GIS REGISTRY INFORMATION

SITE NAME:	Maas Petroleum						
BRRTS #:	03-41-003441			**FID #** (if appropriate):			
COMMERCE # (if appropriate):	53214-5144-30						
CLOSURE DATE:	September 17, 2004						
STREET ADDRESS:	5930 W Greenfield Ave						
CITY:	West Allis						
SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection):	**X =**	684022	**Y =**	284665			
CONTAMINATED MEDIA:	Groundwater		Soil		Both	X	
OFF-SOURCE GW CONTAMINATION >ES:		Yes			No	X	
• **IF YES, STREET ADDRESS:**							
• **GPS COORDINATES** (meters in WTM91 projection):	**X =**		**Y =**				
OFF-SOURCE SOIL CONTAMINATION >Generic or Site-Specific RCL (SSRCL):		Yes		No	X		
• **IF YES, STREET ADDRESS 1:**							
• **GPS COORDINATES** (meters in WTM91 projection):	**X =**		**Y =**				
CONTAMINATION IN RIGHT OF WAY:	Yes	X	No				

DOCUMENTS NEEDED

Closure Letter, and any conditional closure letter issued	X
Copy of most recent deed, including legal description, for all affected properties	X
Certified survey map or relevant portion of the recorded plat map (*if referenced in the legal description*) for all affected properties	X
County Parcel ID number, *if used for county*, for all affected properties	X
Location Map which outlines all properties within contaminated site boundaries on USGS topographic map or plat map in sufficient detail to permit the parcels to be located easily (8.5x14" if paper copy). If groundwater standards are exceeded, the map must also include the location of all municipal and potable wells within 1200' of the site.	X
Detailed Site Map(s) for all affected properties, showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. (8.5x14", if paper copy) This map shall also show the location of all contaminated public streets, highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding ch. NR 140 ESs and soil contamination exceeding ch. NR 720 generic or SSRCLs.	X
Tables of Latest Groundwater Analytical Results (no shading or cross-hatching)	X
Tables of Latest Soil Analytical Results (no shading or cross-hatching)	X
Isoconcentration map(s), *if required for site investigation (SI)* (8.5x14" if paper copy). The isoconcentration map should have flow direction and extent of groundwater contamination defined. **If not available, include the latest extent of contaminant plume map.**	X
GW: Table of water level elevations, with sampling dates, and free product noted if present	X
GW: Latest groundwater flow direction/monitoring well location map (should be 2 maps if maximum variation in flow direction is greater than 20 degrees)	X
SOIL: Latest horizontal extent of contamination exceeding generic or SSRCLs, with one contour	X
Geologic cross-sections, *if required for SI.* (8.5x14' if paper copy)	X
RP certified statement that legal descriptions are complete and accurate.	X
Copies of off-source notification letters (if applicable)	
Letter informing ROW owner of residual contamination (if applicable)(public, highway or railroad ROW)	X
Copy of (soil or land use) deed restriction (s) or deed notice if any required as a condition of closure	

commerce.wi.gov
Wisconsin
Department of Commerce

ENVIRONMENTAL & REGULATORY SERVICES DIVISION
BUREAU OF PECFA
101 West Pleasant Street, Suite 100A
Milwaukee, Wisconsin 53212-3963
TDD #: (608) 264-8777
Fax #: (414) 220-5374
Jim Doyle, Governor
Cory L. Nettles, Secretary

September 17, 2004

Mr. Jeff Maas
Maas Petroleum, Inc.
5930 West Greenfield Avenue
West Allis, WI 53214-5144

RE: **Final Closure**

Commerce # 53214-5144-30 WDNR BRRTS # 03-41-003441
Maas Petroleum, 5930 West Greenfield Avenue, West Allis

Dear Mr. Maas:

The Wisconsin Department of Commerce (Commerce) has received all items required as conditions for closure of the site referenced above. This case is now listed as "closed" on the Commerce database and will be included on the Wisconsin Department of Natural Resources (WDNR) Geographic Information System (GIS) Registry of Closed Remediation Sites to address residual soil and groundwater contamination. It is in your best interest to keep all documentation related to the environmental activities that were conducted.

If residual contamination is encountered in the future, it must be managed in accordance with all applicable state and federal regulations. If it is determined that any remaining contamination poses a threat, the case may be reopened and further investigation or remediation may be required.

Thank you for your efforts to bring this case to closure. If you have any questions, please contact me in writing at the letterhead address or by telephone at (414) 220-5376.

Sincerely,

Linda M. Michalets
Hydrogeologist
Site Review Section

cc: Mr. Jeffrey Larkin, Moraine Environmental, Inc.
Case File

commerce.wi.gov
Wisconsin
Department of Commerce

ENVIRONMENTAL & REGULATORY SERVICES DIVISION
BUREAU OF PECFA
101 West Pleasant Street, Suite 100A
Milwaukee, Wisconsin 53212-3963
TDD #: (608) 264-8777
Fax #: (414) 220-5374
Jim Doyle, Governor
Cory L. Nettles, Secretary

June 30, 2004

Mr. Jeff Maas
Maas Petroleum, Inc.
5930 West Greenfield Avenue
West Allis, WI 53214-5144

RE: **Conditional Case Closure**

Commerce # 53214-5144-30 WDNR BRRTS # 03-41-003441
Maas Petroleum, 5930 West Greenfield Avenue, West Allis

Dear Mr. Maas:

The Wisconsin Department of Commerce (Commerce) has reviewed the request for case closure prepared by your consultant, Moraine Environmental, Inc., for the site referenced above. It is understood that residual soil and groundwater contamination remains on-site. Commerce has determined that this site does not pose a significant threat to the environment and human health. No further investigation or remedial action is necessary.

The following condition must be satisfied to obtain final closure:

- The one temporary and three permanent monitoring wells must be properly abandoned and the appropriate documentation forwarded to me at the letterhead address.

This letter serves as your written notice of "no further action". Timely filing of your final PECFA claim (if applicable) is encouraged. If your claim is not received within 120 days of the date of this letter, interest costs incurred after 60 days of the date of this letter will not be eligible for PECFA reimbursement.

Thank you for your efforts to protect Wisconsin's environment. If you have any questions, please contact me in writing at the letterhead address or by telephone at (414) 220-5376.

Sincerely,

L-m. C

Linda M. Michalets
Hydrogeologist
Site Review Section

cc: Mr. Jeffrey Larkin, Moraine Environmental, Inc.
Case File

DOCUMENT NO.

STATE BAR OF WISCONSIN FORM 3—1963
QUIT CLAIM DEED

REC. 1985 MISC. 1362

THIS SPACE RESERVED FOR RECORDING DATA

5982261

REGISTER'S OFFICE
Milwaukee County, WI } ss
RECORDED AT 3:35 PM

NOV - 4 1986

REEL 1985 IMAGE 1362

Ulrich Angell REGISTER OF DEEDS

Eugene E. Maas and Jeffrey E. Maas, as tenants in common

quit-claims to Maas Petroleum, Inc.

the following described real estate in Milwaukee County, State of Wisconsin:

RETURN TO Atty Sandra E. Stein
759 No Milwaukee St
Milwaukee, WI 53202

Lots Six (6) and Seven (7) in Block One (1) in Hinkley's Subdivision #1, in the North West One-quarter (1/4) of Section Two (2), Township Six (6) North, of Range Twenty-one (21) East and the South West One-quarter (1/4) of Section Thirty-five (35), Township Seven (7) North, of Range Twenty-one (21) East, in the City of West Allis, County of Milwaukee, State of Wisconsin, excepting that part conveyed to the City of West Allis, in Volume 2773 of Deeds, on Pages 495 to 496 inclusive as Document No. 2958139

Tax Parcel No: 438-0397

FEE
77.28(15)
EXEMPT

5982261
RECORD 4.00

This is not (is) (is not) homestead property.

Dated this 1st day of October, 19 86

Eugene E. Maas (SEAL)

Jeffrey E. Maas (SEAL)

(SEAL)

(SEAL)

AUTHENTICATION

Signature(s) Eugene E. Maas and Jeffrey E. Maas

authenticated this 1st day of October, 19 86

Sandra E. Stein

*Sandra E. Stein
TITLE: MEMBER STATE BAR OF WISCONSIN
(If not, authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY
Sandra E. Stein
759 No Milwaukee St. Milw., WI 53202

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

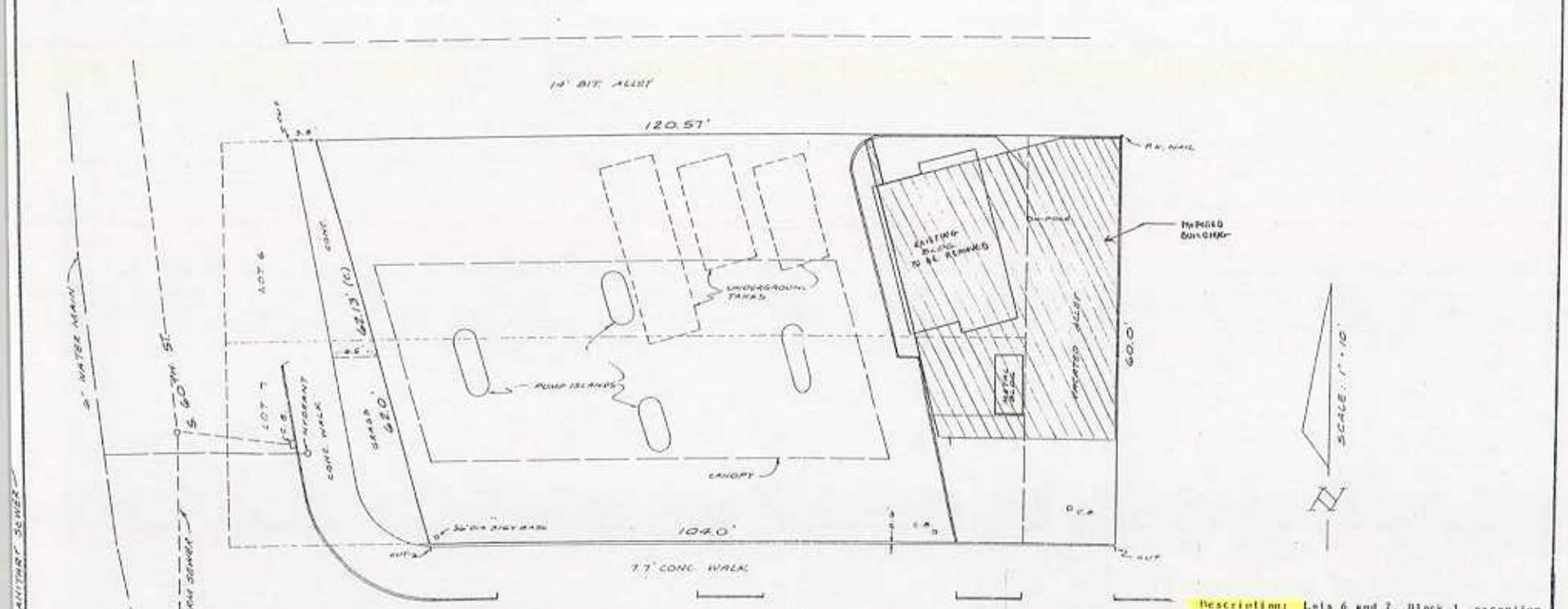
STATE OF WISCONSIN } ss.
County.

Personally came before me this day of, to me the above named

to me known to be the person who executed the foregoing instrument and acknowledge the same.

*
Notary Public County, Wis.
My Commission is permanent. (If not, state expiration date: , 19 .)

QUIT CLAIM DEED — STATE BAR OF WISCONSIN FORM No. 3—1963 — Wisconsin Legal Blank Co., Inc. Milwaukee, Wis.



NOTE: SANITARY SEWER 39' NORTH OF GREENFIELD AVE

6" WATER MAIN — C/L W. GREENFIELD AVE.

15" STORM SEWER

Description: Lots 6 and 7, Block 1, excepting that part commencing at the Southwest corner of said Lot 7; thence North 60.00 feet; thence East 14.00 feet; thence Southeasterly 62.00 feet to the South line of Lot 7; thence West 30.00 feet to the place of commencement; together with all that part of the North-South alley lying east of and adjacent to Lots 6 and 7, Block 1, from the north line extended of said Lot 6 to the south line extended of said Lot 7, in HINKLEY'S SUBDIVISION NO. 1, located in the Southwest 1/4 of Section 35, Township 7 North, Range 21 East, in the City of West Allis, Milwaukee County, Wisconsin.

Note: The exact location of underground structures or facilities shown are based on available records at the time of preparation and are not guaranteed to be complete or correct.

WISCONSIN LAND SURVEYORS, LTD.
730 WEST STATE STREET
WAUWATOSA, WISCONSIN 53213
TELEPHONE: (414) 476-6660

SURVEY CERTIFICATE

I have surveyed the above described property and the above map is a true representation thereof and shows the size and location of the property, its boundaries, the location and dimensions of all visible structures thereon, fences, apparent easements and roadways and visible encroachments.

This survey is made for the exclusive use of the present owners of the property, and also those who purchase, mortgage, or guarantee the title thereto within one (1) year from date hereof.

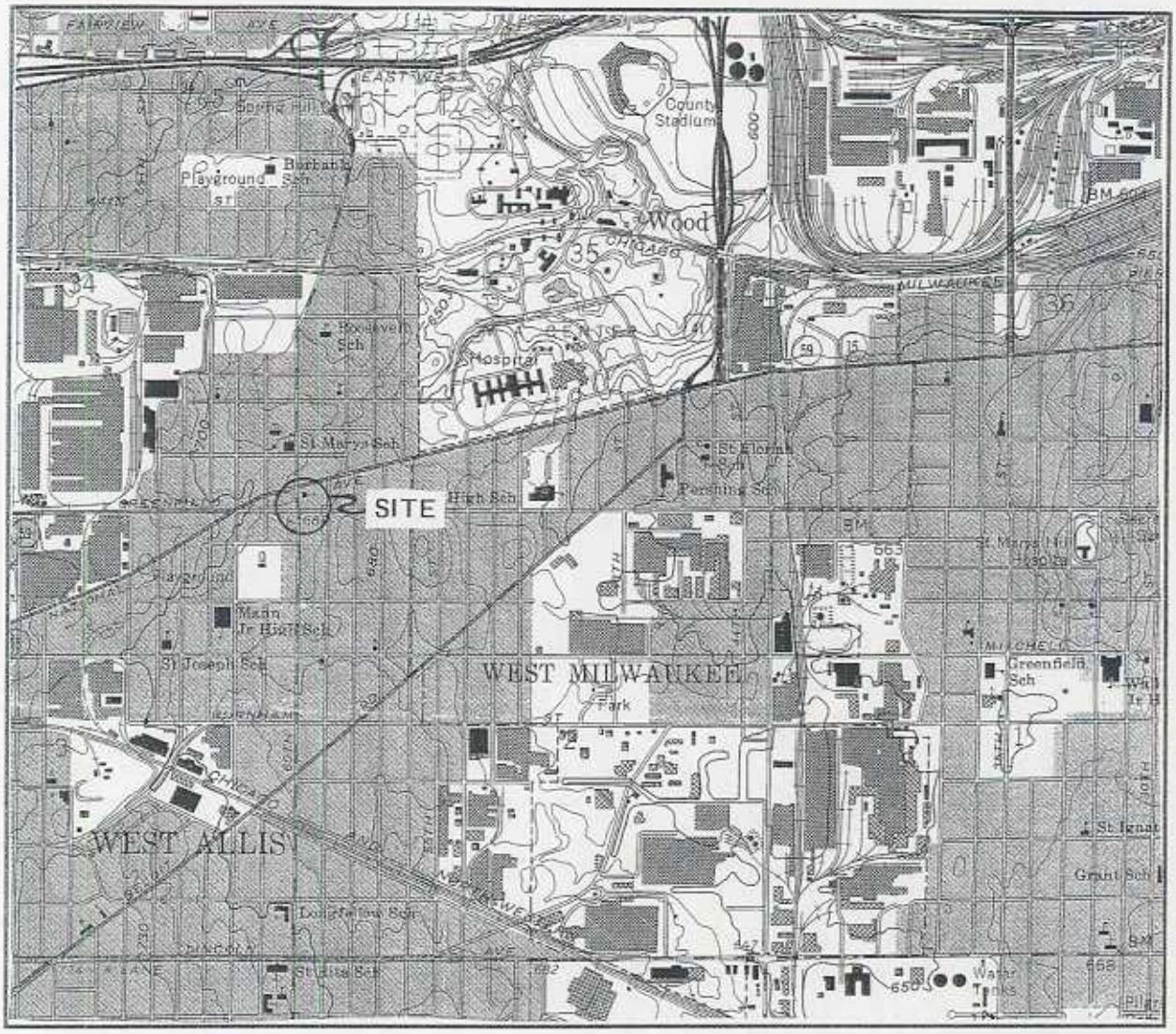
GERALD E. SNYDER
S-0
REGISTERED
WISCONSIN
LAND SURVEYOR

For: Ja Petroleum, Inc.
10 W. Greenfield Ave.
W. Allis, Wisconsin 53214

38 - 39060

April 9, 1992

NOT ORIGINAL UNLESS SEALED IN RED INK



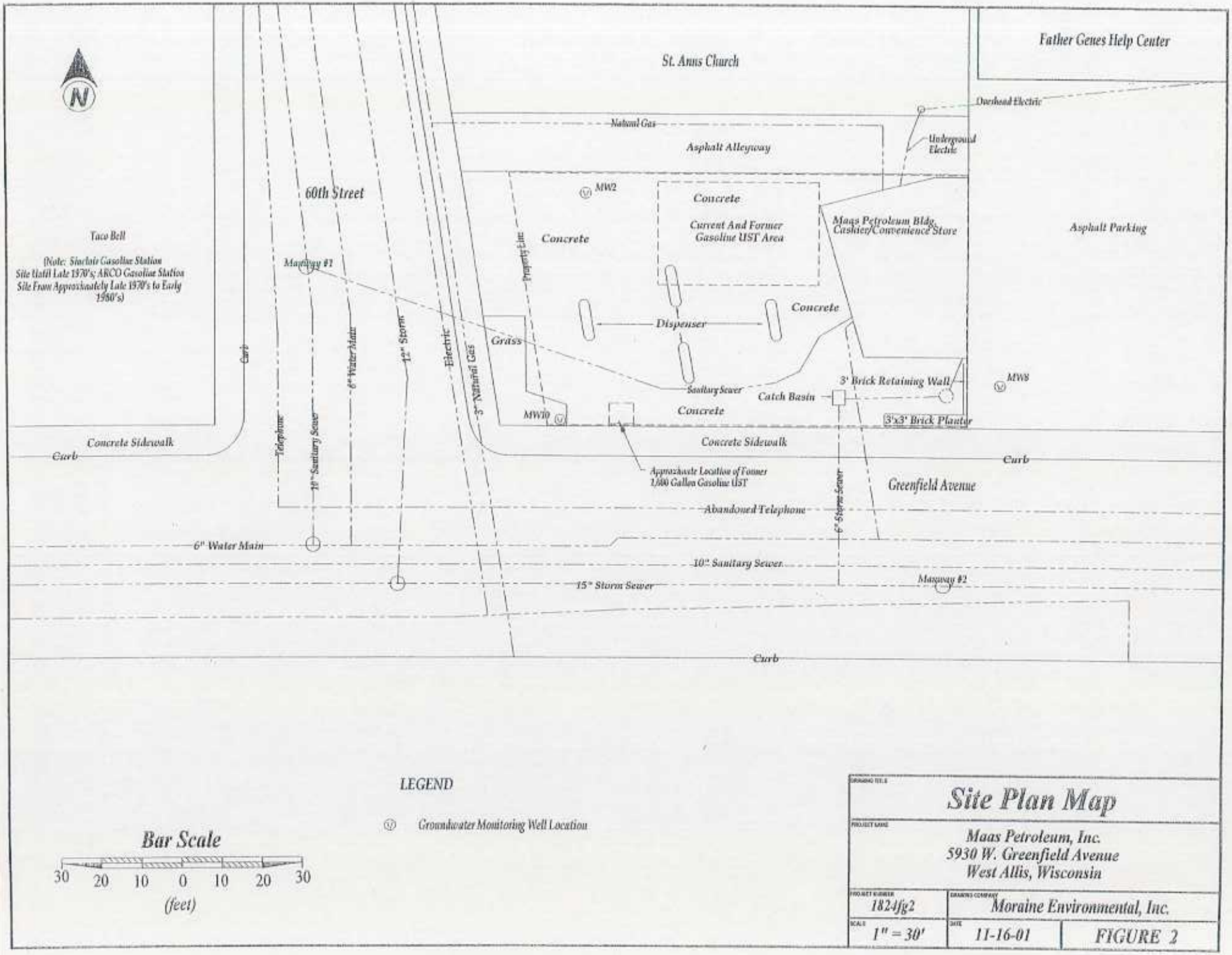
1 MILE 1/2 MILE 0 MILE 1 MILE

Source: 1971 USGS 7.5 Minute Milwaukee Quadrangle

SITE LOCATION

SCALE 1:24,000

DRAWING TITLE: *SITE LOCATION MAP*		
PROJECT NAME: *Maas Petroleum, Inc.* *5930 W. Greenfield Avenue* *West Allis, Wisconsin 53214*		
PROJECT NUMBER: *1824*	DRAWING COMPANY: *Moraine Environmental, Inc.*	
SCALE: *1:24,000*	DATE: *3/28/03*	*FIGURE 1*


St. Anns Church
Father Genes Help Center
Overhead Electric
Underground Electric
Natural Gas
Asphalt Alleyway
60th Street
MW2
Concrete
Current And Former Gasoline UST Area
Maas Petroleum Bldg. Cashier/Convenience Store
Asphalt Parking
Taco Bell
(Note: Sinclair Gasoline Station Site Until Late 1970's; ARCO Gasoline Station Site From Approximately Late 1970's to Early 1980's)
Manway #1
Property Line
Concrete
Dispenser
Concrete
Grass
Curb
Telephone
16" Sanitary Sewer
6" Water Main
12" Storm
Electric
3" Natural Gas
Sanitary Sewer
Catch Basin
3' Brick Retaining Wall
MW8
MW10
Concrete
3'x3' Brick Planter
Concrete Sidewalk
Curb
Approximate Location of Former 1,000 Gallon Gasoline UST
Greenfield Avenue
6" Storm Sewer
Abandoned Telephone
6" Water Main
10" Sanitary Sewer
15" Storm Sewer
Manway #2
Curb
LEGEND
MW Groundwater Monitoring Well Location
Bar Scale
30 20 10 0 10 20 30
(feet)
Site Plan Map
Maas Petroleum, Inc.
5930 W. Greenfield Avenue
West Allis, Wisconsin
1824fg2
Moraine Environmental, Inc.
1" = 30'
11-16-01
FIGURE 2

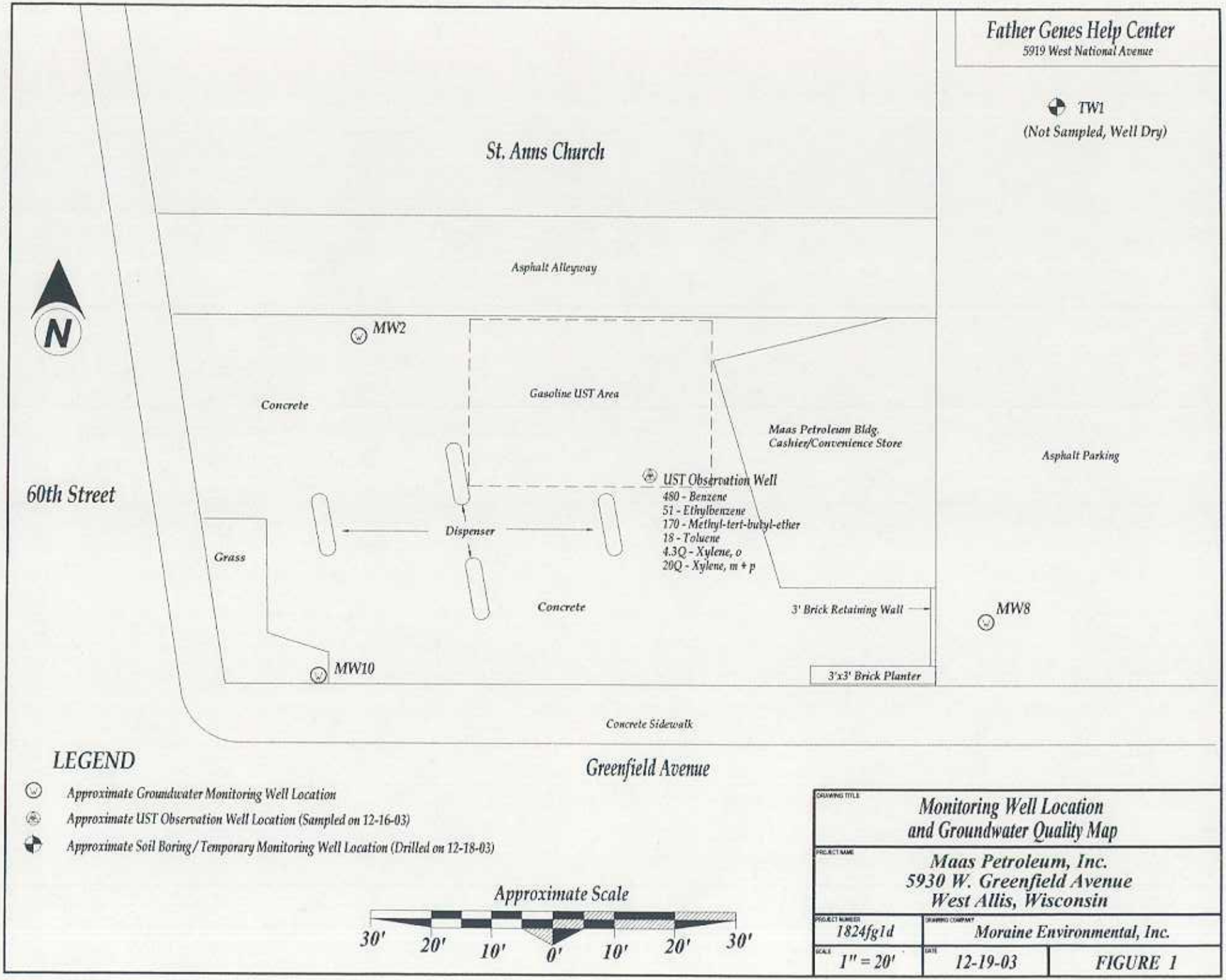

Father Genes Help Center
5919 West National Avenue
TW1
(Not Sampled, Well Dry)
St. Anns Church
Asphalt Alleyway
MW2
Concrete
Gasoline UST Area
Maas Petroleum Bldg.
Cashier/Convenience Store
Asphalt Parking
60th Street
UST Observation Well
480 - Benzene
51 - Ethylbenzene
170 - Methyl-tert-butyl-ether
18 - Toluene
4.3Q - Xylene, o
20Q - Xylene, m + p
Dispenser
Grass
Concrete
3' Brick Retaining Wall
MW8
MW10
3'x3' Brick Planter
Concrete Sidewalk
Greenfield Avenue
LEGEND
Approximate Groundwater Monitoring Well Location
Approximate UST Observation Well Location (Sampled on 12-16-03)
Approximate Soil Boring / Temporary Monitoring Well Location (Drilled on 12-18-03)
Approximate Scale
30' 20' 10' 0' 10' 20' 30'
DRAWING TITLE
Monitoring Well Location and Groundwater Quality Map
PROJECT NAME
Maas Petroleum, Inc.
5930 W. Greenfield Avenue
West Allis, Wisconsin
PROJECT NUMBER
1824fg1d
DRAWING COMPANY
Moraine Environmental, Inc.
SCALE
1" = 20'
DATE
12-19-03
FIGURE 1

TABLE 1
GROUNDWATER QUALITY RESULTS - DETECTABLE AND PVOC RESULTS
MAAS PETROLEUM
10/26/92 - 11/1/02

ANALYTE	MW-2							MW-3	MW-8							MW-10							NR140	
	10/26/92	3/18/99	6/7/99	11/27/01	3/1/02	6/12/02	11/1/02	10/26/92	10/26/92	3/18/99	6/7/99	11/27/01	3/1/02	6/12/02	11/1/02	10/26/92	3/18/99	6/7/99	11/27/01	3/1/02	6/12/02	11/1/02	ES	PAL
Benzene	<0.7	<0.2	*	<0.45	<0.45	<0.45	<0.45	<0.7	<0.7	<0.2	*	<0.45	<0.45	<0.45	<0.45	-	-	2.9	15	8.5	13	47	5.0	0.5
Ethylbenzene	<0.7	<0.2	*	<0.82	<0.82	<0.82	<0.82	<0.7	<0.7	<0.2	*	<0.82	<0.82	<0.82	<0.82	-	-	<0.24	<0.82	<0.82	<0.82	<0.82	700	140
Methyl-tert-butyl-ether	<0.7	<0.2	*	<0.43	<0.43	<0.43	<0.43	<0.7	<0.7	<0.2	*	<0.52Q	<0.43	1.1Q	1.1Q	-	-	<0.22	<0.43	<0.43	<0.43	<0.43	60	12
Toluene	<0.7	<0.3	*	<0.68	<0.68	<0.68	<0.68	<0.7	<0.7	<0.3	*	<0.68	<0.68	<0.68	<0.68	-	-	<0.21	<0.68	<0.68	<0.68	<0.68	1,000	200
Trimethylbenzenes	<1.4	<0.5	*	<1.86	<1.86	<1.86	<1.86	<1.4	<1.4	<0.5	*	<1.86	<1.86	<1.86	<1.86	-	-	<1.4	<1.86	<1.86	<1.86	<1.86	480	96
Xylenes	<1.4	<0.6	*	<2.47	<2.47	<2.47	<2.47	<1.4	<1.4	<0.6	*	<2.47	<2.47	<2.47	<2.47	-	-	<1.24	<2.47	<2.47	<2.47	<2.47	10,000	1,000
Lead, Soluble	30	*	*	<0.39	0.70Q	0.71Q	0.32	46	<0.7	*	*	*	<0.39	0.66Q	0.29	-	-	*	*	<0.39	0.92Q	0.33	15	1.5

Key:
- Well was not yet installed.
Bold Print - Exceeds NR 140 Preventive Action Limit (PAL)
Bold Print /Bold Box - Exceeds NR 140 Enforcement Standard (ES)
* - Not analyzed.
MW3 lost during remedial excavation activities
Q - Results are qualified due to the uncertainty of the parameter concentration between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ).
All results are expressed in micrograms/liter.

TABLE 2

SOIL ANALYTICAL TEST RESULTS

November 9 to December 1, 1992

Maas Petroleum, Inc.
5930 W. Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921112

			Petroleum Volatile Organic Compounds (PVOCs) (3)							
Sample Number	Sample Depth (feet)	Gasoline Range Organics	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	1,2,4 Tri-methyl-benzene	1,3,5-Tri-methyl-benzene
1	6±	<10	--	--	--	--	--	--	--
2	6±	<10	--	--	--	--	--	--	--
3	15±	<10	<2	<2	<2	<2	<2	<2	<2
4	13±	<10	<2	<2	<2	<2	<2	<2	<2
5	12±	<10	<2	10	3	120	170	200	48
6	12±	<10	160	1500	7	100	950	650	68
7	13±	<10	<2	<2	<2	2	8	4	<2
8	13±	<10	<2	<2	<2	<2	3	<2	<2
9	10±	78	<2	2400	12	5000	8600	19,000	170
10	12±	<10	<2	<2	2	2	7	5	<2
11	13±	<10	<2	<2	<2	<2	7	<2	<2
12	10±	<10	<2	<2	<2	<2	3	<2	<2
13	10±	<10	<2	<2	<2	<2	6	<2	<2
14	10±	<10	<2	<2	<2	<2	4	<2	<2
15	13±	<10	<2	280	3	<2	16	2	<2
16	20±	<10	3	93	<2	<2	<2	8	<2
17	20±	89	45	14,000	610	220	2300	37	10
18	20±	84	28	4000	48	4400	4200	6700	3300
19	20±	<10	7	2600	10	10	11	3	<2
20	20±	100	7	36	12	3300	4300	9900	3200
21	20±	500	200	7800	1600	8200	15,000	12,000	8600
22	10±	80	180	1200	<100	4300	6100	2500	9900
23	10±	160	<100	1400	4000	4500	12,000	2300	6500
24	10±	120	<100	200	200	3600	8000	1500	4600
25	10±	57	13	<10	<10	150	1100	520	1700

TABLE 2 (continued)

SOIL ANALYTICAL TEST RESULTS

November 9 to December 1, 1992

Maas Petroleum, Inc.
5930 W. Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921112

Sample Number (1)	Sample Depth (feet)	Gasoline Range Organics (GRO) (2)	Petroleum Volatile Organic Compounds (PVOCs) (3)						
			Methyl-tert-butyl ether	Benzene	Toluene	Ethyl-benzene	Xylenes	1,2,4 Tri-methyl-benzene	1,3,5-Tri-methyl-benzene
26	10±	<10	<2	<2	<2	<2	<2	<2	<2
27	10±	30	8	20	5	43	40	71	120
28	19±	<10	<2	<2	<2	<2	<2	<2	<2
29	19±	99	320	2900	2100	1200	13,000	2300	8200
30	19±	37	150	400	100	510	5000	2500	910
31	19±	<10	23	<2	<2	3	7	5	<2
32	13±	<10	17	65	<10	<10	<10	<10	<10
33	13±	<10	<2	4	5	3	28	17	5
34	13±	35	180	1100	30	73	90	29	15
35	18±	120	<10	69,000	1100	42	35	<10	<10

(1) Sample locations shown on Figure 5.
(2) Test results expressed in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm).
(3) Test results expressed in micrograms per kilogram (ug/kg), equivalent to parts per billion (ppb).

1E1112-2 (WP/BU23)

TABLE 7

SOIL ANALYTICAL TEST RESULTS

January 29 to February 1, 1993

Maas Petroleum, Inc.
5930 W. Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921112

Sample Number (1)	Sample Depth (feet)	Gasoline Range Organics (GRO) (2)	Petroleum Volatile Organic Compounds (PVOCs) (3)						
			Methyl-tert-butyl ether	Benzene	Toluene	Ethyl-benzene	Xylenes	1,2,4 Tri-methyl-benzene	1,3,5-Tri-methyl-benzene
36	4½±	18	<2	<2	2	9	33	48	14
37	5±	17	<2	930	350	5600	25,000	3600	8200
39	5±	820	<100	<100	2300	910	22,000	17,000	4800
41	4½±	<10	<2	<2	<2	3	19	29	5
44	5±	2500	4800	11,000	150,000	49,000	400,000	240,000	89,000
45	5±	180	340	170	175	4900	15,000	25,000	6600
46	5±	780	1300	<500	<500	15,000	74,000	100,000	39,000
47	5±	110	170	<100	660	980	16,000	14,000	3500
48	5±	1000	1100	2500	25,000	12,000	170,000	100,000	35,000
49	5±	<10	<2	<2	<2	<2	<2	<2	<2
50	5±	<10	<2	<2	<2	<2	10	8	7

(1) Sample locations shown on Figure
(2) Test results expressed in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm).
(3) Test results expressed in micrograms per kilogram (ug/kg), equivalent to parts per billion (ppb).

1E1112-7 (WP/BU23)

TABLE 10

SOIL ANALYTICAL TEST RESULTS

February 3 to 4, 1993

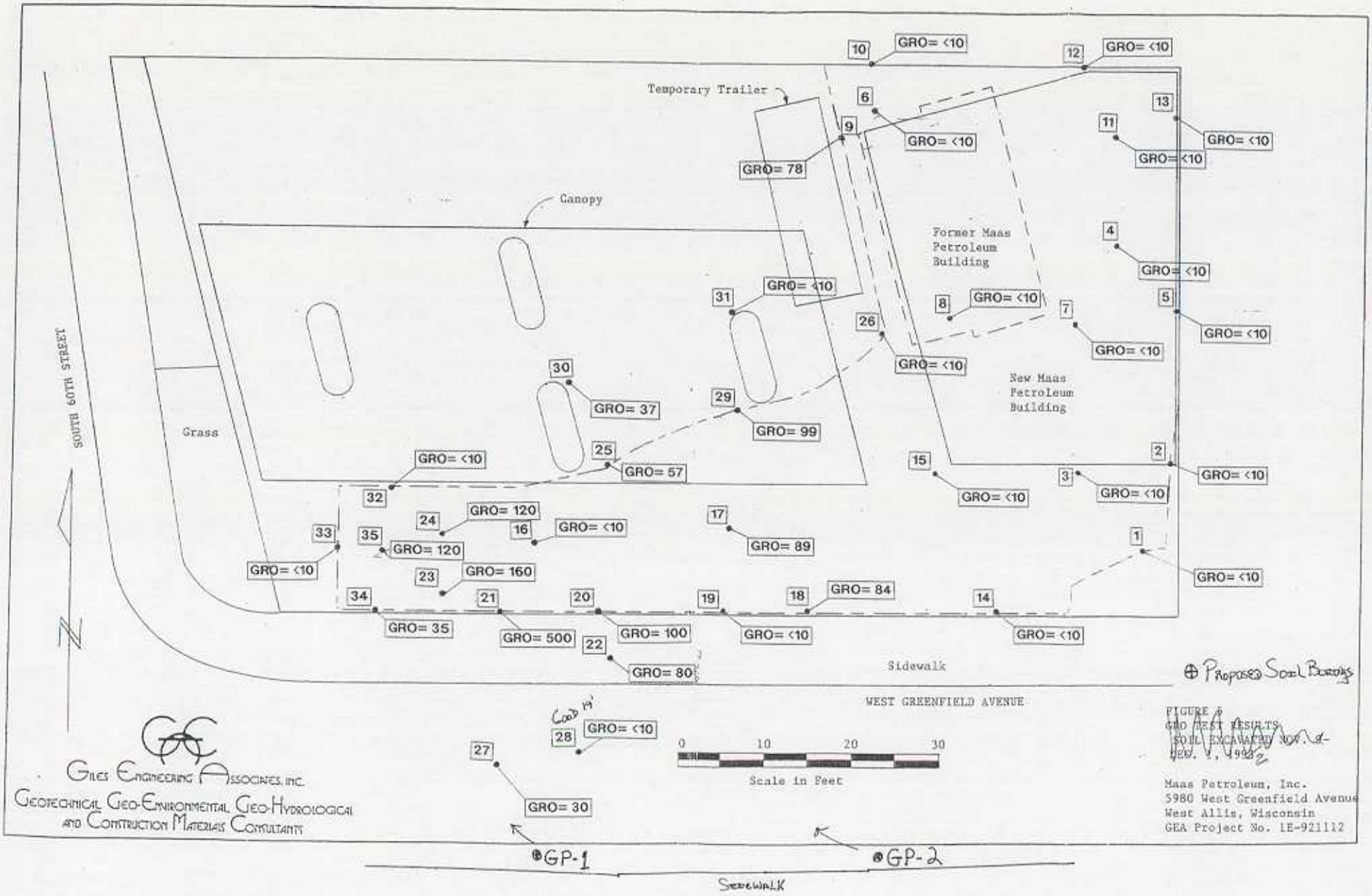
Maas Petroleum, Inc.
5930 W. Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921112

Sample Number (1)	Sample Depth (feet)	Gasoline Range Organics (GRO) (2)	Petroleum Volatile Organic Compounds (PVOCs) (3)						
			Methyl-tert-butyl ether	Benzene	Toluene	Ethyl-benzene	Xylenes	1,2,4 Tri-methyl-benzene	1,3,5-Tri-methyl-benzene
103	--	180	--	--	--	--	--	--	--
105	3±	170	<2	<2	<2	<2	7	5	<2
109	6±	390	170	1000	3500	6400	18,000	15,000	6700
118	4¾±	<10	<2	<2	8	<2	10	6	3
119	5±	<10	<2	<2	<2	3	13	3	<2
120	6±	210	<5	<5	790	2500	6100	16,000	4300
121	10±	<10	<2	<2	<2	9	25	49	14
123	5±	20	<2	<2	<2	5	9	2	4
124	4½±	<10	<2	<2	<2	4	19	6	<2
125	5±	39	<10	<10	<10	21	29	39	19
129	6½±	<10	<2	<2	<2	3	12	3	<2
130	12±	190	11	150	71	1300	3400	190	780

2.5? 5.5? 15? 2.9? 4.6?

(1) Sampling locations shown on Figure
(2) Test results expressed in milligrams per kilogram (mg/kg), expressed in parts per million (ppm).
(3) Test results expressed in micrograms per kilogram (ug/kg), expressed in parts per billion (ppb).

E1112-10 (WP/BU23)



Proposed Soil Borings

FIGURE 6
GRO TEST RESULTS
SOIL EXCAVATED NOV. 4-
DEC. 7, 1992

Maas Petroleum, Inc.
5980 West Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921112

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL GEO-ENVIRONMENTAL GEO-HYDROLOGICAL AND CONSTRUCTION MATERIALS CONSULTANTS

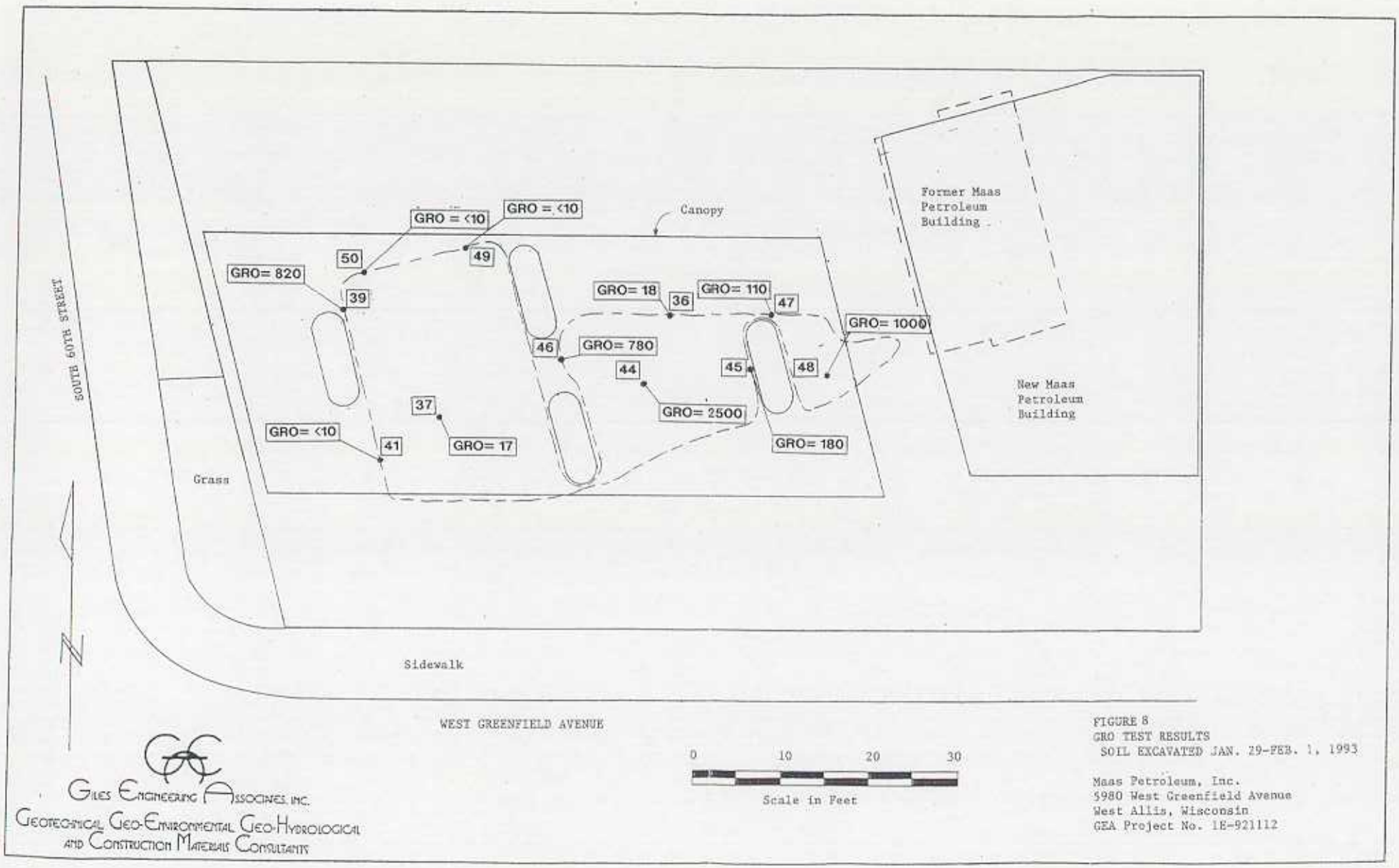


FIGURE 8
GRO TEST RESULTS
SOIL EXCAVATED JAN. 29-FEB. 1, 1993

Maas Petroleum, Inc.
5980 West Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921112

Giles Engineering Associates, Inc.
Geotechnical Geo-Environmental Geo-Hydrological
and Construction Materials Consultants

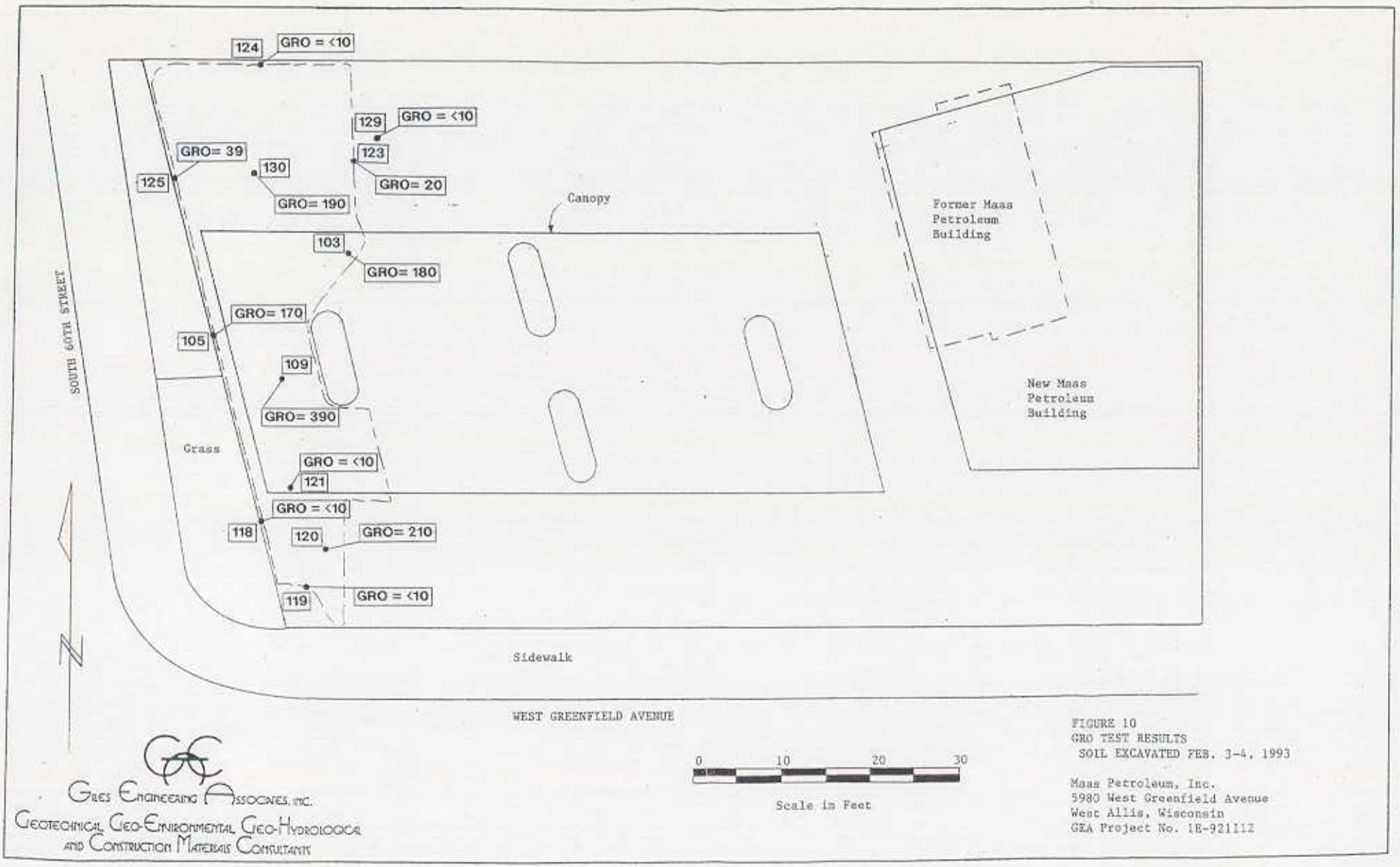
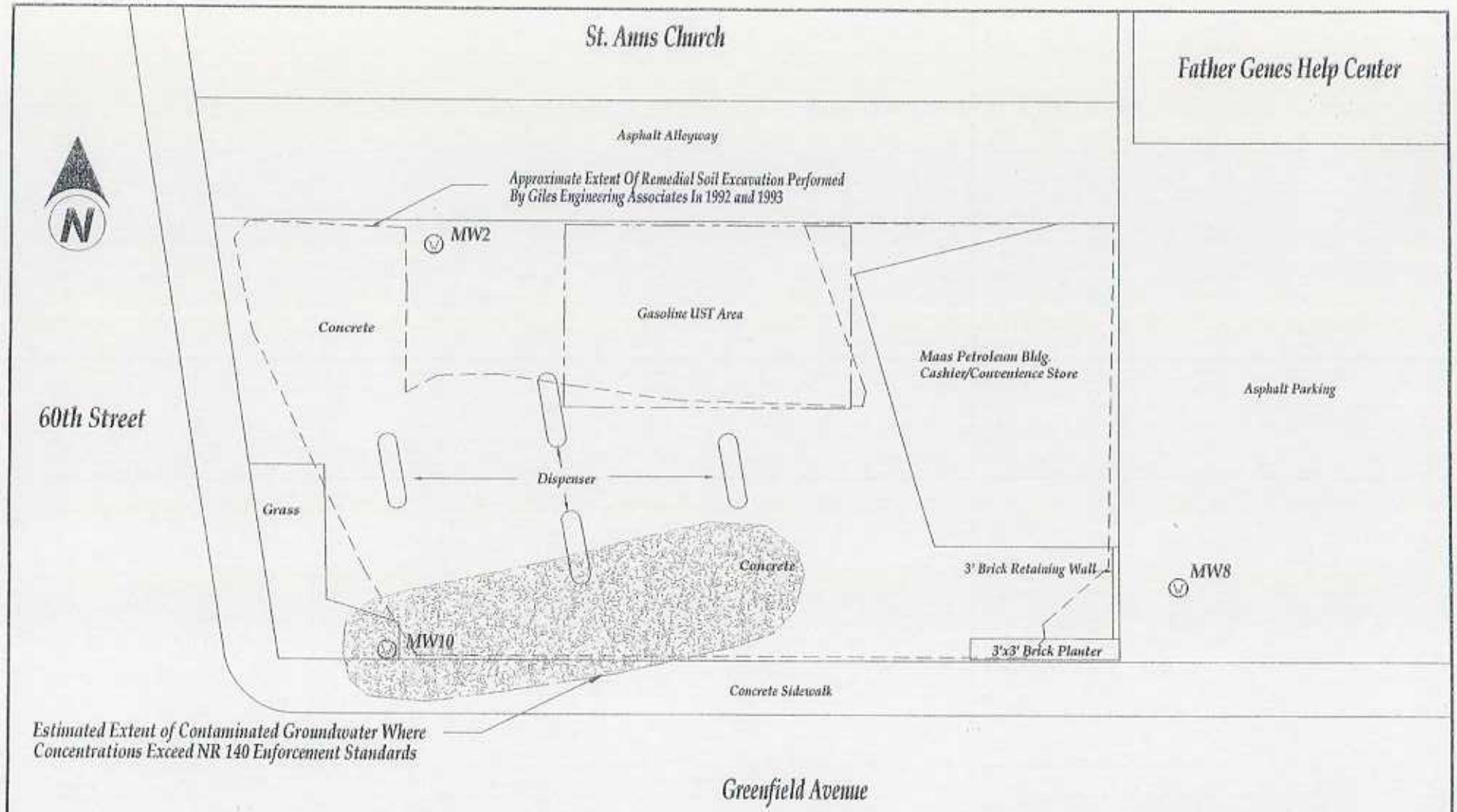


FIGURE 10
GRO TEST RESULTS
SOIL EXCAVATED FEB. 3-4, 1993

Maas Petroleum, Inc.
5980 West Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921112

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL GEO-ENVIRONMENTAL GEO-HYDROLOGICAL
AND CONSTRUCTION MATERIALS CONSULTANTS



LEGEND

- Groundwater Monitoring Well Location
- Estimated Extent of Contaminated Groundwater Where Concentrations Exceed NR 140 Enforcement Standards
- Approximate Extent Of Remedial Soil Excavation Performed By Giles Engineering Associates In 1992 and 1993

Site Features Are Approximate. Site Has Not Been Surveyed.

Approximate Scale

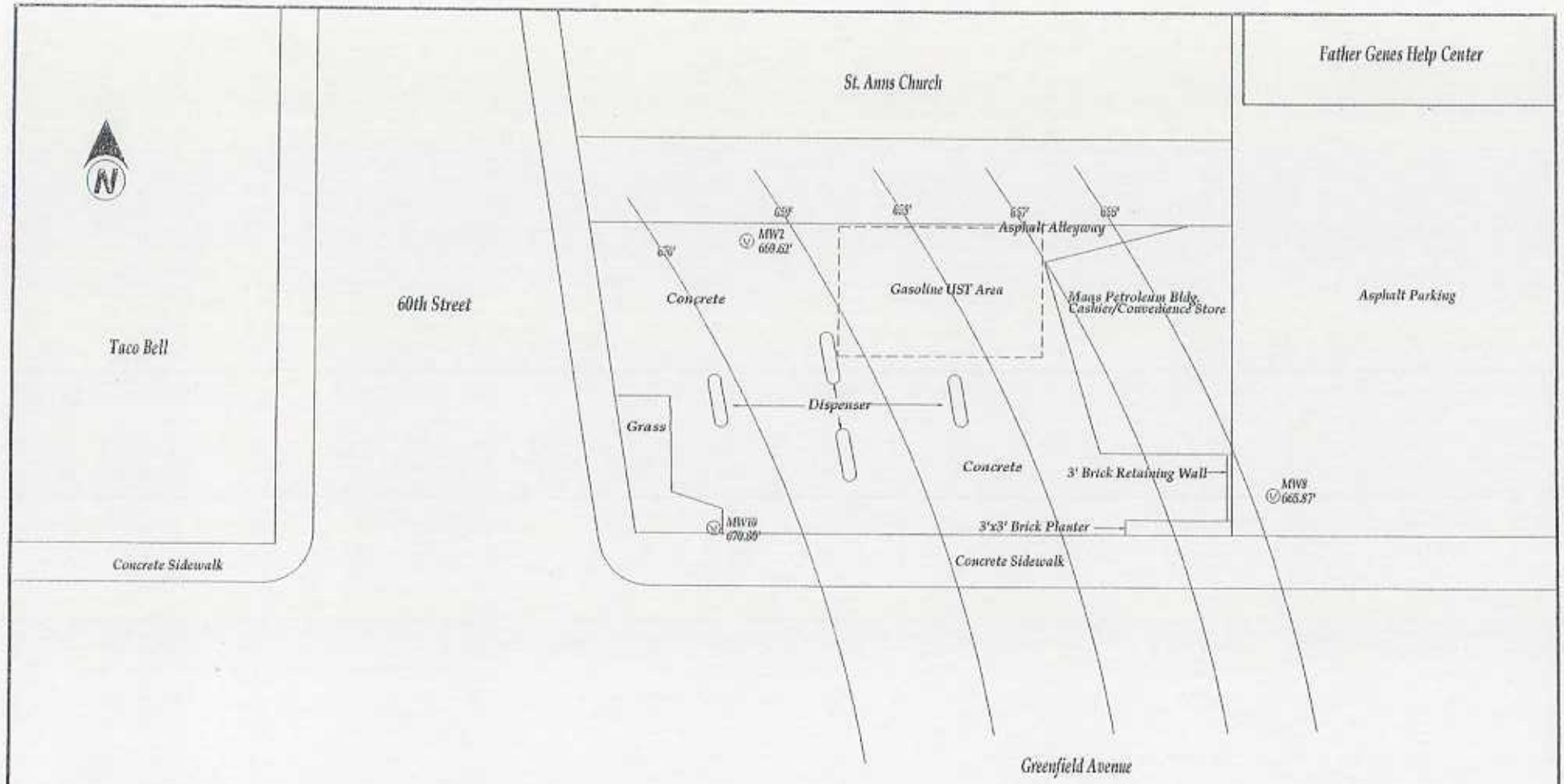
30' 20' 10' 0' 10' 20' 30'

DRAWING TITLE: Estimated Extent Of Groundwater Impacts Exceeding NR 140 Enforcement Standards		
PROJECT NAME: Maas Petroleum, Inc. 5930 W. Greenfield Avenue West Allis, Wisconsin		
PROJECT NUMBER: 1824fg4c	DRAWING COMPANY: Moraine Environmental, Inc.	
SCALE: 1" = 20'	DATE: 4-9-03	FIGURE 5

TABLE 2
GROUNDWATER ELEVATION DATA
MAAS PETROLEUM, INC.

Well I.D.	Sampling Date	Top of Casing Elevation	Depth to Groundwater	Groundwater Elevation
MW-2	11/27/01	686.57'	16.48'	670.09'
	3/1/02		16.06'	670.51'
	6/12/02		16.02'	670.55'
	11/1/02		16.95"	669.62'
MW-8	11/27/01	683.61'	21.11'	662.50'
	3/1/02		18.16'	665.45'
	6/12/02		17.68'	665.93'
	11/1/02		17.74'	665.87'
MW-10	11/27/01	686.14'	14.88'	671.26'
	3/1/02		15.85'	670.29'
	6/12/02		14.83'	671.31'
	11/1/02		15.34'	670.80'

Elevations shown in feet relative to Mean Sea Level



LEGEND

Groundwater Monitoring Well Location

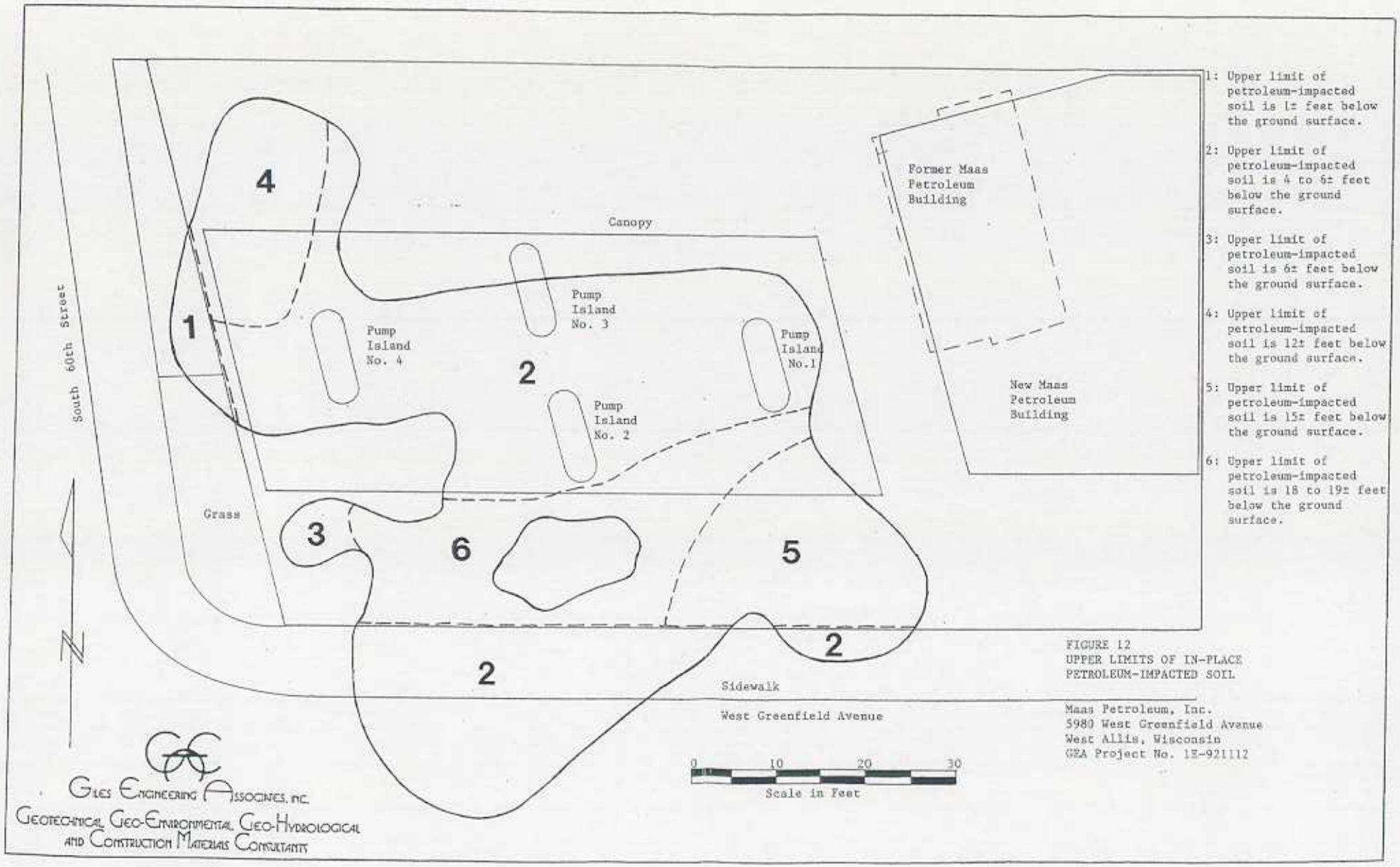
670' Groundwater Elevation

Bar Scale

30 20 10 0 10 20 30

(feet)

DRAWING TITLE: **Groundwater Elevation Map** November 1, 2002 Data		
PROJECT NAME: Maas Petroleum, Inc. 5930 W. Greenfield Avenue West Allis, Wisconsin		
PROJECT NUMBER: 1824fg5	DRAWING COMPANY: Moraine Environmental, Inc.	
SCALE: 1" = 30'	DATE: 12-4-02	FIGURE 9



1: Upper limit of petroleum-impacted soil is 1± feet below the ground surface.

2: Upper limit of petroleum-impacted soil is 4 to 6± feet below the ground surface.

3: Upper limit of petroleum-impacted soil is 6± feet below the ground surface.

4: Upper limit of petroleum-impacted soil is 12± feet below the ground surface.

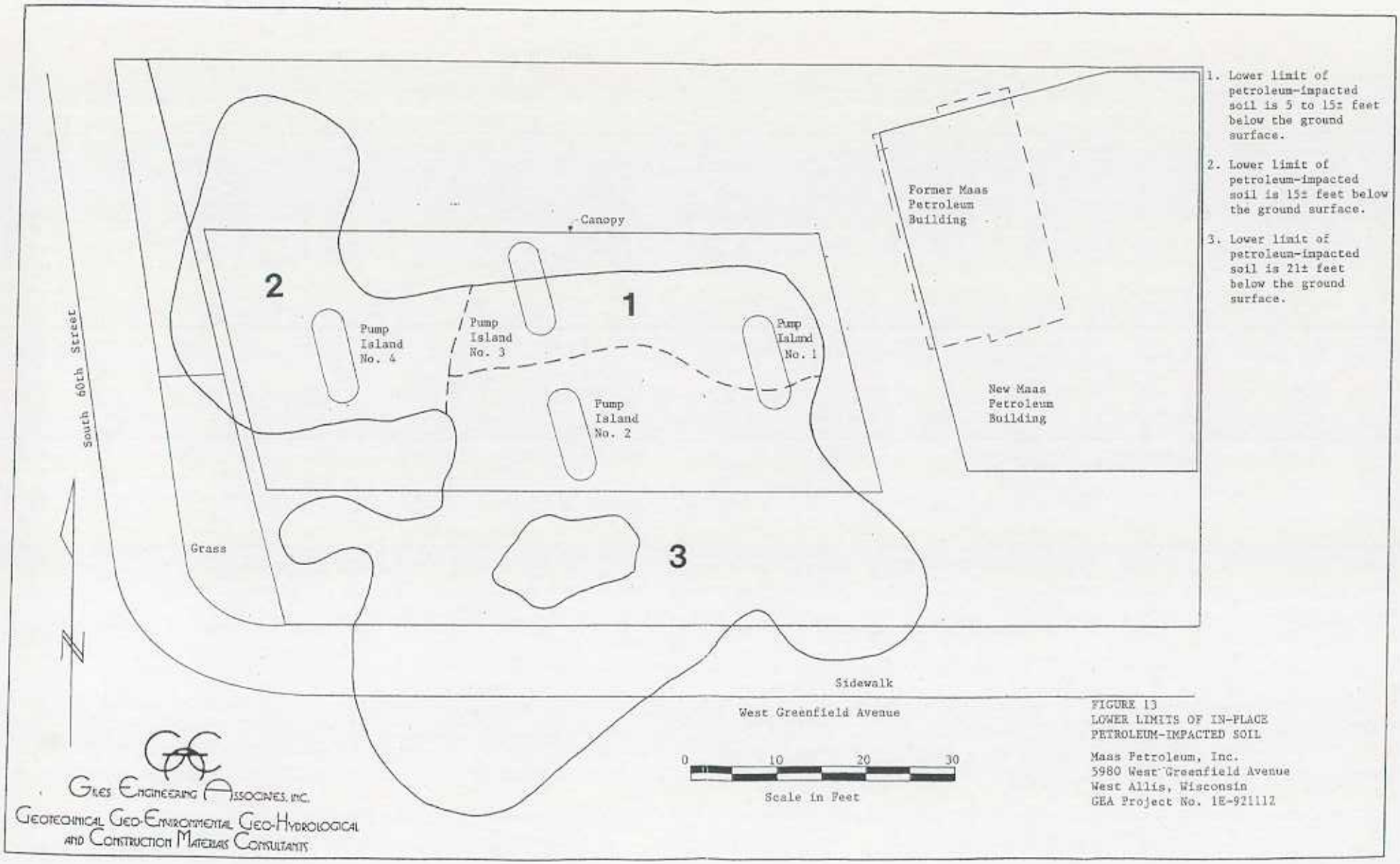
5: Upper limit of petroleum-impacted soil is 15± feet below the ground surface.

6: Upper limit of petroleum-impacted soil is 18 to 19± feet below the ground surface.

FIGURE 12
UPPER LIMITS OF IN-PLACE
PETROLEUM-IMPACTED SOIL

Maas Petroleum, Inc.
5980 West Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921112

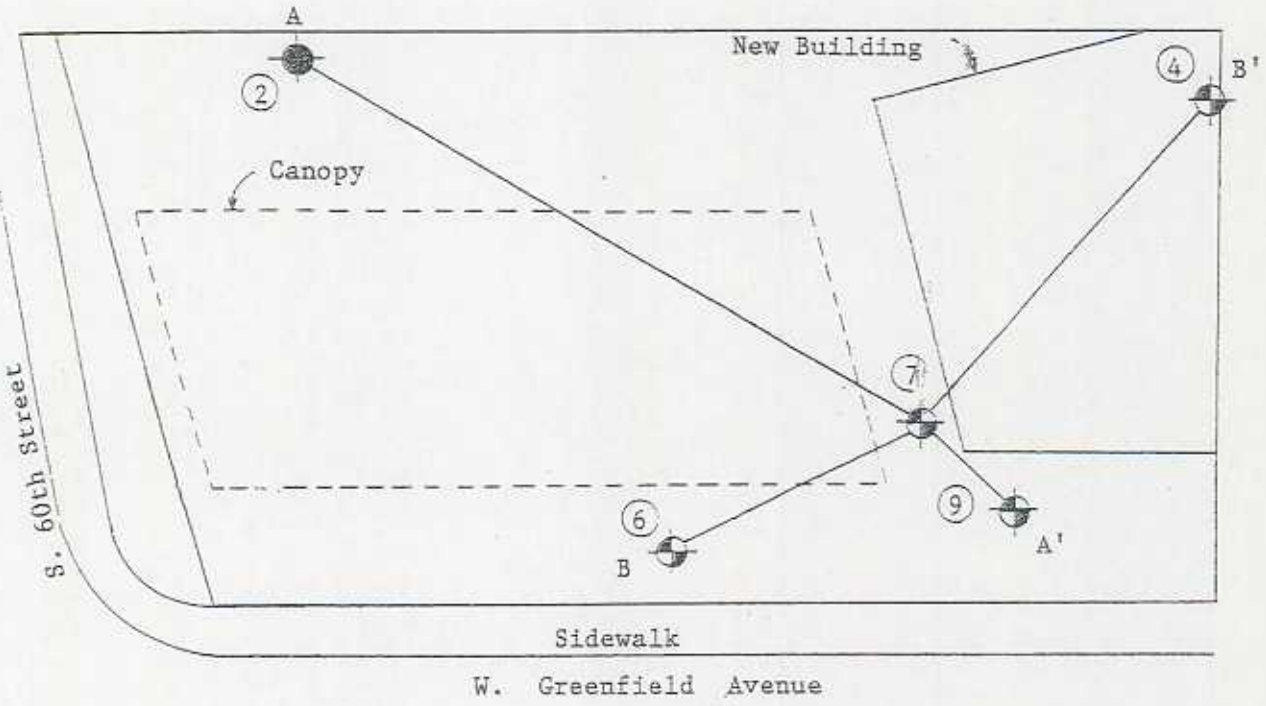
Giles Engineering Associates, Inc.
Geotechnical, Geo-Environmental, Geo-Hydrological
and Construction Materials Consultants



GEA Engineering Associates, Inc.
Geotechnical Geo-Environmental Geo-Hydrological and Construction Materials Consultants

FIGURE 13
LOWER LIMITS OF IN-PLACE PETROLEUM-IMPACTED SOIL

Maas Petroleum, Inc.
5980 West Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921112

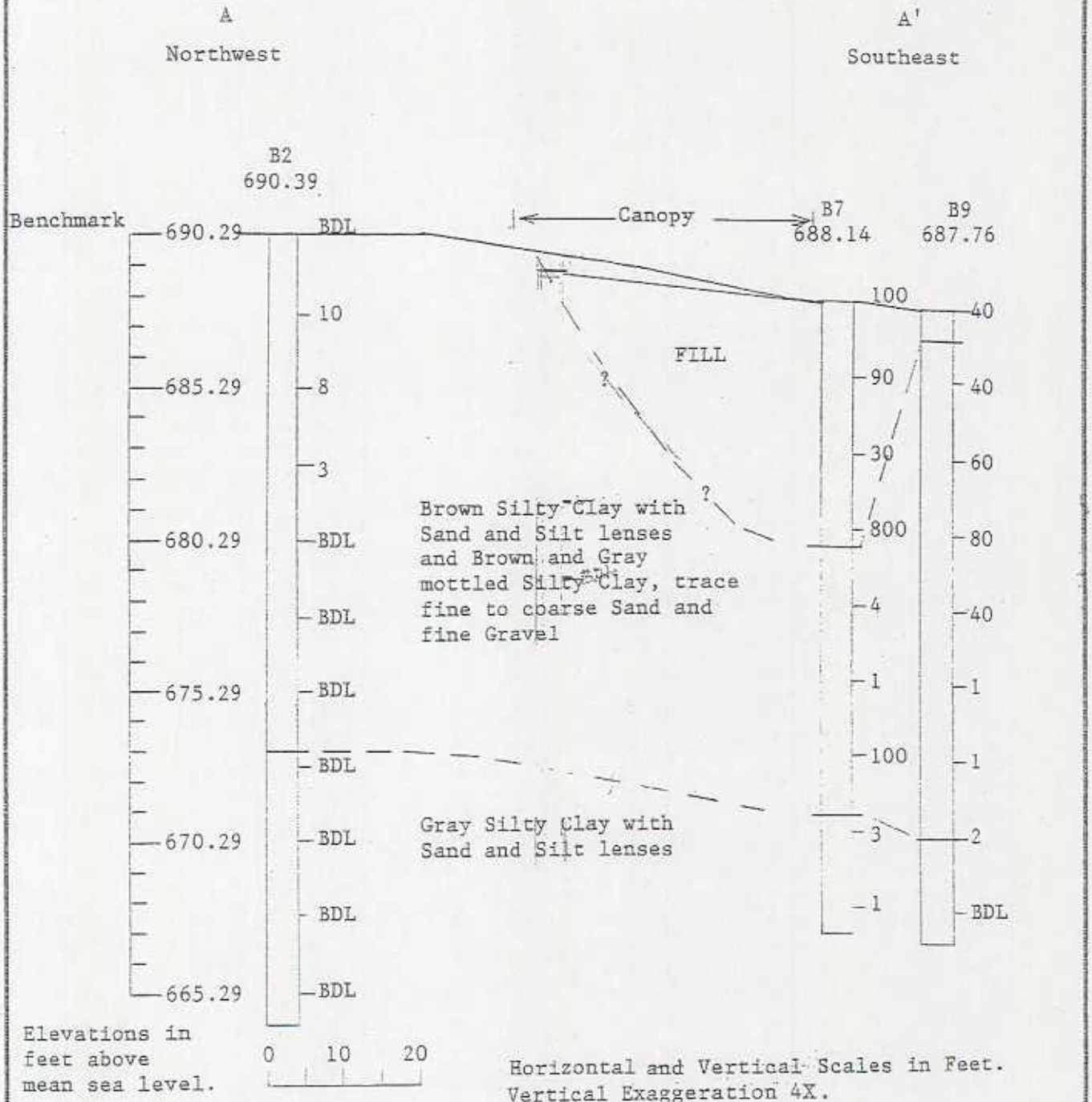


0 20
Feet

FIGURE 3
CROSS SECTION LOCATION PLAN

Maas Petroleum, Inc.
5930 W. Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921037

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL GEOENVIRONMENTAL
AND CONSTRUCTION MATERIALS CONSULTANTS

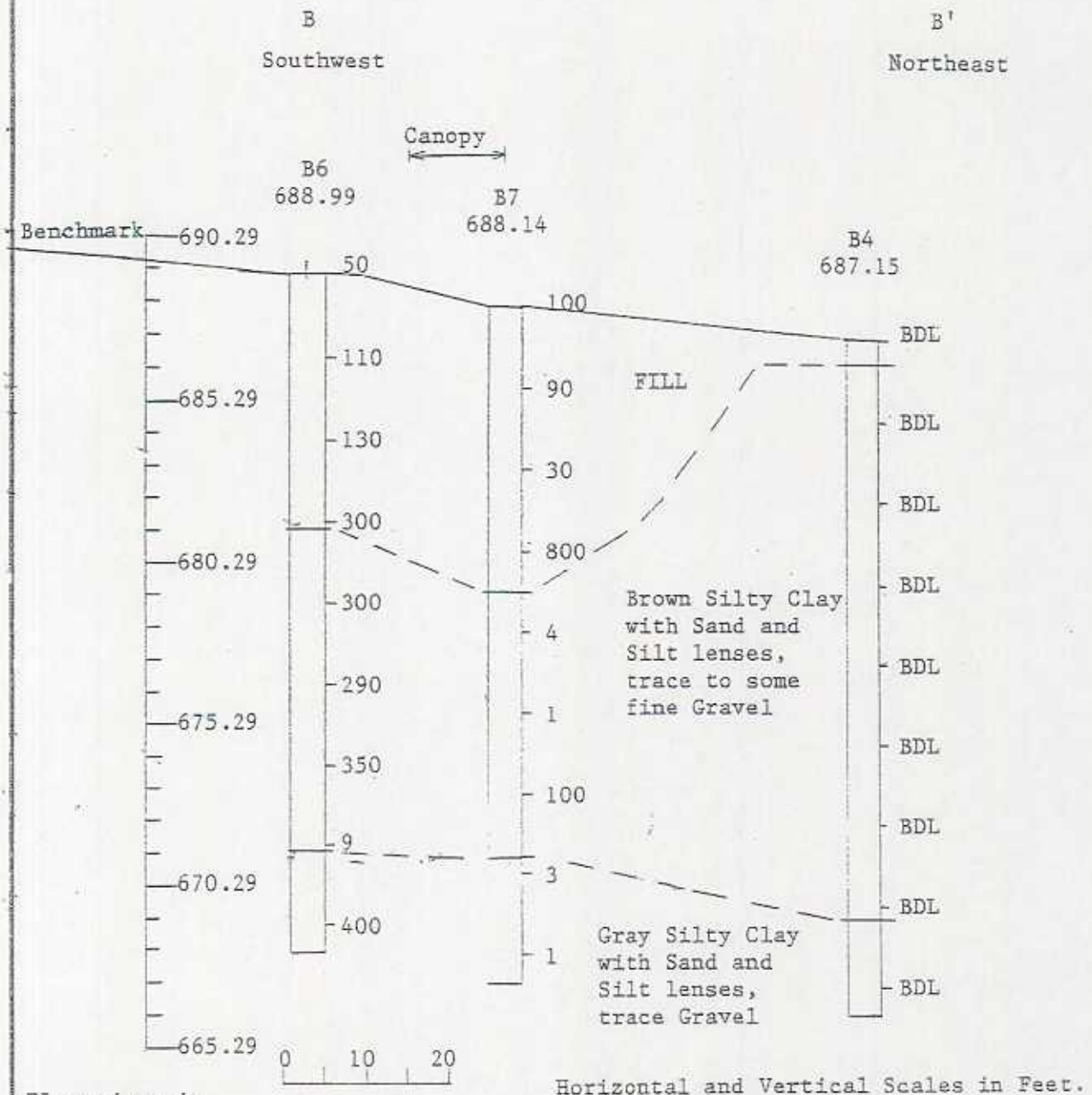


Photoionization Detector (PID) results are presented in HNU units in each boring. BDL = Below Detection Limit.

FIGURE 4
PID RESULTS
CROSS SECTION A-A'

Maas Petroleum, Inc.
5930 W. Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921037

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL GEOENVIRONMENTAL
AND CONSTRUCTION MATERIALS CONSULTANTS



Elevations in feet above mean sea level.

Horizontal and Vertical Scales in Feet.
Vertical Exaggeration 4X.

Photoionization Detector (PID) results are presented in HNU units in each boring. BDL = Below Detection Limit.

FIGURE 5
PID RESULTS
CROSS SECTION B-B'

Maas Petroleum, Inc.
5930 W. Greenfield Avenue
West Allis, Wisconsin
GEA Project No. 1E-921037

GILES ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL GEOENVIRONMENTAL
AND CONSTRUCTION MATERIALS CONSULTANTS

Jeffrey Maas, President

MAAS PETROLEUM, INC.

5930 West Greenfield Avenue
West Allis, WI 53214

Phone: (414)771-0970
Fax (414) 771-9411

October 20,2003

Wisconsin Department of Commerce
Environmental & Regulatory Services
101 Pleasant Street, Suite #100A
Milwaukee, WI 53212-3963

RE: Maas Petroleum, Inc.
5930 W. Greenfield Avenue, West Allis, WI 53214
BRRTS #03-41-003441
Project # 1824

To Whom It May Concern:

I certify that, to the best of my knowledge, the legal description enclosed with this packet is complete, accurate, and describes the correct contaminated property site.

If you should have any questions, please do not hesitate to contact me, Mr. Jeff Maas, or my consultant, Moraine Environmental at (262) 377-9060.

Sincerely,

Jeffrey Maas
President
Maas Petroleum, Inc.

Enc.

Moraine Environmental, Inc.
Environmental Management Services

July 15, 2003

MEI Project#1824

Mr. Robert Charles
City of West Allis
Engineering Department
7525 W. Greenfield Avenue
West Allis, Wisconsin 53214

Re: Notification of Contaminated Soil and Groundwater Within the City of West Allis Right-of-Way Immediately East of the S. 60th St. and W. Greenfield Ave. Intersection

Dear Mr. Charles:

On behalf of our client, Maas Petroleum, Inc. (Maas), Moraine Environmental, Inc. is giving written notification of the presence of residual petroleum soil and groundwater contamination within the City of West Allis right-of-way (ROW) beneath W. Greenfield Avenue. Contaminant concentrations and the approximate location of the residual impacts are presented on the enclosed Tables and Figures. The residual soil and groundwater contamination is related to a leaking Underground Storage Tank (UST) system formerly located at the Maas property, 5930 W. Greenfield Avenue, West Allis, Wisconsin.

The Wisconsin Department of Commerce (Commerce) is currently reviewing closure documentation for the above referenced Maas site. This letter of notification is a condition of Commerce closure. Pursuant to current Wisconsin Department of Natural Resources regulations, MEI believes that soil and groundwater petroleum impacts associated with the Maas site are no longer a threat to human health or the environment.

If you have any questions or comments, please contact us at (262) 377-9060.

Sincerely,

MORAINE ENVIRONMENTAL, INC.

Jeffrey M. Larkin
Project Geologist

cc: Mr. Jeff Maas – Maas Petroleum, Inc.
Enclosures

F:\WORD\MSWTECH18/1824 Off-Site Contamination Letter.doc

1234 12th Avenue • Grafton, WI 53024-1924 • (262) 377-9060 • FAX (262) 377-9770
Email: moraine@execpc.com • www.moraineenvironmental.com