State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

WISCONSIN
DEPT. OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Regional Headquarters
2300 N. Dr. ML King Drive, PO Box 12436
Milwaukee, Wisconsin 53212-0436
Telephone 414-263-8500
FAX 414-263-8483
TDD 414-263-8713

December 15, 2000

Mr. Ray Stoelting
Amoco
2288 W. County Rd. C
Roseville, MN 55113

Subject: Final Closure Letter for Amoco Service Station #15556, 708 W. Garfield Ave., Milwaukee, WI

FID: 241465840
BRRTS: 03-41-004488

Dear Mr. Stoelting:

I have received the filed groundwater use restriction for the above-named site from Delta Environment on this date. Based on the investigation and remedial documentation provided to the Department, it appears that the above-named site is in compliance with the requirements of Chs. NR 700 to 724, Wis. Admin. Code. Therefore, the Department considers the case closed and tracked as such, having determined that no further action is necessary at the site at this time. However, the case may be reopened pursuant to S. NR 726.09, Wis. Admin. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, welfare, or the environment.

The Department appreciates the actions you have taken to investigate and remediate the contamination at this site. If you have any questions or comments, please feel free to contact me at the above address or at (414) 263-8644. Please refer to the FID number at the top of this letter in any future correspondence. Future correspondence should be sent directly to the Remediation and Redevelopment programs assistant (263-8680) at the above address.

Sincerely,

John J. Hnat
Hydrogeologist
Remediation and Redevelopment

C: Timothy Petrofske, Delta Environmental
WDNR SER Files

Document Number

GROUNDWATER USE RESTRICTION

7998366

REGISTER'S OFFICE | SS
Milwaukee County, WI

RECORDED AT 1:10 PM

12-07-2000

WALTER R. BARCZAK
REGISTER OF DEEDS

AMOUNT 14.00

Recording Area

Declaration of Restrictions

In Re: Lots 6, 7 and 8 in Block 210 in HOUGHTON's ADDITION, being a subdivision into city lots of the North part of the East 1/2 of the West 60 acres of the East 1/2 of the Northwest 1/4 of Section 20, in Township 77 North, Range 22 East, in the City of Milwaukee, Milwaukee County, Wisconsin.

Name and Return Address
James Lucari, Esq.
BP Amoco
200 E. Randolph Drive, Mail Code 2206
Chicago, IL 60601

STATE OF Illinois)
) ss
COUNTY OF Cook)

352-0619-100-5
Parcel Identification Number (PIN)

WHEREAS, The American Oil Company (Amoco Oil Company) is the owner of the above-described property.

WHEREAS, one or more petroleum discharges have occurred at this property. Benzene contaminated groundwater above the ch. NR 140 Wis. Adm. Code enforcement standard (ES) existed on this property at the following location: OW-4, as identified in Figure 1, with a concentration of 920 parts per billion (ppb) is in exceedance of the ch. NR 140 Wis. Adm. Code ES of 5.0 ppb for benzene. Methyl-tertiary-butyl-ether contaminated groundwater with a concentration above the ch. NR 140 Wis. Adm. Code ES existed at the following location: GMOW-9, as identified on Figure 1, with concentrations of 300 ppb is in exceedance of the ch. NR 140 Wis. Adm. Code ES of 60 ppb for methyl-tertiary-butyl-ether. The above referenced concentrations were detected in groundwater samples collected October 21, 1998. Figure 1 is attached and hereby made a part of this restriction.

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct additional soil or groundwater remediation activities on the property at the present time.

WHEREAS, natural attenuation has been approved by the Department of Natural Resources to remediate groundwater contamination exceeding ch. NR 140 Wis. Adm. Code groundwater standards within the boundaries of this property.

WHEREAS, construction of wells where the water quality exceeds the drinking water standards in ch. NR 809 is restricted by ch. NR 811 and ch. NR 812 Wis. Adm. Code. Special well construction standards or water treatment requirements, or both, or well construction prohibitions may apply.

NOW THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitation and restrictions:

Anyone who proposes to construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater, or its successor agency, to determine what specific prohibitions or requirements are applicable, prior to constructing or reconstructing a well on this property unless no construction is ever expected to take place at this property. No well may be constructed or reconstructed on this property unless applicable requirements are met.

If construction is proposed on this property that will require dewatering, or if groundwater is to be otherwise extracted from this property, while this groundwater use restriction is in effect, the groundwater shall be sampled and analyzed for contaminants that were previously detected on the property and any extracted groundwater shall be managed in compliance with applicable statutes and rules.

This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. This restriction benefits and is enforceable by, the Wisconsin Department of Natural Resources, its successors and assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, to prevent the proposed violation or to recover damages for such violation.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that the restrictions set forth in this covenant are no longer required. Upon receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, with a copy of the Department's written determination, may be recorded to give notice that this groundwater use restriction is no longer binding.

By signing this document JAMES L. LUCARI Attorney-In-Fact asserts that [he/she] is duly authorized to sign this document on behalf of Amoco Oil Company.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this 14th day of November, 2000.

Signature: James L. Lucari

Printed Name: JAMES L. LUCARI

Title: Attorney

Subscribed and sworn to before me
this 14th day of November, 2000.

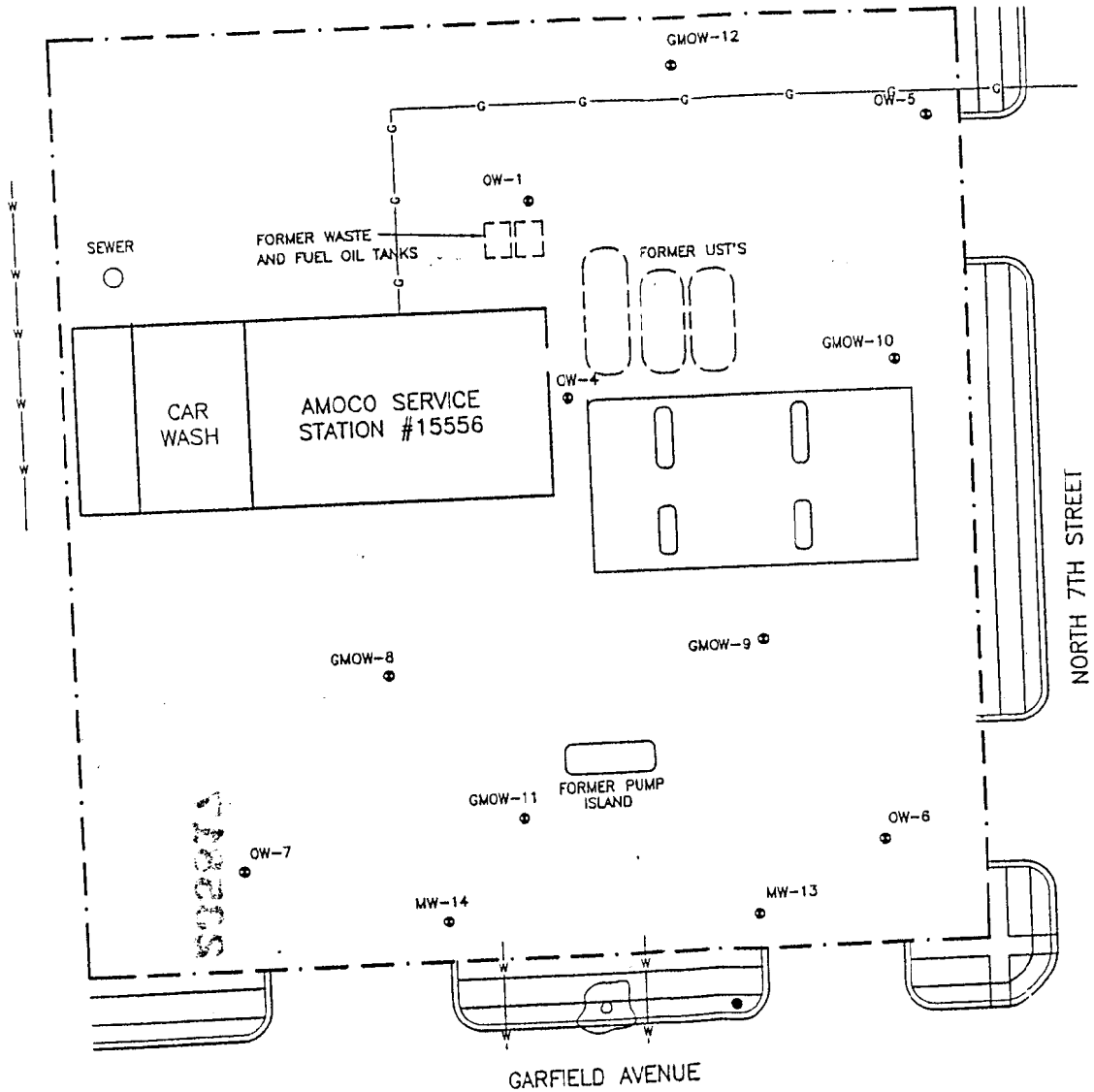
Carol A. Johnson

Notary Public, State of Illinois

My commission 02/25/03

Former Amoco Service Station No. 15556, 708 West Garfield Ave., Milwaukee, WI

This document was drafted by Delta Environmental Consultants, Inc. based on comments from the Wisconsin Department of Natural Resources.



LEGEND:

- MONITORING WELL
- TREE
- —G— GAS LINE
- —W— WATER UTILITY

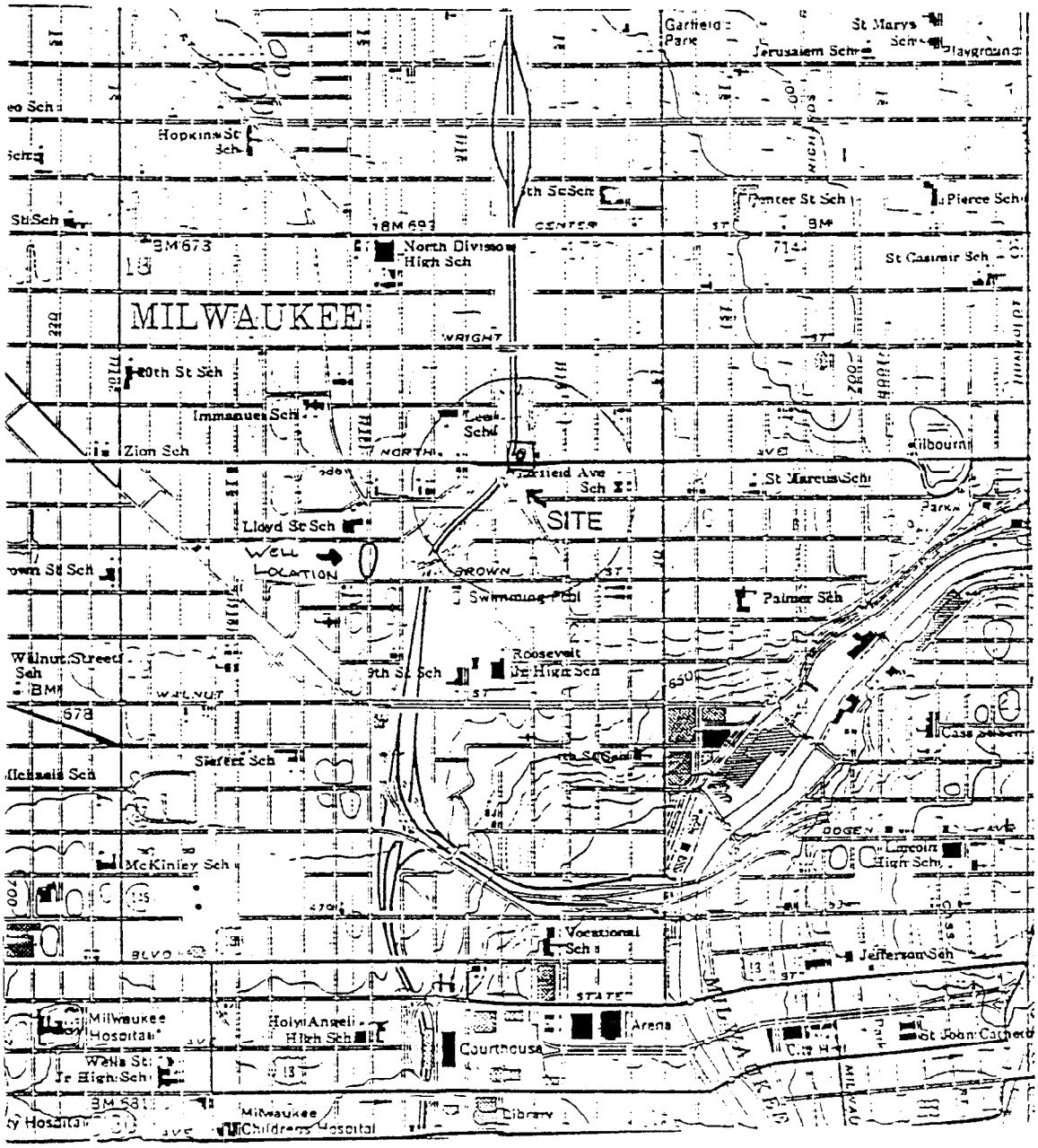
North

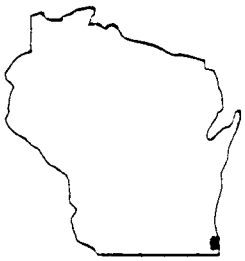
0 20

SCALE IN FEET

FIGURE 1
SITE MAP
AMOCO SERVICE STATION NO. 15556
708 WEST GARFIELD AVENUE
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY	
1095-874	DM	MRA	Delta Environmental Consultants, Inc.
DATE	REVIEWED BY	FILE NAME	
2/23/96		95874-S	





MILWAUKEE QUADRANGLE
WISCONSIN
7.5 MINUTE SERIES (TOPOGRAPHIC)

NORTH

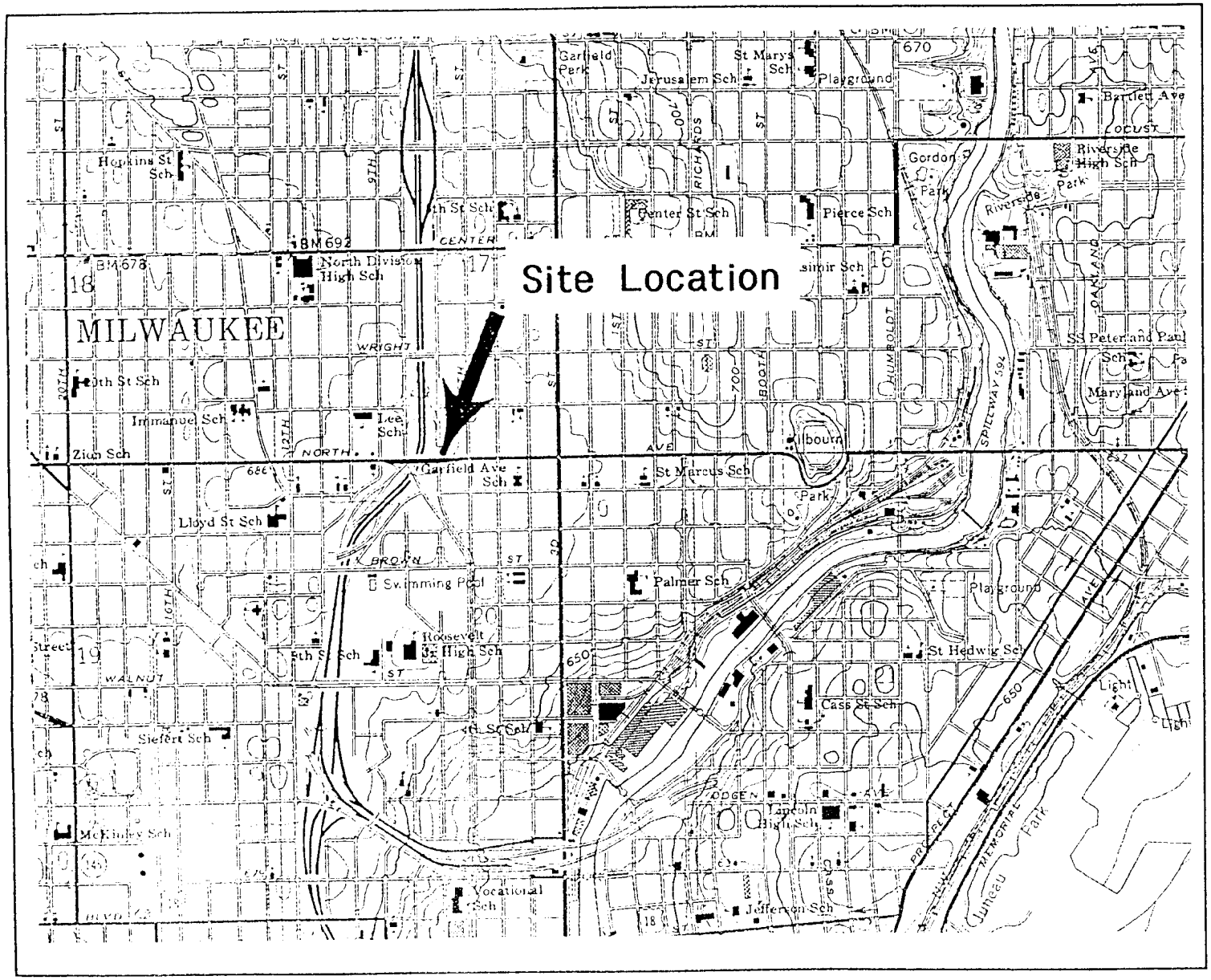
0 2000

SCALE IN FEET

Figure 21
SITE LOCATION MAP
SERVICE STATION NO. 15556
708 WEST GARFIELD AVENUE
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY
1095-874	MRA
DATE	REVIEWED BY
10/17/95	

Delta Environmental Consultants, Inc.



Location map from U.S.G.S. 7.5 Minute Series Quadrangle Milwaukee, WIS. dated 1958 and photorevised 1971.

ECOVA
Ecova Corporation
Amoco Research Center
Mail Code J-8 – P.O. Box 3011
Naperville, Illinois 60566-7011
(708)420-5462

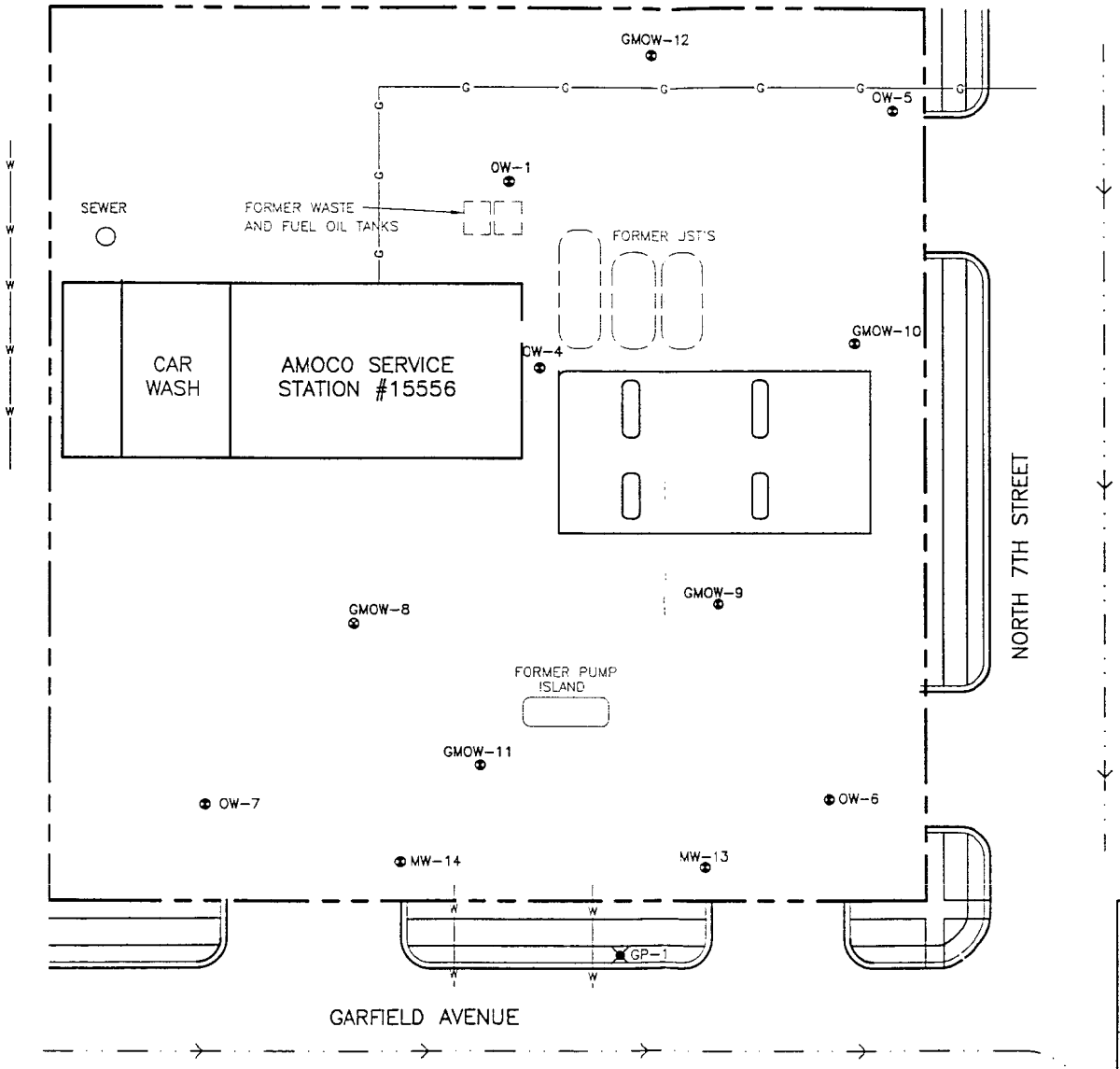
AMOCO OIL COMPANY

Station #15556
708 West Garfield Avenue
Milwaukee, Wisconsin

SITE LOCATION MAP

DRAWN BY BC
CHECKED BY TGW
SCALE 1" = 24,000'
DATE April 1995

SHEET NUMBER 1-OF-6
ECOVA PROJECT NUMBER 15556
DRAWING FILE NUMBER TOPO



LEGEND:

- PROPERTY BOUNDARY
- G — GAS LINE
- W — WATER UTILITY
- COMBINED SANITARY AND STORM SEWER
- MONITORING WELL
- GEOPROBE POINT

North

0 20

SCALE IN FEET

FIGURE 1
SITE MAP
AMOCO SERVICE STATION NO. 15556
708 WEST GARFIELD AVENUE
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY
1095-874	DM	MRA/EKO
DATE	REVIEWED BY	FILE NAME
11/19/96		95874-S

Delta Environmental Consultants, Inc.

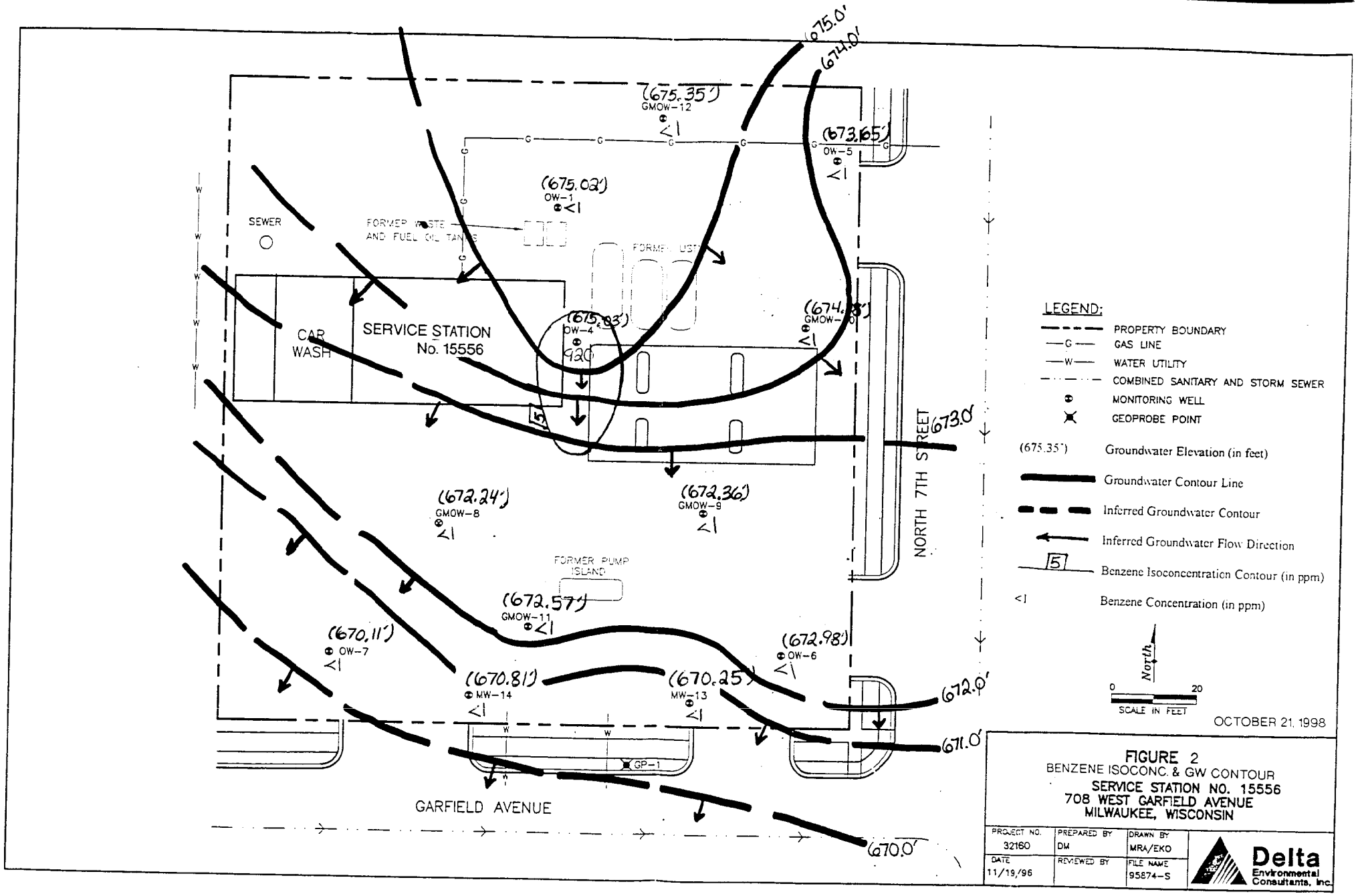


FIGURE 2
BENZENE ISOCONC. & GW CONTOUR
SERVICE STATION NO. 15556
708 WEST GARFIELD AVENUE
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY
32160	DM	MRA/EKO
DATE	REVIEWED BY	FILE NAME
11/19/96		95874-S

Delta Environmental Consultants, Inc.

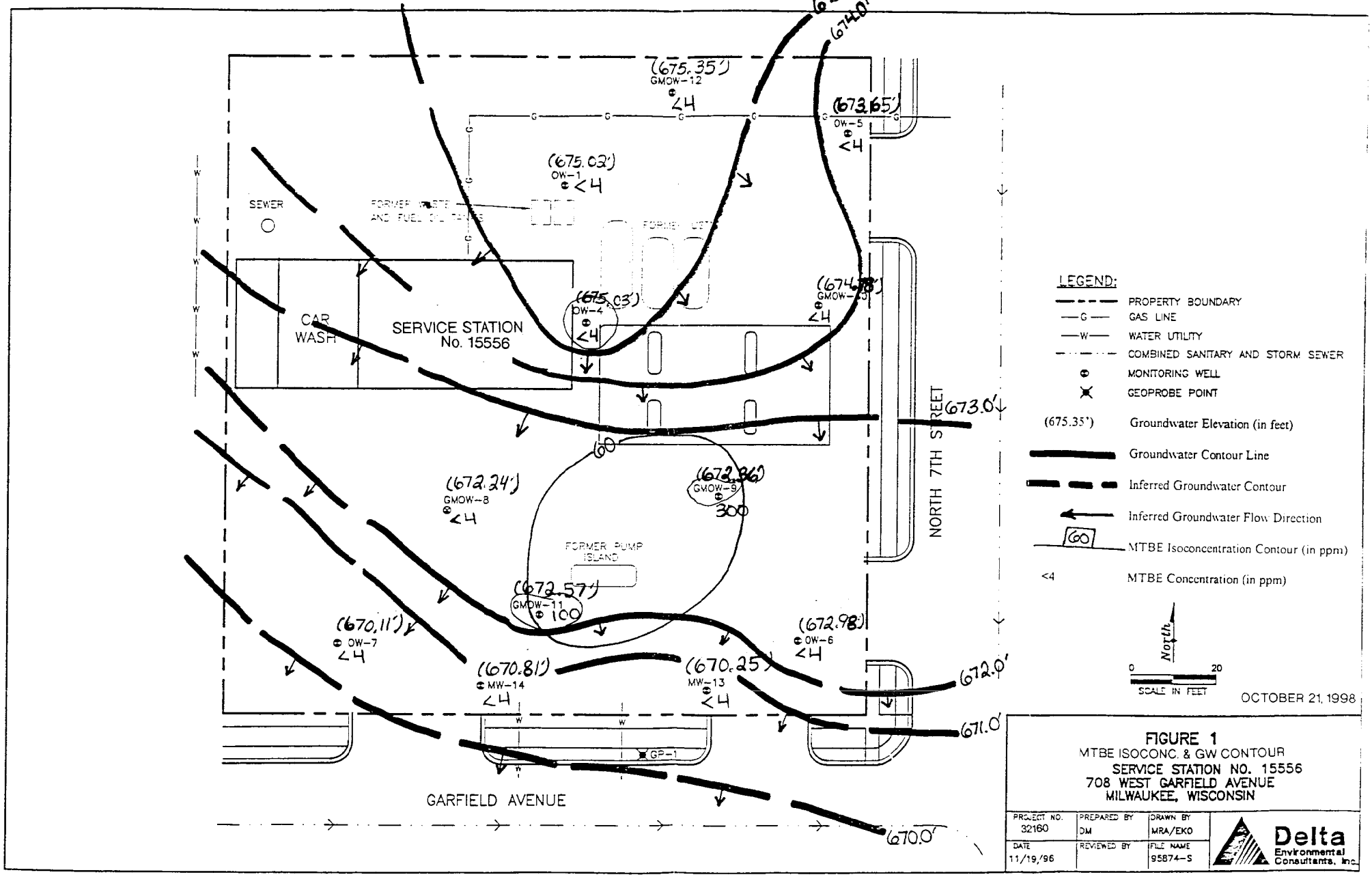


FIGURE 1
MTBE ISOCONC. & GW CONTOUR
SERVICE STATION NO. 15556
708 WEST GARFIELD AVENUE
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY
32160	DM	MRA/EKO
DATE	REVIEWED BY	FILE NAME
11/19/96		95874-S

Delta Environmental Consultants, Inc.

Table 1
Ground Water Data Summary
Former Service Station No. 15556
708 West Garfield Avenue
Milwaukee, WI
Delta Project No. 32160

OW-5	ANALYTICAL PARAMETERS									FIELD MEASUREMENTS								
										TOC: 687.17 Top of Screen: 678.67								
										Ground Water							Soil Gas	
Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total BTEX µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Depth to Water feet	Elevation of Water feet	Dissolved Oxygen mg/L	REDOX milli Volts	Temperature °C	Conductivity µmhos	pH	O_2 %	CO_2 %
NR 140 ES	*5*	*343*	*700*	*620*				*60*										
12/19/91	<0.4	<0.6	<0.8	<1.3	0.0	<0.7	<0.7	<1.0	NS	13.57	673.60	NM	NM	NM	NM	5.94	NM	NM
07/27/93	<0.4	<0.6	<0.8	<1.3	0.0	<0.7	<0.7	<1.0	NS	11.38	675.79	NM	NM	NM	NM	7.2	NM	NM
01/04/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	14.62	672.55	NM	NM	NM	NM	NM	NM	NM
07/27/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	13.70	673.47	NM	NM	NM	NM	NM	NM	NM
11/11/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	14.72	672.45	NM	NM	NM	NM	NM	NM	NM
02/23/95	<1.0	<1.0	<1.0	2.9	2.9	<1.0	<1.0	<4.0	<50	14.87	672.30	8.0	230	11.3	1360	7.2	17.0	2.8
03/21/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	14.27	672.90	6.3	130	9.5	1950	7.1	16.5	2.0
06/06/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	11.89	675.28	6.5	105	11.0	900	7.2	14.9	2.8
04/30/97	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	4.2	<50	13.50	673.67	6.4	125	10.0	1280	7.1	15.9	2.6
10/21/98	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<1000	13.52	673.65	3.7	299	16.6	1309	6.6	NM	NM

Table 1
Ground Water Data Summary
Former Service Station No 15556
708 West Garfield Avenue
Milwaukee, WI
Delta Project No 32160

OW-6	ANALYTICAL PARAMETERS									FIELD MEASUREMENTS								
										TOC: 685 71	Top of Screen: 677 21							
										Ground Water							Soil Gas	
Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total BTEX µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Depth to Water feet	Elevation of Water feet	Dissolved Oxygen mg/L	REDOX milli Volts	Temperature °C	Conductivity µmhos	pH	O_2 %	CO_2 %
NR 140 ES	*5*	*343*	*700*	*620*				*60*										
12/19/91	<0.4	<0.6	<0.8	<1.3	0.0	<0.7	0.7	27	NS	11.34	674.37	NM	NM	NM	NM	8.02	NM	NM
07/27/93	<0.4	<0.6	<0.8	<1.3	0.0	<0.7	0.7	37	NS	10.68	675.03	NM	NM	NM	NM	7.2	NM	NM
01/04/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	27	<50	14.10	671.61	NM	NM	NM	NM	NM	NM	NM
07/27/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	37	<50	13.12	672.59	NM	NM	NM	NM	NM	NM	NM
11/11/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	7.6	<50	14.27	671.44	NM	NM	NM	NM	NM	NM	NM
02/23/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	31	<50	14.64	671.07	2.1	182	11.5	2340	7.0	8.5	5.2
06/01/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	26	<50	11.89	673.82	2.1	190	10.2	2200	7.0	1.3	18.9
09/19/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	36	<50	12.16	673.55	2.1	NM	NM	NM	NM	2.2	17.2
12/07/95	1.9	<1.0	1.2	2.5	5.6	<1.0	1.1	19	<50	12.59	673.12	2.5	NM	NM	NM	6.9	2.0	17.0
03/21/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	34	<50	13.74	671.97	1.5	145	9.5	1490	7.0	13.0	2.9
06/06/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	16	<50	11.19	674.52	3.6	100	9.6	1500	6.9	17.0	1.6
10/16/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	38	<50	13.68	672.03	2.1	80	14.5	2250	6.9	16.9	3.0
04/30/97	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	17	<50	12.84	672.87	2.0	120	9.5	1620	6.9	15.5	2.9
10/21/98	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<100	12.73	672.98	1.7	290	14.8	2100	6.6	NM	NM

Table 1
Ground Water Data Summary
Former Service Station No 15556
708 West Garfield Avenue
Milwaukee WI
Delta Project No 32160

OW-7	ANALYTICAL PARAMETERS									FIELD MEASUREMENTS								
										TOC: 686 77		Top of Screen: 679.07						
										Ground Water							Soil Gas	
Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total BTEX µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Depth to Water feet	Elevation of Water feet	Dissolved Oxygen mg/L	REDOX milli Volts	Temperature °C	Conductivity µmhos	pH	O_2 %	CO_2 %
NR 140 ES	*5*	*343*	*700*	*620*				*60*										
12/19/91	<0 4	<0 6	<0 8	<1 3	0 0	<0 7	<0 7	<1 0	NS	16 39	670 38	NM	NM	NM	NM	6 88	NM	NM
07/27/93	<0 4	<0 6	<0 8	<1 3	0.0	<0 7	<0 7	<1.0	NS	14 28	672 49	NM	NM	NM	NM	7 2	NM	NM
01/04/94	NS	NS	NS	NS	NS	NS	NS	NS	NS	17 35	669 42	NM	NM	NM	NM	NM	NM	NM
07/27/94	NS	NS	NS	NS	NS	NS	NS	NS	NS	17 20	669 57	NM	NM	NM	NM	NM	NM	NM
11/11/94	NS	NS	NS	NS	NS	NS	NS	NS	NS	17 60	669 17	NM	NM	NM	NM	NM	NM	NM
06/06/96	<1 0	<1 0	<1 0	<2.0	0.0	<1 0	<1 0	<4 0	<50	16 19	670 58	1.5	30	10.0	950	6 8	1.9	5.3
10/21/98	<1 0	<1 0	<1 0	<2 0	0.0	<1.0	<1.0	<4 0	<100	16 66	670 11	2 3	240	14.5	958	6 9	NM	NM

Table 1
Ground Water Data Summary
Former Service Station No. 15556
708 West Garfield Avenue
Milwaukee, WI
Delta Project No. 32160

GMOW-8	ANALYTICAL PARAMETERS									FIELD MEASUREMENTS								
										TOC: 687.42		Top of Screen: 678.42						
										Ground Water							Soil Gas	
Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total BTEX µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Depth to Water feet	Elevation of Water feet	Dissolved Oxygen mg/L	REDOX mill: Volts	Temperature °C	Conductivity µmhos	pH	O_2 %	CO_2 %
NR 140 ES	*5*	*343*	*700*	*620*				*60*										
05/13/92	<0.4	<0.6	<0.8	<1.3	0.0	<0.7	<0.7	<1.0	NS	14.69	672.73	NM	NM	NM	NM	7.2	NM	NM
07/27/93	<0.4	<0.6	<0.8	<1.3	0.0	<0.7	<0.7	<1.0	NS	12.82	674.60	NM	NM	NM	NM	6.9	NM	NM
01/04/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	16.18	671.24	NM	NM	NM	NM	NM	NM	NM
07/27/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	15.33	672.09	NM	NM	NM	NM	NM	NM	NM
11/11/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	14.01	673.41	NM	NM	NM	NM	NM	NM	NM
02/23/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	16.88	670.54	0.4	NM	12.4	NM	NM	1.8	5.0
06/01/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	14.66	672.76	1.6	NM*	11.0	NM*	NM*	6.2	0.1
09/19/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	14.47	672.95	1.3	NM	NM	NM	NM	1.1	8.8
12/07/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	14.41	673.01	0.7	NM	NM	NM	6.7	1.0	9.0
03/21/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	16.80	670.62	NM	30	9.5	2700	6.9	8.0	2.1
06/06/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	14.30	673.12	2.1	-25	10.0	2625	6.7	1.0	5.6
10/16/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	15.67	671.75	1.1	-45	14.1	2900	6.7	1.3	8.4
04/30/97	15	29	2.7	17	63.7	1.9	5.0	6.8	110	15.20	672.22	1.2	-20	10.0	2650	6.8	1.1	8.6
10/21/98	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<100	15.18	672.24	1.4	247	15.3	3410	6.59	NM	NM

Table 1
Ground Water Data Summary
Former Service Station No 15556
708 West Garfield Avenue
Milwaukee Wi
Delta Project No 32160

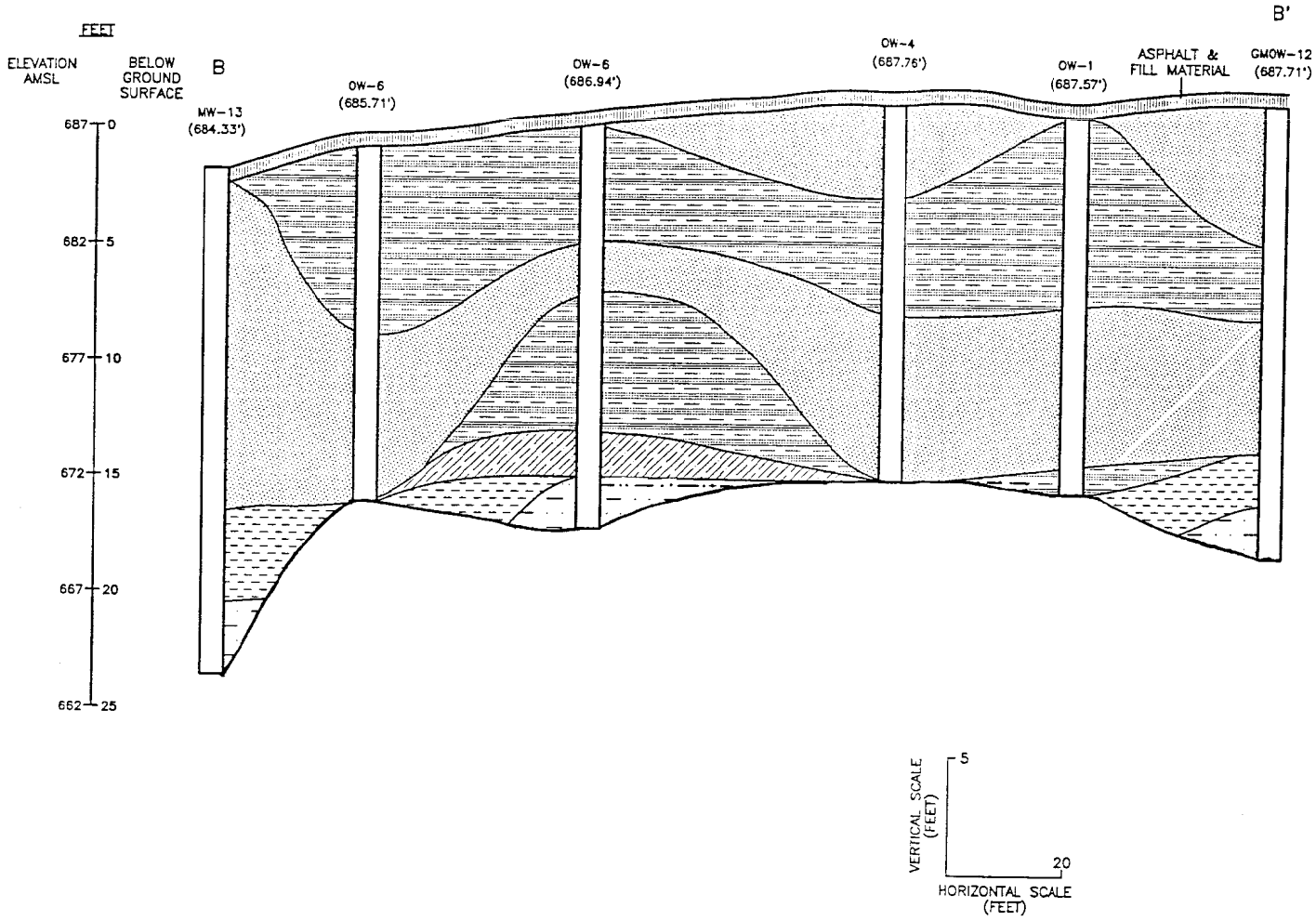
GMOW-10										FIELD MEASUREMENTS								
										TOC: 687.28	Top of Screen: 677.68							
	ANALYTICAL PARAMETERS									Ground Water							Soil Gas	
Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total BTEX µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Depth to Water feet	Elevation of Water feet	Dissolved Oxygen mg/L	REDOX milli Volts	Temperature °C	Conductivity µmhos	pH	O_2 %	CO_2 %
NR 140 ES	*5*	*343*	*700*	*620*				*60*										
05/13/92	<0.4	1.00	<0.8	<1.3	1.0	<0.7	<0.7	3.2	NS	12.54	674.74	NM	NM	NM	NM	7.6	NM	NM
07/27/93	<0.4	<0.6	<0.8	<1.3	0.0	<0.7	<0.7	2.1	NS	10.08	677.20	NM	NM	NM	NM	7	NM	NM
01/04/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	13.89	673.39	NM	NM	NM	NM	NM	NM	NM
07/27/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	12.50	674.78	NM	NM	NM	NM	NM	NM	NM
11/11/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	110	77	15.87	671.41	NM	NM	NM	NM	NM	NM	NM
02/23/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	100	<50	13.85	673.43	1.8	234	11.3	234	6.9	1.9	8.7
06/01/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	11.64	675.64	3.6	245	10.0	1470	6.9	4.2	8.9
09/19/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	11.52	675.76	2.7	NM	NM	NM	NM	3.9	11.8
12/07/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	7.6	<50	11.56	675.72	1.7	NM	NM	NM	6.7	1.5	9.2
03/21/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	13.49	673.79	2.7	120	9.5	3700	7.0	2.2	7.0
06/06/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	11.21	676.07	3.1	130	9.2	3400	6.8	3.3	7.6
10/16/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	13.08	674.20	2.1	95	14.0	4900	6.4	1.5	11.0
04/30/97	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	12.30	674.98	1.9	95	9.8	3600	6.6	1.9	9.8
10/21/98	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<100	12.50	674.78	0.8	314	14.2	2740	6.4	NM	NM

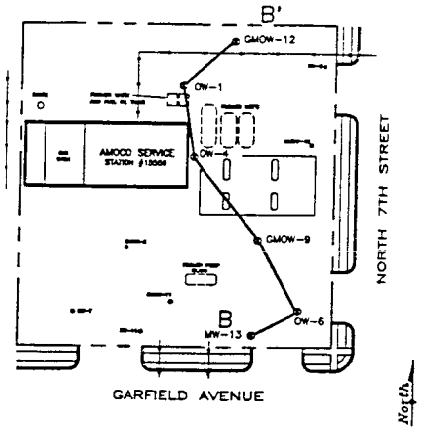
Table 1
Ground Water Data Summary
Former Service Station No 15556
708 West Garfield Avenue
Milwaukee, WI
Delta Project No 32160

GMOW-11	ANALYTICAL PARAMETERS									FIELD MEASUREMENTS								
										TOC: 686.67	Top of Screen: 679.97							
										Ground Water							Soil Gas	
Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total BTEX µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Depth to Water feet	Elevation of Water feet	Dissolved Oxygen mg/L	REDOX milli Volts	Temperature °C	Conductivity µmhos	pH	O_2 %	CO_2 %
NR 140 ES	*5*	*343*	*700*	*620*				*60*										
05/13/92	4.2	<3.0	<4.0	<6.5	4.2	<3.5	<3.5	1,100	NS	13.53	673.14	NM	NM	NM	NM	7.6	NM	NM
07/27/93	10	<6.0	<8.0	<13	10.0	<7.0	<7.0	250	NS	11.62	675.05	NM	NM	NM	NM	7.1	NM	NM
01/04/94	<2.0	<2.0	<2.0	<4.0	0.0	<2.0	<2.0	550	310	15.30	671.37	NM	NM	NM	NM	NM	NM	NM
07/27/94	<2.0	<2.0	<2.0	<4.0	0.0	<2.0	<2.0	740	350	14.20	672.47	NM	NM	NM	NM	NM	NM	NM
11/11/94	<5.0	<5.0	<5.0	<10	0.0	<5.0	<5.0	670	420	15.53	671.14	NM	NM	NM	NM	NM	NM	NM
02/23/95	<2.0	<2.0	<2.0	<4.0	0.0	<2.0	<2.0	920	430	15.90	670.77	0.6	NM	11.3	NM	NM	2.1	6.8
06/01/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	390	180	13.36	673.31	1.3	NM*	10.0	NM*	NM*	0.8	18.6
09/19/95	<2.0	<2.0	<2.0	<4.0	0.0	<2.0	<2.0	420	190	13.41	673.26	1.2	NM	NM	NM	NM	5.0	8.2
12/07/95	1.7	<1.0	<1.0	<2.0	1.7	<1.0	<1.0	90	65	12.39	674.28	1.1	NM	NM	NM	6.7	2.0	7.0
03/21/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	280	170	15.25	671.42	0.7	50	9.5	890	7.0	1.2	6.2
06/06/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	83	55	12.46	674.21	1.5	5	9.0	825	6.8	6.9	4.8
10/16/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	190	130	14.70	671.97	1.1	10	13.9	950	6.8	1.1	9.5
04/30/97	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	160	88	13.96	672.71	1.1	5	10.0	850	6.8	2.1	6.5
10/21/98	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	100	<100	14.10	672.57	1.4	262	14.2	1324	6.5	NM	NM

Table 1
Ground Water Data Summary
Former Service Station No. 15556
708 West Garfield Avenue
Milwaukee, WI
Delta Project No. 32160

GMOW-12										FIELD MEASUREMENTS								
										TOC: 687.71	Top of Screen: 678.81							
	ANALYTICAL PARAMETERS									Ground Water							Soil Gas	
Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total BTEX µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Depth to Water feet	Elevation of Water feet	Dissolved Oxygen mg/L	REDOX milli Volts	Temperature °C	Conductivity µmhos	pH	O_2 %	CO_2 %
NR 140 ES	*5*	*343*	*700*	*620*				*60*										
5/13/92	<0.4	0.9	<0.8	<1.3	0.9	<0.7	<0.7	3.1	NS	13.35	674.36	NM	NM	NM	NM	7.5	NM	NM
7/27/93	<0.4	<0.6	<0.8	<1.3	0.0	<0.7	<0.7	1.0	NS	10.10	677.61	NM	NM	NM	NM	7.1	NM	NM
1/4/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	4.0	<50	14.24	673.47	NM	NM	NM	NM	NM	NM	NM
7/27/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	12.73	674.98	NM	NM	NM	NM	NM	NM	NM
11/11/94	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	16.44	671.27	NM	NM	NM	NM	NM	NM	NM
2/23/95	1.8	<1.0	<1.0	<2.0	1.8	<1.0	<1.0	<4.0	<50	14.67	673.04	4.3	194	11.9	194	6.9	14.9	5.7
12/7/95	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	10.71	677.00	4.6	NM	NM	NM	6.8	15.3	NM
3/21/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	13.25	674.46	5.5	125	9.5	1200	7.1	17.4	3.8
6/6/96	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	10.96	676.75	6.6	100	10.0	1030	7.0	17.0	2.9
4/30/97	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<50	11.97	675.74	5.8	110	9.7	1170	6.9	17.2	3.1
10/21/98	<1.0	<1.0	<1.0	<2.0	0.0	<1.0	<1.0	<4.0	<100	12.36	675.35	1.5	307	13.4	1369	6.77	NM	NM





CROSS SECTION LOCATION MAP

LEGEND:

MONITORING WELL

CLAYEY SAND

SILTY CLAY

SAND

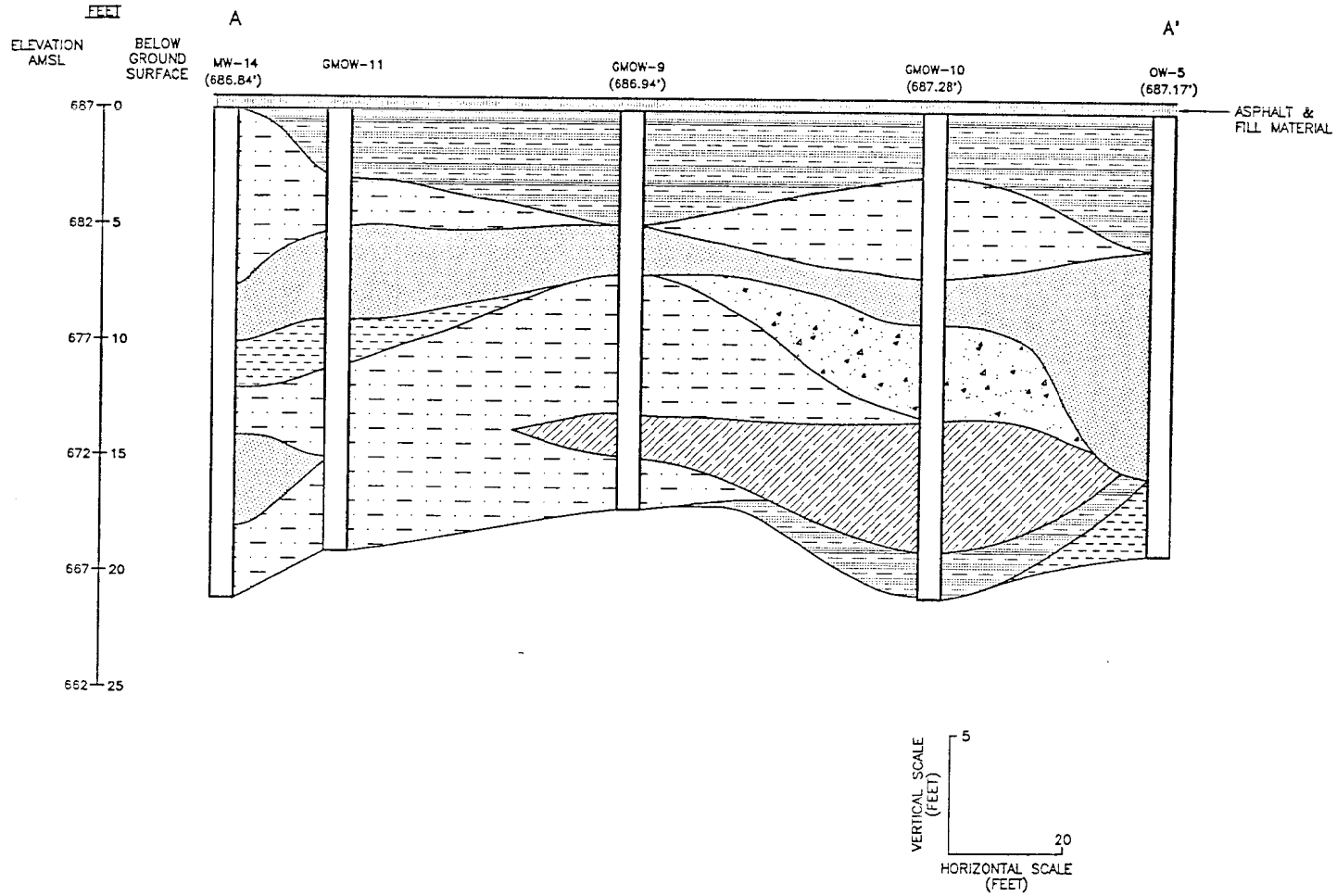
CLAY

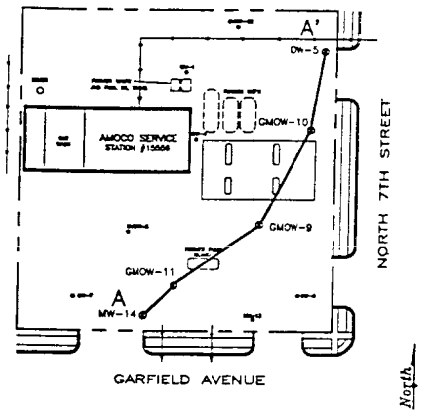
SILTY SAND

FIGURE 7
GEOLOGIC CROSS SECTION B-B'
SERVICE STATION NO. 15556
708 WEST GARFIELD AVENUE
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY
32160	VW	DD
DATE	REVIEWED BY	FILE NAME
12/23/98		32160BB

Delta Environmental Consultants, Inc.





CROSS SECTION LOCATION MAP

LEGEND:

MONITORING WELL

CLAYEY SAND

SILTY CLAY

SAND

CLAY

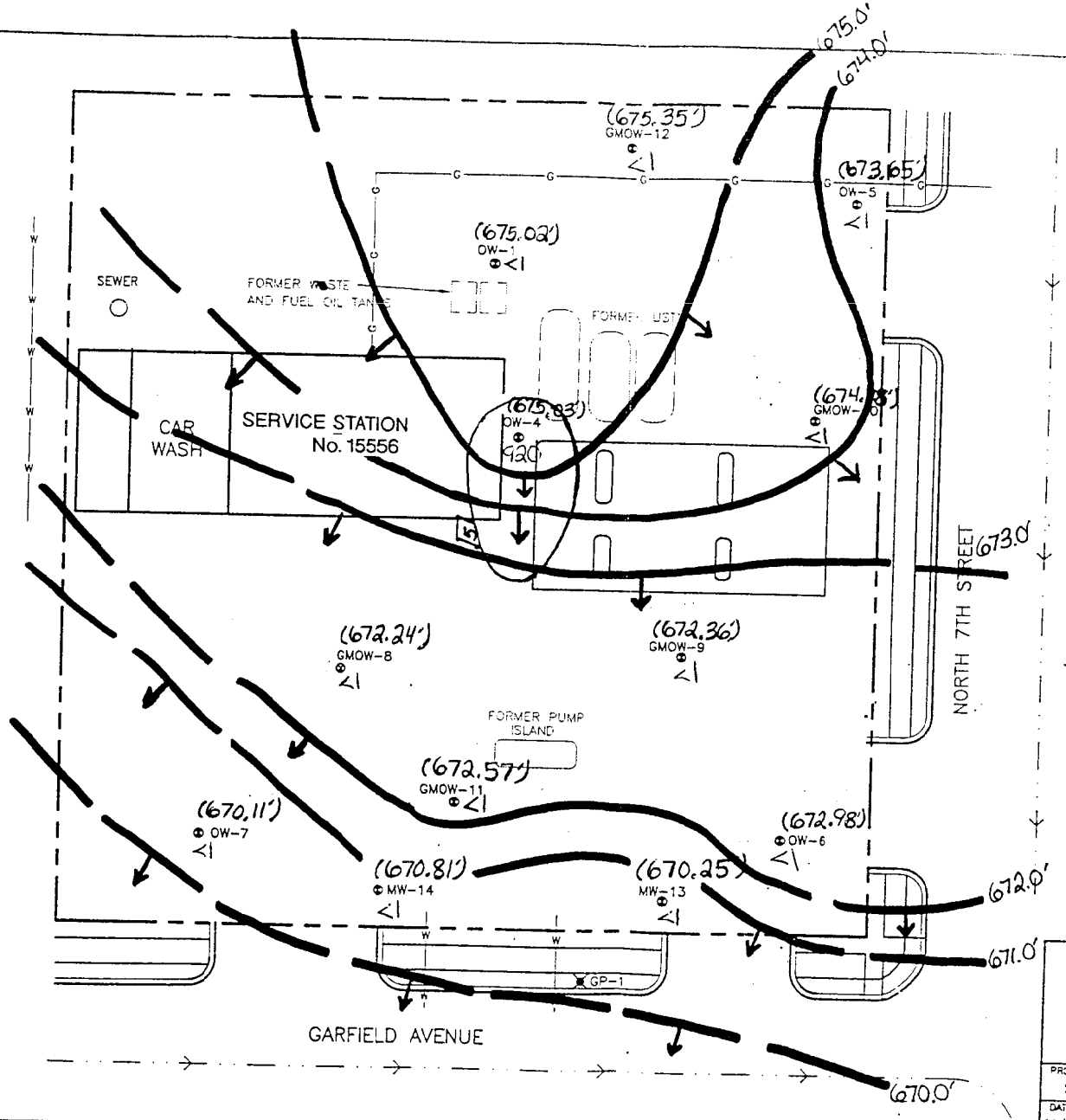
GRAVELLY SAND

SILTY SAND

FIGURE 6
GEOLOGIC CROSS SECTION A-A'
SERVICE STATION NO. 15556
708 WEST GARFIELD AVENUE
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY
32160	VW	DD
DATE	REVIEWED BY	FILE NAME
12/23/98		32160AA

Delta Environmental Consultants, Inc.



LEGEND:

- PROPERTY BOUNDARY
- G — GAS LINE
- W — WATER UTILITY
- COMBINED SANITARY AND STORM SEWER
- MONITORING WELL
- GEOPROBE POINT
- (675.35') Groundwater Elevation (in feet)
- Groundwater Contour Line
- Inferred Groundwater Contour
- Inferred Groundwater Flow Direction
- 5 Benzene Isoconcentration Contour (in ppm)
- <1 Benzene Concentration (in ppm)

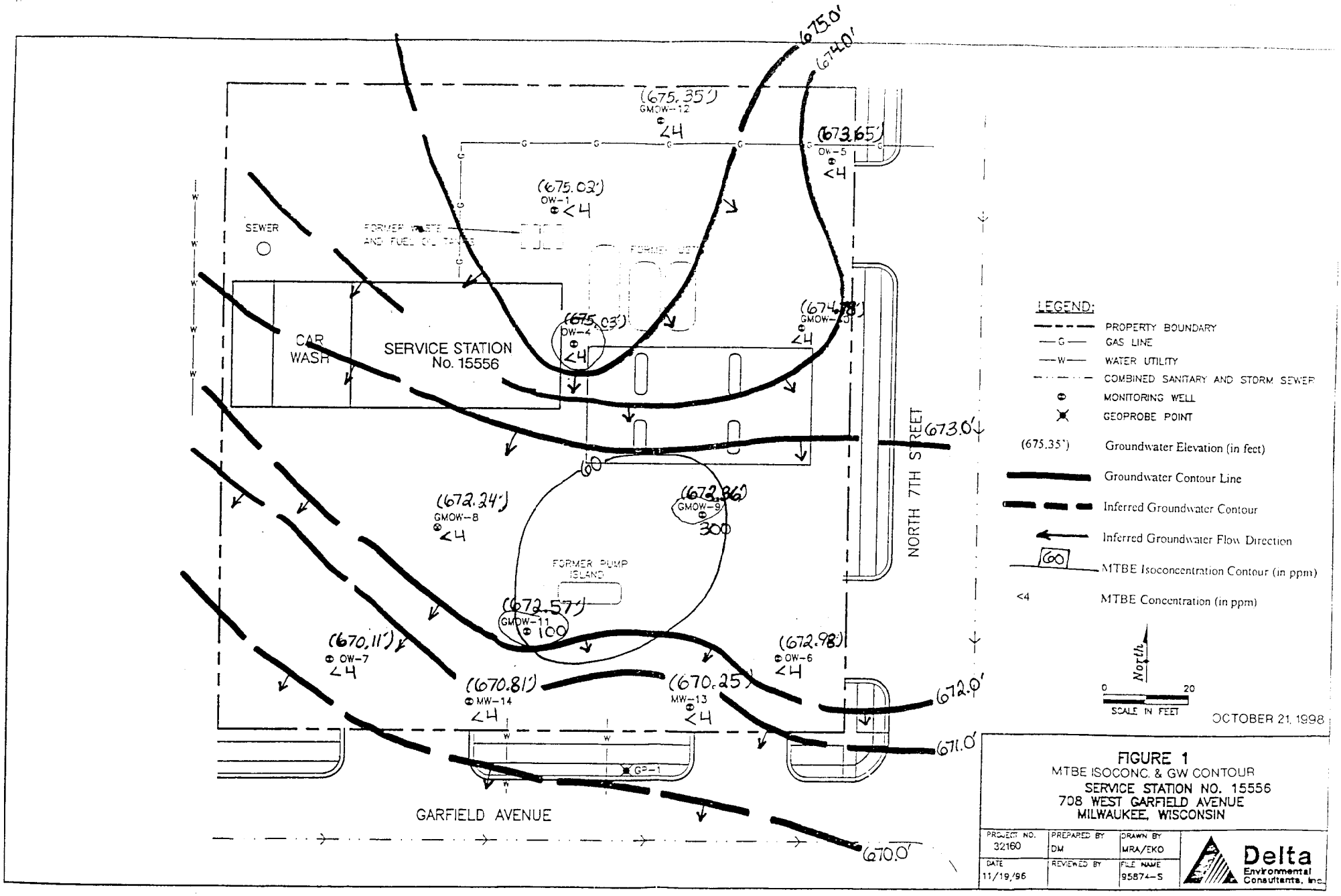
North

0 20
SCALE IN FEET

OCTOBER 21, 1998

FIGURE 2
BENZENE ISOCONC. & GW CONTOUR
SERVICE STATION NO. 15556
708 WEST GARFIELD AVENUE
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY	
32160	DM	MRA/EKO	Delta Environmental Consultants, Inc.
DATE	REVIEWED BY	FILE NAME	
11/19/96		95874-S	


675.0'
674.0'
(675.35')
GMOW-12
<4
(673.65')
OW-5
<4
(675.02')
OW-1
<4
SEWER
FORMER WASTE AND FUEL OIL TANKS
FORMER UST
CAR WASH
SERVICE STATION No. 15556
(675.03')
OW-4
<4
(674.78')
GMOW-10
<4
673.0'
NORTH 7TH STREET
60
(672.24')
GMOW-8
<4
(672.86')
GMOW-9
300
FORMER PUMP ISLAND
(672.57')
GMOW-11
100
(670.11')
OW-7
<4
(672.98')
OW-6
<4
(670.81')
MW-14
<4
(670.25')
MW-13
<4
672.0'
671.0'
GP-1
GARFIELD AVENUE
670.0'
LEGEND:
PROPERTY BOUNDARY
GAS LINE
WATER UTILITY
COMBINED SANITARY AND STORM SEWER
MONITORING WELL
GEOPROBE POINT
(675.35') Groundwater Elevation (in feet)
Groundwater Contour Line
Inferred Groundwater Contour
Inferred Groundwater Flow Direction
60 MTBE Isoconcentration Contour (in ppm)
<4 MTBE Concentration (in ppm)
North
0 20
SCALE IN FEET
OCTOBER 21, 1998
FIGURE 1
MTBE ISOCONC. & GW CONTOUR
SERVICE STATION NO. 15556
708 WEST GARFIELD AVENUE
MILWAUKEE, WISCONSIN
PROJECT NO. 32160
PREPARED BY DM
DRAWN BY MRA/EKO
DATE 11/19/96
REVIEWED BY
FILE NAME 95874-S
Delta Environmental Consultants, Inc.