

46.pdf

GIS REGISTRY INFORMATION

SITE NAME: Former Emerson Oil (Waukesha State Bank Property)

BRRTS #: 03-68-261189 **FID # (if appropriate):** 368009070

COMMERCE # (if appropriate): _____

CLOSURE DATE: 01/25/2007

STREET ADDRESS: 341 West St. Paul Avenue

CITY: Waukesha

SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection): X= 663656 Y= 283451

CONTAMINATED MEDIA: Groundwater Soil Both

OFF-SOURCE GW CONTAMINATION >ES: Yes No

IF YES, STREET ADDRESS 1: _____

GPS COORDINATES (meters in WTM91 projection): X= _____ Y= _____

OFF-SOURCE SOIL CONTAMINATION >Generic or Site-Specific RCL (SSRCL): Yes No

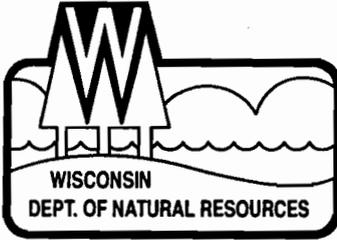
IF YES, STREET ADDRESS 1: _____

GPS COORDINATES (meters in WTM91 projection): X= _____ Y= _____

CONTAMINATION IN RIGHT OF WAY: Yes No

DOCUMENTS NEEDED:

- Closure Letter, and any conditional closure letter or denial letter issued
- Copy of most recent deed, including legal description, for all affected properties
- Certified survey map or relevant portion of the recorded plat map (if referenced in the legal description) for all affected properties
- County Parcel ID number, if used for county, for all affected properties
- 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.
- 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.
- Tables of Latest Groundwater Analytical Results (no shading or cross-hatching)
- Tables of Latest Soil Analytical Results (no shading or cross-hatching)
- 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.
- GW: Table of water level elevations, with sampling dates, and free product noted if present
- GW: Latest groundwater flow direction/monitoring well location map (should be 2 maps if maximum variation in flow direction is greater than 20 degrees)
- SOIL: Latest horizontal extent of contamination exceeding generic or SSRCLs, with one contour
- Geologic cross-sections, if required for SI. (8.5x14" if paper copy)
- RP certified statement that legal descriptions are complete and accurate
- Copies of off-source notification letters (if applicable)
- Letter informing ROW owner of residual contamination (if applicable)(public, highway or railroad ROW)
- Copy of (soil or land use) deed restriction(s) or deed notice if any required as a condition of closure
- Copy of any maintenance plan referenced in the deed restriction.



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Waukesha Service Center
141 NW Barstow St., Room 180
Waukesha, Wisconsin 53188
Telephone 262-574-2100
FAX 262-574-2117

January 25, 2007

Mr. Ty Taylor
Waukesha State Bank
100 Bank Street
P.O. Box 648
Waukesha, WI 53187-0648

Subject: Final Case Closure
Former Emerson Oil Co., 341 W. St. Paul Ave., Waukesha, WI
FID# 368009070 BRRTS# 03-68-261189

Dear Mr. Taylor:

The Department of Natural Resources (the Department) has reviewed the above referenced case for closure. The Department reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On February 22, 2005, you were notified that the Department would close this case when a deed restriction for the property was filed with Waukesha County to ensure that an engineered surface barrier is maintained over the remaining soil contamination. On May 26, 2006, the Department issued a technical assistance letter approving of an alternate method to achieve case closure. Since that time the Department has received documentation that additional contaminated soil at the site was excavated and landfilled. The Department also received the analytical results from a grab groundwater sample that was collected adjacent to soil boring B-30. Based on the correspondence and data provided, it appears that your case meets the requirements of ch. NR 726, Wisconsin Administrative Code. The Department considers this case closed and no further investigation or remediation is required at this time.

Please be aware that pursuant to s. 292.12 Wisconsin Statutes, compliance with the requirements of this letter is a responsibility to which you and any subsequent property owners must adhere. If these requirements are not followed or 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 may take enforcement action under s. 292.11 Wisconsin Statutes to ensure compliance with the specified requirements, limitations or other conditions related to the property or this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code.

Residual soil contamination remains along the perimeter and in the base of Remedial Excavations 4 and 5 as indicated in the information submitted to the Department of Natural Resources. If soil in the specific locations described above is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to

determine if residual contamination remains. If sampling confirms that contamination is present the property owner at the time of excavation will need to determine whether the material would be considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. In addition, all current and future owners and <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. If your property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4)(w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line <http://www.dnr.state.wi.us/org/water/dwg/3300254.pdf> or at the web address listed above for the GIS Registry.

The Department appreciates the actions you have taken to restore the environment at this site. If you have any questions regarding this letter or the site, please contact me at the letterhead address or (262) 574-2166.

Sincerely,



David G. Volkert, P.G.
Hydrogeologist
Bureau for Remediation & Redevelopment

cc: Lacey Twelmeyer, Midwest Engineering
SER File



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Waukesha Service Center
141 NW Barstow St., Room 180
Waukesha, Wisconsin 53188
Telephone 262-574-2100
FAX 262-574-2117

May 26, 2006

Mr. Ty Taylor
Waukesha State Bank
100 Bank Street
P.O. Box 648
Waukesha, WI 53187-0648

Subject: Technical Assistance Request
Former Emerson Oil Co., 341 W. St. Paul Ave., Waukesha, WI
FID# 368009070 BRRTS# 03-68-261189

Dear Mr. Taylor:

On May 1, 2006, the Wisconsin Department of Natural Resources ("the Department") received Midwest Engineering Services, Inc.'s (MES) April 26, 2006 letter requesting technical assistance for the above referenced site. In a February 22, 2005 letter, the Department indicated that the site could be closed, but it would be necessary to maintain an engineered surface barrier to prevent the remaining soil contamination from impacting human health through direct contact and to prevent contaminated soils from leaching additional contamination to the groundwater. The Department also required that a deed restriction would have to be placed on the property to ensure that the engineered surface barrier would be maintained over time.

In the letter requesting technical assistance, MES proposes to conduct a remedial action with additional sampling and requests verification as to whether Department will close the site without a deed restriction upon completion of the work. The proposed remedial action includes removal of soils in the upper 4 feet that are contaminated with polycyclic aromatic hydrocarbons (PAHs). The Department understands that soils containing PAH concentrations exceeding suggested generic residual contaminant levels (RCLs) as defined by Department Publication RR-519-97 would be removed. Soil samples would be collected after excavation to demonstrate remaining contaminant concentrations. The proposed work also includes collecting a grab groundwater sample in the immediate vicinity where previously collected soil samples contained naphthalene (and benzene) in concentrations exceeding suggested generic RCLs for protection of groundwater. The groundwater sample will be collected to verify if groundwater has been impacted by naphthalene and benzene.

If shallow (4 feet or less) soils containing PAH concentrations exceeding suggested generic RCLs are removed and properly disposed, and the grab groundwater sample collected in the area described in the previous paragraph does not contain s. NR 140.10, Wis. Adm. Code, public health groundwater quality exceedances for naphthalene and benzene, then the Department will

close the site without requiring an engineered surface barrier and therefore will not require a deed restriction for the property. Your site would still be included on the Department's GIS registry because some residual soil contamination exceeds s. NR 720.09, Wis. Adm. Code, generic RCL for benzene and the suggested generic RCL for naphthalene.

You should be aware that the Wisconsin Legislature recently passed a bill that may affect your decision regarding additional remediation at your site. The bill was signed by Governor Doyle on May 19, 2006 and is effective June 3, 2006. The bill changes the way the Department and other state agencies implement closures involving land use restrictions that address residual contamination. The state agencies will no longer rely on deed restrictions to ensure that land use conditions placed on a property at the time of closure are maintained over time. Instead the agencies have the specific statutory authority to place these land use conditions on a property, and the owner of the property (or another person who has a legally enforceable responsibility to comply with the requirements, e.g. through a contract) will be responsible for complying with the conditions set out by the state agency. The state agency will use more detailed closure letters to establish these conditions. The detailed closure letter would be part of the packet for a site that would be included on the Department's GIS registry.

After June 3, 2006 with the new legislative change, your site could be closed without any additional remedial work or sampling and a deed restriction would not be placed on the property. If no additional remedial work or sampling is completed, your site could be closed with an engineered surface barrier that must be maintained over time (maintenance plan must be submitted) and inclusion of the site on the Department's GIS registry. If the proposed additional remedial work and sampling is completed and is successful, your site could be closed without an engineered surface barrier, but will be included on the Department's GIS registry due to the residual benzene and naphthalene contamination.

Hopefully this letter satisfactorily answers your request for technical assistance. The Department appreciates the actions you are taking to restore the environment at this site. If you have any questions regarding this letter or the site, please contact me at the letterhead address or (262) 574-2166.

Sincerely,



David G. Volkert, P.G.
Hydrogeologist
Bureau for Remediation & Redevelopment

cc: Shelley Hildebrandt, Midwest Engineering
SER File



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Waukesha Service Center
141 NW Barstow St., Room 180
Waukesha, Wisconsin 53188
Telephone 262-574-2100
FAX 262-574-2117

February 22, 2005

Mr. Ty Taylor
Waukesha State Bank
100 Bank Street
P.O. Box 648
Waukesha, WI 53187-0648

Subject: Former Emerson Oil Co., 341 W. St. Paul Ave., Waukesha, WI
FID# 368009070 BRRTS# 03-68-261189

Dear Mr. Taylor:

On January 6, 2005, the Wisconsin Department of Natural Resources ("the Department") received the January 4, 2005 *Case Closure* letter and the GIS Registry Packet that was prepared by Midwest Engineering Services, Inc. for the above referenced site. The Department reviews environmental remediation cases for compliance with state statutes and rules to maintain consistency in the closure of these cases.

After careful review of your closure request, the Department cannot close the case at this time. Your case will remain open until a deed restriction is signed and recorded to address the remaining soil contamination associated with the site. The purpose of the restriction is to maintain an engineered surface barrier over the remaining soil contamination to prevent contamination from impacting human health through direct contact. The engineered surface barrier will also prevent contaminated soils with s. NR 720.09, Wis. Adm. Code, exceedances from leaching additional contamination to the groundwater. Based on the information submitted to the Department, the current development plans (slab on grade buildings with the remaining portion of the site being paved) would qualify as an appropriate engineered surface barrier. The site, however cannot be closed until the engineered barrier is in place and the deed restriction is filed with Waukesha County.

You will need to submit a draft deed restriction to Department before the document is signed and recorded. You may find a model deed restriction enclosed for your use or visit our web site at www.dnr.state.wi.us/org/tr. To assist us in our review of the deed restriction, you should submit a copy of the property deed to the Department along with the draft document. Also have your consultant prepare a single map showing the area of the site with residual soil contamination that poses a direct contact threat to human health and that exceeds s. NR 720.09, Wis. Adm. Code, groundwater pathway standards. The map should be referenced in the deed restriction. After the Department has reviewed the draft document for completeness, you should sign it if you own the property, or have the appropriate property owner sign it, and have it recorded by the Waukesha

County Register of Deeds. Then you must submit a copy of the recorded document, with the recording information stamped on it, to the Department. Please be aware that if a deed restriction is recorded for the wrong property because of an inaccurate legal description that you have provided, you will be responsible for recording corrected documents at the Register of Deeds Office to correct the problem.

Also, before your site will be eligible for closure, the monitoring wells at the site must be properly abandoned in compliance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment must be submitted to the Department on Form 3300-5B found at www.dnr.state.wi.us/org/water/dwg/gw/ or provided by the Department of Natural Resources.

Site closure was requested under ch. NR 746, Wis. Adm. Code. In the future, the Department will be unable to close the site under ch. NR 746, Wis. Adm. Code, because residual soil contamination remains at the site in concentrations that exceed ss. NR 746.06(2)(b), Wis. Ad. Code, Table 1 values. The site will be eligible for closure under s. NR 726.05, Wis. Adm. Code, after the items requested above are received.

Please include the requested information/documentation in a brief submittal that should be sent to the Department. Please direct correspondence with the site FID# and BRRTS# noted to: Victoria Stovall, Wisconsin Department of Natural Resources, 2300 N. Dr. ML King Dr., PO Box 12436, Milwaukee, WI 53212-0436.

The Department appreciates the actions you are taking to restore the environment at this site. If you have any questions regarding this letter, please contact me at the letterhead address or (262) 574-2166.

Sincerely,



David G. Volkert, P.G.
Hydrogeologist
Bureau for Remediation & Redevelopment

Attachment

cc: Shelley Hildebrandt, Midwest Engineering
SER File



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor
Darrell Bazzell, Secretary
Gloria L. McCutcheon, Regional Director

Waukesha Service Center
407 Pilot Court, Suite 100
Waukesha, Wisconsin 53188
Telephone 262-574-2166
FAX 262-574-2117

March 19, 2002

Mr. Ty Taylor
Waukesha State Bank
100 Bank Street
P.O. Box 648
Waukesha, WI 53187-0648

Subject: Former Emerson Oil Co., 341 W. St. Paul Ave., Waukesha, WI
FID# 368009070 BRRTS# 03-68-261189

Dear Mr. Taylor:

On March 12, 2002, your site was reviewed for closure by the Southeast Region Closure Committee. This committee reviews environmental remediation cases for compliance with state statutes and rules to maintain consistency in the closure of these cases. After careful review of your closure request, the closure committee has decided that additional information and site work is necessary at the above-described site, in order to meet the requirements for site closure. This letter was also forwarded to your environmental consultant.

Your site was denied closure because the existing analytical data indicate that polycyclic aromatic hydrocarbons (PAHs) may pose a direct contact threat to human health at the site. Based on the concentrations of naphthalene (and DRO) detected in shallow soil samples (within 4 feet of the ground surface) collected at the site, other PAHs are likely to be present in concentrations that would exceed residual contaminant levels as developed under s. NR 720.19(5), Wis. Adm. Code.

Please evaluate the direct contact threat of PAHs in the soil in the area of the former aboveground storage tanks (ASTs) at the site. This can be accomplished by collecting soil samples within 4 feet of the ground surface from soil borings advanced in the former AST area. Pertinent boring locations would be adjacent to the former remedial excavation walls where naphthalene concentrations were elevated in the soil, and adjacent to boring P-4 where the DRO concentration was 13,000 ppm in the sample collected from the 2-4 ft. interval.

The Department has developed suggested generic soil cleanup levels (including direct contact numbers for PAHs) in the Bureau for Remediation and Redevelopment (RR) Publication RR-519-97 entitled *Soil Cleanup Levels for Polycyclic Aromatic Hydrocarbons (PAHs) Interim Guidance*, which can be found on the DNR's RR web site under Publications. Site specific soil

cleanup standards for protection of human health from direct contact can also be calculated following the procedures in s. NR 720.19(5), Wis. Adm. Code.

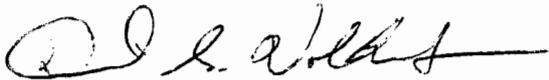
Documentation from the remedial investigation indicated that foundry sands were used as fill material at the site. This information will be included on the BRRTS database. In the future if foundry sand fill material is excavated due to construction or other activities at the site, the material must be properly handled according to all applicable laws in effect at that time.

When the additional work outlined above has been completed, a brief submittal should be sent to the Department. Please direct correspondence with the site FID# and BRRTS# noted to: Victoria Stovall, Wisconsin Department of Natural Resources, 2300 N. Dr. ML King Dr., PO Box 12436, Milwaukee, WI 53212-0436. The information will be added to the file for review and your request for closure will be reconsidered.

If there is additional relevant information that was not previously provided to the Department, which you believe might change the Department's closure decision, you may submit that information for our re-evaluation of your closure request.

The Department appreciates the actions you are taking to restore the environment at this site. If you have any questions regarding this letter, please contact me at (262) 574-2166.

Sincerely,



David G. Volkert
Hydrogeologist
Bureau for Remediation & Redevelopment

cc: Patrick Patterson, Midwest Engineering Services, Inc.
SER File

71881

1262473

1262473

This Deed, made between
Lawrence A. Wolf and Lucylle M. Wolf, his wife
Grantor,
and
Waukesha State Bank, a Wisconsin Corporation

1984 JUN 27 PM 1:17

617 IMAGE 895

Waukesha State Bank
REGISTERED DEEDS

Commencing at a point on the Westerly line of Emily Street as shown on the Plat of Northwest Addition to the Plat of Prairieville, recorded in Volume 2 of Plats on Page 2, Waukesha County, Wisconsin, records, where said line intersects the Northwesterly bank of the Fox River; thence North 42° 5' West along the Westerly line of Emily Street to the Southeasterly line of the right of way of the Chicago, Milwaukee, St. Paul and Pacific Railroad Company; thence South 48° 20' West along the line of said right of way 469 feet more or less to the center line of Wisconsin Avenue; thence East along said center line of Wisconsin Avenue to the Westerly bank of the Fox River; and thence Northeasterly along the bank of said River to the place of beginning. The center line of Emily Street referred to above being 30 feet distant from the Southerly line of Lot 15, Block "L" of the Plat of Northwest Addition to Prairieville and 39 feet distant from the Southerly line of Lot 15, Block "K" of said Plat, according to survey made by Walter G. Caldwell, Civil Engineer, December 28, 1927.

Excepting therefrom that part conveyed to the City of Waukesha by Warranty Deed recorded November 27, 1978, Reel 330, Image 965 as Document No. 1070712.

This (is) (is not) homestead property.

Together with all and singular the hereditaments and appurtenances therunto belonging;

And warrants that the title is good, indefeasible in fee simple and free and clear of encumbrances except

and will warrant and defend the same.

Dated this June 26, 1984

Thelma E. Krocak (SEAL)

Lawrence A. Wolf (SEAL)

William A. Yancy (SEAL)

Lucylle M. Wolf (SEAL)

AUTHENTICATION

ACKNOWLEDGMENT

Signature(s)

STATE OF WISCONSIN

Waukesha County

authenticated this day of 19

Personally came before me this June 26, 1984 day of

Lawrence A. Wolf and Lucylle M. Wolf, his wife

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not authorized by § 706.06, Wis. Stats.)

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

THIS INSTRUMENT WAS DRAFTED BY Lawrence A. Wolf

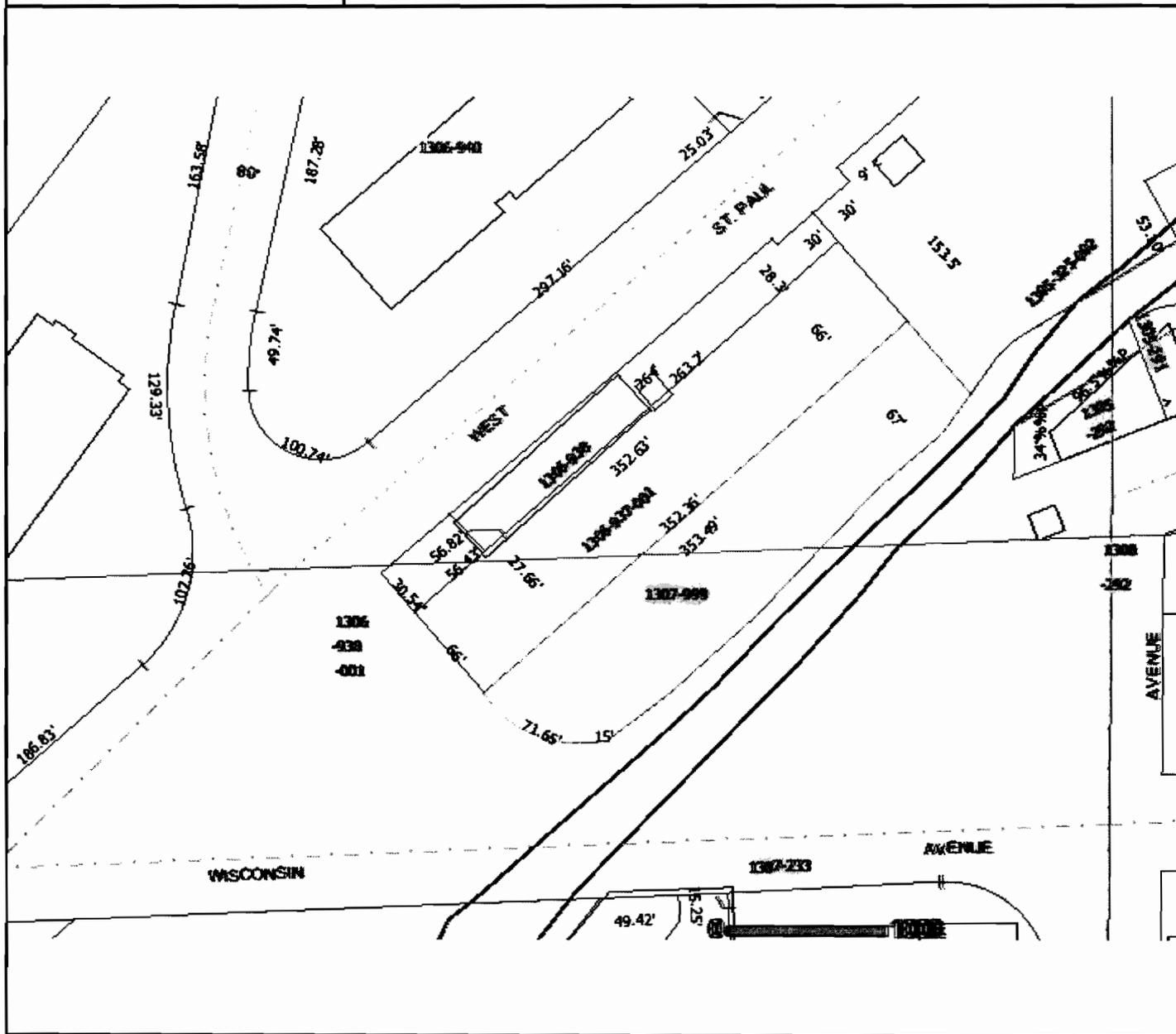
Notary Public My Commission date:

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

*Names of persons signing in any capacity should be typed or printed below their signatures.



Waukesha County IMS



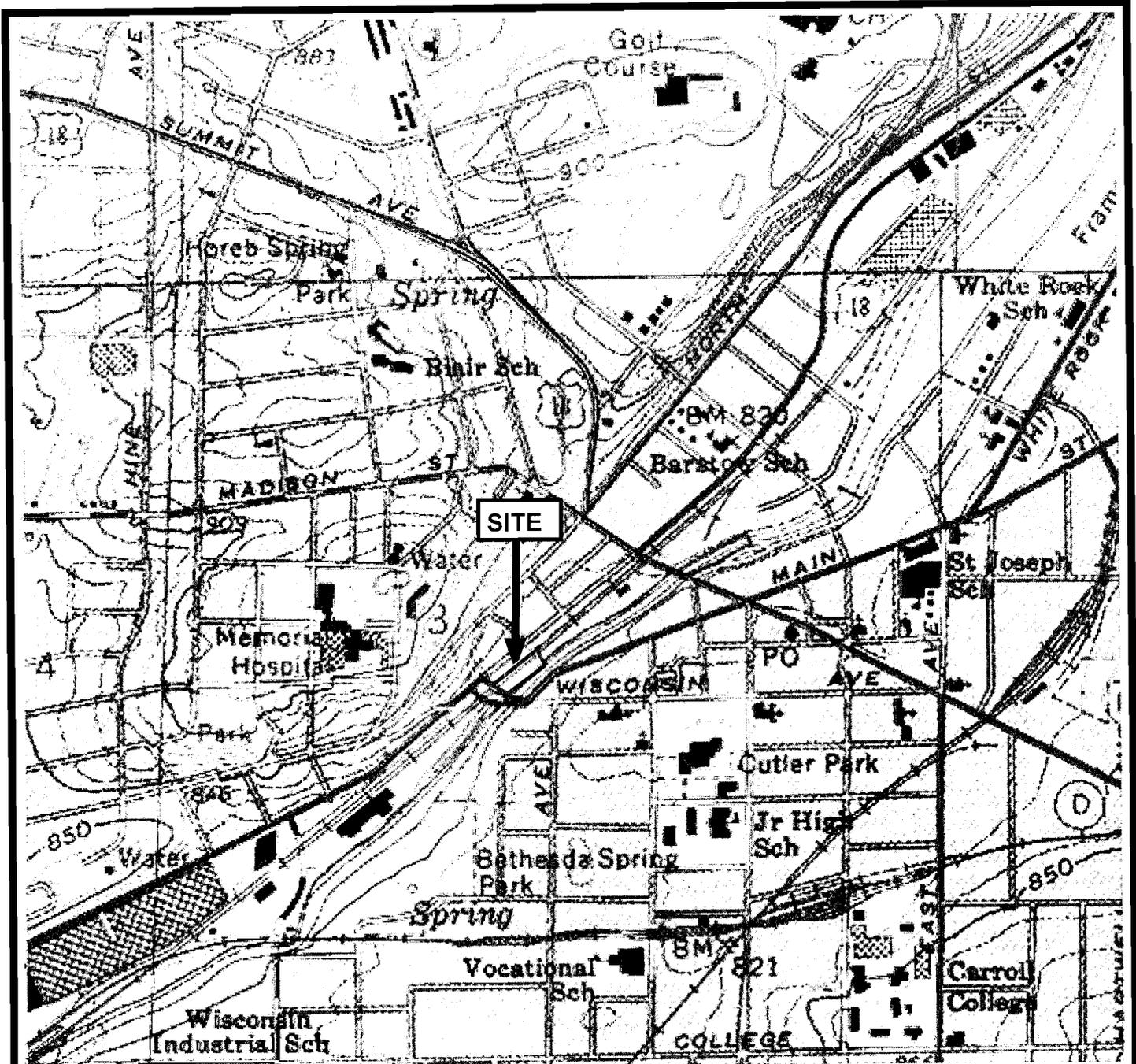
- Sale
- Cal
- Sect
- One
- Sect
- Parc
- Tax I
- Parc
- Note
- Note
- Stur
- Right
- Cent
- Stree
- Lake
- Map
- Wate

Scale: 1" = 73 feet

1/4/200

DISCLAIMER: The information and depictions herein are for informational purposes and Waukesha County specifically disclaims accuracy in this reproduction and specifically advises that if specific and precise accuracy is required, the same should be determined by procurement of certified maps, surveys, plats, Flood Insurance Studies, or other of County will not be responsible for any damages which result from third party use of the information and depictions herein or for use which ignores this warning.

To save: Right Click on the image and select "Save Picture As..." from the pull down menu.



Source: USGS 7.5 Minute Topographic Map - Waukesha Quadrangle, Dated 1994

Southwest 1/4 of the Northeast 1/4, Section 3, Township 6 North, Range 19 East, Waukesha County

BRRTS: 03-68-261189, WTM91 663637, 283438, Parcel ID 1307-999



midwest engineering services, inc.

Former Emerson Oil Company
341 W. St. Paul Avenue
Waukesha, WI

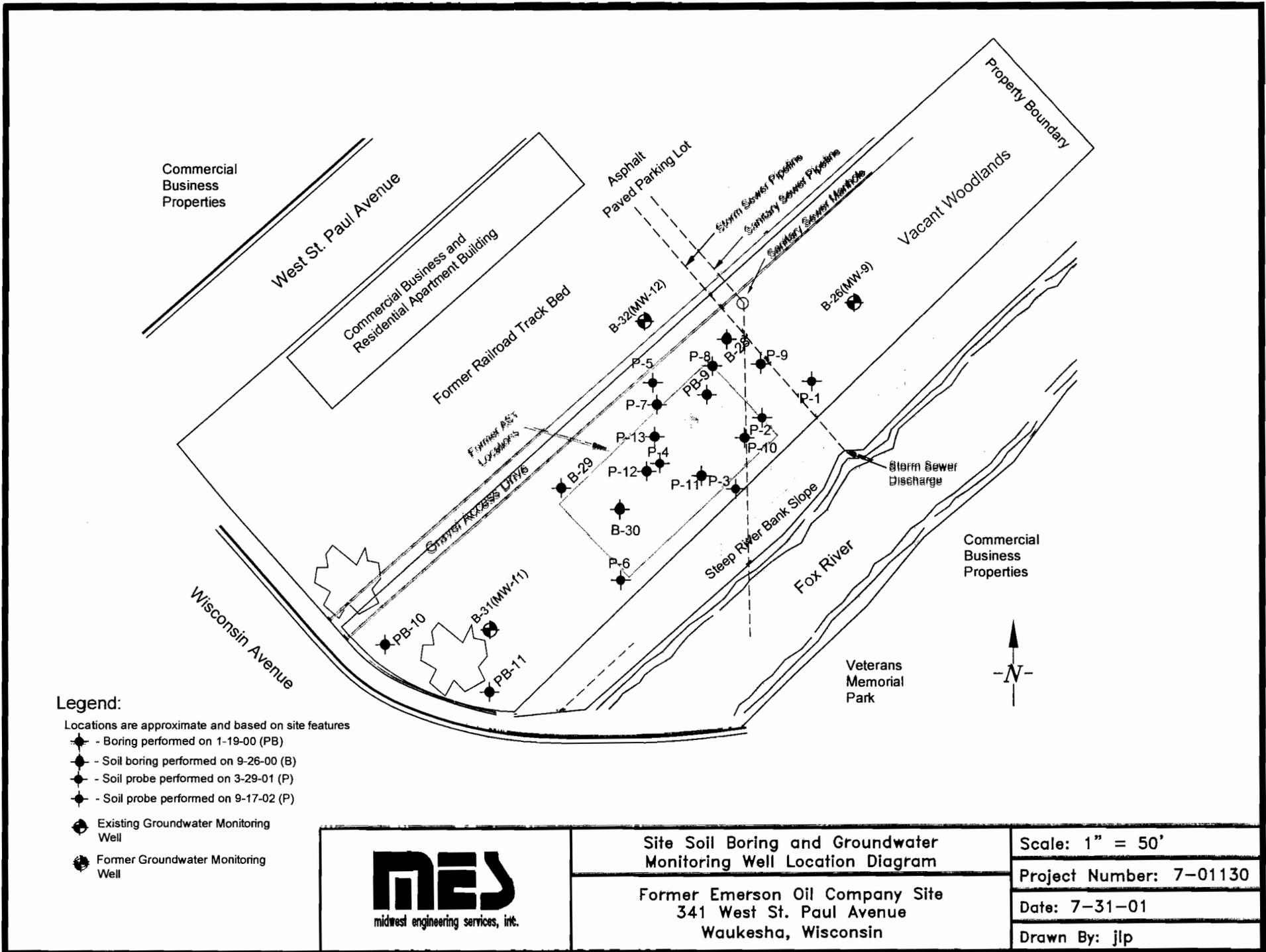
SITE LOCATION MAP

Scale: 1" = 1000'

Project No.: 7-01130

Date: 12-11-00

Figure 1



Legend:

- Locations are approximate and based on site features
- ◆ - Boring performed on 1-19-00 (PB)
 - - Soil boring performed on 9-26-00 (B)
 - ◆ - Soil probe performed on 3-29-01 (P)
 - ◆ - Soil probe performed on 9-17-02 (P)
 - ⊕ - Existing Groundwater Monitoring Well
 - ⊙ - Former Groundwater Monitoring Well



Site Soil Boring and Groundwater Monitoring Well Location Diagram

Former Emerson Oil Company Site
 341 West St. Paul Avenue
 Waukesha, Wisconsin

Scale: 1" = 50'
Project Number: 7-01130
Date: 7-31-01
Drawn By: jlp

TABLE 1
Vacant 5 Acre Parcel - Site No. 5
Former Emerson Oil Company
MES Project Number 7-01130-5
Summary of Soil Boring Sample Analysis Results

Boring	Depth (ft)	Date Collected	PID Value	LABORATORY RESULTS														
				Lead (mg/kg)	DRO (mg/kg)	GRO (mg/kg)	Volatile Organic Compounds (ug/kg)											
							Benzene	n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	p-Isopropylbenzene	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes
PB-9	9 - 11	1-19-00	600	na	430	370	<25	10000	3300	4400	1600	2900	16000	6900	790	2500	4200	1000
PB-9	13 - 15	1-19-00	---	na	<5.8	<5.8	<25	120	<25	<25	<25	<25	<25	430	<25	<25	<25	<25
PB-10	11 - 13	1-19-00	---	na	29	<8.9	<25	<25	<25	<25	<25	<25	230	<25	<25	<25	<25	<25
PB-11	5 - 7	1-19-00	20	na	9.6	<6.3	<25	41	<25	<25	<25	<25	120	<25	31	<25	<25	<25
PB-11	11 - 13	1-19-00	---	na	7.2	<5.6	<25	<25	<25	<25	<25	<25	360	<25	34	<25	<25	<25
B-26	13 - 15	9-26-00	---	2.93	<5.7	<5.7	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
B-27	1 - 3	9-26-00	145	3.15	7230	1580	1400	50900	1180	7190	371	9250	36200	342	2330	73100	47500	74000
B-27	9 - 11	9-26-00	122	11.5	1590	278	1450	5700	2850	542	1230	1130	920	3880	208	12100	835	3920
B-27	13 - 15	9-26-00	3	18.1	28.1	<5.8	<25	170	45.8	<25	<25	<25	32.1	35.4	<25	141	33.6	104
NR720 Generic RCL				50	100	100	5.5	-	-	2900	-	-	-	-	1500	-	-	4100
SSL (NR746)				-	-	-	8500	-	-	4600	-	-	2700	-	38000	83000	11000	42000
DCL (NR746)				-	-	-	1100	-	-	-	-	-	-	-	-	-	-	-

NOTES:

RCL = Generic Residual Contaminant Levels [NR720.09(4)]

SSL = Soil Screening Level [NR746.06(2)(b)]

DCL = Direct Contact Level [NR746.06(2)(c)]

Italicized numbers indicate concentrations above NR 720 RCLs

Bold numbers indicate concentrations above NR 746 SSLs

Bold underlined numbers indicate concentrations above NR 746 DCLs

mg/kg = milligrams per kilogram = parts per million (ppm)

ug/kg = micrograms per kilogram = parts per billion (ppb)

na = Not Analyzed

- = no standard established

--- = Not Detected

TABLE 1, continued
 Vacant 5 Acre Parcel - Site No. 5
 Former Emerson Oil Company
 MES Project Number 7-01130-5
 Summary of Soil Boring Sample Analysis Results

Boring	Depth (ft)	Date Collected	PID Value	LABORATORY RESULTS																
				Lead (mg/kg)	DRO (mg/kg)	GRO (mg/kg)	Volatile Organic Compounds (ug/kg)													
							Benzene	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Ethylbenzene	Isopropylbenzene	p-Isopropylbenzene	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes	
B-28	13 - 15	9-26-00	---	1.85	<5.9	<5.9	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
B-29	15 - 17	9-26-00	---	4.85	<5.8	<5.8	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
B-30	7 - 9	9-26-00	15	49	93.3	<6.8	50.1	53.3	<25	<25	<25	<25	<25	7320	<25	66	108	38.2	139	
B-30	13 - 15	9-26-00	---	2.4	<5.8	<5.8	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
B-31	3 - 5	9-26-00	10	4.29	6.04	<5.3	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
B-31	13 - 15	9-26-00	---	4.66	<6.1	<6.1	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
P-1	2 - 4	3-29-01	---	na	22.5	<6.2	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
P-1	10 - 12	3-29-01	---	na	10.3	<6.8	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NR720 Generic RCL				50	100	100	5.5	-	-	-	2900	-	-	-	-	1500	-	-	4100	
SSL (NR746)				-	-	-	8500	-	-	-	4600	-	-	2700	-	38000	83000	11000	42000	
DCL (NR746)				-	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	

NOTES:

RCL = Generic Residual Contaminant Levels [NR720.09(4)]
 SSL = Soil Screening Level [NR746.06(2)(b)]
 DCL = Direct Contact Level [NR746.06(2)(c)]
 Italicized numbers indicate concentrations above NR 720 RCLs
 Bold numbers indicate concentrations above NR 746 SSLs
 Bold underlined numbers indicate concentrations above NR 746 DCLs

mg/kg = milligrams per kilogram = parts per million (ppm)
 ug/kg = micrograms per kilogram = parts per billion (ppb)
 na = Not Analyzed
 - = no standard established
 --- = Not Detected

TABLE 1, continued
Vacant 5 Acre Parcel - Site No. 5
Former Emerson Oil Company
MES Project Number 7-01130-5
Summary of Soil Boring Sample Analysis Results

Boring	Depth (ft)	Date Collected	PID Value	LABORATORY RESULTS																
				Lead (mg/kg)	DRO (mg/kg)	GRO (mg/kg)	Volatile Organic Compounds (ug/kg)													
							Benzene	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Ethylbenzene	Isopropylbenzene	p-Isopropylbenzene	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes	
P-2	2 - 4	3-29-01	--	na	81.5	<5.9	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
P-2	10 - 12	3-29-01	17	na	167	138	71.6	994	1640	448	<25	76.1	1010	1670	181	<25	310	634	131	
P-3	2 - 4	3-29-01	---	na	21.2	<5.9	<25	<25	<25	<25	42.6	<25	<25	<25	<25	<25	<25	<25	<25	74
P-3	8 - 10	3-29-01	26	na	1280	249	<50	2100	2910	713	<50	386	1700	2050	245	<50	655	897	344	
P-3	10 - 12	3-29-01	---	na	57.8	35.6	<25	369	383	103	<25	77.4	345	384	45.3	<25	<25	156	33.4	
P-4	2 - 4	3-29-01	80	na	13000	884	73.5	244	1800	412	121	183	1520	609	412	135	7190	7500	1570	
P-4	10 - 12	3-29-01	13	na	136	101	<50	793	781	269	<50	217	624	1270	157	<50	<50	356	87.2	
NR720 Generic RCL				50	100	100	5.5	-	-	-	2900	-	-	-	-	1500	-	-	4100	
SSL (NR746)				-	-	-	8500	-	-	-	4600	-	-	2700	-	38000	83000	11000	42000	
DCL (NR746)				-	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	

NOTES:

RCL = Generic Residual Contaminant Levels [NR720.09(4)]

SSL = Soil Screening Level [NR746.06(2)(b)]

DCL = Direct Contact Level [NR746.06(2)(c)]

Italicized numbers indicate concentrations above NR 720 RCLs

Bold numbers indicate concentrations above NR 746 SSLs

Bold underlined numbers indicate concentrations above NR 746 DCLs

mg/kg = milligrams per kilogram = parts per million (ppm)

ug/kg = micrograms per kilogram = parts per billion (ppb)

na = Not Analyzed

- = no standard established

--- = Not Detected

TABLE 1, continued
Vacant 5 Acre Parcel - Site No. 5
Former Emerson Oil Company
MES Project Number 7-01130-5
Summary of Soil Boring Sample Analysis Results

Boring	Depth (ft)	Date Collected	PID Value	LABORATORY RESULTS															
				Lead (mg/kg)	DRO (mg/kg)	GRO (mg/kg)	Volatile Organic Compounds (ug/kg)												
							Benzene	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Ethylbenzene	Isopropylbenzene	p-Isopropylbenzene	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes
P-5	2 - 4	3-29-01	---	na	10.6	<5.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
P-5	10 - 12	3-29-01	---	na	14.8	63.9	<25	754	1330	364	124	296	1300	205	357	<25	155	392	330
P-6	2 - 4	3-29-01	8	na	20.3	12	83.9	136	34.4	<25	89.6	<25	32.8	<25	65	552	230	123	978
P-6	10 - 12	3-29-01	---	na	11.8	<5.4	58.6	42.9	<25	<25	63.9	<25	<25	<25	<25	<25	145	<25	151
NR720 Generic RCL				50	100	100	5.5	-	-	-	2900	-	-	-	-	1500	-	-	4100
SSL (NR746)				-	-	-	8500	-	-	-	4600	-	-	2700	-	38000	83000	11000	42000
DCCCL (NR746)				-	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

RCL = Generic Residual Contaminant Levels [NR720.09(4)]

SSL = Soil Screening Level [NR746.06(2)(b)]

DCCCL = Direct Contact Contaminant Concentration Level [NR746.06(2)(c)]

Italicized numbers indicate concentrations above NR 720 RCLs

Bold numbers indicate concentrations above NR 746 SSLs

Bold underlined numbers indicate concentrations above NR 746 DCLs

mg/kg = milligrams per kilogram = parts per million (ppm)

ug/kg = micrograms per kilogram = parts per billion (ppb)

na = Not Analyzed

- = no standard established

--- = Not Detected

TABLE 2
Former Emerson Oil Co. Site
MES Project Number 7-01130-5
Summary of Excavation Soil Sample Analysis Results - PVOCs

Sample ID	Depth (ft)	Date Collected	PID Value (i.u.)	LABORATORY ANALYSIS RESULTS									
				DRO (mg/kg)	GRO (mg/kg)	Petroleum Volatile Organic Compounds (ug/kg)							
						Benzene	Ethylbenzene	Methyl tert-butyl ether	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes	Napthalene
North Wall	-6'	6-4-01	200	378	137	3300	523	<125	111	2970	465	1650	4330
South Wall	-3'	6-4-01	20	19.4	10.3	148	30	83	50.7	232	93	95.7	303
* West Wall	-6'	6-4-01	25	35.3	57.3	142	89.4	<25	<25	959	644	771	5550
* East Wall	-3'	6-4-01	80	1040	213	476	748	<125	650	15700	1800	5810	7580
N. Bottom 1	-10'	6-4-01	---	41	8.89	<25	38.4	<25	<25	274	52	120	397
S. Bottom 2	-10'	6-4-01	---	97	29	<25	<25	<25	43.6	363	135	158	1120
LF Disposal 1	-3'	6-4-01	300	19100	1170	1660	14600	<1250	2030	68100	26300	80100	51700
LF Disposal 2	-6'	6-4-01	500	2770	469	3110	1290	<125	1070	6540	720	2250	22000
DNR Generic RCLs (NR720)				100	100	5.5	2900	-	1500	-	-	4100	-
SSL [NR746.06(2)(b)]				-	-	8500	4600	-	38000	83000	11000	42000	2700
DCL [NR746.06(2)(c)]				-	-	1100	-	-	-	-	-	-	-

NOTES:

RCL = Residual Contaminant Levels [NR720.09(4)]

DCL = Direct Contact Level

SSL = Soil Screening Level

Italicized numbers indicate concentration above NR 720 RCL

Bold numbers indicate concentration above NR 746.06(2)(b) SSL

Bold underlined numbers indicate concentration above NR 746.06(2)(c) DCL

mg/kg = milligrams per kilogram = parts per million

ug/kg = micrograms per kilogram = parts per billion

i.u. = Instrument Units

- = no standard established

--- = Not Detected

* Sample ID correction (see report and chain-of custody)

TABLE 3
Former Emerson Oil Company Site
MES Project Number 7-01130-5
Summary of Soil Sample Analytical Test Results - PAHs

Boring	Depth (ft)	Date Collected	LABORATORY RESULTS																	
			Polynuclear Aromatic Compounds (ug/kg = micrograms per kilogram = parts per billion)																	
			Acenaphthene	Acenaphthylene	Anthracene	Benz (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
P-7	2' - 4'	9-17-02	<104	<208	<104	<52	42.8	<52	<104	<104	<104	26	<104	<104	<52	<104	<104	<104	<104	<104
P-8	2' - 4'	9-17-02	651	<216	<108	309	450	412	362	278	362	327	559	<108	275	316	428	<108	254	371
P-9	2' - 4'	9-17-02	263	<215	<108	130	89.8	97.8	<108	<108	<108	77	210	<108	62	108	<108	<108	<108	140
P-10	2' - 4'	9-17-02	188	1270	801	1170	15.3	<56.1	<112	<112	164	24	4510	1230	<56.1	5490	5530	429	2300	2070
P-11	3' - 5'	9-17-02	<107	<214	<107	72.9	15.8	<53.6	<107	<107	<107	38	<107	<107	<53.6	126	<107	<107	<107	<107
P-12	2' - 4'	9-17-02	246	<211	<105	82.8	76.7	88.5	<105	<105	<105	104	132	<105	72	111	129	<105	<105	<105
P-13	2' - 4'	9-17-02	<110	<221	<110	<55.2	13.8	<55.2	<110	<110	<110	<5.52	<110	<110	<5.52	<110	<110	<110	<110	<110
Direct Contact RCL			900,000	18,000	5,000,000	88	8.8	88	1,800	880	8,800	8.8	600,000	600,000	88	1,100,000	600,000	20,000	18,000	500,000
Groundwater RCL			38,000	700	3,000,000	17,000	48000	360,000	6,800,000	870,000	37,000	38000	500,000	100,000	680,000	23,000	20,000	400	1,800	8,700,000

NOTES:

RCL = WDNR Suggested Generic Residual Contaminant Levels
 Italicized numbers indicate concentrations above WDNR Direct Contact RCL
 Bold numbers indicate concentrations above WDNR Groundwater RCL

TABLE 4
Former Emerson Oil Company Site
MES Project Number 7-01130-5
Summary of Soil Sample Analytical Test Results

Sample	Depth (ft)	Date Sampled	LABORATORY RESULTS																	
			Polynuclear Aromatic Compounds (ug/kg)																	
			Acenaphthene	Acenaphthylene	Anthracene	Benz (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
Remedial Excavation 2 - April 2003																				
N Wall	3	04/15/03	<103	<205	<103	<51.4	<5.14	<51.4	<103	<103	<103	<5.14	<103	<103	<51.4	<103	<103	<103	<103	<103
E Wall	3	04/15/03	<107	<213	<107	<53.3	<5.33	<53.3	<107	<107	<107	<5.33	<107	<107	<53.3	<107	<107	<107	<107	<107
NW Wall	3	14/15/03	<108	<216	<108	268	302	217	211	116	272	60.8	569	<108	185	<108	159	<108	193	283
Bottom	5	04/15/03	<112	<225	<112	<56.2	25.2	<56.2	<112	<112	<112	<5.62	<112	<112	<56.2	<112	<112	<112	<112	<112
Remedial Excavation 1 - April 2003																				
E. Wall	3	04/15/03	<106	<212	<106	<53.1	57.6	53.7	<106	<106	<106	7.48	110	<106	<53.1	<106	<106	<106	<106	<106
S. Wall	3	04/15/03	<107	<214	<107	130	457	250	498	197	288	20.8	1210	<107	479	643	364	<107	705	1230
W. Wall	3	04/15/03	<110	<220	110	84.2	115	103	<110	<110	<110	16	202	<110	75.9	<110	<110	<110	124	<110
NW. Wall	3	04/15/03	<105	<210	<105	<52.5	<5.25	<52.5	<105	<105	<105	<5.25	<105	<105	<52.5	<105	<105	<105	<105	<105
Bottom 1	5	04/15/03	<114	<228	<114	<57	75.1	64	<114	<114	<114	7.89	220	<114	<57	<114	<114	<114	130	<114
Bottom 2	5	04/15/03	<117	<234	<117	<58.4	52.5	<58.4	<117	<117	<117	7.74	154	<117	<58.4	<117	124	<117	<117	<117
RCL (Direct Contact)			900,000	18,000	5,000,000	88	8.8	88	1,800	880	8,800	8.8	600,000	600,000	88	1,100,000	600,000	20,000	18,000	500,000
RCL (Groundwater)			38,000	700	3,000,000	17,000	48000	360,000	6,800,000	870,000	37,000	38000	500,000	100,000	680,000	23,000	20,000	400	1,800	8,700,000

NOTES:
RCL = WDNR Suggested Generic Residual Contaminant Levels
Italicized numbers indicate concentrations above WDNR Direct Contact RCL
Bold numbers indicate concentrations above WDNR Groundwater RCL
ug/kg = micrograms per kilogram = parts per billion (ppb)

TABLE 4
Former Emerson Oil Company Site
MES Project Number 7-01130-5
Summary of Soil Sample Analytical Test Results

Sample	Depth (ft)	Date Sampled	LABORATORY RESULTS																		
			Polynuclear Aromatic Compounds (ug/kg)																		
			Acenaphthene	Acenaphthylene	Anthracene	Benz (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	
Remedial Excavation 4 - July 2006																					
EW	3	7/12/06	<52	<88	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<7.8	<10	<10	<5.2	<31	<28	<31	<5.2	<5.2	
NW	2	7/12/06	<52	<88	<5.2	21	24	21	19	16	19	<7.8	39	<10	20	<31	<28	<31	14	28	
WW	3½	7/12/06	62	<90	44	300	390	360	280	220	320	61	530	11	260	<32	200	<32	200	530	
Bottom	5½	7/12/06	<60	<100	46	300	400	320	310	200	280	60	560	<12	310	<38	200	48	200	400	
Remedial Excavation 5 - July 2006																					
SW1	3	7/12/06	<53	<90	<5.3	22	25	23	20	15	19	<8	46	<11	23	<32	<27	<32	15	41	
SW2	2½	7/12/06	<57	<97	7.1	63	73	62	60	41	54	12	110	<11	63	<34	28	<34	37	110	
EW1	4	7/12/06	<53	<90	10	31	28	23	25	18	25	<8.0	65	<11	25	<32	<27	<32	45	49	
Bottom 1	5	7/12/06	<270	<460	<27	57	150	85	240	88	50	<40	150	<54	68	<160	170	<160	82	96	
Bottom 2	5	7/12/06	1,400	<1,200	2,500	9,900	9,800	7,600	5,900	4,200	7,800	1,200	20,000	720	6,200	650	4,100	<410	6,600	14,000	
Bottom 3	4½	7/13/06	<550	<930	3,900	11,000	11,000	8,400	7,200	4,800	8,900	1,400	23,000	1,500	7,100	1,200	6,700	340	12,000	16,000	
Bottom 4	4½	7/13/06	<100	<180	16	19	270	260	300	130	190	49	300	<21	260	<62	170	<62	120	240	
WW1	2	7/13/06	<120	<210	<12	71	79	69	120	40	62	<16	110	<25	68	<74	<61	<74	40	60	
WW2	3½	7/13/06	<51	<87	<5.1	45	53	48	48	26	42	9.3	68	<10	40	<31	50	<31	22	43	
NW	2	7/13/06	<260	<440	<28	200	280	270	260	140	190	47	310	<52	290	<150	180	<150	120	200	
RCL (Direct Contact)			900,000	18,000	5,000,000	88	8.8	88	1,800	880	8,800	8.8	600,000	600,000	88	1,100,000	600,000	20,000	18,000	500,000	
RCL (Groundwater)			38,000	700	3,000,000	17,000	48,000	360,000	6,800,000	870,000	37,000	38,000	500,000	100,000	680,000	23,000	20,000	400	1,800	8,700,000	

NOTES:
RCL = WDNR Suggested Generic Residual Contaminant Levels
Italicized numbers indicate concentrations above WDNR Direct Contact RCL
Bold numbers indicate concentrations above WDNR Groundwater RCL
ug/kg = micrograms per kilogram = parts per billion (ppb)



January 4, 2005

Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
2300 N. M.L. King Jr. Dr.
P.O. Box 12436
Milwaukee, WI 53212

SUBJECT: Former Emerson Oil Company
341 West St. Paul Avenue
Waukesha, Wisconsin
MES Project No. 7-01130-5
FID: 368009070
BRRTS No. 03-68-261189

The legal descriptions for all properties within or partially within the boundaries of the contamination originating from the above reference site are attached. The parcel identification number is 1307.999. The WTM91 Coordinates are 663637, 283438.

Sincerely,

Ty R. Taylor
President

TRT:tl