GIS REGISTRY
Cover Sheet

July, 2008
(RR 5367)

Source Property Information

CLOSURE DATE: Nov 6, 1998

BRRTS #: **03-05-000848**

FID #: 405120870

ACTIVITY NAME: DE PERE MOBIL SERVICE STATION

DATCP #:

PROPERTY ADDRESS: 746 MAIN AVE

COMM #: 54115133346

MUNICIPALITY: DE PERE

PARCEL ID #: WD-450, WD-451, WD-453 (May, 2009)

***WTM COORDINATES:**

X: **672745** Y: **443602**

** Coordinates are in WTM83, NAD83 (1991)*

WTM COORDINATES REPRESENT:

- (●) Approximate Center Of Contaminant Source
- ( ) Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

Contaminated Media:

- [x] Groundwater Contamination > ES *(236)*
  - [x] Contamination in ROW
  - [ ] Off-Source Contamination

  *(**note:** for list of off-source properties see "Impacted Off-Source Property")*

- [x] Soil Contamination > *RCL or **SSRCL *(232)*
  - [ ] Contamination in ROW
  - [ ] Off-Source Contamination

  *(**note:** for list of off-source properties see "Impacted Off-Source Property")*

Land Use Controls:

- [ ] Soil: maintain industrial zoning *(220)*

  *(**note:** soil contamination concentrations between residential and industrial levels)*

- [ ] Structural Impediment *(224)*
- [ ] Site Specific Condition *(228)*
- [ ] Cover or Barrier *(222)*

  *(**note:** maintenance plan for groundwater or direct contact)*

- [ ] Vapor Mitigation *(226)*
- [ ] Maintain Liability Exemption *(230)*

  *(**note:** local government or economic development corporation)*

Monitoring wells properly abandoned? *(234)*

(●) Yes ( ) No ( ) N/A

** Residual Contaminant Level*
***Site Specific Residual Contaminant Level*

GIS Registry Checklist

Form 4400-245 (R 4/08)

This Adobe Fillable form is intended to provide a list of information that is required for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request. The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

NOTICE: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

BRRTS #: 03-05-000848 PARCEL ID #: WD-450, WD-451, WD-453 (May, 2009)

ACTIVITY NAME: DE PERE MOBIL SERVICE STATION WTM COORDINATES: X: 672745 Y: 443602

CLOSURE DOCUMENTS (the Department adds these items to the final GIS packet for posting on the Registry)

- [x] **Closure Letter**
- [ ] **Maintenance Plan** (*if activity is closed with a land use limitation or condition (land use control) under s. 292.12, Wis. Stats.*)
- [ ] **Conditional Closure Letter**
- [ ] **Certificate of Completion (COC)** for VPLE sites

SOURCE LEGAL DOCUMENTS

- [x] **Deed:** The most recent deed as well as legal descriptions, for the **Source Property** (where the contamination originated). Deeds for other, off-source (off-site) properties are located in the **Notification** section.
  Note: *If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*
- [x] **Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map *for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map.* (lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).

  Figure #: na **Title: Legal Description**
- [ ] **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

MAPS (meeting the visual aid requirements of s. NR 716.15(2)(h))

Maps must be no larger than 8.5 x 14 inches unless the map is submitted electronically.

- [x] **Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all parcels. If groundwater standards are exceeded, include the location of all potable wells within 1200 feet of the site.
  Note: *Due to security reasons municipal wells are not identified on GIS Packet maps. However, the locations of these municipal wells must be identified on Case Closure Request maps.*

  Figure #: 1 **Title: Location Map**
- [x] **Detailed Site Map:** A map that shows all relevant features (buildings, roads, individual property boundaries, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.

  Figure #: 2 **Title: Site Plan**
- [x] **Soil Contamination Contour Map:** For sites closing with residual soil contamination, <u>this map is to show the location of all contaminated soil and a single contour</u> showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL)as determined under s. NR 720.09, 720.11 and 720.19.

  Figure #: 2 **Title: Site Plan**

BRRTS #: 03-05-000848 ACTIVITY NAME: DE PERE MOBIL SERVICE STATION

MAPS (continued)

☐ **Geologic Cross-Section Map:** A map showing the source location and vertical extent of residual soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL). If groundwater contamination exceeds a ch. NR 140 Enforcement Standard (ES) when closure is requested, show the source location and vertical extent, water table and piezometric elevations, and locations and elevations of geologic units, bedrock and confining units, if any.

Figure #: **Title:**

Figure #: **Title:**

☒ **Groundwater Isoconcentration Map:** For sites closing with residual groundwater contamination, this map shows the horizontal extent of all groundwater contamination exceeding a ch. NR140 Preventive Action Limit (PAL) and an Enforcement Standard (ES). Indicate the direction and date of groundwater flow, based on the most recent sampling data.
Note: *This is intended to show the total area of contaminated groundwater.*

Figure #: 2 **Title: Site Plan**

☒ **Groundwater Flow Direction Map:** A map that represents groundwater movement at the site. If the flow direction varies by more then 20° over the history of the site, submit 2 groundwater flow maps showing the maximum variation in flow direction.

Figure #: 2 **Title: GW Flow April 2, 1998**

Figure #: 2 **Title: GW Flow January 14, 1998**

TABLES (meeting the requirements of s. NR 716.15(2)(h)(3))

Tables must be no larger than 8.5 x 14 inches unless the table is submitted electronically. Tables must not contain shading and/or cross-hatching. The use of **BOLD** or *ITALICS* is acceptable.

☒ **Soil Analytical Table:** A table showing remaining soil contamination with analytical results and collection dates.
Note: This is one table of results for the contaminants of concern. Contaminants of concern are those that were found during the site investigation, that remain after remediation. It may be necessary to create a new table to meet this requirement.

Table #: na **Title: Soil Analytical Summary**

☒ **Groundwater Analytical Table:** Table(s) that show the most recent analytical results and collection dates, for all monitoring wells and any potable wells for which samples have been collected.

Table #: **Title: Natural Attenuation Groundwater Monitoring Data**

☒ **Water Level Elevations:** Table(s) that show the previous four (at minimum) water level elevation measurements/dates from all monitoring wells. If present, free product is to be noted on the table.

Table #: na **Title: Letter of May 1, 1998**

IMPROPERLY ABANDONED MONITORING WELLS

For each monitoring well not properly abandoned according to requirements of s. NR 141.25 include the following documents.
Note: *If the site is being listed on the GIS Registry for only an improperly abandoned monitoring well you will only need to submit the documents in this section for the GIS Registry Packet.*

☒ **Not Applicable**

☐ **Site Location Map:** A map showing all surveyed monitoring wells with specific identification of the monitoring wells which have not been properly abandoned.
Note: *If the applicable monitoring wells are distinctly identified on the Detailed Site Map this Site Location Map is not needed.*

Figure #: **Title:**

☐ **Well Construction Report:** Form 4440-113A for the applicable monitoring wells.

☐ **Deed:** The most recent deed as well as legal descriptions for each property where a monitoring well was not properly abandoned.

☐ **Notification Letter:** Copy of the notification letter to the affected property owner(s).

BRRTS #: 03-05-000848 ACTIVITY NAME: DE PERE MOBIL SERVICE STATION

NOTIFICATIONS

Source Property

☐ **Letter To Current Source Property Owner:** If the source property is owned by someone other than the person who is applying for case closure, include a copy of the letter notifying the current owner of the source property that case closure has been requested.

☐ **Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying current source property owner.

Off-Source Property

Group the following information per individual property and label each group according to alphabetic listing on the "Impacted Off-Source Property" attachment.

☐ **Letter To "Off-Source" Property Owners:** Copies of all letters sent by the Responsible Party (RP) to owners of properties with groundwater exceeding an Enforcement Standard (ES), and to owners of properties that will be affected by a land use control under s. 292.12, Wis. Stats.
Note: *Letters sent to off-source properties regarding residual contamination must contain standard provisions in Appendix A of ch. NR 726.*

Number of "Off-Source" Letters:

☐ **Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying any off-source property owner.

☐ **Deed of "Off-Source" Property:** The most recent deed(s) as well as legal descriptions, for all affected deeded **off-source property(ies).** This does not apply to right-of-ways.
Note: *If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*

☐ **Letter To "Governmental Unit/Right-Of-Way" Owners:** Copies of all letters sent by the Responsible Party (RP) to a city, village, municipality, state agency or any other entity responsible for maintenance of a public street, highway, or railroad right-of-way, within or partially within the contaminated area, for contamination exceeding a groundwater Enforcement Standard (ES) and/or soil exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).

Number of "Governmental Unit/Right-Of-Way Owner" Letters:

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
William R. Selbig, Regional Director

Northeast Regional Headquarters
Solid Waste Office
PO Box 10448, 1125 N. Military Ave.
Green Bay, Wisconsin 54307-0448
TELEPHONE 414-492-5916
FAX 414-492-5859
TDD 414-492-5812

November 13, 1998

Westerfield Oil
Attn: Leon Westerfield
P.O. Box 19
Zachow, WI 54182

SUBJECT: Final Closure, for De Pere Mobil Services Station; 746 Main Avenue, De Pere.

BRRTS CASE #~~02~~-05-000848
03
CR 4/5/00

Dear Mr. Westerfield:

On August 18, 1998, you were notified that the above named site was reviewed by the Northeast Region Closeout Committee and qualified for closeout under ch. NR 726, Wis. Adm. Code. However, the site could not be officially closed until the Department received documentation that the monitoring wells were properly abandoned according to the requirements of NR 141 Wis. Adm. Code.

On November 6, 1998, the Department received written documentation that the monitoring wells were abandoned. On October 28, 1998, the Department received a copy of the filed Groundwater Use Restriction. Therefore, the Department considers this case closed, having determined that no further action is necessary at the site at this time. However, this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicate that contamination on or from the site poses a threat to public health, safety or welfare to the environment.

If you have additional relevant information, which was not formerly provided to the Department, you should resubmit this information to the Department for reevaluation.

If you have any questions regarding the content of this letter, please contact me at (920) 492-5592.

Sincerely,

Roxanne Nelezen Chronert
Spills Coordinator - Hydrogeologist
Remediation & Redevelopment Program

cc: Edwin J. Zalewski; Robert E. Lee & Associates; P.O. Box 2100; Green Bay, WI 54306-2100

MW ABANDONMENT

Document Number | GROUNDWATER USE RESTRICTION

Declaration of Restrictions

In re: Lots Thirty-seven (37), Thirty-nine (39), Forty-one (41), Forty-three (43), Forty-five (45), and part of lots forty-seven (47) and Forty-nine (49), Block Sixteen (16), County of Brown, State of Wisconsin, according to the recorded Plat of De Pere Company's Addition to the Village of West De Pere, now a part of the City of De Pere, West Side of Fox River, except that part conveyed to the City of De Pere by James C. Plunkett and Margaret E. Plunkett, his wife, by Warranty Deed dated January 17, 1970 and recorded April 7, 1970 in the Register's Office, Brown County, Wisconsin, in Volume 886, Page 600.

That portion of Lots Forty-seven (47) and Forty-nine (49) being conveyed herein is described as follows:

Commencing at the Southeast corner of said Lot 47, Block 16, and running thence North 74°47' West 23 feet; thence North 29°53'30" West 38.26 feet; thence North 15°00' East 98 feet; thence South 74 °47' East 50 feet; thence South 15°00' West 125 feet to the point of beginning.

Recording Area

Westerfeld Oil Company, Inc.
P.O. Box 19
Zachow, WI 54182

Parcel Identification Number (PIN)

STATE OF WISCONSIN)
) ss
COUNTY OF BROWN)

WHEREAS, Westerfeld Oil Company, Inc. is the owner of the above-described property.

WHEREAS, one or more petroleum discharges have occurred at this property. Benzene and Methyl Tert-Butyl Ether (MTBE) contaminated groundwater above NR 140 enforcement standards exists on this property at the following location(s): monitoring well two (MW-2) MTBE is equal to 26 ppb; monitoring well eight (MW-8) Benzene is equal to 1,200 ppb; monitoring well fourteen (MW-14) Benzene is equal to 5.3 ppb. Soil contamination exists at the following locations: boring three (B-3) Benzene is equal to 2,300 ppm; boring four (B-4) GRO is equal to 981 ppm, Benzene is equal to 8,500 ppm, Toluene is equal to 11,000 ppm, Ethylbenzene is equal to 29,000 ppm, Total Xylene is equal to 108,000 ppm; boring five (B-5) GRO is equal to 510 ppm, Benzene is equal to 8,800 ppm, Toluene is equal to 13,000 ppm, Ethylbenzene is equal to 17,000 ppm, Total Xylene is equal to 71,000 ppm; boring eight (B-8) GRO is equal to 608 ppm, Benzene is equal to 4,500 ppm, Toluene is equal to 20,000 ppm, Ethylbenzene is equal to 15,000 ppm, Total Xylene is equal to 59,000; boring nine (B-9) GRO is equal to 689 ppm, Benzene is equal to 12,000 ppm, Toluene is equal to 23,000 ppm, Ethylbenzene is equal to 14,000 ppm, Total Xylene is equal to 63,000 ppm; boring ten (B-10) Benzene is equal to 1,000 ppm; boring eleven (B-11) GRO is equal to 263 ppm, Benzene is equal to 2,100 ppm, Ethylbenzene is equal to 6,600 ppm, Total Xylene is equal to 13,590; and boring fourteen (B-14) Benzene is equal to 180 ppm. Location of monitoring wells and borings are provided on Figure 2, attached and made part of this restriction.

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

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

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

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

> Anyone who proposes to construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater, or its successor agency, to determine what specific prohibitions or requirements are applicable, prior to constructing or reconstructing a well on this property. 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.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this _____ day of _____, 19____.

By signing this document, _____ acknowledges that [he/she] is duly authorized to sign this document on behalf of Westerfeld Oil Company, Inc.

Signature: _____

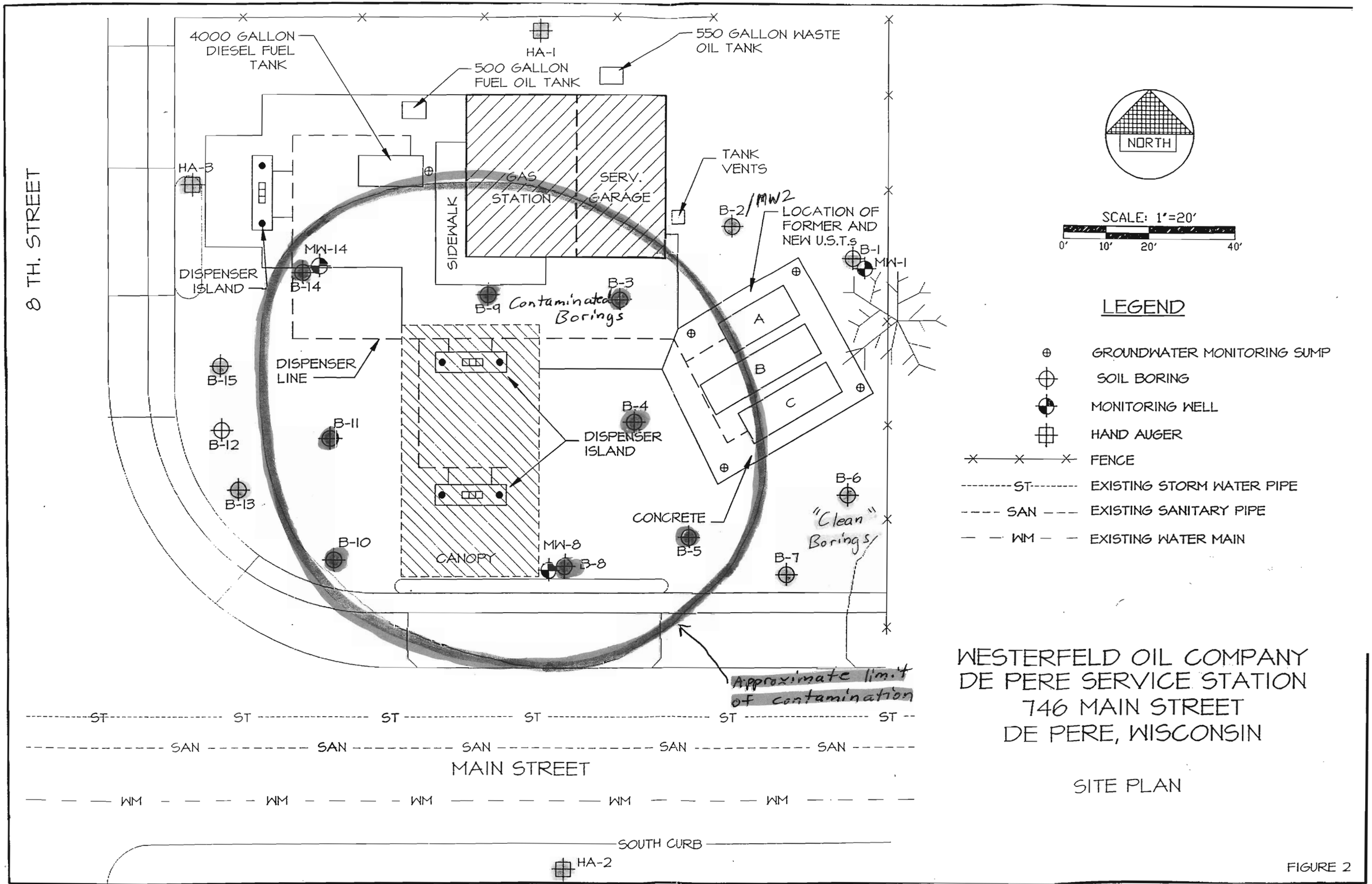
Printed Name:_____

Title: _____

Subscribed and sworn to before me
this _____ day of _____, 19__.

_____
Notary Public, State of _____
My commission _____

This document was drafted by the Wisconsin Department of Natural Resources.



WESTERFELD OIL COMPANY
DE PERE SERVICE STATION
746 MAIN STREET
DE PERE, WISCONSIN

SITE PLAN

FIGURE 2

SITE/JM/8-96/1519012

1025231

DOCUMENT NO.

J 8097 I 1
SS#03-19139

This indenture, Made this 18th day of April A. D., 1984 between MOBIL OIL CORPORATION, a Corporation duly organized and existing under and by virtue of the laws of the State of New York having an office at 3225 Gallows Road, Fairfax, Virginia party of the first part, and WESTERFELD OIL COMPANY, INC. a Corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, located at Zachow, Wisconsin, party of the second part.

Witnesseth, That the said party of the first part, for and in consideration of the sum of TEN AND NO/100 ($10.00) DOLLARS and all other good and valuable consideration, to it paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has given, granted, bargained, sold, remised, released and quit-claimed, and by these presents does give, grant, bargain, sell, remise, release and quit-claim unto the said party of the second part, and to its successors and assigns forever, the following described real estate, situated in the County of Brown, State of Wisconsin, to-wit:

Lots Thirty-seven (37), Thirty-nine (39), Forty-one (41), Forty-three (43), Forty-five (45), and part Forty-seven (47) and Forty-nine (49), Block Sixteen (16), County of Brown, State of Wisconsin, according to the recorded Plat of De Pere Company's Addition to the Village of West De Pere, now a part of the City of De Pere, West Side of Fox River, except that part conveyed to the City of De Pere by James C. Plunkett and Margaret E. Plunkett, his wife, by Warranty Deed dated January 17, 1970 and recorded April 7, 1970 in the Register's Office, Brown County, Wisconsin, in Volume 886, Page 600.

That portion of Lots Forty-seven (47) and Forty-nine (49) being conveyed herein is described as follows:

Commencing at the Southeast corner of said Lot 47, Block 16, and running thence North 74°47' West 23 feet; thence North 29°53'30" West 38.26 feet; thence North 15°00' East 98 feet; thence South 74°47' East 50 feet; thence South 15°00' West 125 feet to the point of beginning.

THIS CONVEYANCE IS SUBJECT TO ALL valid and subsisting covenants, conditions, restrictions, easements, provisions, exceptions, and reservations, if any, of whatsoever nature of record.

TRANSFER
$246.00
FEE

REGISTER OF DEEDS
BROWN COUNTY

MAY 25 1984

AT 8:07 O'CLOCK A.M.
REGISTER OF DEEDS

420

I, Cathy Wallaquette Brown County Register of Deeds, do hereby certify that this is a true and correct copy of the original record on file in the Brown County Register of Deeds Office, Green Bay, Wisconsin.
In witness whereof I hereunto set my hand and official seal this 9th day of September A.D., 1998.
Cathy Wallaquette
REGISTER OF DEEDS

To have and to hold the same, together with all and singular the appurtenances and privileges thereunto belonging or in any wise thereunto appertaining, and all the estate, right, title, interest and claim whatsoever of the said party of the first part, either in law or equity, either in possession or expectancy of, to the only proper use, benefit and behoof of said party of the second part, its successors and assigns FOREVER.

In Witness Whereof, the said MOBIL OIL CORPORATION party of the first part, has caused these presents to be signed by D.J. D'ALESSIO Assistant Authorized Officer and countersigned by JAMES E. McGRATH, JR. its Secretary, at Fairfax, Virginia, and its corporate seal to be hereto affixed, this 18th day of April A. D., 1984.

SIGNED AND SEALED IN PRESENCE OF

Judy M. Cowan
Dorothy A. Hirt

MOBIL OIL CORPORATION
D.J. D'ALESSIO Authorized Officer
JAMES E. McGRATH, JR. Assistant Secretary

STATE OF VIRGINIA
FAIRFAX County, ss.

Personally came before me, this 18th day of April A. D., 1984 D.J. D'ALESSIO Authorized Officer and JAMES E. McGRATH, JR. Assistant Secretary of the above named Corporation, to me known to be the persons who executed the foregoing instrument, and to me known to be such Authorized Officer and Assistant Secretary of said Corporation, and acknowledged that they executed the foregoing instrument as such officers as the deed of said Corporation, by its authority.

Received for Record this ..... day of ..... A. D., 19..... at ..... o'clock ..... M. (SEAL)

Register of Deeds

Deputy Register of Deeds

Notary Public FAIRFAX County, VA
My commission expires June 7 A. D., 1986

This instrument was drafted by V. H. Marra, Esq., 3225 Gallows Rd., Fairfax, VA 22037

No. 414 QUIT CLAIM DEED Corporation to Corporation

Wisconsin Legal Blank Company
Milwaukee, Wis. (Feb 1973)

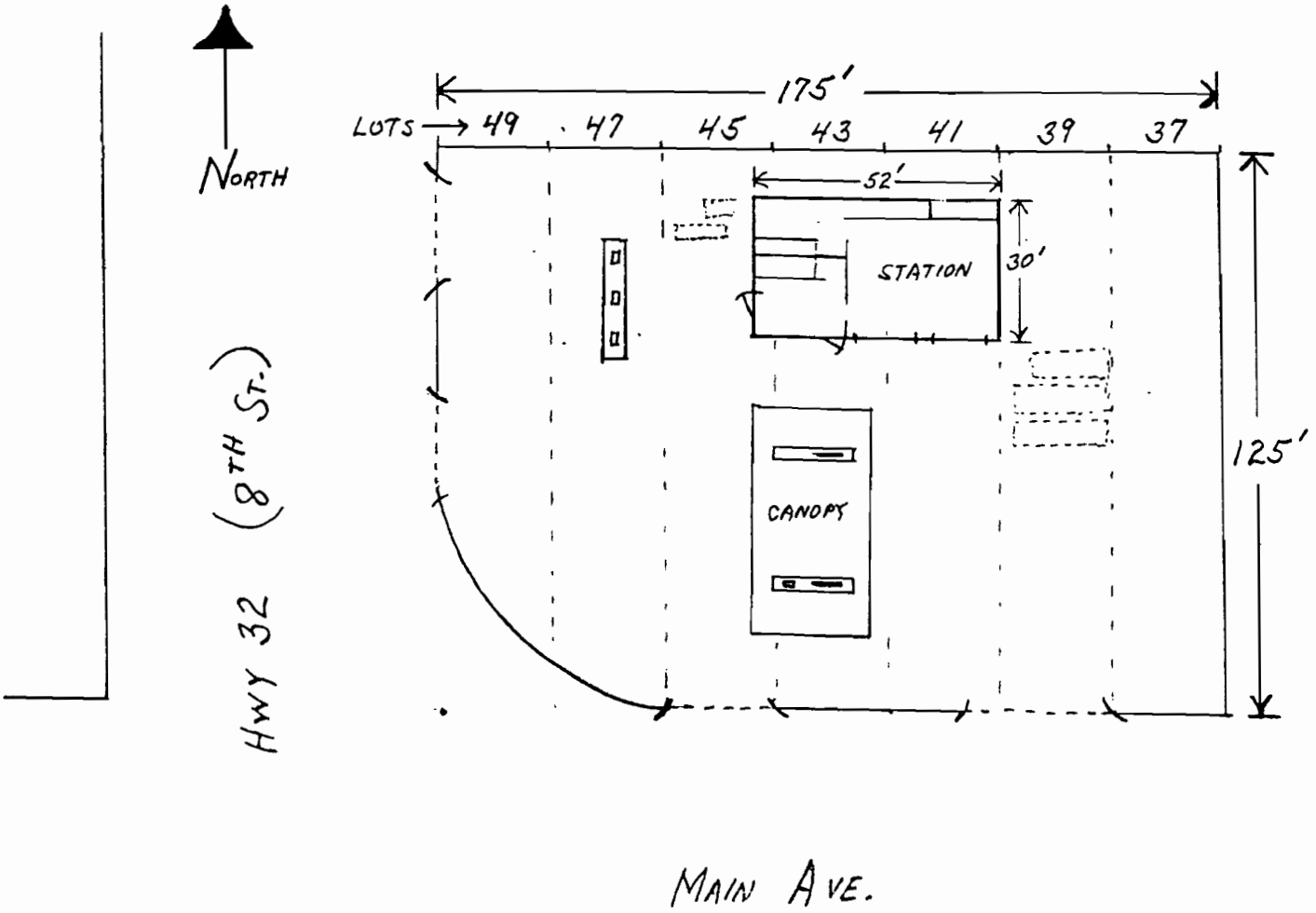
REGISTER OF DEEDS-This document

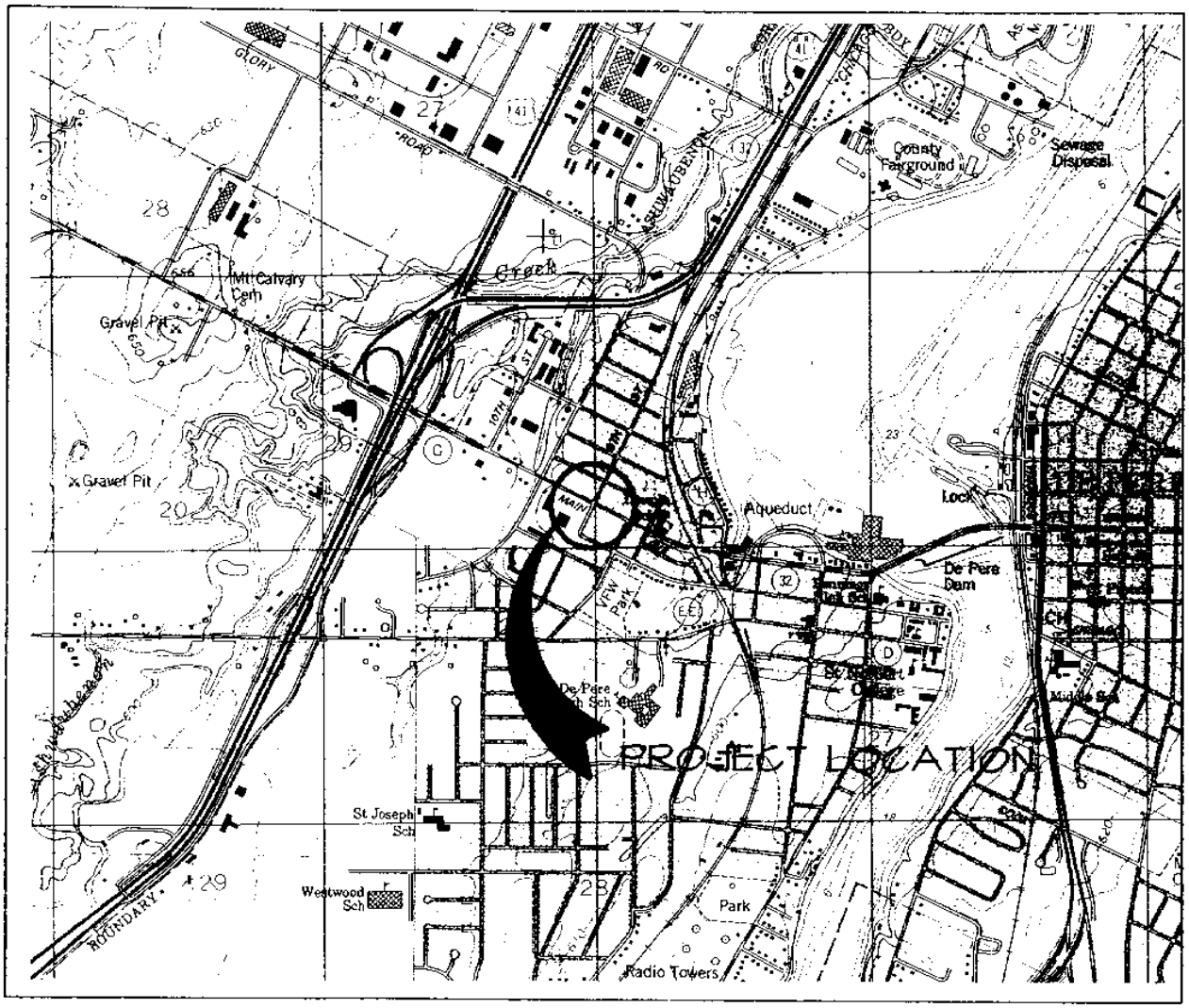
DePere Service Center
746 N. Main St.
DePere, WI 54115

SCALE 1" = 40'

Legal Description

Lots 37, 39, 41, 43, 45 and part of Lots 47 and 49, of Block 16, DePere Company's Addition to West DePere, Brown County, Wisconsin





LOCATION MAP

WESTERFELD OIL COMPANY
DE PERE SERVICE STATION
746 MAIN AVENUE
DE PERE, WISCONSIN

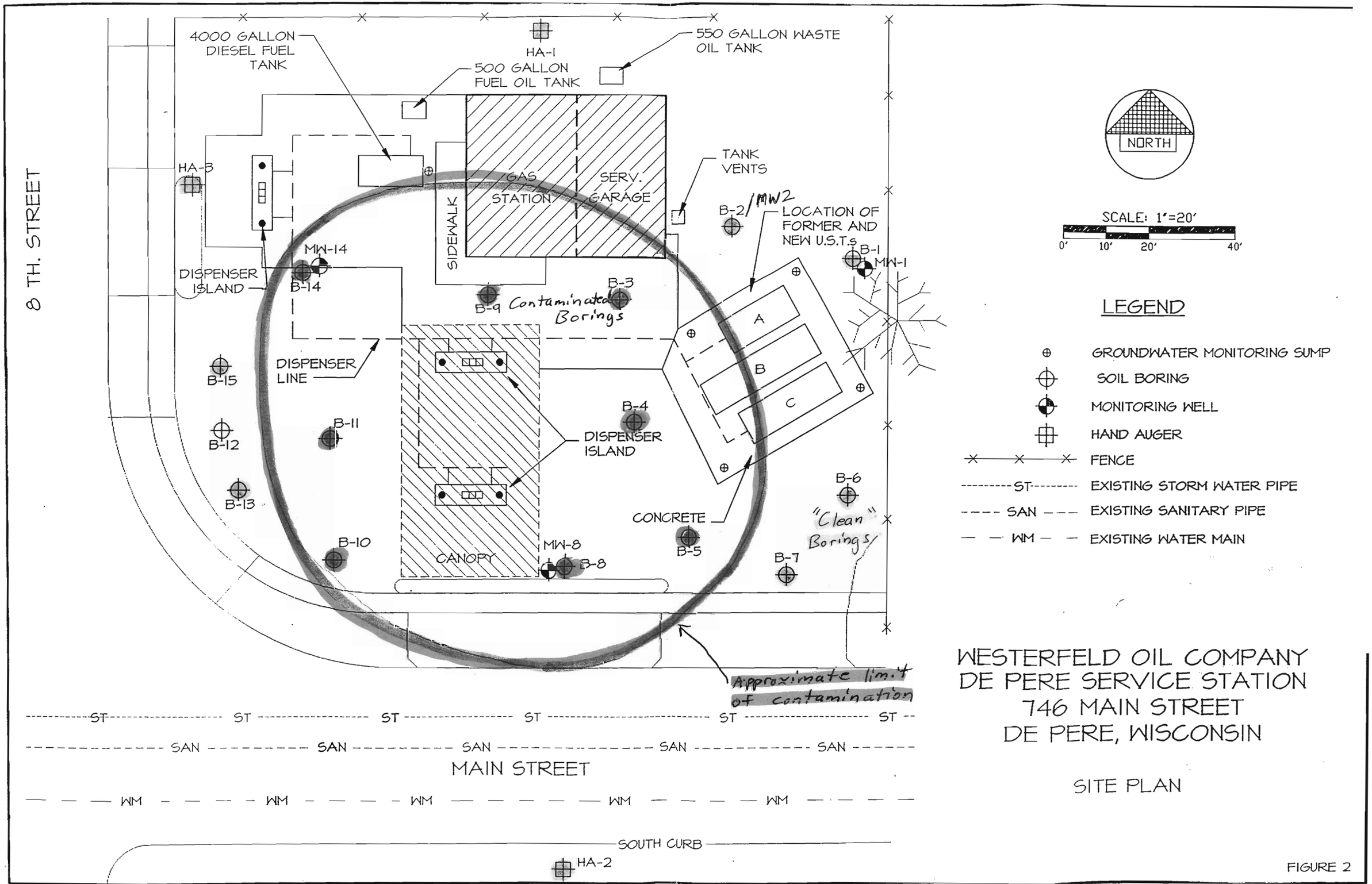
NORTH

1" = 2000'

MAP USED - DE PERE QUAD - 1982

FIGURE 1

1519LOCAMBJD/12-5-95/1519012



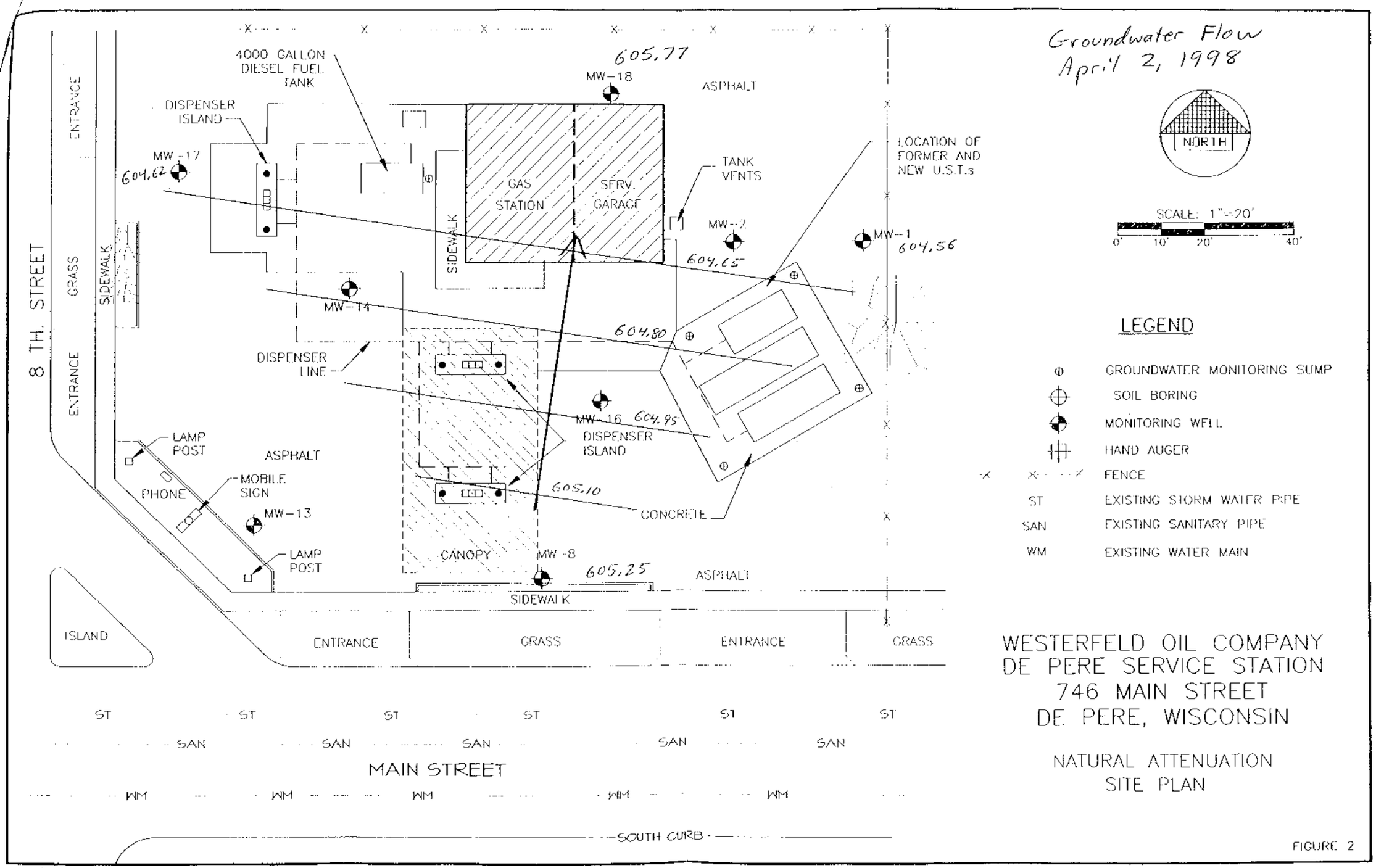
WESTERFELD OIL COMPANY
DE PERE SERVICE STATION
746 MAIN STREET
DE PERE, WISCONSIN

SITE PLAN

FIGURE 2

SITE/JM/8-96/1519012

Groundwater Flow
April 2, 1998



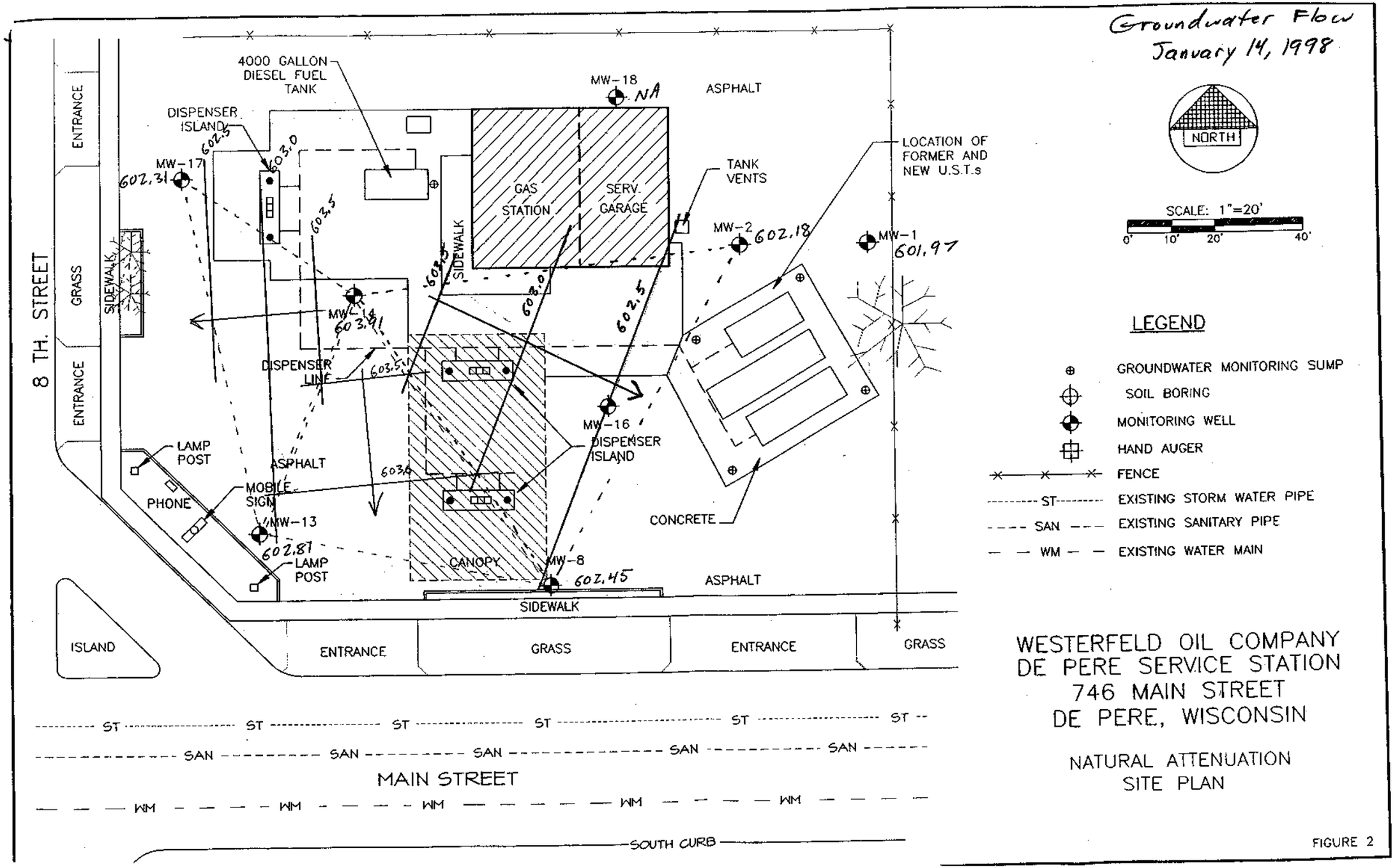
WESTERFELD OIL COMPANY
DE PERE SERVICE STATION
746 MAIN STREET
DE PERE, WISCONSIN

NATURAL ATTENUATION
SITE PLAN

FIGURE 2

WESTOIL3/1519016

Groundwater Flow
January 14, 1998



WESTERFELD OIL COMPANY
DE PERE SERVICE STATION
746 MAIN STREET
DE PERE, WISCONSIN

NATURAL ATTENUATION
SITE PLAN

FIGURE 2

Gw @ 5-7.5' bgs

Westerfeld Oil - Depere Service Center Investigation

Soil Analytical Summary

Parameter	NR 720	Sample ID B-1 9-11	B-2 5-7	B-3 7-9	B-4 5-7	B-5 5-7	B-6 7-9	B-7 5-7	B-8 5-7
GRO (mg/kg)	250	<1.0	<1.0	9.7	981	510	<1.0	<1.0	608
PVOC (μg/kg)									
MTBE	—	<25	<25	<25	<500	<500	<25	<25	<1,000
Benzene	5.5	<25	<25	2,300	8,500	8,800	<25	<25	4,500
Toluene	1,500	<25	<25	200	11,000	13,000	<25	<25	20,000
Ethylbenzene	2,900	<25	<25	690	29,000	17,000	<25	<25	15,000
Total Xylene	4,100	<25	<25	1,310	108,000	71,000	<25	<25	59,000
1,3,5-Trimethylbenzene	—	<25	<25	180	23,000	9,300	<25	<25	9,200
1,2,4-Trimethylbenzene	—	<25	<25	610	5,100	32,000	<25	<25	33,000

= exceedance of NR 720 soil standards

Westerfeld Oil - De Pere Service Center Investigation

Soil Analytical Summary

Parameter	NR 720 Standard	Sample ID								
		B-9 5-7	B-10 5-7	B-11 5-7	B-13 5-7	B-14 5-7	B-15 7-9	HA-1 5-7	HA-2 5.5-6.5	HA-3 6-6.5
GRO (mg/kg)	250	689	55	263	<1.0	19	<1.0	<1.0	<1.0	<1.0
PVOC (μg/kg)										
MTBE	—	<1,000	<25	<100	<25	<25	<25	<25	<25	<25
Benzene	5.5	12,000	1,000	2,100	<25	180	<25	<25	<25	<25
Toluene	1,500	23,000	98	410	<25	<25	<25	<25	<25	<25
Ethylbenzene	2,900	14,000	2,500	6,600	<25	1,700	<25	<25	<25	<25
Total Xylene	4,100	63,000	2,270	13,590	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	—	9,400	790	4,900	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	—	34,000	4,800	15,000	<25	87	<25	<25	<25	<25

= exceedance of NR 720 soil standards

Westerfeld Oil Company - De Pere Service Center
Natural Attenuation Groundwater Monitoring Data

Parameter	NR 140 PAL	NR 140 ES	MW-1			
			5/28/97	10/1/97	1/14/98	4/2/98
PVOC (μg/L)						
Benzene	0.5	5	nd	nd	nd	nd
Ethylbenzene	140	700	nd	nd	nd	nd
MTBE	12	60	nd	2.66	9.34	4.51
Toluene	68.6	343	nd	nd	nd	nd
1,2,4-Trimethylbenzene	--	--	nd	nd	nd	nd
1,3,5-Trimethylbenzene	--	--	nd	nd	nd	nd
Total Xylene	124	620	nd	nd	nd	nd
Natural Attenuation Indicators						
Sulfate (mg/L)			7.5	72.6	72.6	77.4
Nitrate (mg/L)			nd	nd	na	na
Methane (μg/L)			na	na	nd	nd
Dissolved Oxygen (mg/L)			1.7	2.5	2.3	4.3
Iron (mg/L)			0	0.1	0.1	0.1

Parameter	NR 140 PAL	NR 140 ES	MW-2			
			5/28/97	10/1/97	1/14/98	4/2/98
PVOC (μg/L)						
Benzene	0.5	5	nd	nd	nd	nd
Ethylbenzene	140	700	nd	nd	nd	nd
MTBE	12	60	13.3	14.9	53.6	26
Toluene	68.6	343	nd	nd	nd	nd
1,2,4-Trimethylbenzene	--	--	nd	nd	nd	nd
1,3,5-Trimethylbenzene	--	--	nd	nd	nd	nd
Total Xylene	124	620	nd	nd	nd	nd
Natural Attenuation Indicators						
Sulfate (mg/L)			6.7	73.5	79.8	89.1
Nitrate (mg/L)			nd	nd	na	na
Methane (μg/L)			na	na	nd	nd
Dissolved Oxygen (mg/L)			5.3	1.7	1.8	2.9
Iron (mg/L)			0	0.1	0.1	0.1

= NR 140 Preventive Action Limit exceedancee

= NR 140 Enforcement Standard exceedance

nd = no detection na = not analyzed

Westerfeld Oil Company - De Pere Service Center
Natural Attenuation Groundwater Monitoring Data

Parameter	NR 140 PAL	NR 140 ES	MW-8			
			5/28/97	10/1/97	1/14/98	4/2/98
PVOC (μg/L)						
Benzene	0.5	5	1,030	721	1,520	1,200
Ethylbenzene	140	700	87.7	157	302	217
MTBE	12	60	168	115	nd	nd
Toluene	68.6	343	8.5	12.1	72.6	32.9
1,2,4-Trimethylbenzene	--	--	56.4	82.2	240	189
1,3,5-Trimethylbenzene	--	--	11.8	6.45	24.9	20.6
Total Xylene	124	620	101.2	78.6	430	317.2
Natural Attenuation Indicators						
Sulfate (mg/L)			98.1	149	57.9	45.3
Nitrate (mg/L)			nd	nd	na	na
Methane (μg/L)			na	na	670	265
Dissolved Oxygen (mg/L)			2.8	2.8	1.5	3.4
Iron (mg/L)			0.1	0.1	0.3	0.4

Parameter	NR 140 PAL	NR 140 ES	MW-13			
			5/28/97	10/1/97	1/14/98	4/2/98
PVOC (μg/L)						
Benzene	0.5	5	nd	nd	nd	nd
Ethylbenzene	140	700	nd	nd	nd	nd
MTBE	12	60	16.6	9.06	11.7	11.7
Toluene	68.6	343	nd	nd	nd	nd
1,2,4-Trimethylbenzene	--	--	nd	nd	nd	nd
1,3,5-Trimethylbenzene	--	--	nd	nd	nd	nd
Total Xylene	124	620	nd	nd	nd	nd
Natural Attenuation Indicators						
Sulfate (mg/L)			98.1	85.8	80.7	63.3
Nitrate (mg/L)			nd	nd	na	na
Methane (μg/L)			na	na	nd	4.23
Dissolved Oxygen (mg/L)			4.8	1.8	3.0	3.9
Iron (mg/L)			0	0.1	0.1	0.1

= NR 140 Preventive Action Limit exceedancee

= NR 140 Enforcement Standard exceedance

nd = no detection na = not analyzed

Westerfeld Oil Company - De Pere Service Center
Natural Attenuation Groundwater Monitoring Data

Parameter	NR 140 PAL	NR 140 ES	MW-14			
			5/28/97	10/1/97	1/14/98	4/2/98
PVOC (μg/L)						
Benzene	0.5	5	11.3	nd	nd	5.30
Ethylbenzene	140	700	15.3	nd	nd	8.98
MTBE	12	60	31.9	31.7	15.6	23.8
Toluene	68.6	343	nd	nd	nd	nd
1,2,4-Trimethylbenzene	--	--	5.9	nd	nd	1.56
1,3,5-Trimethylbenzene	--	--	1.2	nd	nd	nd
Total Xylene	124	620	7.9	nd	nd	2.75
Natural Attenuation Indicators						
Sulfate (mg/L)			23.1	23.4	23.4	28.0
Nitrate (mg/L)			nd	nd	na	na
Methane (μg/L)			na	na	2.8	24.5
Dissolved Oxygen (mg/L)			2.9	2.1	4.2	3.1
Iron (mg/L)			0	0.1	0.1	0.1

Parameter	NR 140 PAL	NR 140 ES	MW-17			
			5/28/97	10/1/97	1/14/98	4/2/98
PVOC (μg/L)						
Benzene	0.5	5	nd	nd	nd	nd
Ethylbenzene	140	700	nd	nd	nd	nd
MTBE	12	60	6.3	4.98	6.82	5.72
Toluene	68.6	343	nd	nd	nd	nd
1,2,4-Trimethylbenzene	--	--	nd	nd	nd	nd
1,3,5-Trimethylbenzene	--	--	nd	nd	nd	nd
Total Xylene	124	620	nd	nd	nd	nd
Natural Attenuation Indicators						
Sulfate (mg/L)			46.2	57.0	37.8	36.0
Nitrate (mg/L)			nd	nd	na	na
Methane (μg/L)			na	na	nd	nd
Dissolved Oxygen (mg/L)			5.1	2.2	3.4	4.5
Iron (mg/L)			0	0.1	0.1	0.1

= NR 140 Preventive Action Limit exceedancee

= NR 140 Enforcement Standard exceedance

nd = no detection na = not analyzed

Westerfeld Oil Company - De Pere Service Center
Natural Attenuation Groundwater Monitoring Data

Parameter	NR 140 PAL	NR 140 ES	MW-18			
			5/28/97	10/1/97	1/14/98	4/2/98
PVOC (μg/L)						
Benzene	0.5	5	nd	1.22	na	nd
Ethylbenzene	140	700	4.9	nd	na	nd
MTBE	12	60	2.5	nd	na	nd
Toluene	68.6	343	nd	nd	na	nd
1,2,4-Trimethylbenzene	--	--	7.1	nd	na	nd
1,3,5-Trimethylbenzene	--	--	12.6	nd	na	nd
Total Xylene	124	620	4.2	nd	na	nd
Natural Attenuation Indicators						
Sulfate (mg/L)			56.7	58.2	na	46.2
Nitrate (mg/L)			nd	nd	na	na
Methane (μg/L)			na	na	na	nd
Dissolved Oxygen (mg/L)			5.3	1.7	na	3.3
Iron (mg/L)			0	0.1	na	0.1

Note: MW-18 was not sampled in January 1998 because it was not accessible beneath snow.

= NR 140 Preventive Action Limit exceedancee

= NR 140 Enforcement Standard exceedance

nd = no detection na = not analyzed

Westerfeld Oil - De Pere Service Center Investigation

Groundwater Analytical Summary

VOC Parameter (μg/L)	NR 140 PAL	NR 140 ES	MW-1		MW-8		MW-14	
			6/6/96	8/2/96	6/6/96	8/2/96	6/6/96	8/2/96
Benzene	0.5	5	ND	ND	4180	1750	28	6.3
n-Butylbenzene	--	--	ND	ND	ND	ND	0.9	ND
Ethylbenzene	140	700	ND	ND	217	195	19	1.1
Isopropylbenzene	--	--	ND	ND	ND	ND	1.0	ND
MTBE	12	60	1.1	3.0	172	96	37	31
Naphthalene	8	40	ND	ND	ND	ND	1.3	ND
n-Propylbenzene	--	--	ND	ND	ND	ND	1.8	ND
Toluene	68.6	343	ND	ND	821	198	1.6	0.4
1,2,4-Trimethylbenzene	--	--	ND	ND	177	128	6.6	ND
1,3,5-Trimethylbenzene	--	--	ND	ND	64	41	1.9	ND
Total Xylene	124	620	ND	ND	1428	686	10.3	1.0

= Exceedance of NR 140 Preventive Action Limit

= Exceedance of NR 140 Enforcement Standard

Note: only those VOCs which were detected have been listed

Lee & Associates, Inc.
Surveying, Laboratory Services

RECEIVED
MAY 01 1998
LMD SOLID WASTE

2825 S. Webster Ave.
P.O. Box 2100
Green Bay, WI 54306-2100
920/336-6338
FAX 920/336-9141
E Mail rel@netnet.net

1998

REL
CLOSURE
REQUEST

Ms. Roxanne Nelezen-Chronert
DEPARTMENT OF NATURAL RESOURCES
P.O. Box 10448
Green Bay, WI 54307-0448

RE: Westerfeld Oil Company - De Pere Service Center Closure Request
746 Main Avenue, De Pere, Wisconsin
WDNR LUST ID # 05-0848 PECFA Claim # 54115-1333-46

Dear Ms. Nelezen-Chronert:

This letter requests closure for the above site. The petroleum release was discovered during a tank upgrade performed in 1990. The soil investigation included the construction of 15 soil borings and three hand augers to collect soil samples, and the groundwater investigation included the installation and sampling of three monitoring wells. The investigation results are summarized on the enclosed tables, and the sampling locations are shown on the enclosed site plan. Our justification for closure is presented below.

Natural attenuation was selected as the remedial action, and five additional wells were installed for monitoring. However, well MW-16 never yielded sufficient water for sampling. The wells are shown on the enclosed site plan, and the lab data is summarized on the enclosed tables.

The apparent groundwater flow direction was originally calculated as being either northeast or northwest, depending on season. The water table elevations do not indicate an obvious flow direction. Several enclosed site maps show various flow directions calculated from different combinations of well triangles from different sampling dates. The water table elevations for the past year are summarized on the table below.

WELL	Bottom Depth	Water Table Elevation			
		5/28/97	10/1/97	1/14/98	4/2/98
MW-1	14.20	604.06	601.92	601.97	604.56
MW-2	14.50	603.76	602.29	602.18	604.63
MW-8	14.46	604.30	603.18	602.45	605.25
MW-13	14.70	604.24	604.38	602.81	605.00
MW-14	13.60	602.77	604.55	603.91	604.25
MW-17	14.44	604.13	603.30	602.31	604.62
MW-18	14.20	604.12	600.85	NA	605.77

State of Wisconsin
Department of Natural Resources

Route To:
- ☐ Solid Waste
- ☐ Emergency Response
- ☐ Wastewater
- ☐ Superfund
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other

SOIL BORING LOG INFORMATION
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Page 1 of 1

Facility/Project Name DE PERE SERVICE CENTER		License/Permit/Monitoring Number – – – – – – – –	Boring Number B-5
Boring Drilled By (Firm name and name of crew chief) MIDWEST ENGINEERING SERVICES, INC.		Date Drilling Started 02/09/96 (MM/DD/YY)	Date Drilling Completed 02/09/96 (MM/DD/YY)
Drilling Method H.S.A.			
DNR Facility Well No. – – –	WI Unique Well No. – – – – – – –	Common Well Name	Final Static Water Level _____ Feet MSL
Surface Elevation -- Feet MSL	Borehole Diameter 6.0 inches		
Boring Location State Plane _____ N, _____ E S/C/N _____ 1/4 of _____ 1/4 of Section 27, T 23 N, R 20 (E)/W	Lat ___ ° ___ ' ___ " Long ___ ° ___ ' ___ "	Local Grid Location (if applicable) _____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W	
County BROWN	DNR County Code 0 5	Civil Town/City/or Village DE PERE	

Sample Number and Type	Length Att. Recorded (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Inde	P 200	RD/ Comments
				3" +/- Aspaltic Concrete Pavement 6"+/- Brown SAND and GRAVEL Base Course										
	1-SS	43	2	Gray and Brown Silty CLAY, little Sand and Gravel. Frozen to 5"				104						
	2-SS	13	4	Brown Silty CLAY, trace Sand. Moist to Wet				135						
	3-SS	11	6					230						
	4-SS	7	8	Wet at 8'				44						
	5-SS	6	10					1						
	6-SS	3	12	Gray Silty CLAY, trace Sand. Wet				1						
	7-SS	4	14					1						
			16	END OF BORING: 15' Water encountered at 8' during drilling Borehole caved and dry at 5.5' at completion										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm
MIDWEST ENGINEERING SERVICES, INC.

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

Route To:
- ☐ Solid Waste
- ☐ Emergency Response
- ☐ Wastewater
- ☐ Superfund
- ☐ Haz. Waste
- ☒ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name: **Westerfeld Oil - De Pere Service Center**	License/Permit/Monitoring Number	Boring Number: **B-14/MW-14**
Boring Drilled By (Firm name and name of crew chief): **Midwest Engineering Services, Inc.**	Date Drilling Started: 05 / 02 / 96 (MM DD YY)	Date Drilling Completed: 05 / 02 / 96 (MM DD YY) — Drilling Method: **Hollow Stem Auger**
DNR Facility Well No. / WI Unique Well No. / Common Well Name	Final Static Water Level: _____ Feet MSL	Surface Elevation: 609.1 Feet MSL — Borehole Diameter: 6.00 inches
Boring Location: State Plane _____ N, _____ E S; _____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E	Lat 44° 26' 57" Long 88° 4' 47"	Local Grid Location (If applicable): ☐ N _____ Feet ☐ S ☐ E _____ Feet ☐ W
County: **Brown**	DNR County Code: **05**	Civil Town/City/ or Village: **De Pere**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				0.0 to 2.0 4" Concrete over Gravel Basecourse	FILL									BD
1		7	1.4					1.3						SS/HSA
				2.0 to 3.0 Red Clay little silt	CL									
2		7	2.9	3.0 to 4.0 Dark Brown Clay little Silt	CL			4.9						SS/HSA
			4.3	4.0 to 15.0 Red Clay trace silt	CL									
3		5	5.7					6.2						SS/HSA
4		7	7.1	1" granular seam @ 7'				1.7						SS/HSA
5		4	8.6					2.0						SS/HSA
6		4	10.0					2.3						SS/HSA
7		2	11.4					2.4						SS/HSA
			12.9											
			14.3											
			15.7	End of Boring @ 15.0 Feet										
			17.1											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Elvin J. Johnski

Firm: **Robert E. Lee & Associates, Inc.**
P. O. Box 2100, Green Bay, WI 54306 (414) 336-6338

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

1519-012