent Recovery	Acceptable Range	Percent Reproducibility	Acceptable Range
Benzene (EPA 8020)	M	99	128 - 81	105	112 - 78
Toluene (EPA 8020)	M	98	129 - 84	105	113 - 78
Ethylbenzene (EPA 8020)	M	98	127 - 84	105	113 - 79
m,p-Xylenes (EPA 8020)	M	103	134 - 90	105	113 - 79
o-Xylenes (EPA 8020)	M	108	141 - 80	103	113 - 78
GRO (Wis. DNR)	M	93	123 - 83	104	120 - 74

M = Matrix Spike / Matrix Spike Duplicate

L = Laboratory Control Sample

Reviewed

Approved

Compounds were identified by column retention time and quantified by peak area of known standards using a Hewlett Packard ChemStation Data System. The samples were rec by HORIZON LABORATORIES, INC. and accompanied by the Chain-of-Custody record. The Laboratory Report is the sole property of the client to whom it is addressed. The Laboratory Results are only a part of the Laboratory Report.

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LABORATORY RESULTS

Client: Delta Environmental Consultants, Inc
3900 Northwoods Drive, Suite 200
St. Paul, MN 55112
Attn: Chai Insook

Project: Holiday
Hinckley, MN

Date Sampled: 04/20/95
Date Analyzed: 04/27/95 - 04/28/95
Physical State: Aqueous

Report Date: 05/01/95
Lab P.N.: 1000-324.4
Client P.N.: A094-158

Sample I.D.	Benzene µg/l EPA 8020	Toluene µg/l EPA 8020	Ethyl-benzene µg/l EPA 8020	Total, Xylenes µg/l EPA 8020	GRO µg/l Wis. DNR
MW-3	3.4	<0.50	<0.20	<0.80	140
MW-2	0.42	<0.50	<0.20	<0.80	<20
MW-1	1,200	310	1,500	2,800	10,000
PQL, µg/l	0.20	0.50	0.20	0.80	20
MDL, µg/l	0.14	0.13	0.15	0.36	1.4

PQL; Practical Quantitation Limit for undiluted samples

MDL; Method Detection Limit for undiluted samples

GRO; Gasoline Range Organics

All results are in µg/l which is equal to parts-per-billion (ppb).

The Laboratory Results are only a part of the Laboratory Report.

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CHAIN–OF–CUSTODY RECORD

Delta
Environmental
Consultants, Inc.
3900 Northwoods Dr., Suite 200
St. Paul, MN 55112

11 MAY 95 7:59

DELTA PROJECT NO. 1094-158 | INVOICE CODE | PAGE 1 OF 1

PROJECT MANAGER: Chai Insook

PROJECT NAME: Holiday

PROJECT LOCATION: Hinckley, MN

SAMPLER'S SIGNATURE: JoEllen Kuzyman

TURN AROUND REQUESTED: [X] NORMAL [ ] RUSH _____ [ ] OTHER _____

LAB NAME: Horizon

LAB USE ONLY

LABORATORY PROJECT NO.: 1000-324.4

SAMPLE ID	SAMPLE LOCATION/DESCRIPTION	DATE/TIME SAMPLED	SAMPLE MATRIX: SOIL(S): AIR(A): BULK(B): AQUEOUS(Q): SLUDGE(L): OTHER(O)	ANALYSIS REQUESTED: BTEX	GRO	hold				NUMBER OF CONTAINERS	ACCEPT (A) REJECT (R)	SAMPLE CONDITION AS RECEIVED: CHILLED YES/NO; SEALED YES/NO; SAMPLE CONDITION/ COMMENTS	LABORATORY SAMPLE NUMBER
MW-3	monitoring well	4/20/95 10:25	Q	X	X					3			15240
MW-2	" "	4/20/95 10:45	Q	X	X					3			15241
MW-1	" "	4/20/95 10:50	Q	X	X					3			15242
Trip Blank		—	Q			X				2			15243

GENERAL COMMENTS:

11 ◀ TOTAL NUMBER OF CONTAINERS

1 RELINQUISHED BY (SIGNATURE): JoEllen Kuzyman	DATE: 4/21/95	3 RELINQUISHED BY (SIGNATURE):	DATE:	5 RELINQUISHED BY (SIGNATURE):	DATE:
COMPANY: Delta Environmental	TIME: 8:00	COMPANY:	TIME:	COMPANY:	TIME:
2 RECEIVED BY (SIGNATURE): Edward Hello	DATE: 4/21	4 RECEIVED BY (SIGNATURE):	DATE:	6 RECEIVED BY (SIGNATURE):	DATE:
COMPANY: Horizon Labs	TIME: 16:45	COMPANY:	TIME:	COMPANY:	TIME:

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy

GROUND WATER LEVEL DATA

PROJECT: Hinckley Holiday DELTA PROJECT NO. 4094-158

DATE: 4/20/95 RECORDED BY: J. Kuszmaul MEASURING DEVICE: WLI #12007

WELL NO.	TIME	REFERENCE ELEVATION	DEPTH TO G.W.*	ELEVATION	FREE PRODUCT THICKNESS	PHYSICAL OBSERVATIONS/COMMENTS
MW-3	9:25	1029.71	19.69	1010.02		DTB ≈ 25 lock rusted well box full of water
MW-2	9:45	1034.02	24.17	1009.85		
MW-1	9:50	1031.11	21.00	1010.11		lock rusted

* Measured from top of riser unless otherwise noted.

1012/10-88

WATER SAMPLING INFORMATION SHEET

Project No. A094-158
Project Name: Holiday
Location: Hinckley, MN

Date: 4/20/95

Weather Conditions: cool, overcast
Cloud Cover: 100 % Temp:
Wind Speed:

Sample I.D.: MW-3
Depth to water (ft below MP): 19.69 Date Time
Time: 10:25 Well depth (ft below MP): ~25 Describe Sampling Point: near grade Casing Size:
Bailer/Volume: Tap Other/Rate/Volume/Intake Depth: bailed 4 gallons
Appearance: brown, silty Odor: none
Samples Collected: GRO/BTEX
Comments/Problems/Decon: well bails down needs new lock

Sample I.D.: MW-2
Depth to water (ft below MP): 24.17 Date Time
Time: 10:45 Well depth (ft below MP): Describe Sampling Point: above grade Casing Size:
Bailer/Volume: Tap Other/Rate/Volume/Intake Depth: bailed 5 gallons
Appearance: clear Odor: slight
Samples Collected: GRO/BTEX
Comments/Problems/Decon: good recharge

Sample I.D.: MW-1
Depth to water (ft below MP): ~~24.~~ 21.00 Date Time
Time: 10:30 Well depth (ft below MP): Describe Sampling Point: near grade Casing Size:
Bailer/Volume: Tap Other/Rate/Volume/Intake Depth: bailed 4. gallons
Appearance: Odor: moderate diesel (?) odor
Samples Collected: light brown
Comments/Problems/Decon: well bails down needs new lock

Gallons per linear foot: 2-inch I.D. = 0.163; 4-inch I.D. = 0.0661; 6-inch I.D. = 1.50; 12-inch I.D. = 5.88

Sampled by: J. Kuszmaul

Transportation: Ford truck

Form Completed by: J. Kuszmaul

T00-021
Rev. 1/94

(Evacuation/Stabilization Data on Reverse Side)