

GRCRS Package Cover Sheet

Site Name Marshfield Municipal Airport  
Site Address 400 W 29th St., Marshfield WI  
BRRTS # 03-72-001109 Date of Closure Decision 7/20/99  
<sup>54449</sup>

Closure letter(s)

Groundwater Use Restriction/Warranty Deed

Yes/No  Off-site contamination present? (Include related documents)

Yes/No  Right-of-way contamination present? (Include related documents)

General location map

504990.5312500 GPS x-coordinate

463071.5937500 GPS y-coordinate

Detailed site map(s)

Groundwater flow map(s)

Latest map(s) showing extent or outline of plume

Latest table(s) of analytical results (soil results included only if soil deed restriction is incorporated into groundwater use restriction document)

If available:

Legal description

3566, 3565, 3565A County and Parcel I.D./Tax Parcel No.

Geologic cross sections

Isoconcentrations map(s)

*Rene L Krause*

REC. FEE 16.00  
TRAN. FEE:  
PAGES: 4

Document Number

GROUNDWATER USE RESTRICTION

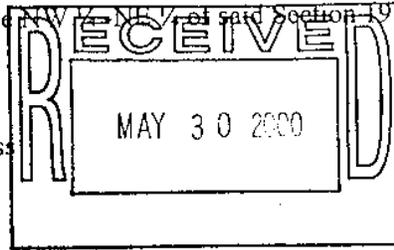
Declaration of Restrictions

In Re: A parcel of land located in part of the Northeast One-Quarter of the Northeast One-Quarter, and part of the Northwest One-Quarter of the Northeast One-Quarter, all in Section 19, T25N, R3E, in the City of Marshfield, Wood County, Wisconsin, described as follows;

The West 540 feet of the South 540 feet of the North 573 feet of the NE 1/4 - NE 1/4, of said Section 19, and the East 830 feet of the South 540 feet of the North 573 Feet of the NW 1/4 - NE 1/4 of said Section 19 (see attached map).

STATE OF WISCONSIN )

COUNTY OF WOOD )



Recording Area

Name and Return Address  
Marshfield Municipal Airport  
210 West 29th Street  
Marshfield, WI 54449

*1600c MCC*

WHEREAS, City of Marshfield is the owner of the above-described property.

WHEREAS, one or more petroleum discharges have occurred at this property. Benzene was present at 34 ug/L and benzo (a) pyrene at 0.55 ug/L at monitoring well MW-1, and benzo (a) pyrene was detected at 0.10 ug/L at monitoring well MW-3, 0.05 ug/L at monitoring well MW-4, 0.051 at monitoring well MW-5 and at 0.24 ug/L at monitoring well MW-6 on January 21, 1999. The locations of the monitoring wells are shown on Figure 3, which is attached and hereby made a part of this restriction. Soil contamination exists at depth near the former waste oil tank location where a soil sample collected at 8 feet below ground surface from soil boring SB-1 contained 19 mg/Kg diesel range organics.

*3566, 3565, 3565A*  
Parcel Identification Number (PIN)

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 at the present time.

WHEREAS, natural attenuation has been approved by the Department of Natural Resources to remediate groundwater 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 Wis. Adm. Code is restricted by ch. NR 811 Wis. Adm. Code 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:

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.

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 requirements are applicable, prior to constructing or reconstructing a well on this property. No well may be constructed or reconstructed on this property unless applicable requirements are met.

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, H. Nathan Norberg asserts that he/she is duly authorized to sign this document on behalf of the City of Marshfield.

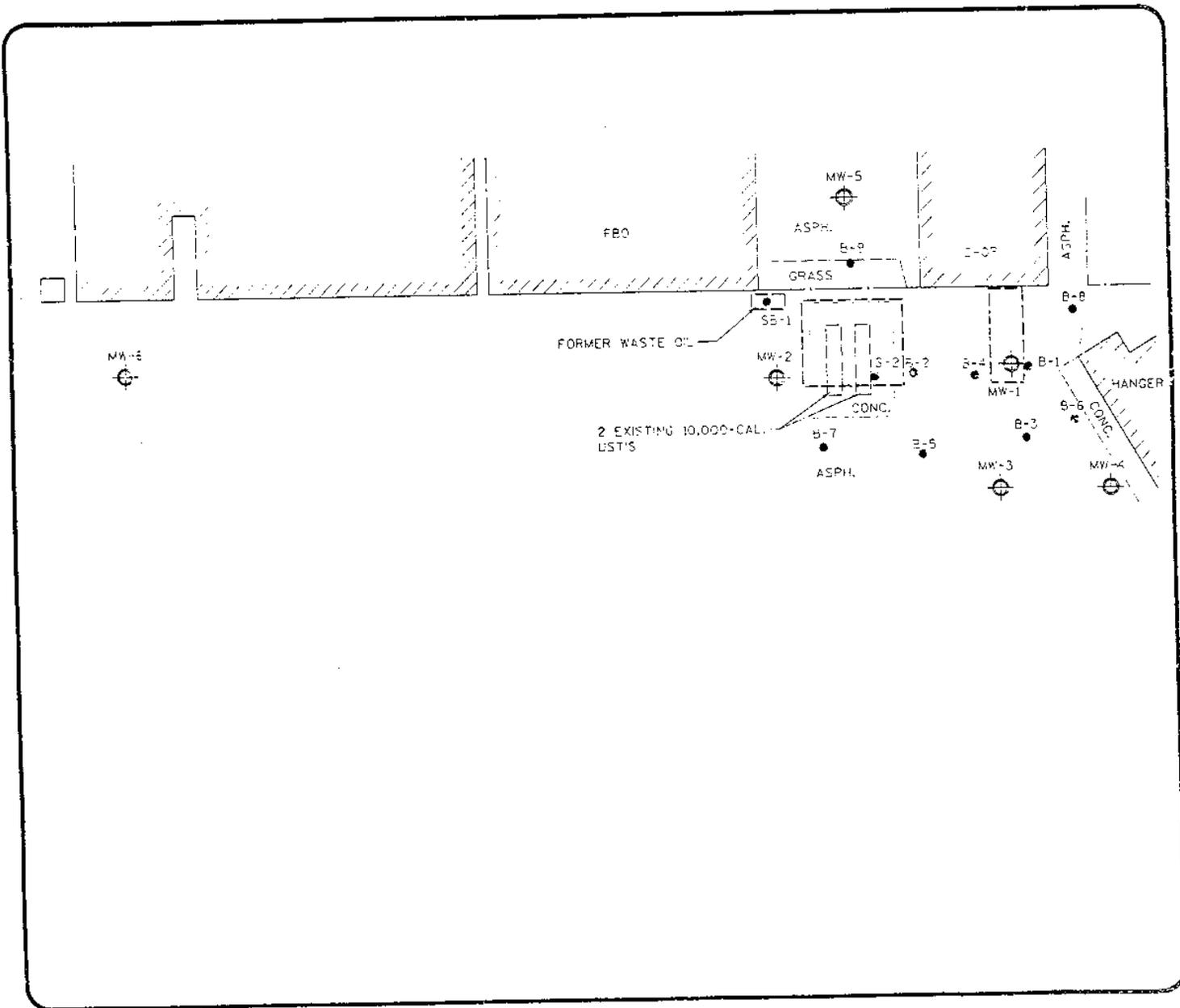
IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this 3rd day of April, 2000.

Signature: [Handwritten Signature]  
Printed Name: H. Nathan Norberg

Subscribed and sworn to before me  
this 3rd day of April, 2000.

Mary B. Anderson  
Notary Public, State of WI Mary B Anderson  
My Commission Expires 9/103

This document was drafted by MSA Professional Services, 1835 N. Stevens Street, Rhinelander, WI 54501, based on comments from the Wisconsin Department of Natural Resources.



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P.O. Box 1026 1835 N. Stevens St. Rhinelander, WI 54501  
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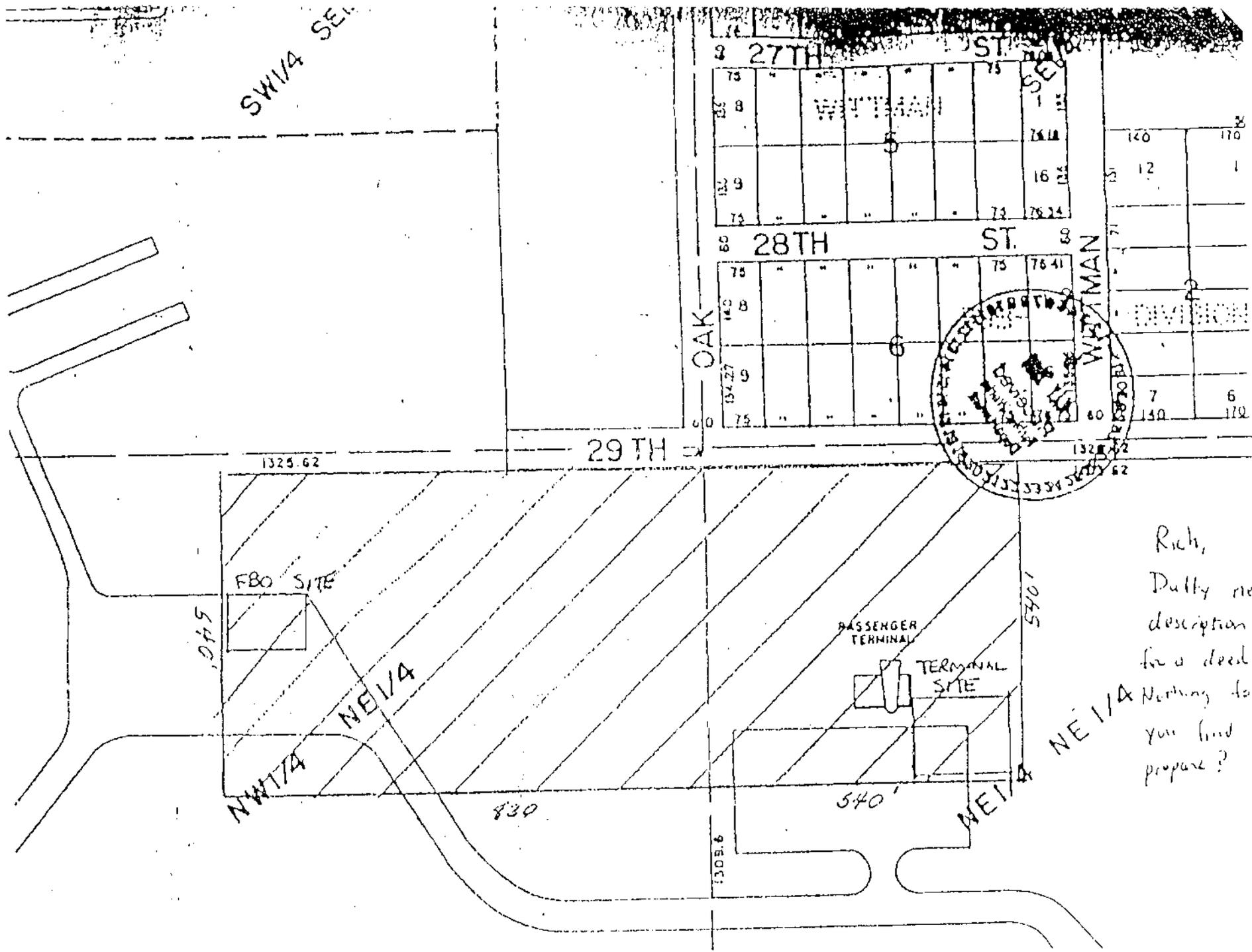
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LEGEND

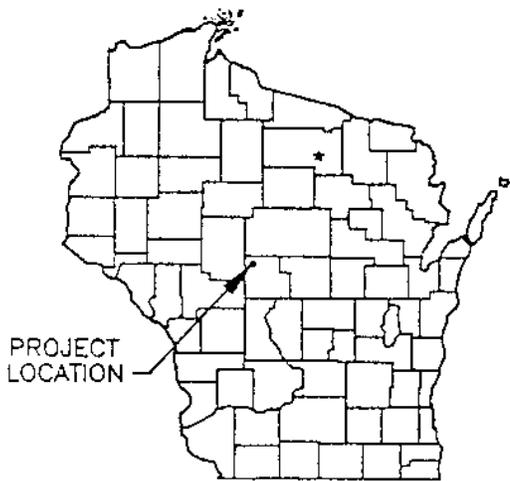
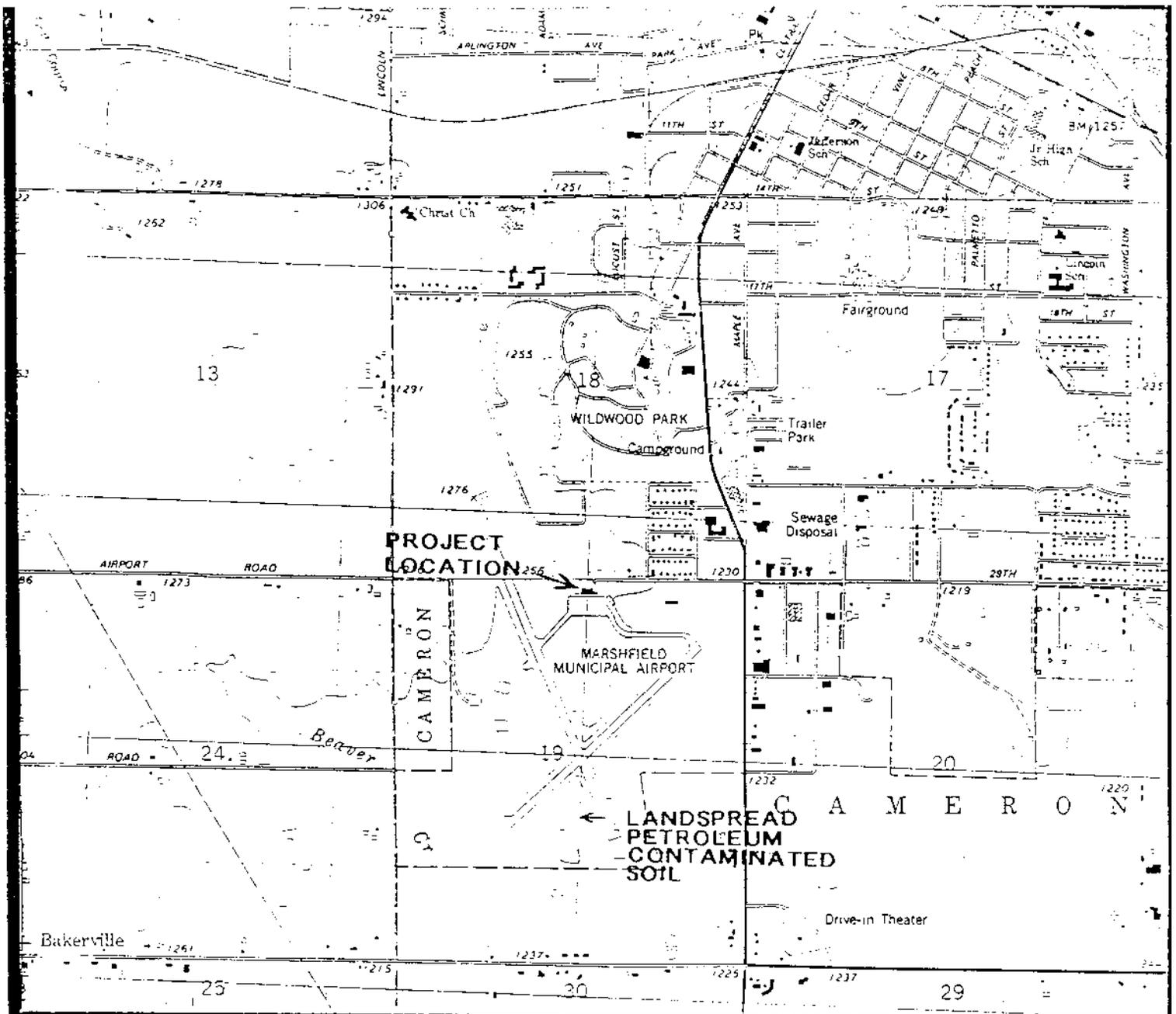
- MW-1 MONITORING WELL LOCATION
- S9-1 SOIL BORING LOCATION
- B-1 SAMPLE LOCATION
- S-1 SAMPLE LOCATION
- FENCE
- UST EXCAVATION LIMITS

40 0 40  
 SCALE IN FEET

**FIGURE 3**  
 SOIL BORING AND  
 MONITORING WELL LOCATIONS  
 MARSHFIELD AIRPORT  
 FIXED BASE OF OPERATIONS  
 MARSHFIELD, WISCONSIN



Rich,  
 Dully re  
 description  
 for a deed  
 for a deed  
 you had  
 propose?



2000 0 2000  
 SCALE IN FEET  
 1 INCH = 2000 FT.



Marshfield Quadrangle  
 Wisconsin—Wood Co.  
 7.5 Minute Series (Topographic)  
 NW/4 Marshfield 15' Quadrangle  
 Contour Interval 10 Feet  
 1979

**FIGURE I**  
**SITE LOCATION MAP**  
 FIXED BASE OF OPERATION  
 MARSHFIELD MUNICIPAL AIRPORT, MARSHFIELD, WI



# MSA

PROFESSIONAL SERVICES

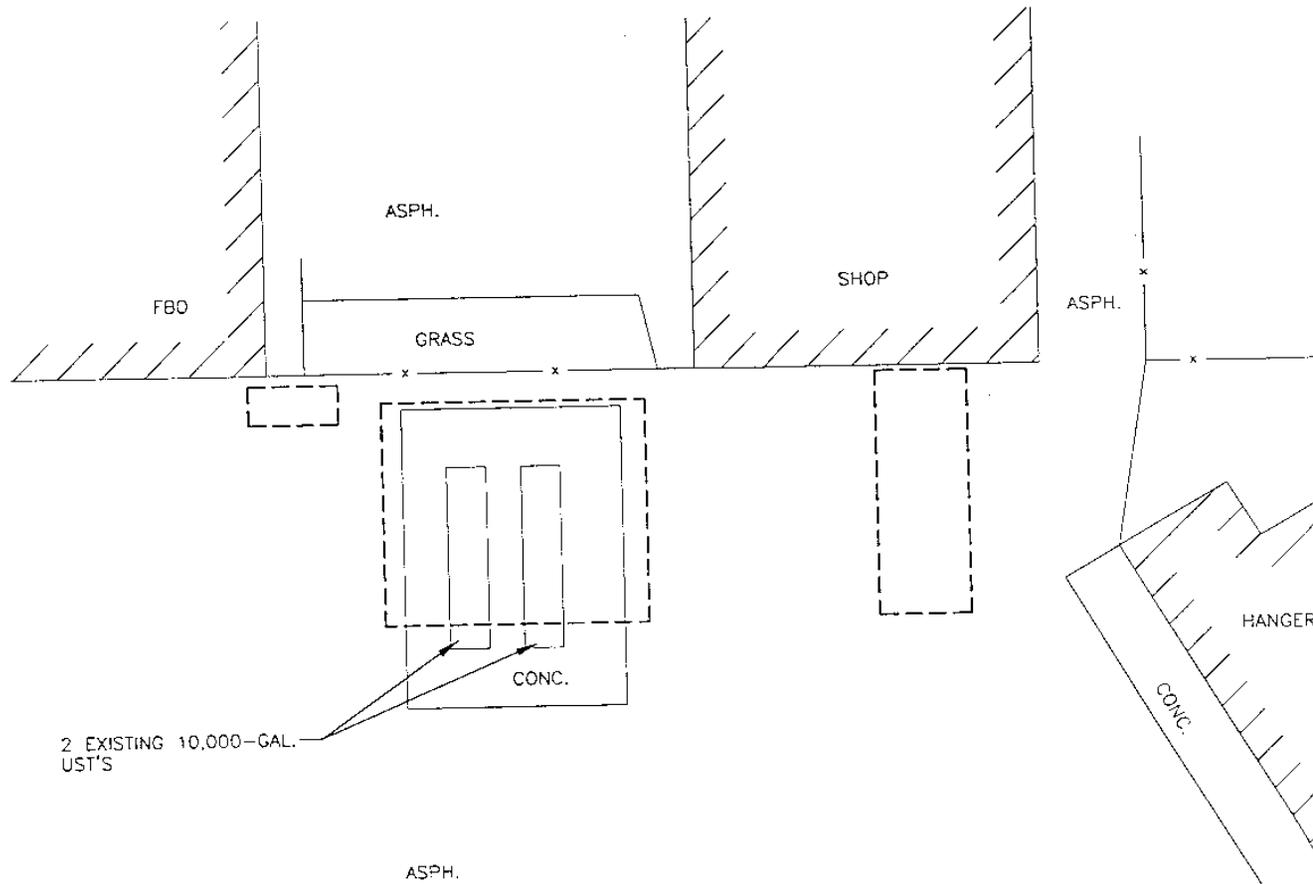
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715-362-3244 1-800-844-7854 Fax: 715-362-4116

## LEGEND

—\*—\*—\*— FENCE

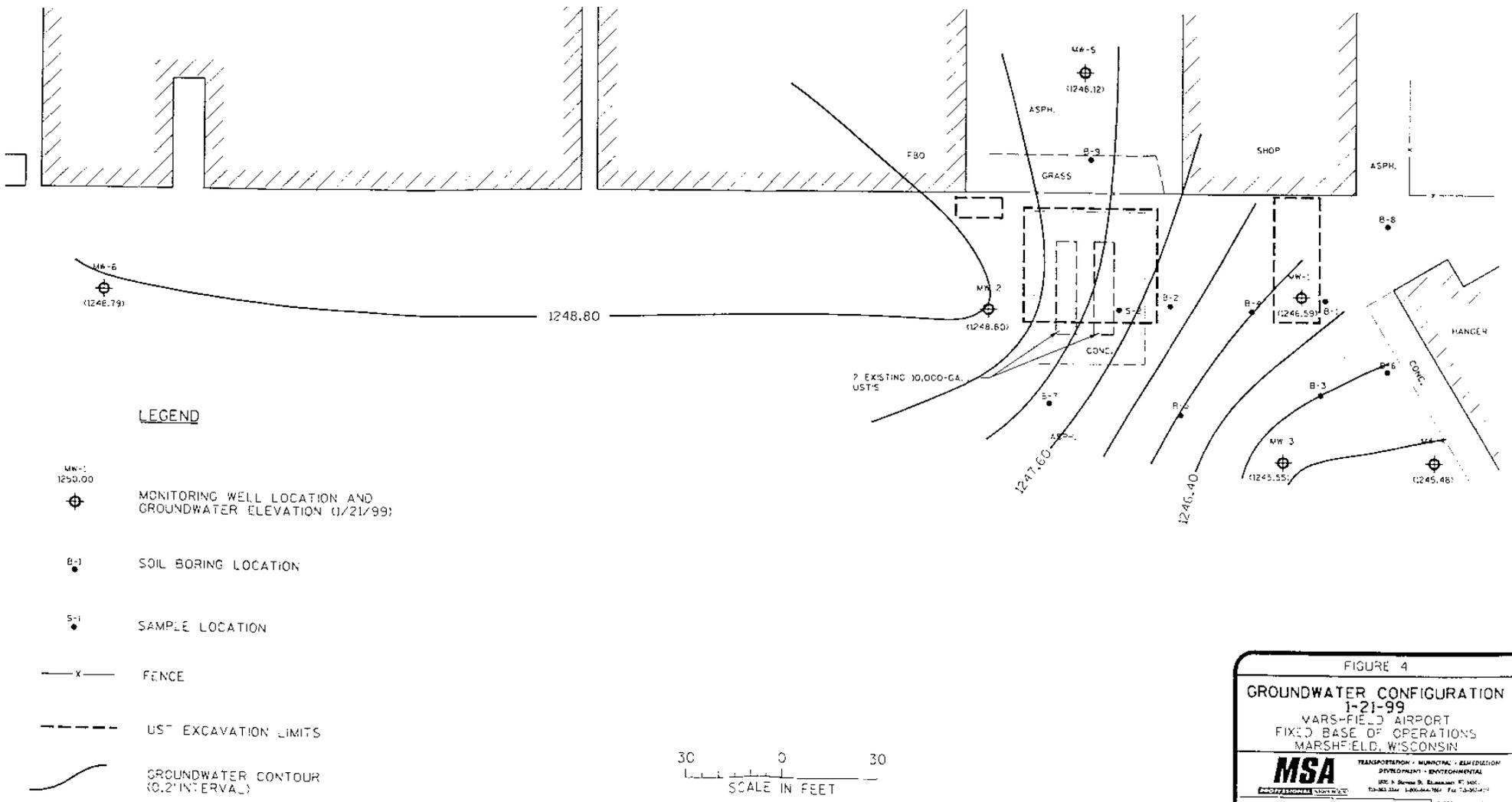
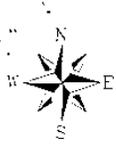
- - - - - UST EXCAVATION LIMITS



20 0 20  
SCALE IN FEET

## FIGURE 2 SITE LAYOUT

MARSHFIELD AIRPORT  
FIXED BASE OF OPERATIONS  
MARSHFIELD, WI



**LEGEND**

- MW-1  
1250.00  
MONITORING WELL LOCATION AND GROUNDWATER ELEVATION (1/21/99)
- B-1  
SOIL BORING LOCATION
- S-1  
SAMPLE LOCATION
- X  
FENCE
- - -  
UST EXCAVATION LIMITS
- ~  
GROUNDWATER CONTOUR (0.2' INTERVAL)

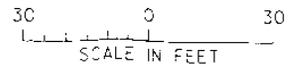
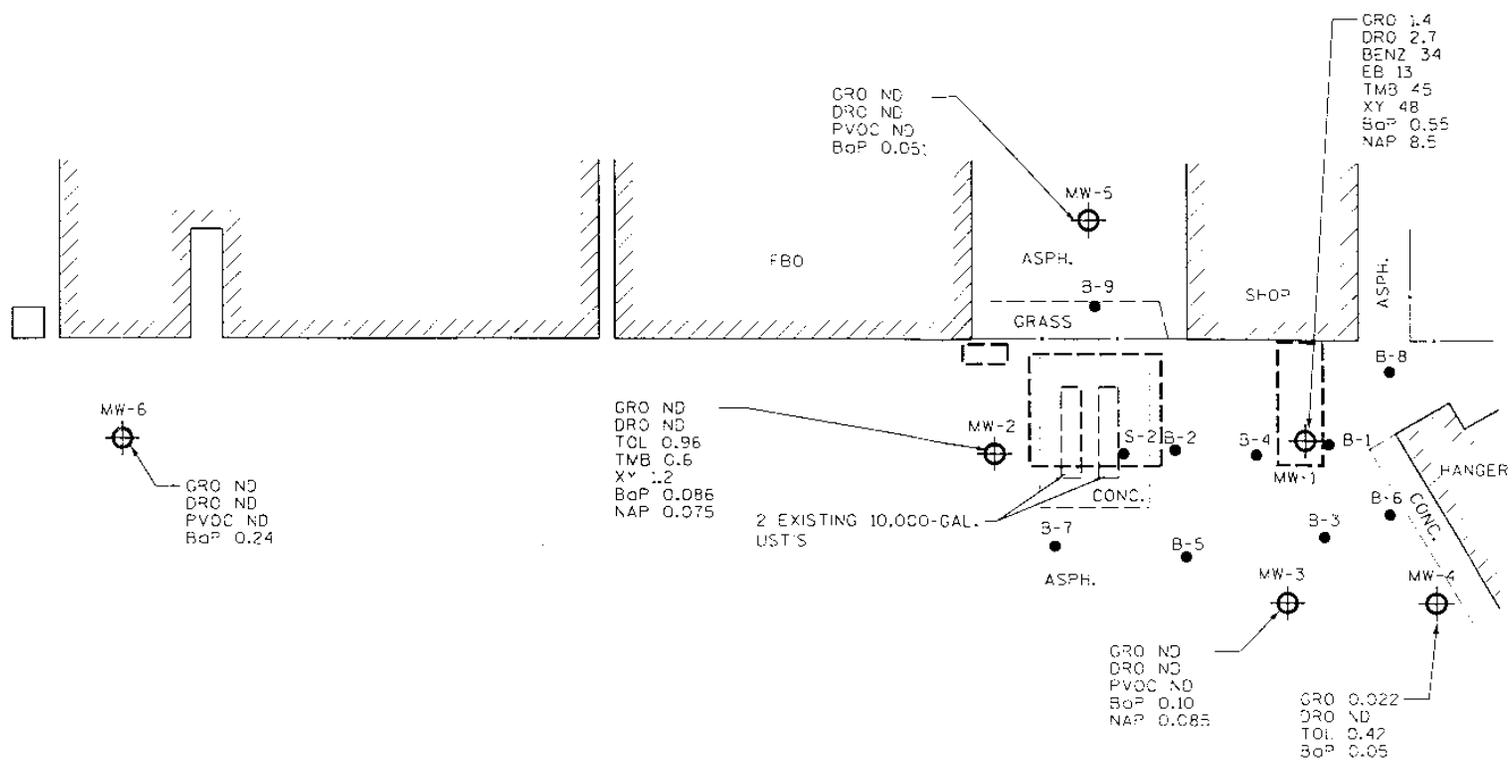


FIGURE 4

**GROUNDWATER CONFIGURATION**  
1-21-99  
VARS-FIELD AIRPORT  
FIXED BASE OF OPERATIONS  
MARSHFIELD, WISCONSIN

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300 N. Geneva St., Marshfield, WI, 54449  
715-863-3344 1-800-644-7667 Fax 715-863-3347

DRAWN BY: P. J. K.	DATE:	SHEET: 1 OF 1	FILE NO.:
CHKD BY: G. J.	SCALE: AS SHOWN		



ND NOT DETECTED  
 GRO GASOLINE RANGE ORGANICS  
 DRO DIESEL RANGE ORGANICS  
 PVOC PETROLEUM VOLATILE ORGANIC COMPOUNDS  
 BENZ BENZENE  
 EB ETHYLBENZENE  
 TOL TOLUENE  
 XY TOTAL XYLENE  
 TMB TOTAL TRIMETHYLBENZENE  
 BaP BENZO(a)PYRENE  
 NAP NAPHTHALENE



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**LEGEND**

- MW-1 MONITORING WELL LOCATION
- B-1 SOIL BORING LOCATION
- S-1 SAMPLE LOCATION
- FENCE
- - - UST EXCAVATION LIMITS



40 0 40  
 SCALE IN FEET

**FIGURE 5**  
**GROUNDWATER CONTAMINATION**  
**DISTRIBUTION 1-21-99**  
 MARSHFIELD AIRPORT  
 FIXED BASE OF OPERATIONS  
 MARSHFIELD, WISCONSIN

**NR 720 GENERIC RESIDUAL CONTAMINANT LEVELS**

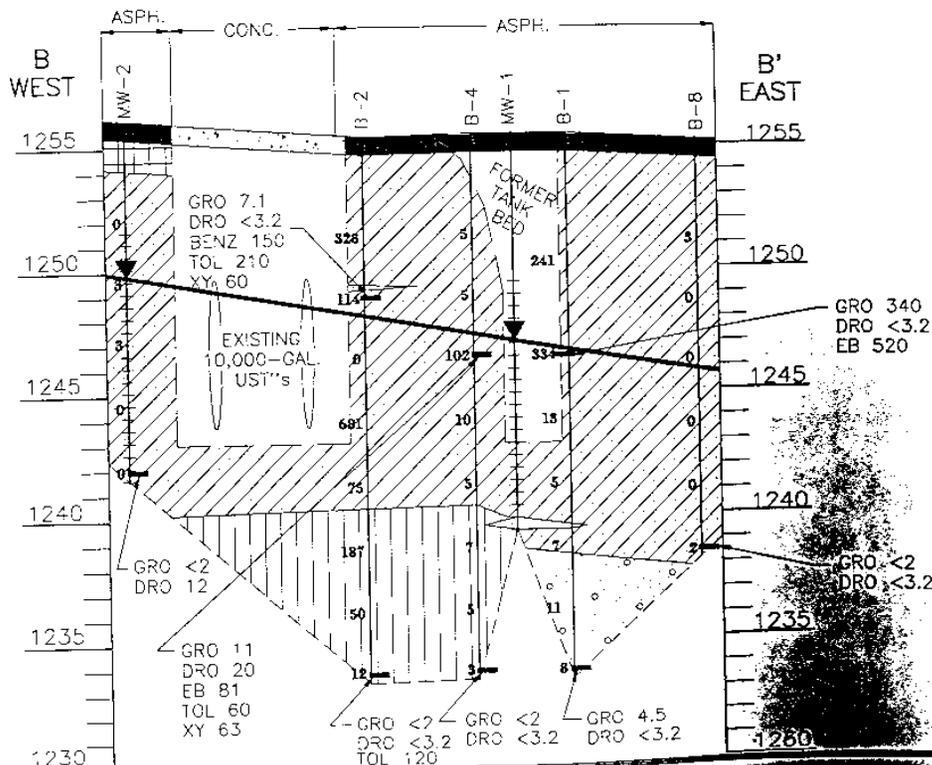
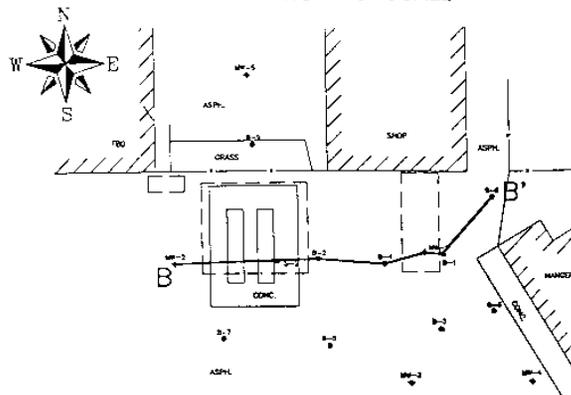
BENZENE (BENZ)	5.5	µg/Kg
TOLUENE (TOL)	1500	µg/Kg
ETHYLBENZENE (EB)	2900	µg/Kg
TOTAL XYLENE (XY)	4100	µg/Kg
GASOLINE RANGE ORGANICS (DRO)	250	mg/Kg
DIESEL RANGE ORGANICS (DRO)	250	µg/Kg

**EXPLANATION**

- SOIL BORING
- ORGANIC VAPOR METER READINGS
- MONITORING WELL SCREEN
- LABORATORY SAMPLE GRO & DRO RESULTS IN mg/Kg PVOC RESULTS IN µg/Kg
- GROUNDWATER (1/25/95)

**LOCATION OF GEOLOGIC CROSS SECTION**

NOT TO SCALE

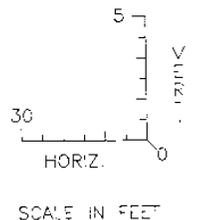


**NOTE:** INFORMATION BETWEEN SOIL BORINGS IS INTERPRETED BASED UPON AVAILABLE DATA. ACTUAL CONDITIONS BETWEEN SOIL BORINGS ARE UNKNOWN.

**MSA** 1835 N. Stevens St.  
Rhineland, WI 54501  
715-367-3244

**MID-STATE ASSOCIATES, INC.**  
Engineers - Architects - Planners - Surveyors - Scientists

- ASPHALT
- TOPSOIL
- CONCRETE
- FILL - yellow medium grained sand
- SANDY CLAY -(CL) reddish brown sandy clay with pebbles
- FINE SAND -(SP) brown, very fine grained sand, found as thin seams
- SAND -(SW) grey to brown fine to medium grained sand
- SILT -(ML) light brown to grey silt



**FIGURE 5**  
**HYDROGEOLOGIC**  
**CROSS SECTION**  
**B-B'**

MARSHFIELD AIRPORT FIXED BASE OF OPERATIONS  
MARSHFIELD, WI

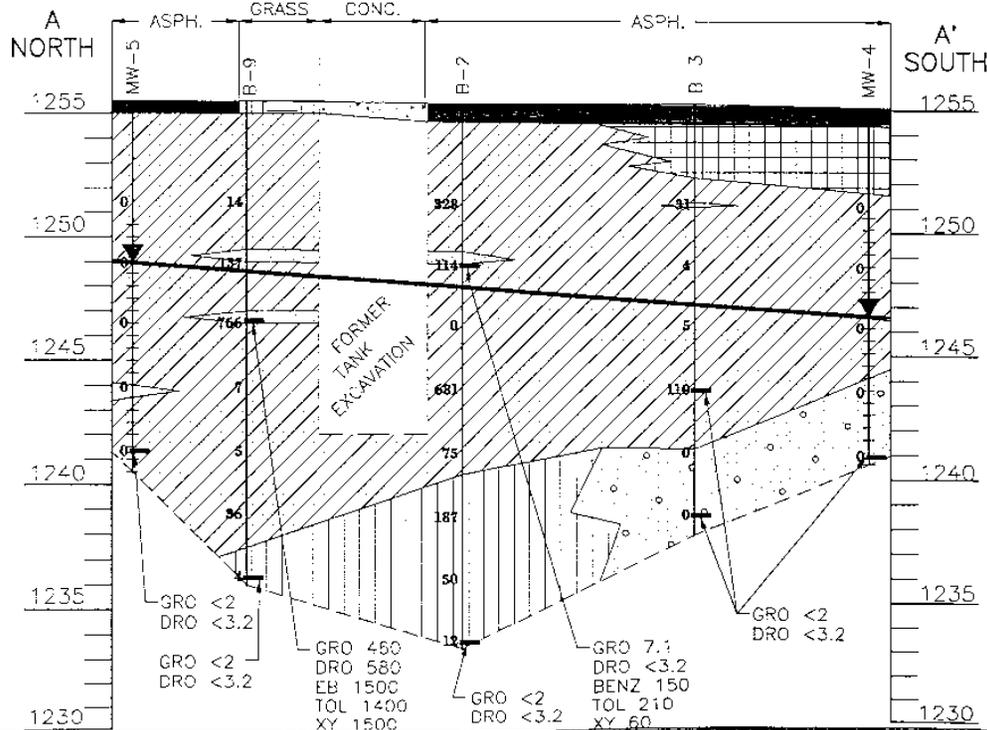
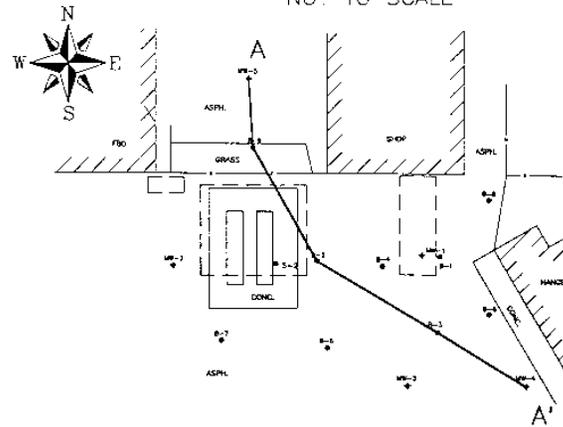
NR 720 GENERIC RESIDUAL CONTAMINANT LEVELS

BENZENE (BENZ)	5.5	µg/Kg
TOLUENE (TOL)	1500	µg/Kg
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TOTAL XYLENE (XY)	4100	µg/Kg
GASOLINE RANGE ORGANICS (DRO)	250	mg/Kg
DIESEL RANGE ORGANICS (DRO)	250	µg/Kg

EXPLANATION

- SOIL BORING
- ORGANIC VAPOR METER READINGS
- MONITORING WELL SCREEN
- LABORATORY SAMPLE GRC & DRO RESULTS IN mg/Kg  
PVOC RESULTS IN µg/Kg
- GROUNDWATER (1/25/95)

LOCATION OF GEOLOGIC CROSS SECTION

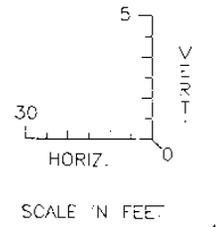


**MSA** 1835 N. Stevens St.  
Rhineland, WI. 54501  
715-367-3244

**MID-STATE ASSOCIATES, INC.**  
Engineers - Architects - Planners - Surveyors - Scientists

LEGEND

- ASPHALT
- TOPSOIL
- CONCRETE
- FILL - yellow medium grained sand
- SANDY CLAY - (CL) reddish brown sandy clay with pebbles
- FINE SAND - (SP) brown, very fine grained sand, found as thin seams
- SAND - (SW) grey to brown fine to medium grained sand
- SILT - (ML) light brown to grey silt



**FIGURE 4**  
**HYDROGEOLOGIC**  
**CROSS SECTION**  
**A-A'**  
MARSHFIELD AIRPORT FIXED BASE OF OPERATIONS  
MARSHFIELD, WI

**Table 1**  
**Groundwater Analytical Sample Results**  
**Marshfield Airport FBO, Marshfield, WI**

Well Identification Date Collected	MW-1									WAC NR 140	
	10/14/94	01/25/95	01/10/96	04/01/97	07/29/97	03/02/98	06/04/98	10/27/98	01/21/99	PAL	ES
<b>Analyte</b>											
DRO (mg/L)	15	28.4		6.5	8.6	4.0	8.6	3.4	2.7		
GRO (mg/L)	1.5	2.6				1.4	0.8	1.9	1.4		
<b>PAHs (µg/L)</b>											
Benzene	--	<b>7.2</b>	<b>49</b>	<b>20</b>	<b>26</b>	<b>12</b>	4.1	<b>18.0</b>	<b>34</b>	0.5	5
Ethylbenzene	25	64	21	14	17	18	9.1	16	13	140	700
Methyl tert-butyl ether	--	--	--	2.8	--	--	3.6	--	--	12	60
Toluene	--	--	1.1	3.6	3.8	0.9	0.50	3.20	--	68.6	343
1,2,4-Trimethylbenzene	44	99	6.5	23	27	29	12	40	35		
1,3,5-Trimethylbenzene	11	31	7.4	7.9	6.7	7.8	3.7	17	10	96**	480**
Total Xylenes	98	<b>189</b>	44	83	<b>129</b>	88	29	72	48	124*	620*
Isopropylbenzene	9.5		7.4								
p-Isopropyltoluene	--		6.1								
n-Butylbenzene	11		2.7								
sec-Butylbenzene	--		3.8								
Dichlorodifluoromethane	--		1.9								
1,2-Dichloroethane	--		2.7							0.5	5
Methylene Chloride	<b>94</b>		--							0.5	5
Naphthalene	<b>19</b>		<b>14</b>			<b>9.1</b>	5.0			8	40
n-Propylbenzene	--		4.9								
<b>PAHs (µg/L)</b>											
Acenaphthene	--			--	--		--	0.98	--		
Acenaphthylene	25			--	--		--	--	--		
Anthracene	--			--	0.14		--	0.13	--		
Benzo(a)anthracene	--			--	--		--	0.096	0.44		
Benzo(a)pyrene	--			--	--		<b>0.10</b>	<b>0.2</b>	<b>0.55</b>	0.02	0.2
Benzo(b)fluoranthene	--			--	--		0.023	0.16	--		
Benzo(g,h,i)perylene	--			--	--		--	0.089	0.62		
Benzo(k)fluoranthene	--			--	--		--	0.088	--		
Chrysene	--			--	0.047		--	0.12	0.42		
Dibenzo (a,h) anthracene	--			--	--		--	0.054	--		
Fluoranthene	0.42			--	0.11		--	0.57	0.9		
Fluorene	16			0.11	0.09		--	0.5	0.7	80	400
Indeno(1,2,3-cd)pyrene	--			--	--		--	0.24	--		
Methyl-1-naphthalene	13			12	7.0		--	17	16		
Methyl-2-naphthalene	18			14	7.8		8.5	16	15		
Naphthalene	<b>195</b>			4.6	3.9		--	<b>8.4</b>	<b>8.5</b>	8	40
Phenanthrene	0.58			0.26	0.16		0.37	0.64	0.85		
Pyrene	0.35			--	0.082		0.37	0.33	0.56	50	250

PAL = ch. NR 140, Wis. Adm. Code, Preventive Action Limits  
ES = ch. NR 140, Wis. Adm. Code, Enforcement Standard.  
WAC = Wisconsin Administrative Code.  
Blank = Parameter not analyzed.  
-- = Parameter analyzed but not detected above laboratory Method Detection Limits (MDLs).  
\* = WAC NR 140 combined Xylene standards.  
\*\* = WAC NR 140 combined Trimethylbenzene standards as of December 1998.  
Bold = PAL exceedance.  
Shaded & Bold = ES exceedance.

**Table 1**  
**Groundwater Analytical Sample Results**  
**Marshfield Airport FBO, Marshfield, WI**

Well Identification	MW-1 DUP						WAC NR 140		
	Date Collected	10/14/94	01/25/95	01/10/96	04/01/97	10/27/98	01/21/99	PAL	ES
<b>Analyte</b>									
DRO (mg/L)	14	27.7		9.3			2.6		
GRO (mg/L)	3.3	2.4				2	1.5		
<b>PVOCs (µg/L)</b>									
Benzene	--	6.6	43	15	17	32		0.5	5
Ethylbenzene	32	61	21	10	16	14		140	700
Methyl tert-butyl ether	--	--	--	2.0	--	--		12	60
Toluene	--	--	1.1	3.1	1.9	--		68.6	343
1,2,4-Trimethylbenzene	57	93	6.2	17	42	34			
1,3,5-Trimethylbenzene	13	19	7	6.4	17	9.7		96**	480**
<b>Total Xylenes</b>	<b>128</b>	<b>178</b>	<b>43</b>	<b>63</b>	<b>75</b>	<b>47</b>		<b>124*</b>	<b>620*</b>
Isopropylbenzene	13		7.0						
p-Isopropyltoluene			5.9						
n-Butylbenzene	14		2.8						
sec-Butylbenzene			3.7						
Dichlorodifluoromethane			1.9						
1,2-Dichloroethane			3					0.5	5
Methylene Chloride	85		--					0.5	5
Naphthalene	28		14					8	40
n-Propylbenzene	8.5		4.6						
<b>PAHs (µg/L)</b>									
Acenaphthylene	--			--					
Anthracene	--			--					
Benzo(a)anthracene	--			--					
Benzo(a)pyrene	--			--				0.02	0.2
Benzo(b)fluoranthene	--			--					
Benzo(g,h,i)perylene	--			--					
Chrysene	--			--					
Fluoranthene	0.20			--					
Fluorene	11			0.11				80	400
Indeno(1,2,3-cd)pyrene	--			--					
Methyl-1-naphthalene	9.0			16					
Methyl-2-naphthalene	12			18					
Naphthalene	390			5.7				8	40
Phenanthrene	0.24			0.12					
Pyrene	0.26			--				50	250

PAL = ch. NR 140, Wis. Adm. Code, Preventive Action Limits

ES = ch. NR 140, Wis. Adm. Code, Enforcement Standard.

WAC = Wisconsin Administrative Code.

Blank = Parameter not analyzed.

-- = Parameter analyzed but not detected above laboratory Method Detection Limits (MDLs).

\* = WAC NR 140 combined Xylene standards.

\*\* = WAC NR 140 combined Trimethylbenzene standards as of December 1998.

Bold = PAL exceedance.

Shaded & Bold = ES exceedance.

**Table 1  
Groundwater Analytical Sample Results  
Marshfield Airport FBO, Marshfield, WI**

Soil Boring ID Date Collected	MW-2								MW-2 DUP	WAC NR 140	
	10/14/94	01/25/95	04/01/97	07/29/97	03/02/98	06/04/98	10/27/98	01/21/99	03/02/98	PAL	ES
<b>Analyte</b>											
DRO (mg/L)	0.15	0.502	--	0.46	0.49	0.091	--	--			
GRO (mg/L)	0.05	<0.018			0.21	0.053	0.042	--	0.22		
<b>PVOCs (µg/L)</b>											
Benzene	--	--	--	<b>95.0</b>	<b>86</b>	<b>8.0</b>	--	--	<b>90</b>	0.5	5
Ethylbenzene	--	--	--	1.1	--	--	--	--	--	140	700
Methyl tert-butyl ether	--	--	--	--	--	--	--	--	--	12	60
Toluene	12	--	0.82	3.2	0.3	--	--	0.96	0.3	68.6	343
1,2,4-Trimethylbenzene	--	--	0.62	1.5	--	--	--	--	--	96**	480**
1,3,5-Trimethylbenzene	--	--	1.1	--	--	--	--	0.6	--		
Total Xylenes	--	--	0.89	3.2	0.4	--	--	1.2	0.4	124*	620*
Isopropylbenzene	--										
n-Butylbenzene	--									0.5	5
Methylene Chloride	--								--	8	40
Naphthalene	--				--	--					
n-Propylbenzene	--										
<b>PAHs (µg/L)</b>											
Acenaphthylene			--	--		--	--	--			
Anthracene			--	--		--	--	0.059			
Benzo(a)anthracene			--	--		0.037	--	0.07			
Benzo(a)pyrene			--	--		<b>0.095</b>	<b>0.073</b>	<b>0.086</b>		0.02	0.2
Benzo(b)fluoranthene			--	0.1		0.09	0.15	0.12			
Benzo(g,h,i)perylene			--	--		--	0.064	0.095			
Benzo(k)fluoranthene			--	0.1		0.045	0.052	0.079			
Chrysene			--	0.1		--	0.057	0.073			
Dibenzo (a,h) anthracene			--	--		--	0.054	0.097			
Fluoranthene			0.15	0.15		--	0.10	0.13			
Fluorene			--	--		--	--	0.045		80	400
Indeno(1,2,3-cd)pyrene			--	0.20		--	0.42	0.13			
Methyl-1-naphthalene			--	0.1		--	--	--			
Methyl-2-naphthalene			--	--		--	--	0.16			
Naphthalene			--	0.74		--	--	0.075		8	40
Phenanthrene			--	--		--	--	0.083			
Pyrene			--	0.087		0.098	0.093	0.085		50	250

PAL = ch. NR 140, Wis. Adm. Code, Preventive Action Limits  
 ES = ch. NR 140, Wis. Adm. Code, Enforcement Standard.  
 WAC = Wisconsin Administrative Code.  
 Blank = Parameter not analyzed.  
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 \* = WAC NR 140 combined Xylene standards.  
 \*\* = WAC NR 140 combined Trimethylbenzene standards as of December 1998.  
 Bold = PAL exceedance.  
 Shaded & Bold = ES exceedance.

**Table 1**  
**Groundwater Analytical Sample Results**  
**Marshfield Airport FBO, Marshfield, WI**

Soil Boring ID	MW-3									WAC NR 140		
	Date Collected	10/14/94	01/25/95	01/10/96	04/01/97	07/29/97	03/02/98	06/04/98	10/27/98	01/21/99	PAL	ES
<b>Analyte</b>												
DRO (mg/L)	<0.08	0.258		--	0.1	--	--	--	--	--		
GRO (mg/L)	<0.01	<0.018					--	--	--	--		
<b>PVOCs (µg/L)</b>												
Benzene	--	--	--	--	--	--	--	--	--	--	0.5	5
Ethylbenzene	--	--	--	--	--	--	--	--	--	--	140	700
Methyl tert-butyl ether	--	--	--	--	--	--	--	--	--	--	12	60
Toluene	1.4	--	--	--	--	--	--	--	--	--	68.6	343
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	96**	480**
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--		
Total Xylenes	--	--	--	--	--	--	--	--	--	--	124*	620*
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--		
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--		
Methylene Chloride	--	--	--	--	--	--					0.5	5
Naphthalene	--	--	--	--	--	--	--	1.9			8	40
n-Propylbenzene	--	--	--	--	--	--	--					
<b>PAHs (µg/L)</b>												
Acenaphthene	--	--	--	--	--	--	--	--	--	0.053		
Acenaphthylene	120	--	--	--	--	--	--	--	--	--		
Anthracene	--	--	--	--	--	--	--	--	--	0.11		
Benzo(a)anthracene	0.44	--	--	--	--	--	--	--	--	0.11		
Benzo(a)pyrene	--	--	--	--	--	--	<b>0.025</b>	<b>0.036</b>	<b>0.10</b>		0.02	0.2
Benzo(b)fluoranthene	2.7	--	--	--	--	--	<b>0.027</b>	--	0.14			
Benzo(g,h,i)perylene	0.23	--	--	--	--	--	--	0.035	0.11			
Benzo(k)fluoranthene	--	--	--	--	--	--	--	--	0.088			
Chrysene	0.73	--	--	--	--	--	--	--	0.12			
Dibenzo (a,h) anthracene	--	--	--	--	--	--	--	--	0.10			
Fluoranthene	1.1	--	--	0.073	--	--	--	0.076	0.26			
Fluorene	--	--	--	--	--	--	--	--	0.063	80	400	
Indeno(1,2,3-cd)pyrene	0.27	--	--	--	--	--	--	--	0.15			
Methyl-1-naphthalene	40	--	--	--	--	--	--	--	--			
Methyl-2-naphthalene	41	--	--	--	--	--	--	--	0.18			
Naphthalene	<b>0.230</b>	--	--	--	--	--	--	--	0.085	8	40	
Phenanthrene	0.7	--	--	--	--	--	--	--	0.27			
Pyrene	0.86	--	--	--	--	--	0.030	0.061	0.18	50	250	

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\* = WAC NR 140 combined Xylene standards.  
\*\* = WAC NR 140 combined Trimethylbenzene standards as of December 1998.  
Bold = PAL exceedance.  
Shaded & Bold = ES exceedance.

Table I  
Groundwater Analytical Sample Results  
Marshfield Airport FBO, Marshfield, WI

Soil Boring ID Date Collected	MIW-4								WAC NR 140	
	10/14/94	01/25/95	04/01/97	07/29/97	03/02/98	06/04/98	10/27/98	01/21/99	PAL	ES
Analyte										
DRO (mg/L)	<0.08	0.778	--	0.12	--	--	0.14	--		
GRO (mg/L)	0.06	<0.018			--	--	--	0.022		
PVOCs (µg/L)										
Benzene	--	--	--	--	--	--	--	--	0.5	5
Ethylbenzene	--	--	--	--	--	--	--	--	140	700
Methyl tert-butyl ether	--	--	--	--	--	--	--	--	12	60
Toluene	48	--	--	--	--	--	--	0.42	68.6	343
1,2,4-Trimethylbenzene	--	--	0.33	--	--	--	--	--		
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	96**	480**
Total Xylenes	--	--	--	--	--	--	--	--	124*	620*
Isopropylbenzene	--									
n-Butylbenzene	--									
Methylene Chloride	--								0.5	5
Naphthalene	--				--	--			8	40
n-Propylbenzene	--									
PAHs (µg/L)										
Acenaphthylene	--		--	--		--	--	--		
Anthracene	--		--	--		--	0.048	0.056		
Benzo(a)anthracene	--		--	0.08		--	--	0.043		
Benzo(a)pyrene	--		--	--		0.031	0.047	0.05	0.02	0.2
Benzo(b)fluoranthene	--		--	0.17		0.038	--	--		
Benzo(g,h,i)perylene	--		--	0.07		--	0.049	--		
Benzo(k)fluoranthene	--		--	0.07		--	0.038	0.067		
Chrysene	--		--	0.15		--	0.036	0.041		
Fluoranthene	--		--	0.26		--	0.12	0.075		
Fluorene	--		--	--		--	0.034	0.044	80	400
Indeno(1,2,3-cd)pyrene	--		--	--		--	0.20	--		
Methyl-1-naphthalene	--		--	--		--	--	--		
Methyl-2-naphthalene	--		--	--		--	--	--		
Naphthalene	--		--	--		--	--	--	8	40
Phenanthrene	0.12		--	0.12		--	0.14	--		
Pyrene	--		--	0.16		0.037	0.095	0.030	50	250

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\* = WAC NR 140 combined Xylene standards.

\*\* = WAC NR 140 combined Trimethylbenzene standards as of December 1998.

Bold = PAL exceedance.

Shaded & Bold = ES exceedance.

**Table 1**  
**Groundwater Analytical Sample Results**  
**Marshfield Airport FBO, Marshfield, WI**

Soil Boring ID	MW-5								WAC NR 140		
	Date Collected	10/14/94	01/25/95	04/01/97	07/29/97	03/02/98	06/04/98	10/27/98	01/21/99	PAL	ES
Analyte											
DRO (mg/L)	<0.08	0.244	--	0.09	--	--	--	--	--		
GRO (mg/L)	0.03	<0.018									
PVOCs (µg/L)											
Benzene	--	--	--	--	--	--	--	--	--	0.5	5
Ethylbenzene	--	--	--	--	--	--	--	--	--	140	700
Methyl tert-butyl ether	1.3	--	--	--	--	--	--	--	--	12	60
Toluene	14	--	--	--	--	--	--	--	--	68.6	343
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--		
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	96**	480**
Total Xylenes	--	--	--	--	--	--	--	--	--	124*	620*
Isopropylbenzene	--										
n-Butylbenzene	--										
Methylene Chloride	--									0.5	5
Naphthalene	--									8	40
n-Propylbenzene	--										
PAHs (µg/L)											
Acenaphthylene			--	--		--	--	--	--		
Anthracene			--	--		--	--	0.047			
Benzo(a)anthracene			--	--		--	--	0.046			
Benzo(a)pyrene			--	--		--	--	<b>0.051</b>	0.02	0.2	
Benzo(b)fluoranthene			--	--		--	--	--			
Benzo(g,h,i)perylene			--	--		--	--	--			
Benzo(k)fluoranthene			--	--		--	--	--			
Chrysene			--	--		--	--	0.045			
Fluoranthene			--	--		--	--	0.079			
Fluorene			--	--		--	--	--	80	400	
Indeno(1,2,3-cd)pyrene			--	--		--	--	--			
Methyl-1-naphthalene			--	--		--	--	--			
Methyl-2-naphthalene			--	--		--	--	--			
Naphthalene			--	--		--	--	--	8	40	
Phenanthrene			--	--		--	--	--			
Pyrene			--	--		--	--	0.030	50	250	

PAL = ch. NR 140, Wis. Adm. Code, Preventive Action Limits  
ES = ch. NR 140, Wis. Adm. Code, Enforcement Standard.  
WAC = Wisconsin Administrative Code.  
Blank = Parameter not analyzed.  
-- = Parameter analyzed but not detected above laboratory Method Detection Limits (MDLs).  
\* = WAC NR 140 combined Xylene standards.  
\*\* = WAC NR 140 combined Trimethylbenzene standards as of December 1998.  
Bold = PAL exceedance.  
Shaded & Bold = ES exceedance.

**Table 1**  
**Groundwater Analytical Sample Results**  
**Marshfield Airport FBO, Marshfield, WI**

Soil Boring ID Date Collected	MW-6			WAC NR 140	
	06/04/98	10/27/98	01/21/99	PAL	ES
<b>Analyte</b>					
DRO (mg/L)	--	--	--		
GRO (mg/L)	--	0.20	--		
<b>PVOCs (µg/L)</b>					
Benzene	--	--	--	0.5	5
Ethylbenzene	--	--	--	140	700
Methyl tert-butyl ether	--	--	--	12	60
Toluene	--	--	--	68.6	343
1,2,4-Trimethylbenzene	--	--	--		
1,3,5-Trimethylbenzene	--	--	--	96**	480**
Total Xylenes	--	--	--	124*	620*
Isopropylbenzene					
n-Butylbenzene					
Methylene Chloride				0.5	5
Naphthalene	--			8	40
n-Propylbenzene					
<b>PAHs (µg/L)</b>					
Acenaphthylene	--	--	--		
Anthracene	--	0.03	0.071		
Benzo(a)anthracene	0.032	0.11	0.12		
Benzo(a)pyrene	<b>0.14</b>	--	<b>0.24</b>	0.02	0.2
Benzo(b)fluoranthene	0.11	0.17	0.3		
Benzo(g,h,i)perylene	0.18	--	0.26		
Benzo(k)fluoranthene	0.064	0.042	0.16		
Chrysene	--	0.18	0.16		
Dibenzo (a,h) anthracene	--	0.20	0.16		
Fluoranthene	--	0.29	0.25		
Fluorene	--	--	--	80	400
Indeno(1,2,3-cd)pyrene	0.093	1.8	0.59		
Methyl-1-naphthalene	--	--	--		
Methyl-2-naphthalene	6.3	--	--		
Naphthalene	--	--	--	8	40
Phenanthrene	--	0.068	0.066		
Pyrene	0.12	0.29	0.22	50	250

PAL = ch. NR 140, Wis. Adm. Code, Preventive Action Limits

ES = ch. NR 140, Wis. Adm. Code, Enforcement Standard.

WAC = Wisconsin Administrative Code.

Blank = Parameter not analyzed.

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\*\* = WAC NR 140 combined Trimethylbenzene standards as of December 1998.

Bold = PAL exceedance.

Shaded & Bold = ES exceedance.

**Table 1  
Groundwater Analytical Sample Results  
Marshfield Airport FBO, Marshfield, WI**

Soil Boring ID Date Collected	Equipment Blank		Trip Blank						WAC NR 140		
	10/14/94	01/25/95	10/14/94	04/01/97	07/29/97	03/02/98	06/04/98	10/27/98	01/21/99	PAL	ES
<b>ANALYTE</b>											
DRO (mg/L)											
GRO (mg/L)		<0.018				--	--	--	--		
<b>PVOCs (µg/L)</b>											
Benzene	--	--	--	--	--	--	--	--	--	0.5	5
Ethylbenzene	--	--	--	--	--	--	--	--	--	140	700
Methyl tert-butyl ether	--	4.6	1.0	--	--	--	--	--	--	12	60
Toluene	--	--	--	--	--	--	--	--	--	68.6	343
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--		
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	96**	480**
Total Xylenes	--	--	--	--	--	--	--	--	--	124*	620*

PAI = ch. NR 140, Wis. Adm. Code, Preventive Action Limits

ES = ch. NR 140, Wis. Adm. Code, Enforcement Standard.

WAC = Wisconsin Administrative Code.

Blank = Parameter not analyzed.

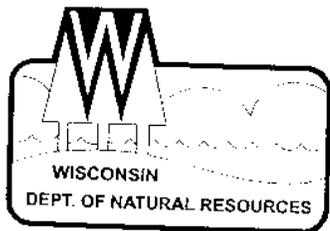
-- = Parameter analyzed but not detected above laboratory Method Detection Limits (MDLs).

\* = WAC NR 140 combined Xylene standards.

\*\* = WAC NR 140 combined Trimethylbenzene standards as of December 1998.

Bold = PAL exceedance.

Shaded & Bold = ES exceedance.



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor  
George E. Meyer, Secretary  
Scott A. Humrickhouse, Regional Director

Wisconsin Rapids Office  
473 Griffith Avenue  
Wisconsin Rapids, Wisconsin 54494-7859  
Telephone 715-421-7800  
FAX 715-421-7830

November 28, 1999

BRRTS #: 03-72-001109

Mr. Duffy Gaier  
City of Marshfield - Marshfield Airport  
210 West 29<sup>th</sup> Street  
Marshfield, WI 54449

**FILE COPY**

SUBJECT: Closure Request, Marshfield Municipal Airport - Fixed Base Operations Site,  
400 West 29<sup>th</sup> Street, Marshfield, Wisconsin.

Dear Mr. Gaier:

On November 18, 1999, the above named site was reconsidered by the Wisconsin Department of Natural Resources West (DNR) Central Region closeout committee for a determination as to whether or not the case qualified for close out under Wis. Adm. Code (WAC) ch. NR 726. The data presented to the committee indicates that a WAC ch. 140 groundwater quality enforcement standard (ES) exceedence for benzene and benzo(a)pyrene is present in the groundwater at the site and that residual petroleum-related soil contamination remains at depth at the site. Due to the presence of residual soil and groundwater contamination, a clean closure can not be granted in this case at this time. However, based on the investigative and remediation documentation provided to the Department, it appears that the extent of the petroleum contamination at the above-named site has been investigated and remediated to the extent practicable, the location of the potential residual soil contamination does not pose a threat to direct contact under current site conditions, and that natural attenuation will be effective in reducing the mass of residual contamination at this site. Therefore, the Department considers the case "closed," having determined pursuant to WAC NR 726, that no further action is necessary on the site at this time, providing the property owner complies with the following two conditions.

The first condition of the closeout for this case is that a groundwater use restriction be filed on the property deed describing the type, location, and extent of the residual groundwater contamination, and requiring that Department (or successor agency) approval must be obtained before any water supply wells are reconstructed or installed on the property and that if contaminated groundwater is extracted from the property (i.e. for construction purposes) the groundwater must be managed in compliance with applicable laws and regulations.

The second condition of the closeout of this case is the proper abandonment of the monitoring wells currently at the site (pursuant of WAC NR 141). Documents should be forwarded to me at the WDNR Wisconsin Rapids office that substantiates proper abandonment (Form 3300-5W).

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July 22, 1999

BRRTS #03-72-001109

Mr. Duffy Gaier - City of Marshfield, Marshfield Airport

Page 2

You should note that some impacted material remains at depth at this site. That material may represent solid waste should it be excavated in the future and may represent a direct contact hazard to workers should they be exposed to the material. If future excavation exposes impacted material, you should take steps to address the potential risks to workers and make sure the material is properly disposed of as solid waste.

Draft copies of these deed documents must be submitted to the Department for approval within 30 days after Wood County takes title to the property, and the deed documents must be registered with the County Register of Deeds fifteen days after receiving Department approval of the draft deed restriction and notice. To document that this condition has been complied with, the property owner must submit to the Department a copy of the recorded deed documents, with the recording information stamped on them, within 15 days after the County Register of Deeds returns the deed documents to the property owner. The deed documents may be amended in the future with the approval of Department if conditions change at the site such that the residual contamination is completely remediated (if deemed necessary).

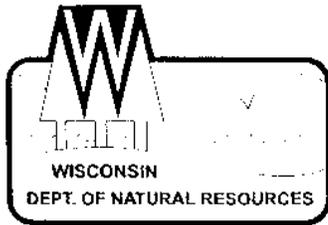
You should note that this letter does not constitute Department "certification" under s. 292.15(2)(a)3, Stats., as created by 1993 Wisconsin Act 453 (May 12, 1994). Also, in 1997 Wisconsin Act 27, the legislature amended s. 292.15, Wis. Stats., creating the new "Voluntary Party Remediation and Exemption from Liability" statute. This statute provides liability protection for persons who did not intentionally or recklessly cause the release of a hazardous substance and who conducts an environmental investigation and cleans up property by restoring the environment to the extent practicable and in accordance with rules promulgated by the Department. Upon completion of the cleanup, the person receives a "certificate of completion" that provides an exemption from the "Hazardous Substance Spills" statute and protection from future liability for the past releases. You must apply for the program by filling out an application form and fees are charged to cover administrative costs associated with the program. If you are interested in more information about the program or would like an application package, please call Loren Brumberg at the West Central Region Office in Eau Claire at 715-839-3770.

Once the deed restriction and monitoring well abandonment forms have been properly submitted to this office, you will be issued a final closure letter for this site. Thank you for your efforts to cleanup Wisconsin's environment. If you should have any questions regarding this letter please contact me at (715) 421-7850.

Sincerely,

Tom Hvizdak  
Hydrogeologist

c: Brian Hegge, 1835 N. Stevens St., Rhinelander, WI 54501



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor  
George E. Meyer, Secretary  
Scott A. Humrickhouse, Regional Director

Wisconsin Rapids Office  
473 Griffith Avenue  
Wisconsin Rapids, Wisconsin 54494-7859  
Telephone 715-421-7800  
FAX 715-421-7830

June 8, 2000

BRRTS #03-72-001109

**FILE COPY**

Mr. Duffy Gaier  
City of Marshfield - Marshfield Airport  
210 West 29<sup>th</sup> Street  
Marshfield, WI 54449

SUBJECT: Case Closure, Marshfield Municipal Airport - Fixed Base Operations Site,  
400 West 29<sup>th</sup> Street, Marshfield, Wisconsin.

Dear Mr. Gaier:

The Wisconsin Department of Natural Resources (WDNR) west central region has received the monitoring well abandonment forms for the monitoring wells associated with the subsurface environmental assessment conducted by your consultant for the above referenced site, and a copy of the groundwater use restriction deed affidavit (with the recording information stamped on it) recorded with the Wood County Register of Deeds as required by WDNR west central closure committee as conditions for closure of this site. The investigative and remediation documentation provided to the Department, indicates that the extent of the petroleum contamination at the above-named site has been investigated and remediated to the extent practicable, and that natural attenuation will be effective in reducing the mass of residual contamination at this site. Therefore, based on all information contained in the site file and the information included in the well abandonment form and deed affidavit submitted by you, it is the decision of the DNR that, **no further investigatory or clean-up action is needed at the above referenced site at this time and that this site is considered closed.**

You should note that this letter does not constitute Department "certification" under s. 292.15(2)(a)3, Stats., as created by 1993 Wisconsin Act 453 (May 12, 1994). Also, in 1997 Wisconsin Act 27, the legislature amended s. 292.15, Wis. Stats., creating the new "Voluntary Party Remediation and Exemption from Liability" statute. This statute provides liability protection for persons who did not intentionally or recklessly cause the release of a hazardous substance and who conducts an environmental investigation and cleans up property by restoring the environment to the extent practicable and in accordance with rules promulgated by the Department. Upon completion of the cleanup, the person receives a "certificate of completion"

---

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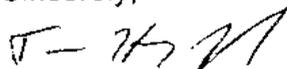
January 25, 2000  
Mr. Duffy Gaier - City of Marshfield  
Page 2

BRRTS #03-72-001109

That provides an exemption from the "Hazardous Substance Spills" statute and protection from future liability for the past releases. You must apply for the program by filling out an application form and fees are charged to cover administrative costs associated with the program. If you are interested in more information about the program or would like an application package, please call Loren Brumberg at the West Central Region Office in Eau Claire at 715-839-3770.

The Department appreciates the actions you have undertaken to restore the environment. If you have any questions, please feel free to call me at (715) 421-7850.

Sincerely,



Tom Hvizdak  
Hydrogeologist

c: Brian Hegge, MSA, 1835 N. Stevens St., Rhinelander, WI 54501



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor  
George E. Meyer, Secretary  
Scott A. Humrickhouse, Regional Director

Wisconsin Rapids Office  
473 Griffith Avenue  
Wisconsin Rapids, Wisconsin 54494-7859  
Telephone 715-421-7800  
FAX 715-421-7830

November 28, 1999

BRRTS #: 03-72-001109

Mr. Duffy Gaier  
City of Marshfield - Marshfield Airport  
210 West 29<sup>th</sup> Street  
Marshfield, WI 54449

**FILE COPY**

SUBJECT: Closure Request, Marshfield Municipal Airport - Fixed Base Operations Site,  
400 West 29<sup>th</sup> Street, Marshfield, Wisconsin.

Dear Mr. Gaier:

On November 18, 1999, the above named site was reconsidered by the Wisconsin Department of Natural Resources West (DNR) Central Region closeout committee for a determination as to whether or not the case qualified for close out under Wis. Adm. Code (WAC) ch. NR 726. The data presented to the committee indicates that a WAC ch. 140 groundwater quality enforcement standard (ES) exceedence for benzene and benzo(a)pyrene is present in the groundwater at the site and that residual petroleum-related soil contamination remains at depth at the site. Due to the presence of residual soil and groundwater contamination, a clean closure can not be granted in this case at this time. However, based on the investigative and remediation documentation provided to the Department, it appears that the extent of the petroleum contamination at the above-named site has been investigated and remediated to the extent practicable, the location of the potential residual soil contamination does not pose a threat to direct contact under current site conditions, and that natural attenuation will be effective in reducing the mass of residual contamination at this site. Therefore, the Department considers the case "closed," having determined pursuant to WAC NR 726, that no further action is necessary on the site at this time, providing the property owner complies with the following two conditions.

The first condition of the closeout for this case is that a groundwater use restriction be filed on the property deed describing the type, location, and extent of the residual groundwater contamination, and requiring that Department (or successor agency) approval must be obtained before any water supply wells are reconstructed or installed on the property and that if contaminated groundwater is extracted from the property (i.e. for construction purposes) the groundwater must be managed in compliance with applicable laws and regulations.

The second condition of the closeout of this case is the proper abandonment of the monitoring wells currently at the site (pursuant of WAC NR 141). Documents should be forwarded to me at the WDNR Wisconsin Rapids office that substantiates proper abandonment (Form 3300-5W).

*Quality Natural Resources Management  
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July 22, 1999

BRRTS #03-72-001109

Mr. Duffy Gaier - City of Marshfield, Marshfield Airport

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You should note that some impacted material remains at depth at this site. That material may represent solid waste should it be excavated in the future and may represent a direct contact hazard to workers should they be exposed to the material. If future excavation exposes impacted material, you should take steps to address the potential risks to workers and make sure the material is properly disposed of as solid waste.

Draft copies of these deed documents must be submitted to the Department for approval within 30 days after Wood County takes title to the property, and the deed documents must be registered with the County Register of Deeds fifteen days after receiving Department approval of the draft deed restriction and notice. To document that this condition has been complied with, the property owner must submit to the Department a copy of the recorded deed documents, with the recording information stamped on them, within 15 days after the County Register of Deeds returns the deed documents to the property owner. The deed documents may be amended in the future with the approval of Department if conditions change at the site such that the residual contamination is completely remediated (if deemed necessary).

You should note that this letter does not constitute Department "certification" under s. 292.15(2)(a)3, Stats., as created by 1993 Wisconsin Act 453 (May 12, 1994). Also, in 1997 Wisconsin Act 27, the legislature amended s. 292.15, Wis. Stats., creating the new "Voluntary Party Remediation and Exemption from Liability" statute. This statute provides liability protection for persons who did not intentionally or recklessly cause the release of a hazardous substance and who conducts an environmental investigation and cleans up property by restoring the environment to the extent practicable and in accordance with rules promulgated by the Department. Upon completion of the cleanup, the person receives a "certificate of completion" that provides an exemption from the "Hazardous Substance Spills" statute and protection from future liability for the past releases. You must apply for the program by filling out an application form and fees are charged to cover administrative costs associated with the program. If you are interested in more information about the program or would like an application package, please call Loren Brumberg at the West Central Region Office in Eau Claire at 715-839-3770.

Once the deed restriction and monitoring well abandonment forms have been properly submitted to this office, you will be issued a final closure letter for this site. Thank you for your efforts to cleanup Wisconsin's environment. If you should have any questions regarding this letter please contact me at (715) 421-7850.

Sincerely,

Tom Hvizdak  
Hydrogeologist

c: Brian Hegge, 1835 N. Stevens St., Rhinelander, WI 54501