WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor
Darrell Bazzell, 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
TTY 414-263-8713

February 15, 2001

Mr. Mohammend A. Ghaffer
1215 W. Manor Lane
Milwaukee WI 53217-1645

Subject: Final Closure Letter for Former Amoco Station #19713, 7616 W. Good Hope Rd., Milwaukee, WI

FID: 241125830
BRRTS: 03-41-000075

Dear Mr. Ghaffar:

I have received a copy of the filed groundwater use restriction for the above-named site from Delta Environmental on February 5, 2001. This fulfills all the requirements of the conditional closure. 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: Lisa Noblet, Delta Environmental
WDNR SER Files

8015558

REGISTER'S OFFICE) SS
Milwaukee County, WI)

RECORDED AT 8:17 AM

01-24-2001

WALTER R. BARCZAK
REGISTER OF DEEDS

AMOUNT 14.00

Document Number | GROUNDWATER USE RESTRICTION

Recording Area

Name and Return Address:

Mohammed A. Ghaffar
1215 West Manor Lane
Milwaukee, WI 53217-1645

107-9994-210-6

Parcel Identification Number (PIN)

Declaration of Restrictions

In Re: All that part of the Southeast ¼ of Section 16, Town 8 North, Range 21 East, in the City of Milwaukee, County of Milwaukee, State of Wisconsin, bounded and described as follows:
Commencing at the South East corner of said ¼ Section; thence North along the East line of said ¼ Section, 80.08 feet to the place of beginning; thence North along the East line of said ¼ Section, 150.00 feet to a point; thence West and parallel to the South line of said ¼ Section, 200.00 feet to a point; thence South and parallel to the East line of said ¼, 150.00 feet to a point; thence East and parallel to the South line of said ¼ Section, 200.00 feet to the place of commencement.
EXCEPTING THEREFROM the East 60.00 feet thereof.

STATE OF WISCONSIN)
) ss
COUNTY OF MILWAUKEE)

WHEREAS, Mohammed Ghaffar is the owner of the above-described property, known as the former BP Amoco Service Station No. 19713, 7616 West Good Hope Road, Milwaukee, Wisconsin.

WHEREAS, one or more petroleum discharges have occurred on this property. Petroleum-contaminated groundwater above ch. NR 140, Wis. Adm. Code enforcement standards (ES) existed on this property as identified on Figure 1, hereby attached and made a part of this document, at the following locations: On September 15, 1998, benzene contaminated groundwater existed at this property at groundwater monitoring wells MW-3, MW-4, and MW-8 with concentrations of 12 micrograms per liter (µg/L), 62 µg/L, and 590 µg/L, respectively, which is above ch. NR 140 ES of 5 µg/L. On September 15, 1998, total xylenes contaminated groundwater existed at this property at groundwater monitoring well MW-8 with a concentration of 1,200 µg/L which is above ch. NR 140 ES of 620 µg/L. On September 15, 1998, total trimethylbenzenes contaminated groundwater existed at this property at groundwater monitoring well MW-8 with a concentration of 590 µg/L which is above ch. NR 140 ES of 480 µg/L. On September 15, 1998, methyl-tert-butyl ether contaminated groundwater existed at this property at groundwater monitoring wells MW-1, MW-3, MW-4, MW-5, and MW-8 with a concentration of 420 µg/L, 640 µg/L, 650 µg/L, 540 µg/L, and 1,900 µg/L, respectively, which is above ch. NR 140 ES of 60 µg/L. Figure 1 presents a site map showing the monitoring well locations.

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct further groundwater or soil 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 does not comply with drinking water standards in ch. NR 809 is restricted by chs. NR 811 and 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 it successor agency, to determine what specific requirements are applicable, prior to constructing or reconstructing a well on this property. No well may be constructed 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 or 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 one or more of the restrictions set forth in this covenant is no longer required. Upon the 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, attached to a copy of the Department's written determination, may be recorded to give notice that this deed restriction, or portions of this deed restriction, are no longer binding.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this

18 day of Dec, 2000.

Signature: [signature]

Printed Name: MOHAMMED GHAFFAR

Title: OWNER

Subscribed and sworn to before me

this 18 day of December 2000.

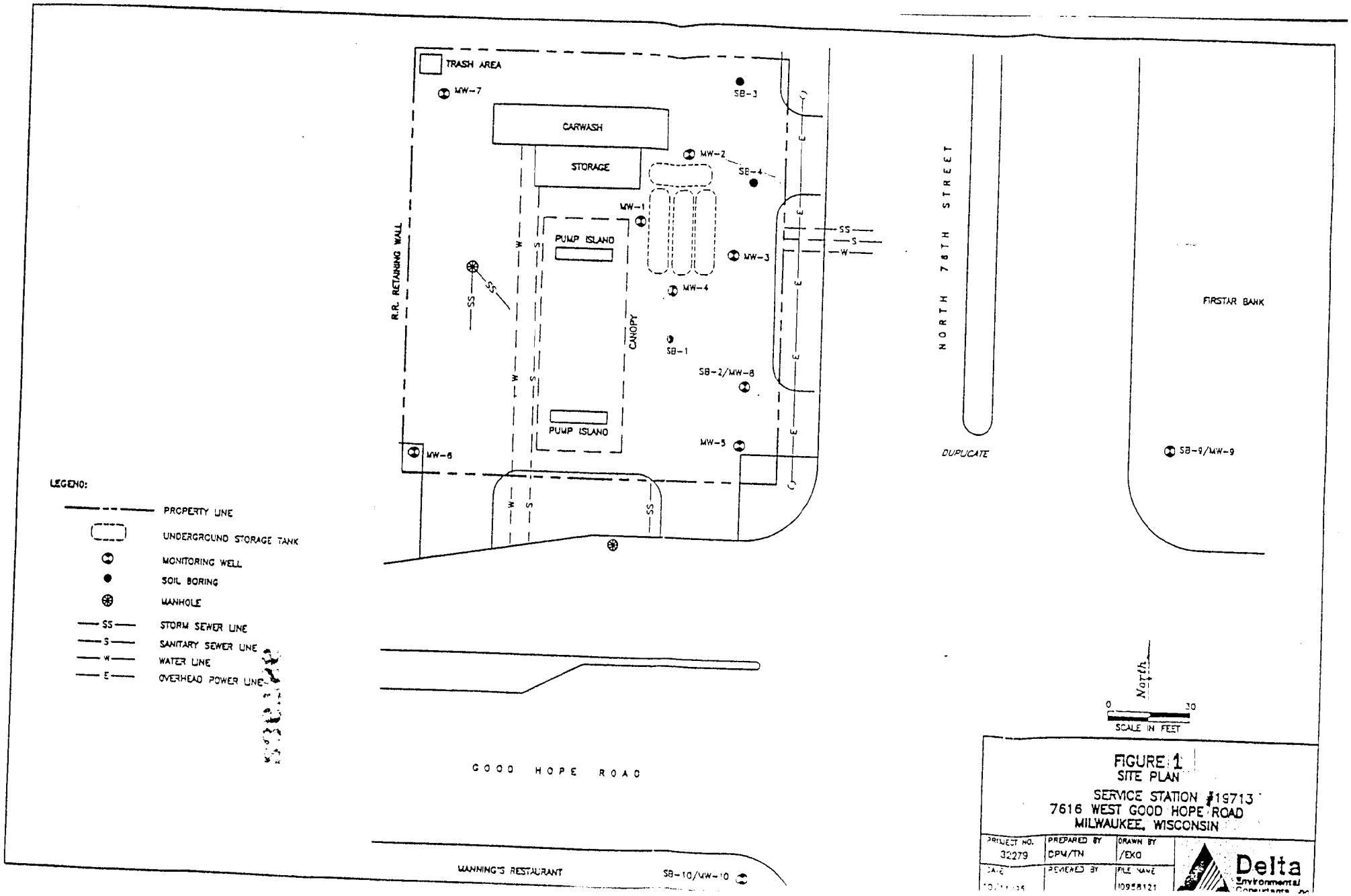
[signature]

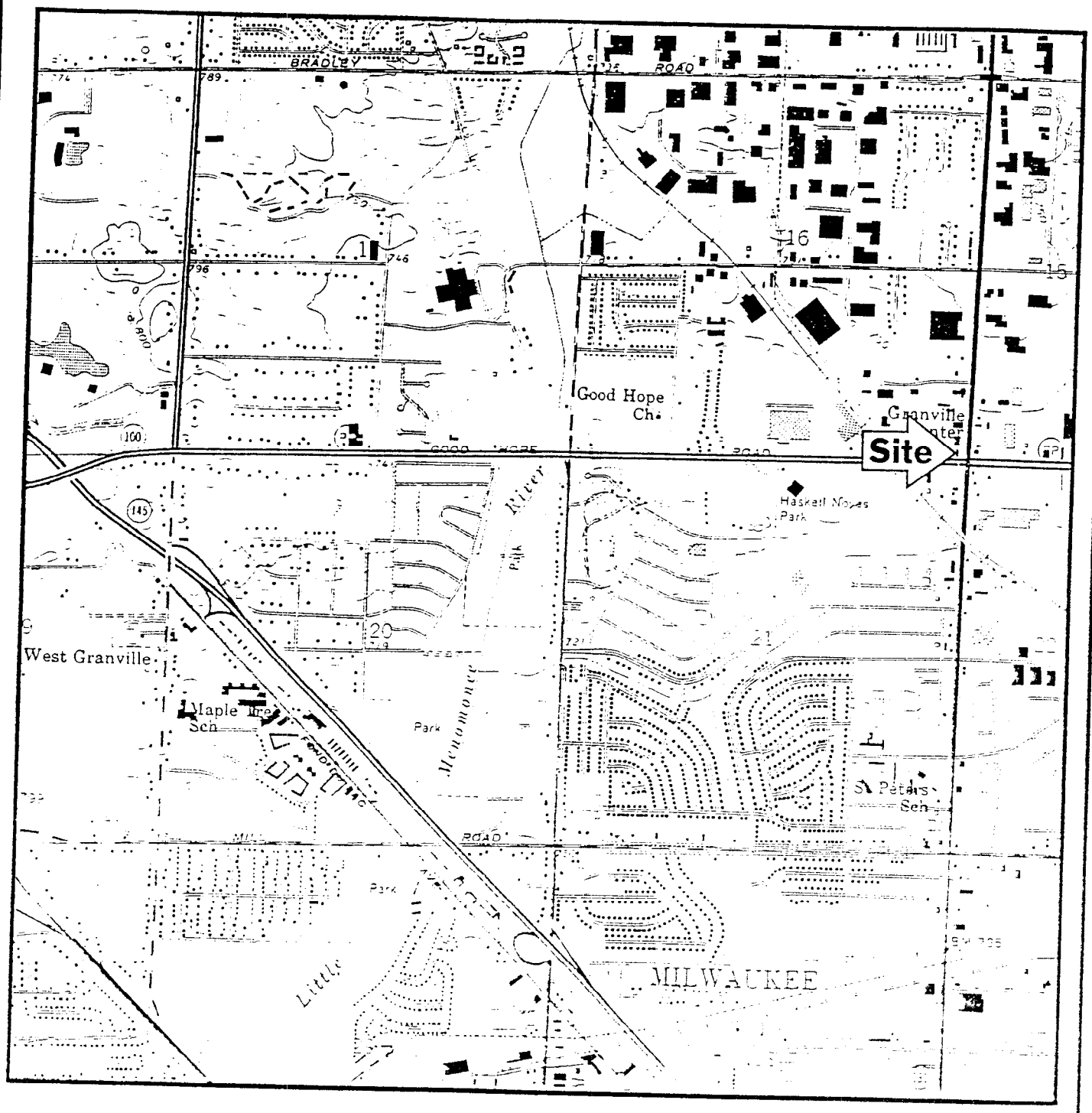
Notary Public, State of WISCONSIN

NOTARY PUBLIC JULIANNA GOMEZ STATE OF WISCONSIN

My commission expires July 25, 2004

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


TRASH AREA
MW-7
CARWASH
STORAGE
MW-2
SB-3
SB-4
MW-1
PUMP ISLAND
MW-3
MW-4
CANOPY
SB-1
SB-2/MW-8
PUMP ISLAND
MW-5
MW-6
R.R. RETAINING WALL
SS
S
W
E
NORTH 76TH STREET
DUPLICATE
FIRSTAR BANK
SB-9/MW-9
GOOD HOPE ROAD
MANNING'S RESTAURANT
SB-10/MW-10
LEGEND:
PROPERTY LINE
UNDERGROUND STORAGE TANK
MONITORING WELL
SOIL BORING
MANHOLE
STORM SEWER LINE
SANITARY SEWER LINE
WATER LINE
OVERHEAD POWER LINE
North
0
30
SCALE IN FEET
FIGURE 1
SITE PLAN
SERVICE STATION #19713
7616 WEST GOOD HOPE ROAD
MILWAUKEE, WISCONSIN
PROJECT NO.
32279
PREPARED BY
DPM/TN
DRAWN BY
/EKO
REVIEWED BY
FILE NAME
10958121
Delta
Environmental



N↑

0 ═══ 2000

Scale In Feet
(1 in = 2000 ft)

Contour Interval 10 Feet

MENOMONEE FALLS QUADRANGLE
WAUKESHA COUNTY
7.5 MINUTE SERIES (TOPOGRAPHIC)

FIGURE 1
SITE LOCATION MAP

7616 WEST GOOD HOPE ROAD
MILWAUKEE, WISCONSIN

Project No.	Prepared By	
32279	EYG	Delta Environmental Consultants, Inc.
Date 8-01-95	Reviewed By	

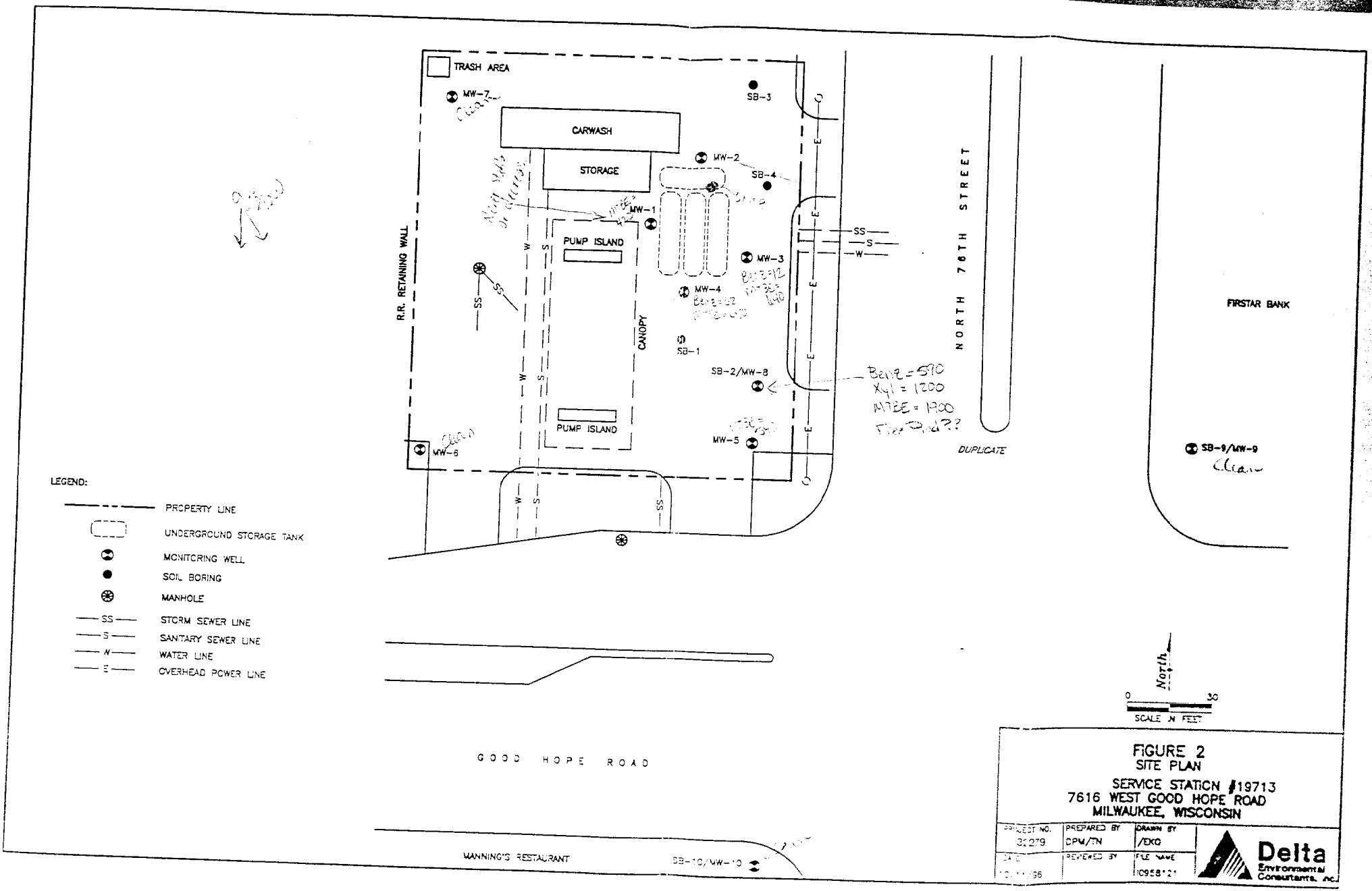
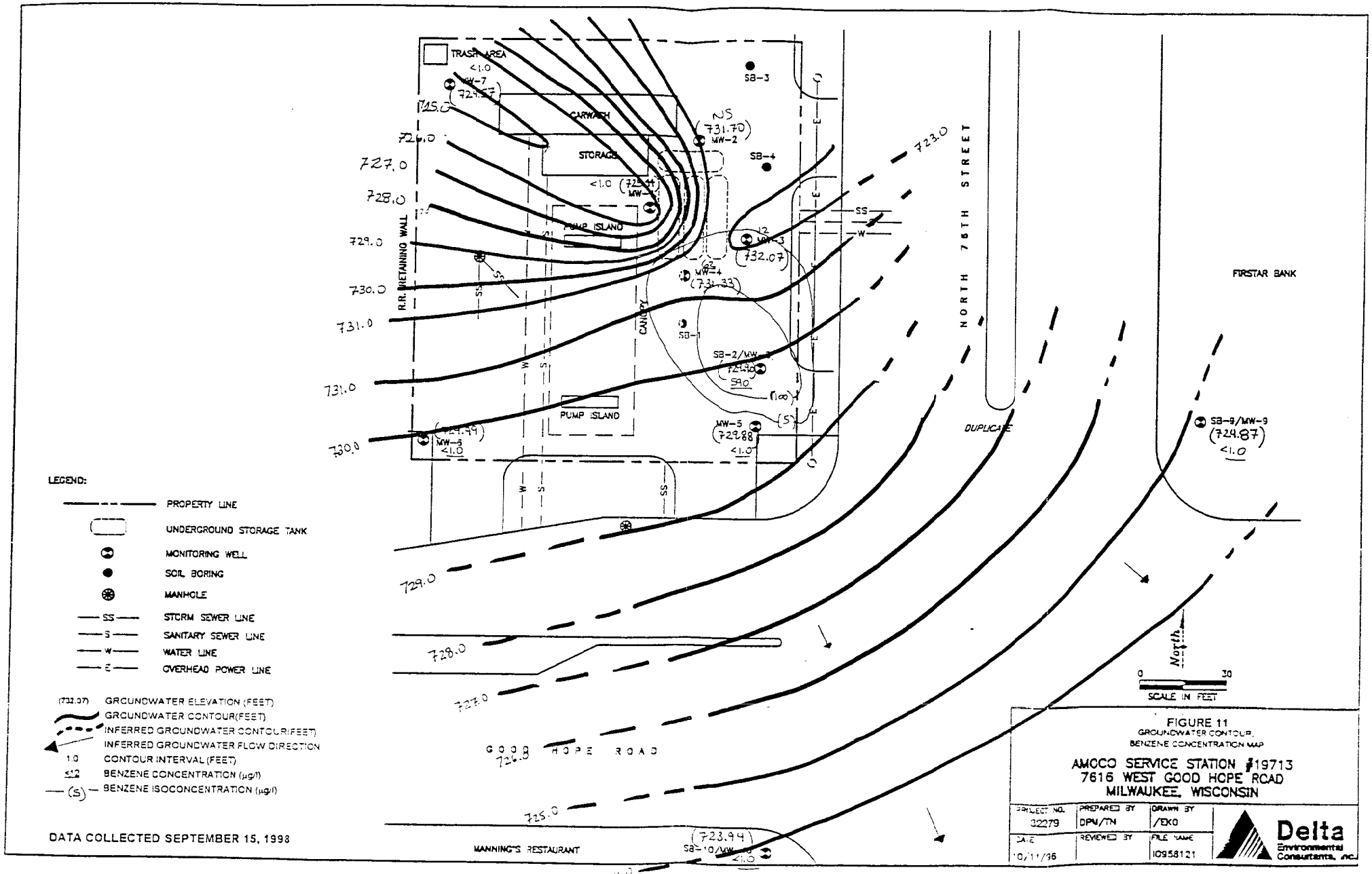


FIGURE 2
SITE PLAN
SERVICE STATION #19713
7616 WEST GOOD HOPE ROAD
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY
30279	CPM/TN	/EKG
DATE	REVIEWED BY	FILE NAME
10/11/96		10958121

Delta Environmental Consultants, Inc.


TRASH AREA
<1.0
MW-7
(724.57)
CARWASH
STORAGE
<1.0
MW-1
PUMP ISLAND
NS
(731.70)
MW-2
SB-3
SB-4
MW-3
(732.07)
MW-4
(731.33)
SB-1
SB-2/MW-2
(724.10)
59.0
(100)
(5)
MW-5
(729.88)
<1.0
PUMP ISLAND
MW-6
<1.0
R.R. RETAINING WALL
CANOPY
NORTH 76TH STREET
DUPLICATE
FIRSTAR BANK
SB-9/MW-9
(724.87)
<1.0
GOOD HOPE ROAD
MANNING'S RESTAURANT
SB-10/MW-10
(723.94)
<1.0
723.0
724.0
725.0
726.0
727.0
728.0
729.0
730.0
731.0
LEGEND:
PROPERTY LINE
UNDERGROUND STORAGE TANK
MONITORING WELL
SOIL BORING
MANHOLE
SS STORM SEWER LINE
S SANITARY SEWER LINE
W WATER LINE
E OVERHEAD POWER LINE
(732.07) GROUNDWATER ELEVATION (FEET)
GROUNDWATER CONTOUR(FEET)
INFERRED GROUNDWATER CONTOUR(FEET)
INFERRED GROUNDWATER FLOW DIRECTION
1.0 CONTOUR INTERVAL (FEET)
<1.0 BENZENE CONCENTRATION (µg/l)
(5) BENZENE ISOCONCENTRATION (µg/l)
DATA COLLECTED SEPTEMBER 15, 1998
North
0 30
SCALE IN FEET
FIGURE 11
GROUNDWATER CONTOUR, BENZENE CONCENTRATION MAP
AMOCO SERVICE STATION #19713
7616 WEST GOOD HOPE ROAD
MILWAUKEE, WISCONSIN
PROJECT NO. 32279
PREPARED BY DPN/TN
DRAWN BY /EKO
DATE 10/11/96
REVIEWED BY
FILE NAME 10958121
Delta Environmental Consultants, Inc.

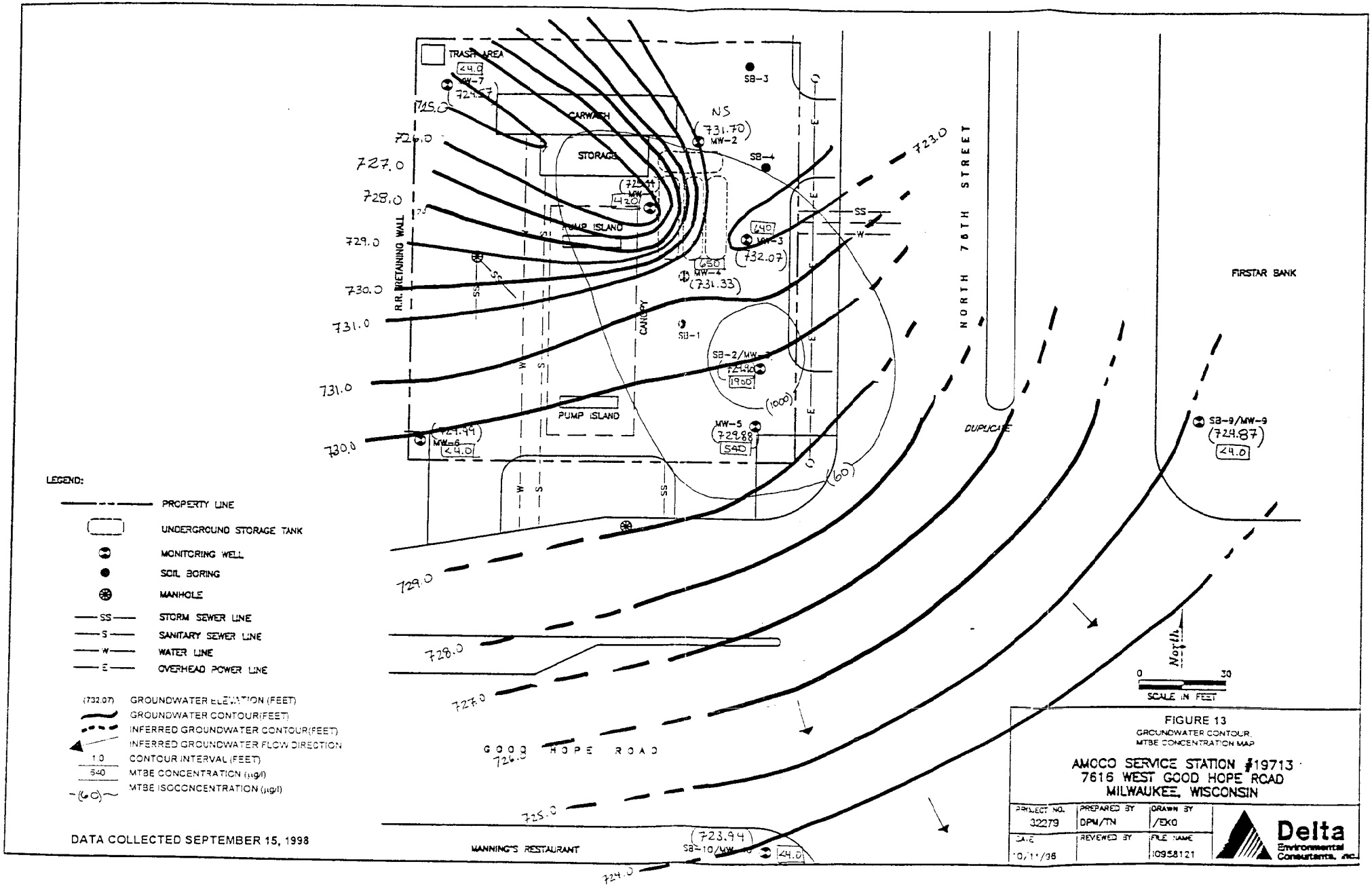

TRASH AREA
MW-7
<4.0
(724.57)
CARWASH
STORAGE
PUMP ISLAND
NS
(731.70)
MW-2
SB-3
SB-4
MW-1
(725.44)
420
MW-3
640
(732.07)
MW-4
650
(731.33)
SB-1
SB-2/MW-3
(729.90)
1900
(1000)
MW-5
(729.88)
540
(60)
MW-6
(729.99)
<4.0
CANOPY
R.R. RETAINING WALL
NORTH 76TH STREET
DUPLICATE
FIRSTAR BANK
SB-9/MW-9
(724.87)
<4.0
GOOD HOPE ROAD
MANNING'S RESTAURANT
SB-10/MW-10
(723.94)
<4.0
725.0
726.0
727.0
728.0
729.0
730.0
731.0
723.0
724.0
North
0
30
SCALE IN FEET
LEGEND:
PROPERTY LINE
UNDERGROUND STORAGE TANK
MONITORING WELL
SOIL BORING
MANHOLE
SS STORM SEWER LINE
S SANITARY SEWER LINE
W WATER LINE
E OVERHEAD POWER LINE
(732.07) GROUNDWATER ELEVATION (FEET)
GROUNDWATER CONTOUR(FEET)
INFERRED GROUNDWATER CONTOUR(FEET)
INFERRED GROUNDWATER FLOW DIRECTION
1.0 CONTOUR INTERVAL (FEET)
540 MTBE CONCENTRATION (µg/l)
(60) MTBE ISOCONCENTRATION (µg/l)
DATA COLLECTED SEPTEMBER 15, 1998
FIGURE 13
GROUNDWATER CONTOUR,
MTBE CONCENTRATION MAP
AMOCO SERVICE STATION #19713
7616 WEST GOOD HOPE ROAD
MILWAUKEE, WISCONSIN
PROJECT NO. 32279
PREPARED BY DPM/TN
DRAWN BY /EKO
DATE 10/11/98
REVIEWED BY
FILE NAME 10958121
Delta Environmental Consultants, Inc.

Table 2

Groundwater Analytical Results
Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

MW-1

	Analytical Parameters									Phase 1 Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
01/10/89	9	3.0	NA	2.0	NA	NA	NA	NA	NA							
08/17/89	95	5.0	13.0	12.0	NA	NA	NA	NA	NA							
06/12/91	<1.0	<1.0	<1.0	<1.0	NA	NA	**99**	840*	NA							
12/02/91	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**120**	<10	NA							
04/13/93	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**65**	<50	NA							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	<0.7	**70**	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**75**	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**130**	61	<3.0	1.6	-011	16.0	446	7.26	1.5	0.4
02/07/96	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**150**	64	NA	3.3	120	9.9	4150	6.90	0.4	0.2
08/07/96	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	**150**	130	NA	1.3	069	17.1	3700	6.91	1.8	0.5
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**300**	170	NA	1.5	147	10.2	3120	7.47	6.0	5.0
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**420**	210	NA	0.7	163	17.3	5160	6.50	1.0	1.0

MW-2

	Analytical Parameters									Phase 1 Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
01/10/89	6	4.0	NA	3.0	NA	NA	NA	NA	NA							
08/17/89	36	5.0	NA	7.0	NA	NA	NA	NA	NA							
06/12/91	<1.0	<1.0	<1.0	<1.0	NA	NA	47	<100	NA							
12/02/91	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	48	<10	NA							
04/13/93	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	29	93.6	NA							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	<0.7	37	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**64**	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**84**	<50	<3.0	2.3	014	19.6	382	7.34	1.5	1.0
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	6.8	<100	NS	2.5	124	10.1	1980	7.26	10+-	10+
09/15/98	NS	NS	NS	NS	NS	NS	NS	NS	NS		slight amount of water in well bottom - not enough to sample					

Table 2

Groundwater Analytical Results
Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

MW-3

Analytical Parameters										Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/l
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
01/10/89	**3304**	**2300**	192.0	**2387**	NA	NA	NA	NA	NA							
08/17/89	**3379**	**1998**	489.0	**1252**	NA	NA	**1660**	NA	NA							
06/12/91	**960**	300	32.0	180	NA	NA	**730**	1300 *	NA							
12/02/91	**100**	54	32.0	34	1.4	19.0	**360**	1200	NA							
04/13/93	**240**	**380**	110.0	360	12.0	120.0	**96**	2100	NA							
11/01/94	**17**	1.8	12.0	2.5	<0.7	5.4	**240**	320	NA							
05/18/95	**120**	12	98.0	49	<5.0	71.0	**2400**	1700	NA							
10/18/95	**33**	17	27.0	<10.0	<5.0	7.7	**2300**	1400	NA	0.8	-105	17.6	414	6.93	10++	10+
02/07/96	**66**	<10.0	33.0	<20.0	<10.0	<10.0	**3300**	1900	NA	2.5	-156	7.0	5290	6.90	10+	10+
08/07/96	**14**	<2.0	7.0	<4.0	<2.0	<2.0	**1700**	1300	NA	1.1	-150	18.5	3640	6.92	10++	10+
04/03/98	**5.4**	<1.0	8.3	<2.0	<1.0	1.2	**380**	270	NA	1.5	203	7.8	2230	7.43	10++	10+
09/15/98	**12**	3.0	24.0	4.9	<1.0	4.5	**640**	530	NA	0.7	-071	21.6	2230	6.99	5.0	4.0

MW-4

Analytical Parameters										Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
01/10/89	**232**	39.0	37.0	474.0	NA	NA	NA	NA	NA							
06/12/91	**1400**	250.0	8.6	370.0	NA	NA	**520**	2800	NA							
12/02/91	**100**	37.0	25.0	80.0	3.1	140.0	**190**	2000	NA							
04/13/93	**170**	43.0	32.0	82.0	6.9	120.0	**100**	1000	NA							
11/01/94	**15**	0.9	1.2	3.9	<0.7	12.0	**180**	280	NA							
05/18/95	**100**	3.0	16.0	9.9	1.1	49.0	**25**	370	NA							
10/18/95	**25**	3.2	1.6	6.5	<1.0	23.0	**150**	240	<3.0	2.1	-095	18.4	289	6.83	8.0	7.0
02/07/96	**62**	3.2	19.0	<2.0	<1.0	17.0	**150**	400	NA	2.7	-084	8.0	4660	6.90	10+	10+
08/07/96	**8**	<2.0	<2.0	<4	<2.0	5.0	**160**	170	NA	1.6	-188	18.9	2690	7.26	10++	10+
04/03/98	**130**	3.5	28.0	19.0	3.0	180	**900**	1300	NA	0.9	170	9.5	2880	8.01	9.0	8.0
09/15/98	**62**	5.3	3.7	34.0	5.3	96	**650**	910	NA	0.6	-090	19.8	2680	6.86	7.0	6.5

Table 2
Groundwater Analytical Results
Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

MW-5

Analytical Parameters										Phase 1 Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
01/10/89	**490**	4.0	25.0	43.0	NA	NA	NA	NA	NA							
08/17/89	**191**	8.0	26.0	2.0	NA	NA	**192**	NA	NA							
06/12/91	<1.0	<1.0	<1.0	<1.0	NA	NA	**230**	<100	NA							
12/02/91	**170**	1.3	20.0	24.0	1.9	16.0	**420**	1100.0	NA							
04/13/93	**2600**	170.0	620.0	**1100**	<20	630.0	**570**	7900.0	NA							
11/01/94	1.4	<0.6	<0.8	1.3	<0.7	<0.7	**110**	70.0	NA							
05/18/95	**130**	2.4	24.0	25.0	<1.0	16.0	**43**	270.0	NA							
02/07/96	4.9	<1.0	<1.0	<2.0	<1.0	<1.0	**120**	88.0	NA	2.7	-084	8.6	4650	7.10	0.6	0.3
08/07/96	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	**45**	<100	NA	1.2	088	18.1	1977	7.01	1.0	0.2
04/03/98	<1.0	1.7	<1.0	2	<1.0	2.1	**560**	410.0	NA	1.4	140	9.8	2970	7.67	5.0	2.0
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**540**	220.0	NA	0.7	134	21.9	2710	6.71	0.3	0.2

MW-6

Analytical Parameters										Phase 1 Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
06/12/91*	<1.0	<1.0	<1.0	<1.0	NA	NA	<1.0	600.0	NA							
12/02/91	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<10	NA							
04/13/93	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	<4.0	<50	NA							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	<0.7	<1.0	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<50	<3.0	2.3	046	16.5	266	7.15	2.0	0.3
04/03/98	<1.0	<1.0	<1.0	<2.0	1.4	1.6	30.0	<100	NA	4.1	108	8.3	1543	8.16	1.0	0.2
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<100	NA	0.8	142	19.6	2800	6.84	0.2	0.1

Table 2

Groundwater Analytical Results
Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No 32279

MW-7

Analytical Parameters										Phase 1 Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
01/10/89	NA	4.0	NA	NA	NA	NA	NA	NA	NA							
12/02/91	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<10	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<50	NA							
10/18/95	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	<4.0	50	<3.0	2.3	.077	16.3	439	7.16	1.5	1.0
02/07/96	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<50	NA	9.3	-.078	10.1	4020	7.10	3.5	2.0
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	49	<100	NA	1.6	.179	10.2	2880	6.97	10++	10+
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<100	NA	1.5	.143	18.8	4390	6.63	10++	10+

MW-8

Analytical Parameters										Phase 1 Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
12/02/91	**11000**	**18000**	**2300**	**9900**	950	3300	**1900**	190000	NA							
04/13/93	**7300**	**9300**	**2300**	**9700**	680	2700	**1000**	53000	NA							
11/01/94	**3400**	**2300**	**1600**	**4300**	270	1700	**220**	22000	NA							
05/18/95	**4300**	**2900**	**2200**	**8500**	660	2800	**650**	29000	NA							
10/18/95	**2400**	**1000**	**1400**	**5000**	390	1700	**2000**	22000	<3.0	1.4	-.102	17.0	389	7.13	10++	10+
02/07/96	**2200**	**430**	**940**	**2500**	210	930	**2600**	12000	NA	3.1	-.147	6.6	3620	7.00	10+	10+
08/07/96	**1300**	**380**	**1200**	**2960**	360	1400	**470**	17000	NA	1.1	-.121	19.1	3290	6.72	10++	10+
04/03/98	**990**	120	690	**1400**	140	510	**2500**	6000	NA	1.0	.132	9.5	3030	6.97	8.0	7.0
09/15/98	**590**	62	540	**1200**	120	470	**1900**	6800	NA	0.6	-.090	22.4	3380	6.67	10++	10+

Table 2
Groundwater Analytical Results
Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

MW-9

Analytical Parameters										Phase 1 Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/l	Soluble Iron mg/l
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	<0.7	<1.0	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<50	<3.0	1.5	014	13.8	1124	7.57	NM	NM
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<100	NA	1.5	209	9.2	978	7.30	0.2	0.1
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<100	NA	0.9	137	17.4	1026	7.59	0.1	0.05

MW-10

Analytical Parameters										Phase 1 Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	1,3,5-TMB µg/L	1,2,4 TMB µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	*5*	*343*	*700*	*620*			*60*		*15*							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	<0.7	<1.0	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<50	<3.0	1.1	012	14.5	209	7.25	0.1	0.0
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	5.3	<100	NA	2.2	221	10.0	1763	8.17	0.6	0.1
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<4.0	<100	NA	0.8	054	17.8	1934	6.79	0.15	0.1

COPY

Delta
Environmental Consultants, Inc.

17500 W. Liberty Lane
Suite A
New Berlin, WI 53146-2109
U.S.A.
262 789-0254
FAX: 262/789-5483

August 17, 2000

Mr. James P. Purkl
Milwaukee City Engineering
Room 612, Frank P. Ziedler Municipal Bldg.
841 North Broadway Street,
Milwaukee, Wisconsin 53202

RECEIVED
AUG 22 2000

Subject: **Notification of Residual Petroleum Contamination**
Former BP Amoco Service Station No. 19713
7616 West Good Hope Road
Milwaukee, WI
BRRTS No. 03-41-000075
Delta Project No. 32279

Dear Mr. Purkl:

The Wisconsin Department of Natural Resources (WDNR) granted conditional case closure to the above referenced site. As part of the conditional closure, the WDNR requires notification to the City of Milwaukee of residual petroleum contamination associated with the subject site.

The most current groundwater analytical data available was collected September 15, 1998. Petroleum-contaminated groundwater above Wisconsin Administrative Code (WAC) NR 140 enforcement standards (ES) existed on this property on September 15, 1998, as identified on Figure 1, hereby attached and made a part of this document, at the following locations:

- Benzene contaminated groundwater existed at this property at groundwater monitoring wells MW-3, MW-4, and MW-8 with concentrations of 12 micrograms per liter (µg/L), 62 µg/L, and 590 µg/L, respectively, which are above WAC NR 140 ES of 5 µg/L.
- Total trimethylbenzenes contaminated groundwater existed at this property at groundwater monitoring well MW-8 with a concentration of 590 µg/L which is above WAC NR 140 ES of 480 µg/L.
- Methyl-tert-butyl ether contaminated groundwater existed at this property at groundwater monitoring wells MW-1, MW-3, MW-4, MW-5, and MW-8 with a concentration of 420 µg/L, 640 µg/L, 650 µg/L, 540 µg/L, and 1,900 µg/L, respectively, which are above WAC NR 140 ES of 60 µg/L.

Figure 1 presents a site map showing the monitoring well locations. Historical groundwater analytical results are summarized on Table 1.

Should you have any questions or require additional information regarding this site, please do not hesitate to contact me at (262) 827-4819.

Sincerely,
DELTA ENVIRONMENTAL CONSULTANTS, INC.

Lisa Noblet
Project Professional

Attachment

C: Ray Stoelting – BP Amoco
John Hnat - WDNR

Table 2

Groundwater Analytical Results
Amoco Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

MW-1

	Analytical Parameters								Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
01/10/89	9	3.0	NA	2.0	NA	NA	NA	NA							
08/17/89	**95**	5.0	13.0	12.0	NA	NA	NA	NA							
06/12/91	<1.0	<1.0	<1.0	<1.0	NA	**99**	840*	NA							
12/02/91	<1.0	<1.0	<1.0	<2.0	<1.0	**120**	<10	NA							
04/13/93	<1.0	<1.0	<1.0	<2.0	<1.0	**65**	<50	NA							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	**70**	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	**75**	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	**130**	61	<3.0	1.6	-011	16.0	446	7.26	1.5	0.4
02/07/96	<1.0	<1.0	<1.0	<2.0	<1.0	**150**	64	NA	3.3	120	9.9	4150	6.90	0.4	0.2
08/07/96	<2.0	<2.0	<2.0	<4.0	<2.0	**150**	130	NA	1.3	069	17.1	3700	6.91	1.8	0.5
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	**300**	170	NA	1.5	147	10.2	3120	7.47	6.0	5.0
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	**420**	210	NA	0.7	163	17.3	5160	6.50	1.0	1.0

MW-2

									Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
01/10/89	**6**	4.0	NA	3.0	NA	NA	NA	NA							
08/17/89	**36**	5.0	NA	7.0	NA	NA	NA	NA							
06/12/91	<1.0	<1.0	<1.0	<1.0	NA	47	<100	NA							
12/02/91	<1.0	<1.0	<1.0	<2.0	<1.0	48	<10	NA							
04/13/93	<1.0	<1.0	<1.0	<2.0	<1.0	29	93.6	NA							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	37	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	**64**	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	**84**	<50	<3.0	2.3	014	19.6	382	7.34	1.5	1.0
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	6.8	<100	NS	2.5	124	10.1	1980	7.26	10++	10+
09/15/98	NS	NS	NS	NS	NA	NS	NS	NS	slight amount of water in well bottom - not enough to sample						

Table 2

Groundwater Analytical Results
Amoco Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

MW-3

	Analytical Parameters								Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
01/10/89	**3304**	**2300**	192.0	2387	NA	NA	NA	NA							
08/17/89	**3379**	**1998**	489.0	1252	NA	**1660**	NA	NA							
06/12/91	**960**	300	32.0	180	NA	**730**	1300 *	NA							
12/02/91	**100**	54	32.0	34	20.4	**360**	1200	NA							
04/13/93	**240**	380	110.0	360	132.0	**96**	2100	NA							
11/01/94	**17**	1.8	12.0	2.5	5.4	**240**	320	NA							
05/18/95	**120**	12	98.0	49	71.0	**2400**	1700	NA							
10/18/95	**33**	17	27.0	<10.0	7.7	**2300**	1400	NA	0.8	-105	17.6	414	6.93	10++	10+
02/07/96	**66**	<10.0	33.0	<20.0	<10	**3300**	1900	NA	2.5	-156	7.0	5290	6.90	10+	10+
08/07/96	**14**	<2.0	7.0	<4.0	<2.0	**1700**	1300	NA	1.1	-150	18.5	3640	6.92	10++	10+
04/03/98	**5.4**	<1.0	8.3	<2.0	1.2	**380**	270	NA	1.5	203	7.8	2230	7.43	10++	10+
09/15/98	**12**	3.0	24.0	4.9	4.5	**640**	530	NA	0.7	-071	21.6	2230	6.99	5.0	4.0

MW-4

	Analytical Parameters								Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
01/10/89	**232**	39.0	37.0	474.0	NA	NA	NA	NA							
06/12/91	**1400**	250.0	8.6	370.0	NA	**520**	2800	NA							
12/02/91	**100**	37.0	25.0	80.0	143.1	**190**	2000	NA							
04/13/93	**170**	43.0	32.0	82.0	126.9	**100**	1000	NA							
11/01/94	**15**	0.9	1.2	3.9	12	**180**	280	NA							
05/18/95	**100**	3.0	16.0	9.9	50.1	25	370	NA							
10/18/95	**25**	3.2	1.6	6.5	23	**150**	240	<3.0	2.1	-095	18.4	289	6.83	8.0	7.0
02/07/96	**62**	3.2	19.0	<2.0	17	**150**	400	NA	2.7	-084	8.0	4660	6.90	10+	10+
08/07/96	**8**	<2.0	<2.0	<4	5	**160**	170	NA	1.6	-188	18.9	2690	7.26	10++	10+
04/03/98	**130**	3.5	28.0	19.0	183	**900**	1300	NA	0.9	170	9.5	2880	8.01	9.0	8.0
09/15/98	**62**	5.3	3.7	34.0	101.6	**650**	910	NA	0.6	-090	19.8	2680	6.86	7.0	6.5

Table 2

Groundwater Analytical Results
Amoco Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

MW-5

	Analytical Parameters								Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
01/10/89	**490**	4.0	25.0	43.0	NA	NA	NA	NA							
08/17/89	**191**	8.0	26.0	2.0	NA	**192**	NA	NA							
06/12/91	<1.0	<1.0	<1.0	<1.0	NA	**230**	<100	NA							
12/02/91	**170**	1.3	20.0	24.0	17.1	**420**	1100.0	NA							
04/13/93	**2600**	170.0	620.0	1100	630.0	**570**	7900.0	NA							
11/01/94	1.4	<0.6	<0.8	<1.3	<0.7	**110**	70.0	NA							
05/18/95	**130**	2.4	24.0	25.0	16.0	43	270.0	NA							
02/07/96	4.9	<1.0	<1.0	<2.0	<1.0	**120**	88.0	NA	2.7	-084	8.6	4650	7.10	0.6	0.3
08/07/96	<2.0	<2.0	<2.0	<4.0	<2.0	45	<100	NA	1.2	088	18.1	1977	7.01	1.0	0.2
04/03/98	<1.0	1.7	<1.0	<2	2.1	**560**	410.0	NA	1.4	140	9.8	2970	7.67	5.0	2.0
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	**540**	220.0	NA	0.7	134	21.9	2710	6.71	0.3	0.2

MW-6

	Analytical Parameters								Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
06/12/91*	<1.0	<1.0	<1.0	<1.0	NA	<1.0	600.0	NA							
12/02/91	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<10	NA							
04/13/93	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	NA							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	<1.0	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	<3.0	2.3	046	16.5	266	7.15	2.0	0.3
04/03/98	<1.0	<1.0	<1.0	<2.0	3.0	30.0	<100	NA	4.1	108	8.3	1543	8.16	1.0	0.2
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<100	NA	0.8	142	19.6	2800	6.84	0.2	0.1

Table 2

Groundwater Analytical Results
Amoco Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

MW-7

	Analytical Parameters								Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
01/10/89	NA	4.0	NA	NA	NA	NA	NA	NA							
12/02/91	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<10	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	<3.0	2.3	077	16.3	439	7.16	1.5	1.0
02/07/96	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	NA	9.3	-078	10.1	4020	7.10	3.5	2.0
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	49	<100	NA	1.6	179	10.2	2880	6.97	10++	10+
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<100	NA	1.5	143	18.8	4390	6.63	10++	10+

MW-8

	Analytical Parameters								Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
12/02/91	**11000**	**18000**	**2300**	9900	**4250**	**1900**	190000	NA							
04/13/93	**7300**	**9300**	**2300**	9700	**3380**	**1000**	53000	NA							
11/01/94	**3400**	**2300**	**1600**	4300	**1970**	**220**	22000	NA							
05/18/95	**4300**	**2900**	**2200**	8500	**3460**	**650**	29000	NA							
10/18/95	**2400**	**1000**	**1400**	5000	**2090**	**2000**	22000	<3.0	1.4	-102	17.0	389	7.13	10++	10+
02/07/96	**2200**	430	**940**	2500	**1140**	**2600**	12000	NA	3.1	-147	6.6	3620	7.00	10+	10+
08/07/96	**1300**	380	**1200**	2960	**1760**	**470**	17000	NA	1.1	-121	19.1	3290	6.72	10++	10+
04/03/98	**990**	120	690	1400	**650**	**2500**	6000	NA	1.0	132	9.5	3030	6.97	8.0	7.0
09/15/98	**590**	62	540	1200	**590**	**1900**	6800	NA	0.6	-090	22.4	3380	6.67	10++	10+

Table 2

Groundwater Analytical Results
Amoco Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

MW-9

	Analytical Parameters								Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	<1.0	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	<3.0	1.5	014	13.8	1124	7.57	NM	NM
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<100	NA	1.5	209	9.2	978	7.30	0.2	0.1
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<100	NA	0.9	137	17.4	1026	7.59	0.1	0.05

MW-10

	Analytical Parameters								Phase I Biodegradation Parameters						
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH	Total Iron mg/L	Soluble Iron mg/L
NR 140 ES	***5***	***1000***	***700***	***10000***	***480***	***60***		***15***							
11/01/94	<0.4	<0.6	<0.8	<1.3	<0.7	<1.0	<50	NA							
05/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	NA							
10/18/95	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<50	<3.0	1.1	012	14.5	209	7.25	0.1	0.0
04/03/98	<1.0	<1.0	<1.0	<2.0	<1.0	5.3	<100	NA	2.2	221	10.0	1763	8.17	0.6	0.1
09/15/98	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<100	NA	0.8	054	17.8	1934	6.79	0.15	0.1

Table 2
Groundwater Analytical Results
Amoco Service Station No. 19713
7616 West Good Hope Road
Milwaukee, Wisconsin
Delta No. 32279

Trip Blank

Analytical Parameters								
Parameter/ Date Sampled	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	GRO µg/L	Dissolved Lead µg/L
04/03/98	<1	<1	<1	<2	<1.0	8.0	<100	ND

NOTES:
06/12/91* analysis for MW-1, MW-3, & MW-6 was somewhat atypical of the gasoline standard.
TMB = Trimethylbenzene
MTBE = Methyl Tertiary Butyl Ether
GRO = Gasoline Range Organics. Prior to 1993, GRO was analyzed as Total Hydrocarbons.
DO = Dissolved Oxygen
Redox = Reduction/Oxidation potential
µg/L = micrograms per liter or parts per billion (ppb)
ppm = parts per million
µmhos/cm = micromhos per centimeter
D = Duplicate
NA = Not analyzed for indicated parameter
NR 140 ES = Rev. 03/00 Wisconsin Adm. Code Chap. NR 140 Enforcement Standard
NM = Not measured on indicated date
NS = Not sampled on indicated date
E = The concentration reported for this compound exceeds the calibration range of the instrument.

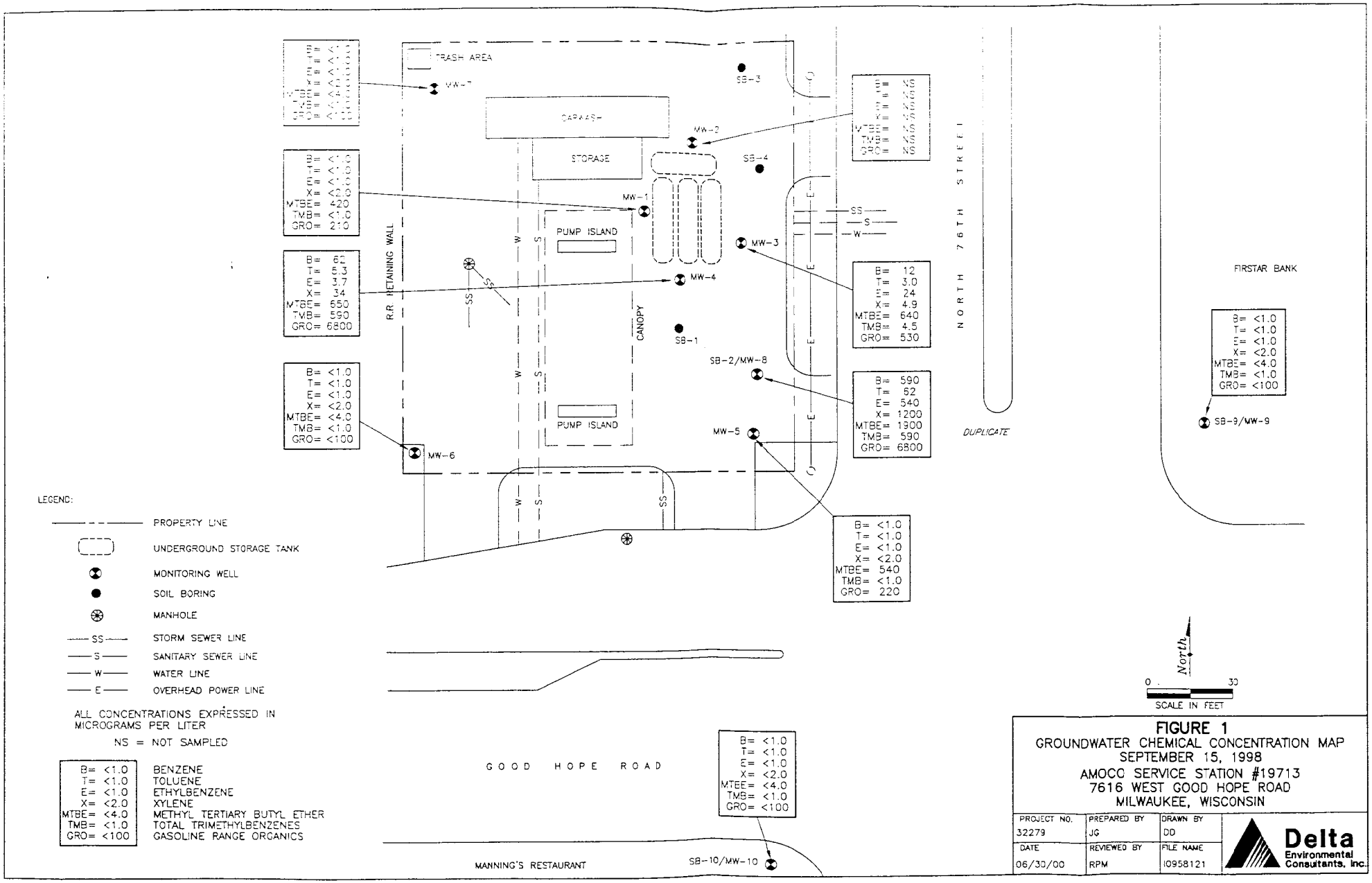
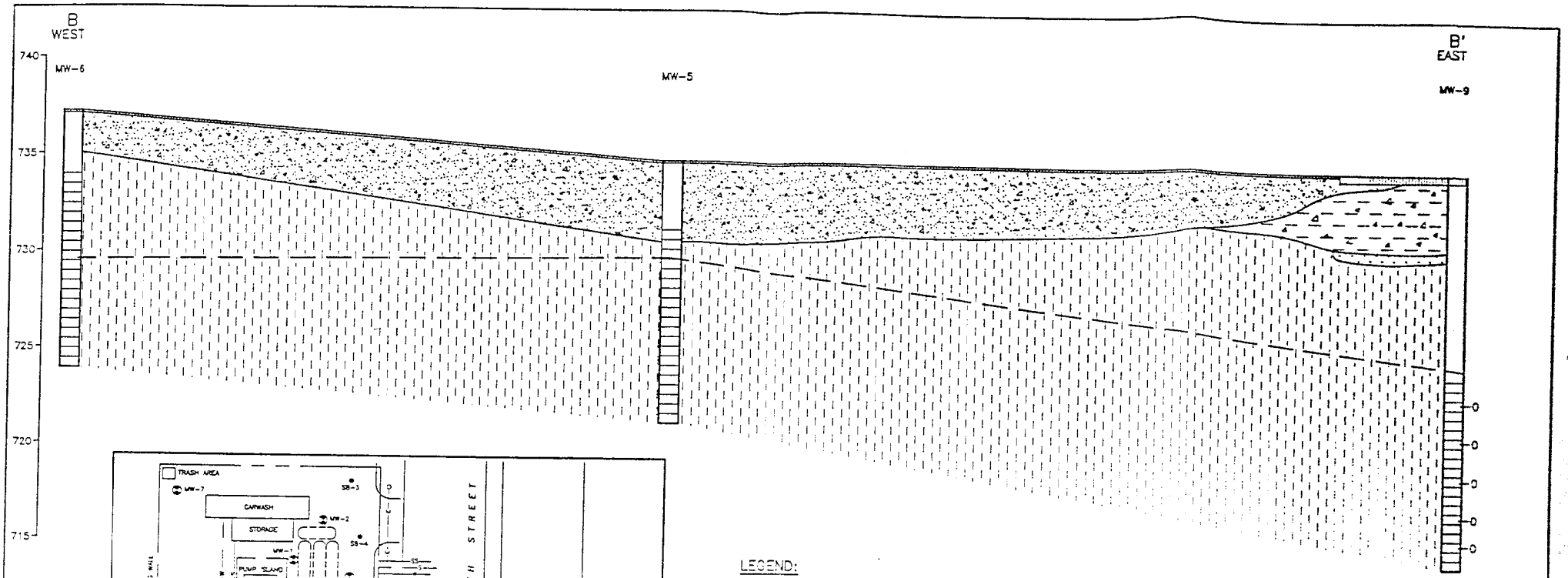


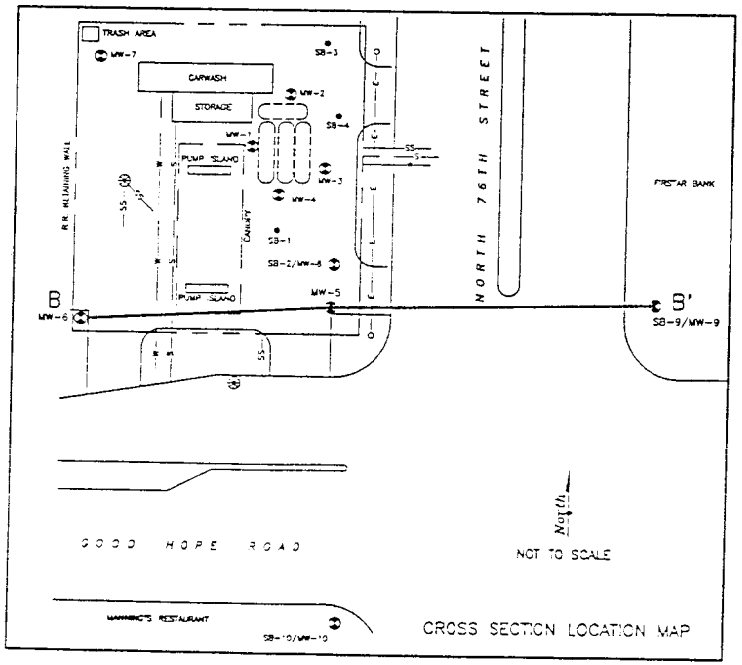
FIGURE 1

GROUNDWATER CHEMICAL CONCENTRATION MAP
SEPTEMBER 15, 1998
AMOCO SERVICE STATION #19713
7616 WEST GOOD HOPE ROAD
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY
32279	JG	DD
DATE	REVIEWED BY	FILE NAME
06/30/00	RPM	10958121

Delta Environmental Consultants, Inc.





LEGEND:

MONITORING WELL

0 PHOTOIONIZATION READING (PID) (PARTS PER MILLION)

SCREENED INTERVAL

NOTE:
NO PID READINGS WERE MEASURED FOR MW-5 & MW-6.

GROUNDWATER ELEVATION (SEPTEMBER 15, 1998)

ASPHALT

GRAVEL WITH SAND

CLAY WITH GRAVEL

CONCRETE

CLAY

VERTICAL SCALE (FEET) 5

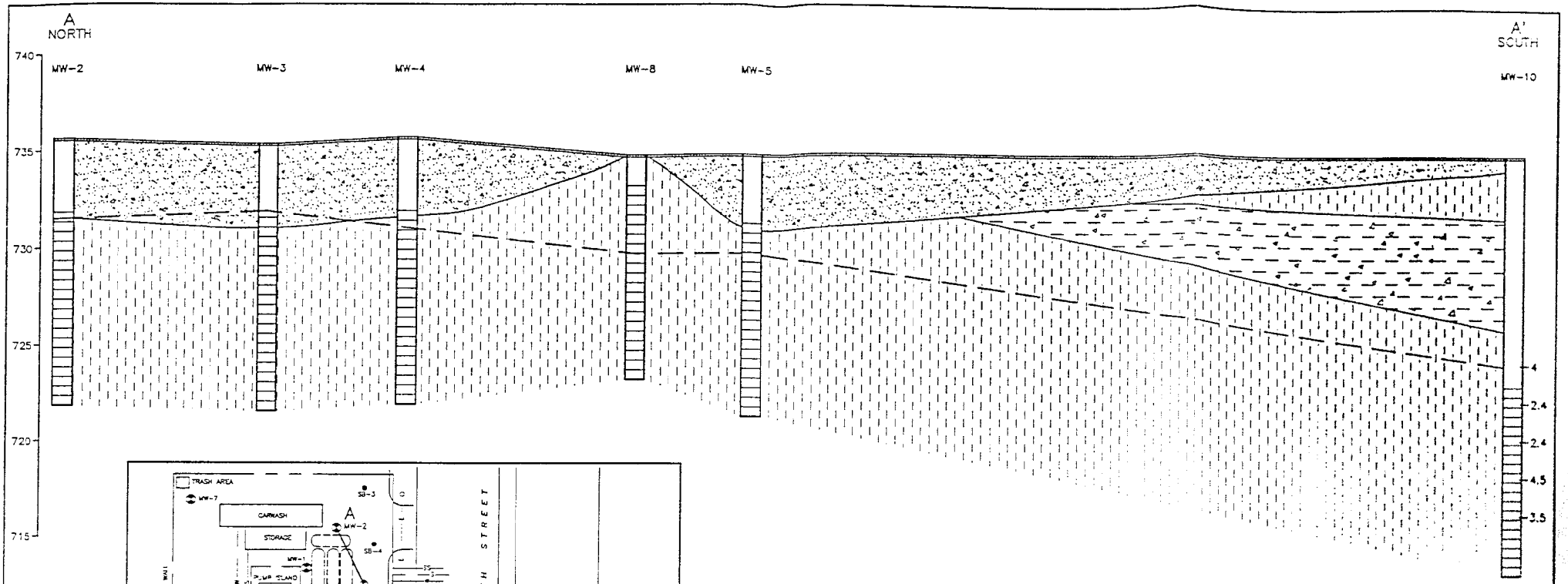
VERTICAL EXAGGERATION 4x

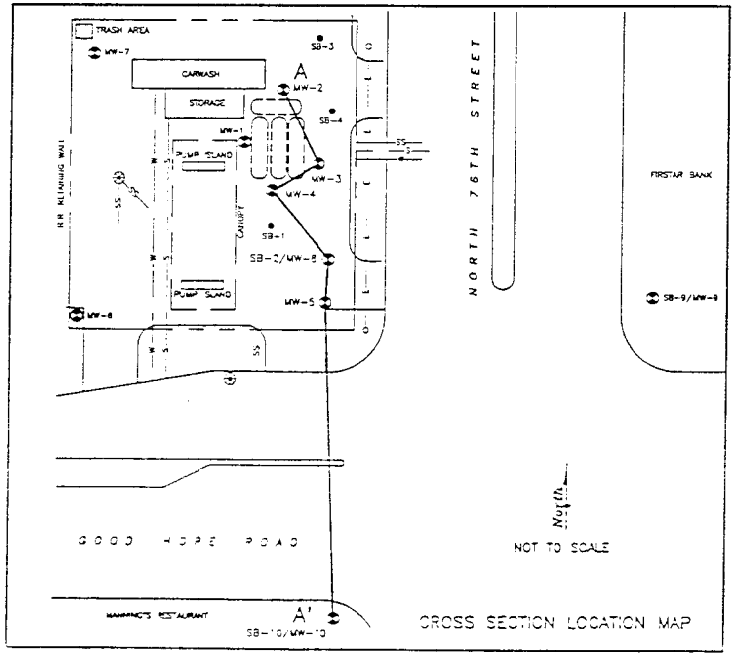
20 HORIZONTAL SCALE (FEET)

FIGURE 5
GEOLOGIC CROSS SECTION B-B'
SERVICE STATION NO. 19713
7616 WEST GOOD HOPE ROAD
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY
32279	SM	CD
DATE	REVIEWED BY	FILE NAME
10/20/98		32279B9

Delta Environmental Consultants, Inc.





CROSS SECTION LOCATION MAP

LEGEND:

MONITORING WELL

4 PHOTOIONIZATION READING (PID) (PARTS PER MILLION)

SCREENED INTERVAL

NOTE:
NO PID READINGS WERE MEASURED FOR MW-2, MW-3, MW-4, MW-5 & MW-8.

GROUNDWATER ELEVATION (SEPTEMBER 15, 1998)

ASPHALT

GRAVEL WITH SAND

CLAY WITH GRAVEL

CLAY

VERTICAL SCALE (FEET) 5

VERTICAL EXAGGERATION 4x

20 HORIZONTAL SCALE (FEET)

FIGURE 4

GEOLOGIC CROSS SECTION A-A'
SERVICE STATION NO. 19713
7616 WEST GOOD HOPE ROAD
MILWAUKEE, WISCONSIN

PROJECT NO.	PREPARED BY	DRAWN BY
32279	SM	CD
DATE	REVIEWED BY	FILE NAME
10/19/98		32279AA

Delta Environmental Consultants, Inc.