

**GIS REGISTRY INFORMATION**

**SITE NAME:** Baraboo City Garage  
**BRRTS #:** 03-57-001666 **FID # (if appropriate):**  
**COMMERCE # (if appropriate):** 53913-9999-07  
**CLOSURE DATE:** 10-Apr-2006  
**STREET ADDRESS:** 407 Briar Street  
**CITY:** Baraboo

**SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection):** X= 541535 Y= 332260

**CONTAMINATED MEDIA:** Groundwater  Soil  Both

**OFF-SOURCE GW CONTAMINATION >ES:**  Yes  No

**IF YES, STREET ADDRESS 1:** 626 Potter Street

**GPS COORDINATES (meters in WTM91 projection):** X= 541640 Y= 332270

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



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Scott Hassett, Secretary  
Lloyd L. Eagan, Regional Director

South Central Region Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711-5397  
Telephone 608-275-3266  
FAX 608-275-3338  
TTY Access via relay - 711

April 10, 2006

Mr. Terry Kramer  
City of Baraboo  
134 4th Street  
Baraboo, WI 53913

Subject: Final Case Closure, By Closure Committee (With Conditions Met), of the Baraboo City Garage Case, 407 Briar Street, Baraboo; Sauk County, WDNR BRRTS No. 03-57-001666

Dear Mr. Kramer:

On February 28, 2006, the South Central Region Closure Committee reviewed the above-referenced case for closure. This committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On March 7, 2006, you were notified that the Closure Committee had granted conditional closure to this case.

On April 6, 2006, the Department received correspondence indicating that you have complied with the requirement for closure of the site: the abandonment of the groundwater monitoring wells and remediation system wells associated with your site. Based on the correspondence and data provided, it appears that your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code. The Department considers this case closed and no further investigation, remediation, or other action is required at this time.

Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites for remaining soil and groundwater contaminants. Information that was submitted with your closure request application will be included on the GIS Registry. To review the sites on the GIS Registry web page, visit <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. If your property is listed on the GIS Registry and you intend to construct or reconstruct a well, you will need Department approval. Department approval is required before construction or reconstruction of a well on a property listed on the GIS Registry, in accordance with s. NR 812.09(4)(w). To obtain approval, Form 3300-254 must be completed and submitted to the DNR Drinking and Groundwater Program's regional water supply specialist. This form can be obtained on-line at <http://www.dnr.state.wi.us/org/water/dwg/3300254.pdf> or at the web address listed above for the GIS Registry.

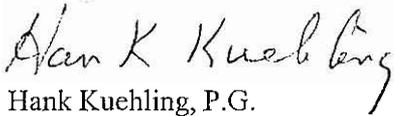
Residual soil contamination remains off the southwest and southeast corners of the municipal garage building, as indicated in the information submitted to the Department of Natural Resources. If soil in these specific locations is excavated in the future, the property owner at the time of excavation will be required to sample and analyze the excavated soil to determine whether the contamination still remains. If contamination remains, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard at the time of excavation. **Special precautions may need to be taken during excavation activities to prevent a direct contact health threat to humans.** Based upon the results of sample analysis, the current owner

will also have to properly store, treat, or dispose of any excavated materials, in accordance with state and federal laws.

Please be aware that this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety or welfare, or the environment.

The Department appreciates your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at the address listed above or as indicated below.

Sincerely,

A handwritten signature in black ink that reads "Hank Kuehling". The signature is written in a cursive style with a large, prominent "H" and "K".

Hank Kuehling, P.G.

Remediation & Redevelopment Program Hydrogeologist

(608) 275-3286

harlan.kuehling@dnr.state.wi.us

cc: Ken Gradall – MSA Professional Services



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Scott Hassett, Secretary  
Lloyd L. Eagan, Regional Director

South Central Region Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711-5397  
Telephone 608-275-3266  
FAX 608-275-3338  
TTY Access via relay - 711

March 7, 2006

Mr. Terry Kramer  
City of Baraboo  
134 4<sup>th</sup> Street  
Baraboo, WI 53913

Subject: Conditional Closure Decision with Requirements to Achieve Final Closure of the Baraboo City Garage Case, 407 Briar St., Baraboo; Sauk County; WDNR BRRTS Activity No. 03-54-001666

Dear Mr. Kramer:

On February 28, 2006, the South Central Region closure committee reviewed your request for closure of the case identified above. This closure committee reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. After careful review of the closure request, the closure committee has determined that the petroleum volatile organic compound (PVOC) contamination on the site in the vicinity of the former gasoline, diesel fuel, and fuel oil underground storage tanks appears to have been investigated and remediated to the extent practicable under site conditions.

Your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code and will be closed if the following condition is satisfied. The monitoring wells at the site must be properly abandoned in compliance with ch. NR 141, Wis. Adm. Code, as must any remaining remediation system wells (soil vapor extraction, groundwater extraction, and air sparging wells). Documentation of well abandonment must be submitted to me on Form 3300-5B that is available at [www.dnr.state.wi.us/org/water/dwg/gw/](http://www.dnr.state.wi.us/org/water/dwg/gw/) or can otherwise be provided by the Department. When the above condition has been satisfied, please submit a letter to me that verifies this completion, and this case will then be closed.

Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites for groundwater and soil contamination. Information that was submitted with your closure request application will be included on the GIS Registry. You can visit the GIS Registry web page at <http://maps.dnr.state.wi.us/brrts>

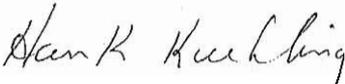
Note that soil contaminated with PVOCs in the vicinity of the former gasoline and diesel fuel tanks remains on this property, as indicated by the most recent soil analytical results submitted for the site. If this contaminated soil is excavated in the future, the soil must be sampled and analyzed, may be considered solid or hazardous waste, and will need to be disposed in accordance with applicable statutes and rules.

If this is a PECFA site, section 101.143, Wis. Stats., requires that PECFA claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received by the PECFA Program within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement.

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.

We appreciate your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at the address listed above or as indicated below.

Sincerely,



Hank Kuehling, P.G.  
Remediation & Redevelopment Program Hydrogeologist  
608.275.3286  
harlan.kuehling@dnr.state.wi.us

cc: Ken Gradall – MSA Professional Services

DOCUMENT NO.

429993

STATE BAR OF WISCONSIN-FORM 1  
WARRANTY DEED  
THIS SPACE RESERVED FOR RECORDING DATA  
REGISTER'S OFFICE  
SAUK COUNTY, WIS.  
RECEIVED FOR RECORD

MAR 5 1979  
AT 3:30 O'CLOCK P.M., RECORDED IN  
REEL 138, IMAGE 435  
Robert J. Scheible REGISTER

THIS DEED, made between Sauk County Farmers Union  
Cooperative Supply Company, a Wisconsin  
cooperative

Grantor  
and City of Baraboo, a municipal corporation

Grantee,  
Witnesseth, That the said Grantor, for a valuable consideration

conveys to Grantee the following described real estate in Sauk  
County, State of Wisconsin: A parcel of land in the SE 1/4,  
NW 1/4 of Section 1, Township 11 North, Range 6  
East, City of Baraboo, Sauk County, Wisconsin,  
more particularly described as follows:

Commencing at the northwest corner of said SE  
1/4, NW 1/4, thence easterly along the north line  
of said SE 1/4, NW 1/4, 317 feet, thence southerly parallel with the west  
line of said SE 1/4, NW 1/4, 268 feet to the point of beginning, said point  
being on the property line between the Boyd Potter property and the City of  
Baraboo;

Thence southerly along said property line parallel with the west line of  
said SE 1/4, NW 1/4, 200 feet;

Thence easterly parallel with the north line of said SE 1/4, NW 1/4, 409  
feet to the southeast corner of aforementioned Potter property;

Thence northerly parallel with the west line of said SE 1/4, NW 1/4, 200  
feet;

Thence westerly parallel with the north line of said SE 1/4, NW 1/4, 409  
feet, more or less, to the point of beginning.

The above parcel contains 1.88 acres, more or less.

This is not homestead property. Exempt Section 77.25(2) \$10,000.00 value  
(is) (is not)

Together with all and singular the hereditaments and appurtenances thereunto belonging;  
And Sauk County Farmers Union Cooperative Supply Company

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 13th day of July, 19 78.

SAUK COUNTY FARMERS UNION COOPERATIVE  
SUPPLY COMPANY

By: Verne Wing (SEAL)

\* Verne Wing, Secretary

By: LeRoy Litscher (SEAL)

\* LeRoy Litscher, President

AUTHENTICATION

Signatures authenticated this 13th day of  
July, 19 78

William F. Frazier

ACKNOWLEDGMENT

STATE OF WISCONSIN

Sauk County, } ss. 138-435  
Personally came before me, this \_\_\_\_\_ day of \_\_\_\_\_

Charge to \$ 2.00  
RETURN TO City Clerk  
Municipal Bldg., Baraboo, WI.  
53913  
Tax Key No. 206 0897-0000  
206 0899-0000

**This Indenture, Made this 24th day of October**  
 in the year of our Lord, one thousand nine hundred and fifty-one  
**BETWEEN the**  
 Sauk County Farmers Union Co-op Supply Company, a corporation,  
 duly organized and existing under the laws of the State of Wisconsin and having its principal  
 office in the City of Baraboo and State of Wisconsin / party of the first part and  
 City of Baraboo, a municipal corporation, ~~XXXXXXXXXXXX~~

**Witnesseth, That the said party of the first part, for and in consideration of the sum of**  
 . Four Thousand Twenty and no/100 (\$4020.00) ----- Dollars  
 to it in hand paid by the said party of the second part, the receipt whereof is hereby confessed and ac-  
 knowledged, has given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed  
 and by these presents does give, grant, bargain, sell, remise, release, alien, convey and confirm unto the  
 said party of the second part, its successors and assigns, forever, the following described real estate, sit-  
 uated in the County of Sauk and the State of Wisconsin, to-wit:

A parcel of land in the Southeast Quarter of the Northwest  
 Quarter (SE $\frac{1}{4}$  NW $\frac{1}{4}$ ) of Section One (1), Township Eleven (11)  
 North, of Range Six (6) East in the City of Baraboo which  
 is bounded by a line described as follows:

Beginning at the Northwest corner of said Southeast Quarter  
 of the Northwest Quarter (SE $\frac{1}{4}$  NW $\frac{1}{4}$ ), thence East 317 feet,  
 thence South 468 feet, thence East 409 feet to the West  
 line of the Bartley land, thence South along the West line  
 of the Bartley land 192 feet, thence East 33 feet to the  
 Westerly line of land now owned by the City of Baraboo,  
 thence Southwesterly along the Westerly line of said City  
 of Baraboo land to a point which is 833.6 feet South and  
 621 feet East of the Northwest corner of said Southeast  
 Quarter of the Northwest Quarter, thence West 301 feet,  
 thence North 272.2 feet, thence West 320 feet, thence North  
 561.4 feet to the point of beginning. Containing 7.40 acres  
 more or less.

**Together** with all and singular the hereditaments and appurtenances thereunto belonging, or in any-  
 wise appertaining; and all the estate, right, title, interest, claim or demand whatsoever of the said  
 party of the first part, either in law or equity, either in possession or expectancy of, in and to the above  
 bargained premises and their hereditaments and appurtenances, **TO HAVE AND TO HOLD** the said  
 premises as above described, with the hereditaments and appurtenances, unto the said party of the second  
 part and to its successors and assigns forever.

**And the Said** grantor, for itself and its successors doth hereby covenant, grant, bargain and agree to  
 and with the said party of the second part, its successors and assigns, that at the time of the enscailing  
 and delivery of these presents that the said party of the first part is well seized of the premises above  
 described, as of a good, sure, perfect, absolute and indefeasible estate of inheritance in the law, in  
 fee simple, and that the same are free and clear from all incumbrances whatever.

and doth  
 further covenant that the above bargained premises, in the quiet and peaceable possession of the said  
 party of the second part, its successors and assigns, against all and every person or persons lawfully  
 claiming the whole or any part thereof, it and they shall and will forever **WARRANT AND DEFEND.**

In Witness Whereof, The said party of the first part hath caused these presents to be signed by Udo Braun its President, countersigned by Verne Wing its Secretary, and its corporate seal to be hereunto affixed the day and year first herein written.

Signed, Sealed and Delivered in Presence of

Harland H. Hill  
Jeannine M. Rau  
Jeannine M. Rau

SAUK COUNTY FARMERS UNION CO-OP SUPPLY CO.

By Udo Braun  
Udo Braun President.

Countersigned by

Verne Wing  
Verne Wing Secretary.

{ Corporate Seal }

State of Wisconsin,

Sauk County } ss.

Personally came before me this 24th day of October A. D., 1951, the above named Udo Braun as President and Verne Wing as Secretary of the Sauk County Farmers Union Co-op Supply Company, a corporation to me known to be the persons and officers who, for and in behalf of said corporation, executed the foregoing instrument and acknowledged the same.

Harland H. Hill  
Harland H. Hill

Notary Public, Sauk County, Wisconsin

My Commission expires December 28 A. D., 1952.  
(To be filled in if signed by a Notary Public)

No. 201363

Sauk County Farmers Union  
Co-op Supply Company,  
To

City of Paraboo

Warranty Deed

REGISTERS OFFICE,

Sauk County, Wis.

Received for Record this 29 day of October A. D., 1951, at 4:00 o'clock P. M., and recorded in Vol.

For Deeds on Page 134  
Richard W. Olt  
Register of Deeds

150

742777

000151

City Baraboo

Document Number

WARRANTY DEED

This Deed, made between Charles A. Rachuj and Nicole M. Rachuj, husband and wife, as survivorship marital property, Grantor, and Charles A. Rachuj, Sr. and Karen F. Rachuj, husband and wife, as survivorship marital property, Grantee. Witnesseth, That the said Grantor, for a valuable consideration conveys to Grantee the following described real estate in Sauk County, State of Wisconsin:

Lot One (1), Certified Survey Map No. 3387 as recorded in Volume 16 of Certified Surveys on Page 3387 in the office of the Register of Deeds for Sauk County, Wisconsin. (Located in the SE 1/4 NW 1/4, Section 1, T11N, R6E, City of Baraboo, Sauk County, Wisconsin.)

REGISTRAR'S OFFICE SAUK COUNTY WI RECEIVED FOR RECORD

AT 10:25 O'CLOCK A M

ON Feb 26 20 01

Scott Daily REGISTRAR

10-00ch

Recording Area

Name and Return Address

Charles and Karen Rachuj 626 Potter Street Baraboo, WI 53913

206-0888

(Parcel Identification Number)

206-0888 ✓

Transfer Fee

\$ 375.00

( " )

This is not homestead property.

Together with all and singular hereditaments and appurtenances thereunto belonging; And Grantor warrants that the title is good, indefeasible in fee simple and free and clear of encumbrances except easements and restrictions of record, if any, building and zoning ordinances, and general taxes levied in 2001, and will warrant and defend the same.

Dated this 23 day of February, 2001

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*Charles A. Rachuj*  
Charles A. Rachuj  
*Nicole M. Rachuj*  
Nicole M. Rachuj

AUTHENTICATION

Signature(s) \_\_\_\_\_

authenticated this \_\_\_\_\_ day of \_\_\_\_\_

signature \_\_\_\_\_

type or print name \_\_\_\_\_

TITLE: MEMBER STATE BAR OF WISCONSIN (If not, \_\_\_\_\_ authorized by §706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Atty. John C. Hoffman Baraboo, WI 53913-0041

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

ACKNOWLEDGMENT

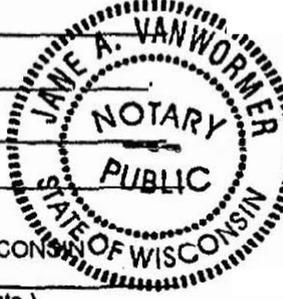
STATE OF WISCONSIN SAUK COUNTY

Personally came before me this 23 day of February, 2001 the above named Charles A. Rachuj and Nicole M. Rachuj, to me known to be the persons who executed the foregoing instrument and acknowledge the same.

*Jane A. Vanwormer*  
Jane A. Van Wormer

Notary Public Sauk County, Wisconsin. My commission is permanent. (If not, state expiration date: June 08, 2002)

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



742777

C. BOU

SAUK COUNTY CERTIFIED SURVEY MAP No. 3387

Located in the SE¼-NW¼, Section 1, T11N, R6E, City of Baraboo, Sauk County, Wisconsin.

Client: Dale Luther, 1530 Grand Ave, Prairie du Sac, WI, 53578

Carlson Surveying & Engineering, 1709 Ash St, Baraboo, WI, 53913  
Phone & FAX (608) 356-8598

K 106-426 Lot

- = Found 3/4" round iron rod
- ⊙ = Found government corner (as shown)
- ▲ = Found railroad spike
- = Set 3/4"x24" round iron rod weighing 1.5#/lin. ft.
- = Found 5"x5" 3' high concrete monument

Bearings are referenced to west line of NW¼ of Section 1 and assumed to bear N0°20'45"E.

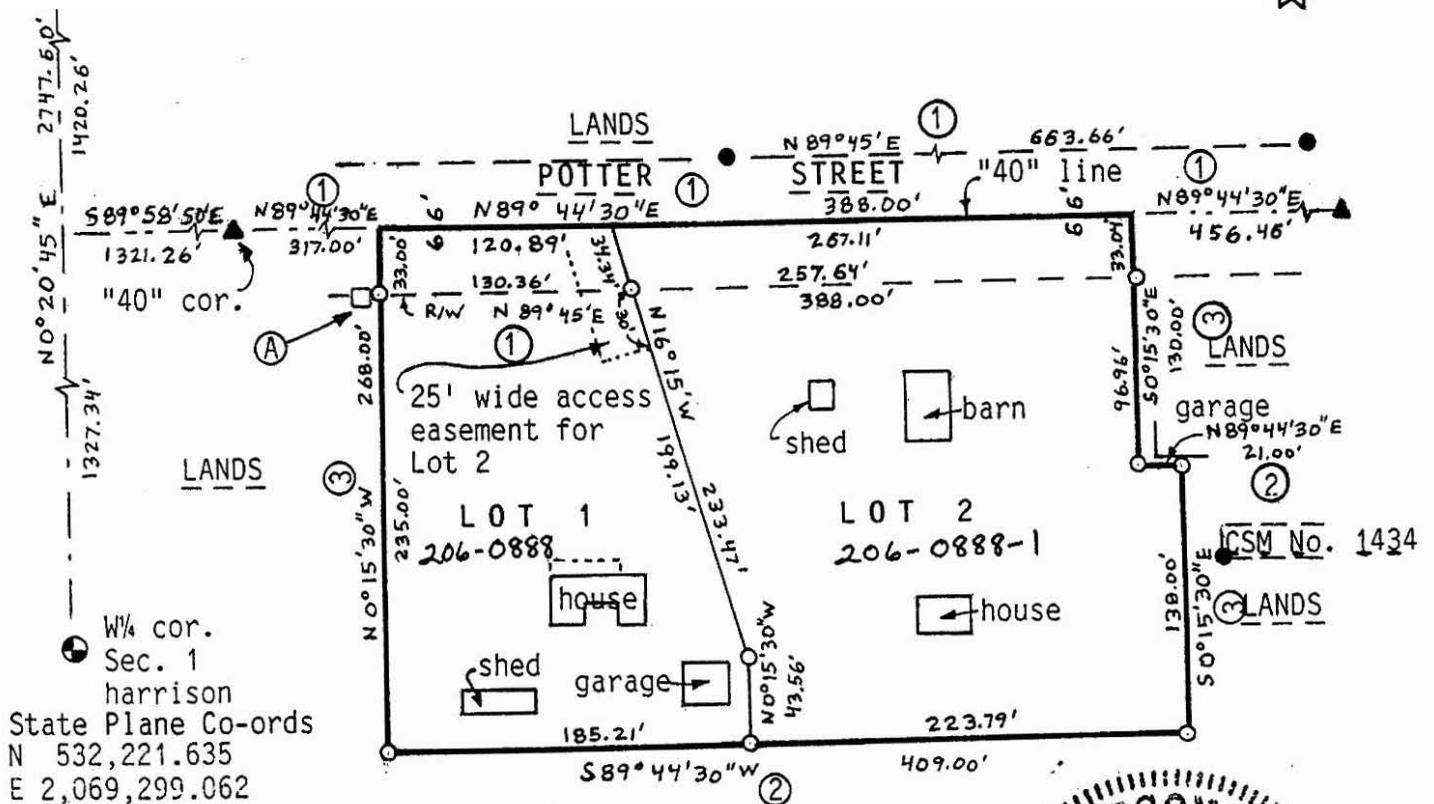
● NW cor. Sec. 1  
PK nail

Graphic scale in feet:



Lot 2 = 206-0888-1

for 71 signs



Ⓐ = Found 5"x5" 3' high concrete monument N89°22'W, 1.09' from corner

LINE:	RECORDED AS:
①	East/West, N89°53'44"W
②	East/west
③	North/South

Lot 1 contains 42,420 sq. ft. or 0.974 acres with R/W and 38,270 sq. ft. or 0.879 acres without R/W

Lot 2 contains 64,460 sq. ft. or 1.480 acres with R/W and 55,800 sq. ft. or 1.281 acres without R/W



Mark C. Carlson

2-27-96

see CSM 4504 for split of Lot 2.

**SURVEYORS CERTIFICATE:**

I, Mark C. Carlson, registered land surveyor, hereby certify that I have surveyed, divided and mapped a parcel of land located in SE¼-NW¼, Section 1, T11N, R6E, City of Baraboo, Sauk County, Wisconsin bounded by the following described line:

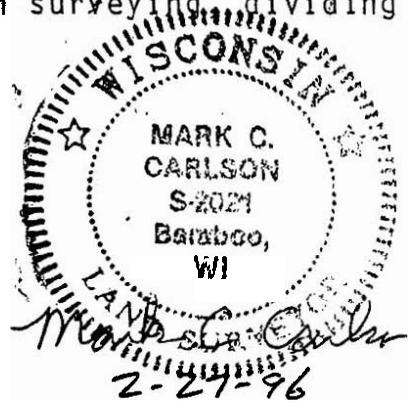
Commencing at the W¼ corner of said Section 1; thence N0°20'45"E, 1327.34 feet; thence S89°58'50"E, 1321.26 feet; thence N89°44'30"E, 317.00 feet to point of beginning; thence N89°44'30"E, 388.00 feet; thence S0°15'30"E, 130.00 feet; thence N89°44'30"E, 21.00 feet; thence S0°15'30"E, 138.00 feet; thence S89°44'30"W, 409.00 feet; thence N0°15'30"W, 268.00 feet to point of beginning.

Said parcel contains 2.454 acres and is subject to highway and other easements of record.

That I have complied with the provisions of Chapter 236.34 Wisconsin Statutes and the subdivision regulations of the City of Baraboo to the best of my knowledge, information and belief in surveying, dividing and mapping the same.

That such plat is a correct representation of all exterior boundaries of the land surveyed and the subdivision thereof made.

That I have made such survey under the direction of Dale Luther.



**CITY OF BARABOO CERTIFICATE:**

Resolved that the Certified Survey Map, attached hereto, and filed with the City of Baraboo, Wisconsin by Dale Luther, owner, is hereby approved by the Plan Commission of the City of Baraboo, Wisconsin.

Approved by: Plan Commission, City of Baraboo, Wisconsin

Terry M. Kraus  
City Engineer

Dale Luther  
Mayor

I hereby certify that the foregoing Resolution was adopted by the Plan Commission of the City of Baraboo, Wisconsin on the 19<sup>th</sup> day of MARCH, 1996.

City of Baraboo Patricia J. Seaberg  
Clerk

**634043**

REGISTRAR'S OFFICE  
SAUK COUNTY WI  
RECEIVED FOR RECORD ✓

AT 3:20 O'CLOCK P M

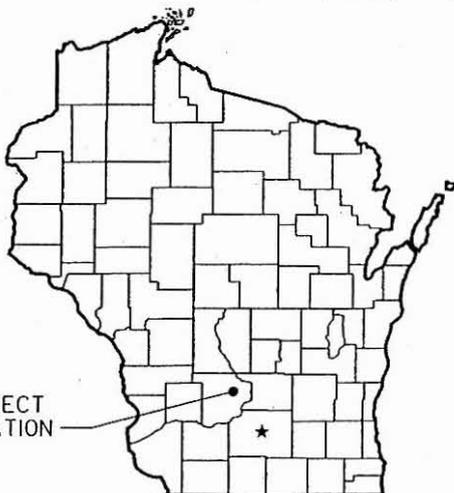
ON April 10 1996  
Mary Klingemeyer  
REGISTRAR

12.00  
3.25<sup>c.</sup>

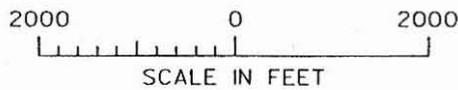
c.e. H. Nochten



SITE LOCATION



PROJECT LOCATION



SCALE IN FEET



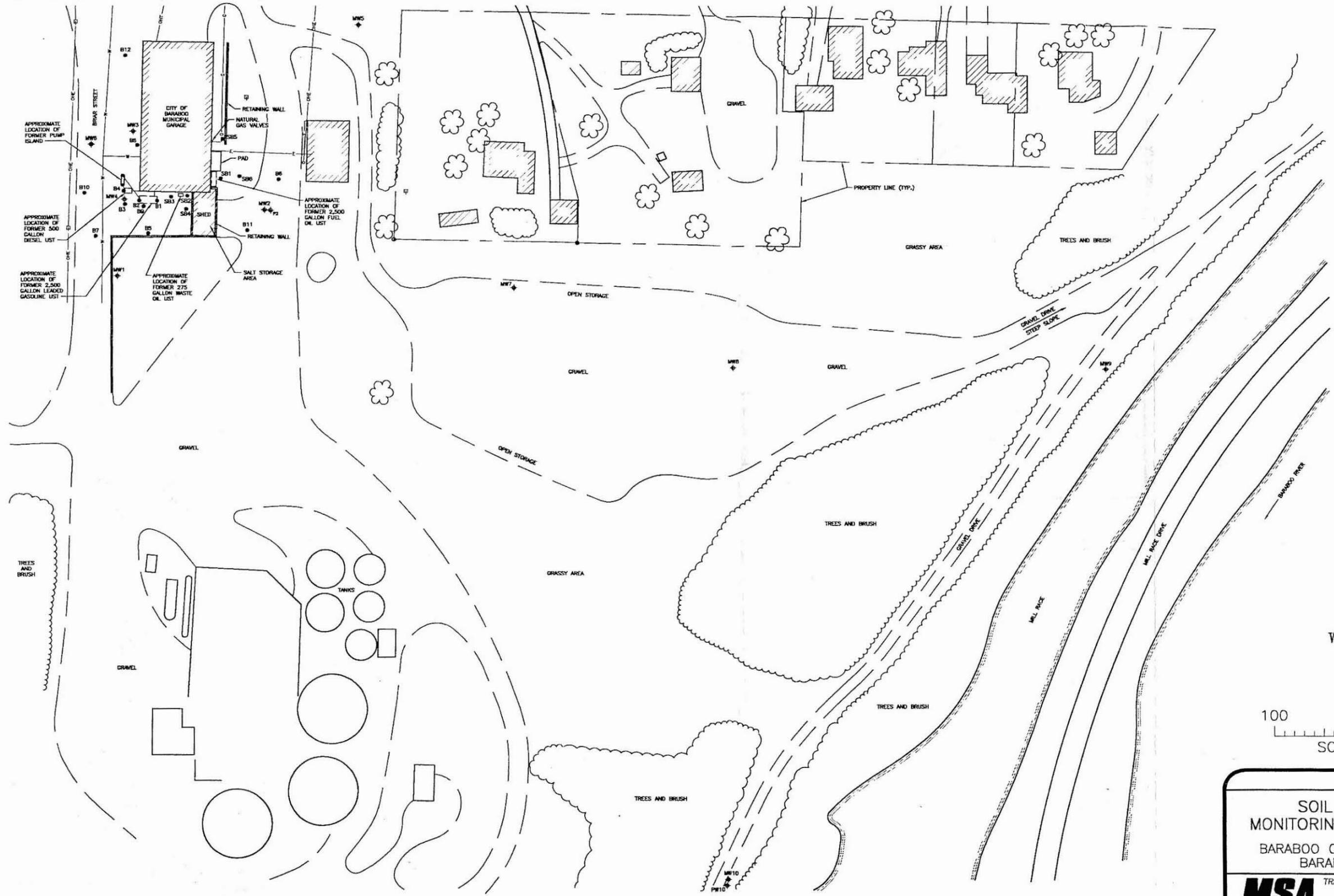
Baraboo Quadrangle  
 Wisconsin - Sauk Co.  
 7.5 Minute Series (Topographic)

NW/4 Baraboo 15' Quadrangle  
 Contour Interval 20 Feet  
 1975



TRANSPORTATION • MUNICIPAL • REMEDIATION  
 DEVELOPMENT • ENVIRONMENTAL  
 1230 South Boulevard Baraboo, WI 53913  
 608-356-2771 1-800-362-4506 Fax: 608-356-2770

FIGURE 1  
 SITE LOCATION MAP  
 BARABOO CITY GARAGE UST SITE  
 BARABOO, WISCONSIN



**LEGEND**

- SOIL BORING LOCATION
- ◆ MONITORING WELL LOCATION

**NOTE:**  
FOR ADDITIONAL NOTES AND  
LEGEND REFER TO FIGURE 2



100 0 100  
SCALE IN FEET

FIGURE 2

**SOIL BORING AND  
MONITORING WELL LOCATIONS**

BARABOO CITY GARAGE UST SITE  
BARABOO, WISCONSIN

**MSA** TRANSPORTATION • MUNICIPAL • REMEDIATION  
DEVELOPMENT • ENVIRONMENTAL  
1230 South Boulevard Baraboo, WI 53913  
608-356-2771 1-800-362-4505 Fax: 608-356-2770

PROFESSIONAL SERVICES

DRAWN BY RHM DATE 1-12-06 SHEET \_\_\_\_\_ of \_\_\_\_\_  
CHECKED BY SCALE AS NOTED FILE NO. 359403HB

BRIAR STREET

NORTH WALL - 11'	
GRO	9700
DRO	3000
MTBE	31
Benzene	110
Toluene	940
Ethylbenzene	420
M+P Xylene	1300
O-Xylene	560
1,3,5 TMB	310
1,2,4 TMB	800

NE CORNER - 10'	
GRO	9500
DRO	3000
MTBE	41
Benzene	130
Toluene	1600
Ethylbenzene	290
M+P Xylene	1200
O-Xylene	460
1,3,5 TMB	260
1,2,4 TMB	650

EAST WALL - 11'	
GRO	<1.3
DRO	<1.4
MTBE	0.03
Benzene	<0.025
Toluene	<0.025
Ethylbenzene	<0.025
M+P Xylene	<0.025
O-Xylene	<0.025
1,3,5 TMB	<0.025
1,2,4 TMB	<0.025

WEST WALL - 11'	
GRO	1100
DRO	1400
MTBE	16
Benzene	23
Toluene	150
Ethylbenzene	38
M+P Xylene	130
O-Xylene	48
1,3,5 TMB	28
1,2,4 TMB	72

BOTTOM - 13'	
GRO	3800
DRO	2300
MTBE	67
Benzene	100
Toluene	650
Ethylbenzene	120
M+P Xylene	340
O-Xylene	120
1,3,5 TMB	84
1,2,4 TMB	200

SOUTH WALL - 11'	
GRO	1.8
DRO	3
MTBE	0.5
Benzene	<0.025
Toluene	0.06
Ethylbenzene	0.028
M+P Xylene	0.071
O-Xylene	0.039
1,3,5 TMB	0.041
1,2,4 TMB	0.099

CITY OF BARABOO MUNICIPAL GARAGE

RETAINING WALL

NATURAL GAS VALVES

CONCRETE PAD

LOCATION OF FORMER FUEL OIL UST

APPROXIMATE EXCAVATION EXTENT

SALT STORAGE AREA

RETAINING WALL

FORMER DISPENSER ISLAND

LOCATION OF FORMER DIESEL UST

LOCATION OF FORMER GASOLINE UST

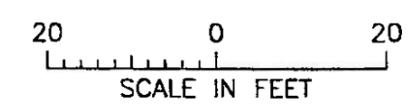
**LEGEND**

- ☐ POWER POLE
- E — UNDERGROUND ELECTRIC
- W — UNDERGROUND WATER
- G — UNDERGROUND GAS

GRO = Gasoline Range Organics  
 DRO = Diesel Range Organics  
 MTBE = methyl tert-butyl ether  
 TMB = Trimethylbenzene

**NOTES:**

1. UNITS ARE IN mg/Kg.
2. BOLD NUMBERS CONCENTRATIONS ABOVE THE NR 720 GENERIC RESIDUAL CONTAMINANT LEVELS (GRCLs).



**FIGURE 3**  
**APPROXIMATE EXTENT OF EXCAVATION**  
**JULY 1998**  
**BARABOO CITY GARAGE UST SITE**  
**BARABOO, WISCONSIN**

**MSA** TRANSPORTATION • MUNICIPAL • REMEDIATION  
 DEVELOPMENT • ENVIRONMENTAL  
 1230 South Boulevard, Baraboo, WI 53613  
 608-356-2771 1-800-361-4505 Fax: 608-356-2770

DRAWN BY RHM DATE 6-23-99 SHEET \_\_\_\_\_ of \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ SCALE AS NOTED FILE NO. 359403JC

**TABLE 5**  
**Groundwater Monitoring Results**  
**City of Baraboo Garage, Baraboo**

SAMPLING DATE	Ethyl				Total TMB	1,2-DCA	MTBE	Naphthalene	GW Elev (ft msl)	DO (mg/L)	Nitrates (mg/L)	Sulfates (mg/L)	Iron (mg/L)
	Benzene	Benzene	Toluene	Xylenes									
NR 140 ES	5	700	1000	10000	480	5	60	40					
NR 140 PAL	0.5	140	200	1000	96	0.5	12	8					
<b>MW1</b>	<b>Length of Well Screen: 15</b>				<b>Top of Well Screen:</b>				<b>Top of Casing: 880.41</b>				
06/01/95	<i>0.819</i>	<1.0	<2.0	<1.0	<1.0	<i>0.887</i>	<2.0	<1.0	824.03				
05/14/96	<1.6	<1.9	<1.7	<3.9	<2.0	2.9	<1.5	<3.8	823.69				
01/21/97	11	<0.2	<0.2	<0.4	<0.7	1.7	4.9	<0.8	823.23	0.6	11.00	71.0	2.9
01/18/99	12	<0.21	<0.22	<0.44	<0.22	1.5	6.8	<0.19	822.55		15.00	100.0	
02/23/99	SVE/IAS System Started												
06/23/99	1.4	<0.24	<0.24	<0.50	<0.27	1.2			822.87	1.0			
11/01/99	3.3	<0.20	<0.20	<0.30	<0.60	<0.20	5.6	<1.1	822.76	1.4	16.50	84.3	0.0
02/29/00	<0.1	<0.1	<0.1	<0.30	<0.30	<0.40	<1.1	<0.7	822.77		19.50	85.1	
05/16/00	<0.1	<0.1	<0.1	<0.2	<0.30	<0.40	1.6	<0.7	822.16				
<b>MW2</b>	<b>Length of Well Screen: 15</b>				<b>Top of Well Screen: 827.9</b>				<b>Top of Casing: 883.92</b>				
06/01/95	2820	909	6180	5610	1449	50.8	<200	<100	823.64				
05/14/96	800	29	170	310	142	42	9	34	823.30				
01/21/97	1770	112	793	1090	547	14	<10	157	822.81	1.70	3.95	84.0	9.3
01/18/99	840	95	460	780	397	<26	<20	160	822.13		12.00	97.0	
02/23/99	SVE/IAS System Started												
06/23/99	340	62	33	<12	29	27	<11	60	822.47	0.80			
11/01/99	not sampled												
02/29/00	1600	130	740	1450	419	<20	<55	150	822.35		2.30	1.2	
05/16/00	1300	50	400	740	302	<20	<55	140	821.77				
08/21/00	1300	150	580	1340	460	4.4	<55	110	822.18				
01/08/01	2200	350	1000	2040	820	<40	<110	150	822.00				
04/25/01	2700	850	2200	4010	1610	<80	<220	390	822.31	2.85			
07/11/01	1800	420	1700	2230	910	<40	<110	290	822.24	1.68			
10/17/01	1700	650	1700	1980	960	<20	<55	250	822.01	2.01			
01/17/02	2300	480	2800	2740	960	<20	<55	240	821.90	3.19			
04/17/02	920	440	1200	2410	590	<20	<55	270	821.96	2.42			
04/19/02	SVE/IAS System Shut Off												
10/15/02	780	390	1200	1930	820	<9.0	<5.0	150	821.84	1.81			
01/08/03	340	110	380	770	200	<9.0	<5.0	94	821.63	1.28			
04/09/03	200	76	190	458	224	<0.90	1.2	110	821.51	1.81			
07/11/03	320	110	250	1050	530	<9.0	<5.0	140	821.18	1.84			
07/15/03	SVE/IAS System Started												
10/13/03	94	<1.3	4.7	21.2	43	<2.3	1.5	84	820.61	2.68			
05/14/04	SVE/IAS System Shut Off												
07/16/04	140	520	190	1790	860	<45	<25	280	822.14	1.68			
10/27/04	74	600	250	1970	1190	<45	<25	280	821.91				
01/19/05	89	580	700	2950	1530	<9.0	<5.0	380	821.67	3.17			
04/05/05	37	350	440	1350	1190	<4.5	<25	320	822.00	2.03			
07/07/05	35	150	210	560	534	<45	<25	75	821.21	3.80			
10/12/05	6.9	170	34	358	128	<5.0	<6.0	120	820.78	0.65			
<b>P2</b>	<b>Length of Well Screen: 5</b>				<b>Top of Well Screen: 799.40</b>				<b>Top of Casing: 884.37</b>				
05/14/96	61	<1.9	32	8.7	<2.0	3.8	<1.5	<3.8	<u>823.26</u>				
01/21/97	23	<0.2	<0.2	<0.2	<0.7	<0.2	<0.2	0.8	<u>822.60</u>	2.4	1.35	38.0	2.4
01/18/99	0.67	<0.21	<0.22	<0.44	<0.22	<0.26	<0.2	0.87	822.14		2.20	40.0	
02/23/99	SVE/IAS System Started												
06/23/99	160	<0.26	6.1	31	1.14	17	2.0	14	<u>822.41</u>	1.2			
11/01/99	not sampled												
02/29/00	27	<0.1	4.7	19	0.94	12	<1.1	19	<u>822.21</u>		5.24	88.9	
05/16/00	<0.1	<0.1	<0.1	0.2	<0.30	<0.40	<1.1	1.7	<u>821.66</u>				
08/21/00	49	<0.10	1.4	8.2	<0.20	4.4	<1.1	20	<u>822.07</u>				
01/08/01	33	<0.1	<0.1	0.23	<0.30	2.9	<1.1	<0.7	<u>821.95</u>				
04/25/01	1.5	<0.10	<0.10	<0.20	<0.20	<0.40	<1.1	<0.70	822.39	1.13			
07/11/01	24	<0.10	0.24	0.89	<0.30	<0.40	<1.1	2.1	<u>822.10</u>	1.34			
10/17/01	7.5	<0.10	<0.10	<0.20	<0.30	<0.40	<1.1	<0.70	<u>822.09</u>	3.49			
01/17/02	26	<0.10	<0.10	<0.20	<0.30	<0.40	<1.1	2.3	<u>821.74</u>	2.06			
04/17/02	6.1	<0.1	<0.1	<0.2	<0.30	<0.40	<1.1	2	<u>821.99</u>	1.69			
04/19/02	SVE/IAS System Shut Off												
10/15/02	1.7	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	<0.50	<u>821.83</u>	2.32			
01/08/03	11	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	3.4	<u>821.45</u>	1.75			
04/09/03	8.5	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	1.7	<u>818.49</u>	1.63			
07/11/03	15	<0.50	0.59	2.66	<0.50	<0.90	<0.50	8.7	<u>821.63</u>	4.35			
07/15/03	SVE/IAS System Started												
10/13/03	<0.40	<0.90	<0.50	<0.60	<0.50	<0.90	<0.50	<0.50	<u>820.66</u>	2.19			
05/14/04	SVE/IAS System Shut Off												
07/16/04	<0.26	0.72	<0.30	1.6	1.1		<0.21		822.14	6.37			
10/27/04	4.7	<0.50	<0.30	0.75	<0.50		<0.21		821.97				
01/19/05	<0.40	<0.40	<0.40	<0.80	<0.40		<0.40		821.71	1.92			
04/05/05	<0.40	<0.40	<0.40	<0.80	<0.40		<0.40		<u>821.98</u>	1.97			
07/07/05	<0.40	<0.40	<0.40	<0.80	<0.40		<0.40		821.16	3.64			
10/12/05	0.83	<0.40	<0.40	<0.80	<0.40		<0.40		820.77	0.82			

All concentrations are in ug/L except where otherwise noted  
 blank = not analyzed  
 TMB = trimethylbenzene  
 MTBE = methylterbutyl ether  
 Italic values exceed the WAC NR 140 PAL  
 Values in BOLD exceed the WAC NR 140 ES  
 ES = WAC NR 140 enforcement standard concentration  
 PAL = WAC NR 140 preventive action level concentration

This table only includes compounds which are monitored quarterly at this site  
 For a complete list of compounds detected, see site investigation reports  
 Free product detected in well MW-4 in fall of 1996  
 Free product detected in well MW-3 on February 23, 1999  
 Underlined groundwater elevations indicate a downward vertical gradient measured at piezometer nest.  
 DO = dissolved oxygen  
 Sampling at MW-9, MW-10 and P-10 suspended after November 1, 1999

**TABLE 5**  
**Groundwater Monitoring Results**  
**City of Baraboo Garage, Baraboo**

SAMPLING DATE	Ethyl				Total TMB	1,2-DCA	MTBE	Naphthalene	GW Elev (ft msl)	DO (mg/L)	Nitrates (mg/L)	Sulfates (mg/L)	Iron (mg/L)
	Benzene	Benzene	Toluene	Xylenes									
NR 140 ES	5	700	1000	10000	480	5	60	40					
NR 140 PAL	0.5	140	200	1000	96	0.5	12	8					
	Length of Well Screen: 15				Top of Well Screen: 829.4				Top of Casing: 874.41				
MW3 06/01/95	1140	834	1650	4650	1773	60.2	<100	505	824.05				
05/14/96	410	130	510	970	290	15	12	80	823.68				
01/21/97	738	284	937	3414	1051	<10	<10	190	823.23	0.80	13.00	121.0	108.0
01/18/99	2700	860	3300	5400	2930	<100	<82	680	822.15		35.00	140.0	
02/23/99	SVE/IAS System Started												
06/23/99	40	1.0	2.3	39	20.5	<0.66	<1.1	5.4	822.88				
11/01/99	760	20	180	2330	1910	<20	<20	270	823.01	1.11	<0.14	138.0	0.0
02/29/00	22	<0.2	5.2	44	25.1	<0.8	<2.2	4.9	823.04		1.81	147	
05/16/00	5.6	<1.0	4	64	188	<4.0	<11	36	822.04				
08/21/00	300	7.8	94	1370	990	<8.0	<22	180	822.72				
01/08/01	39	<1.0	14	219	292	<4.0	<11	28	822.56				
04/25/01	54	0.73	20	196	420	6.0	1.9	44	822.58	4.21			
07/11/01	53	<2.0	36	522	740	<8.0	<22	99	822.78	0.98			
10/17/01	2.6	<0.50	4.6	69	165	<2.0	<5.5	17	822.28	1.41			
01/17/02	12	0.83	7.3	118	190	1.2	<1.1	19	822.51	1.92			
04/17/02	0.91	<0.10	1.7	26.9	66	2.5	<1.1	8.5	822.22	1.66			
04/19/02	SVE/IAS System Shut Off												
07/18/02	1.3	0.56	2.9	58	113	2.6	<0.50	16					
10/15/02	1.3	0.56	2.9	58	113	2.6	<0.50	16	822.25	1.77			
01/08/03	<10	<13	14	300	630	<23	<13	88	822.03	1.33			
04/09/03	12	<10	40	910	1560	<18	<10	150	822.20	1.98			
07/11/03	Free Product, System Restarted on 7/15/03												
10/13/03	<4.0	<5.0	<5.0	121	460	<9.0	<5.0	110	820.90	1.62			
02/05/04	<20	<25	<25	300	1270	<45	<25	230	821.34	2.34			
04/22/04	<4.0	<5.0	<5.0	131	450	<9.0	<5.0	170	821.51	1.79			
05/14/04	SVE System Shut Off												
07/16/04	<4.0	<5.0	<5.0	74	327	<9.0	<5.0	250	822.5	1.61			
10/27/04	<4.0	<5.0	<5.0	42	310	<9.0	<5.0	160	822.33				
01/19/05	17	3.9	37	117	566	<0.90	<0.50	270	822.07	1.17			
04/05/05	0.57	<0.50	0.60	11.3	234	<0.90	<0.50	69	822.34	1.24			
07/07/05	0.55	<0.5	0.94	1.3	27.1	<0.9	<0.5	21	821.55	2.72			
10/12/05	0.53	<0.50	<0.40	<1.4	0.53	<0.5	<0.6	0.61	821.13	0.84			
	Length of Well Screen: 15				Top of Well Screen: 828.89				Top of Casing: 873.89				
MW4 06/01/95	222	390	1200	2134	588	<25	<100	166	824.03				
05/14/96	7100	1900	950	9500	2920	260	<120	970	823.17				
01/21/97	Free Product												
01/18/99	Free Product												
02/23/99	SVE System Started												
06/23/99	470	200	1300	7700	2520	<53	<84	530	822.66				
11/01/99	110	<20	200	1900	670	<20	<20	200	823.42	1.53	0.26	88.4	0.0
02/29/00	32	10	93	490	193	<2.0	10	80	823.18		1.96	97.6	
05/16/00	1.6	<0.10	1.2	21.4	4.9	<0.40	<1.1	2.6					
08/21/00	34	<2.5	49	1490	520	<10	<28	130	822.40				
01/08/01	20	8.3	79	780	580	<4.0	<11	72	822.83				
04/25/01	1.9	0.47	1.8	510	356	<0.40	<1.1	83	822.58	3.93			
07/11/01	<5	<5.0	15	1400	1190	<20	<55	330	823.14	3.65			
10/17/01	<2	<2.0	7.9	1020	720	<8.0	<22	230	822.34	2.40			
01/07/02	4.0	<2.0	18	1130	570	<8.0	<22	110	822.58	4.98			
04/17/02	1.3	0.52	5.5	520	272	<0.40	<1.1	64	822.48	2.25			
04/19/02	SVE System Shut Off												
07/18/02	2.3	1.6	8.8	930	500	<0.90	<0.50	110	822.70				
10/15/02	1.3	<0.50	2.2	355	362	<0.90	<0.50	47	822.03	1.05			
01/08/03	5.4	1.2	15	153	160	<1.8	1.1	27	821.84	1.39			
04/09/03	<80	<100	<100	6200	5600	<180	<100	850	821.58	1.35			
07/11/03	Free Product, System Restarted 7/15/03												
10/13/03	<40	<50	73	1600	4100	<90	<50	720	820.80	5.85			
02/05/04	<20	<25	46	1610	1970	<45	<25	290	821.51	5.47			
04/22/04	<8.0	<10	34	1200	970	<18	<10	230	821.78	1.31			
05/14/04	System Shut Off												
07/16/04	<8.0	<10	14	720	1020	<18	<10	190	822.28	1.25			
10/27/04	<10	<13	<13	387	830	<23	<13	140	822.10				
01/19/05	<2.0	<2.5	<2.5	379	1090	<4.5	<2.5	210	821.74	1.23			
04/05/05	<2.0	<2.5	<2.5	173	950	<4.5	<2.5	100	822.14	1.13			
07/07/05	5.1	<5.0	5.5	61	334	<9.0	<5.0	78	821.32	1.91			
10/12/05	1.1	<0.5	1.8	8.1	5.7	<0.5	0.61	0.69	820.91	0.85			

All concentrations are in ug/L, except where otherwise noted  
 blank = not analyzed  
 TMB = trimethylbenzene  
 MTBE = methyltertbutyl ether  
 Italic values exceed the WAC NR 140 PAL  
 Values in BOLD exceed the WAC NR 140 ES  
 ES = WAC NR 140 enforcement standard concentration  
 PAL = WAC NR 140 preventive action level concentration

This table only includes compounds which are monitored quarterly at this site  
 For a complete list of compounds detected, see site investigation reports  
 Free product detected in well MW-4 in fall of 1996  
 Free product detected in well MW-3 on February 23, 1999  
 Underlined groundwater elevations indicate a downward vertical gradient measured at piezometer nest.  
 DO = dissolved oxygen  
 Sampling at MW-9, MW-10 and P-10 suspended after November 1, 1999

**TABLE 5**  
**Groundwater Monitoring Results**  
**City of Baraboo Garage, Baraboo**

SAMPLING DATE		Benzene	Ethyl Benzene	Toluene	Xylenes	Total TMB	1,2-DCA	MTBE	Naphthalene	GW Elev (ft msl)	DO (mg/L)	Nitrates (mg/L)	Sulfates (mg/L)	Iron (mg/L)	
NR 140 ES		5	700	1000	10000	480	5	60	40						
NR 140 PAL		0.5	140	200	1000	96	0.5	12	8						
		Length of Well Screen: 15					Top of Well Screen: 829.40			Top of Casing: 885.43					
MW5	05/14/96	<1.6	<1.9	<1.7	<3.9	<2.0	9	50	<3.8	822.87					
	01/21/97	<0.2	<0.2	<0.2	<0.4	<0.7	1.7	29	<0.8	822.48	1.80	2.62	95.0	86.4	
	01/18/99	0.87	<0.21	<0.22	<0.44	<0.22	7.1	2.7	1	821.68		0.53	100.0		
	02/23/99	SVE System Started													
	06/23/99	0.28	<0.24	<0.24	<0.50	<0.27	12	3.1	<0.25	821.97	0.60				
	11/01/99	5.8	<0.20	<0.20	<0.50	0.5	11	3.7	<1.1	821.83	1.45	0.26	88.4	0.0	
	02/29/00	13	1.3	<0.1	0.96	0.97	<0.40	6.3	1.1	821.92		0.12	85.6		
	05/16/00	2	0.48	<0.1	0.65	0.91	16	4.4	0.99	821.31	0.99				
	08/21/00	17	0.99	<0.10	1.2	<0.30	23	4.4	<0.70	821.75					
	01/08/01	1.5	1	<0.1	<0.2	<0.30	20	4.9	<0.70	821.62					
	04/25/01	2.7	<0.10	<0.10	<0.20	<0.30	15	4.1	<0.70	822.05	1.64				
	07/11/01	3.7	<0.1	<0.1	<0.2	<0.3	7.2	3.3	<0.7	821.77	2.28				
	10/17/01	0.43	<0.10	<0.10	<0.20	<0.30	7.4	3.6	<0.70	821.68	1.78				
	01/17/02	1.0	<0.10	<0.10	<0.20	<0.30	6.4	4.4	<0.70	821.49	2.32				
	04/17/02	0.62	<0.10	<0.10	<0.2	<0.30	5.6	3.2	<0.70	821.65	1.61				
	04/19/02	SVE System Shut Off													
	07/18/02	<0.40	<0.50	<0.50	<0.50	<0.50	1.3	1.2	<0.50	821.55	2.08				
	10/15/02	<0.40	<0.50	<0.50	<0.60	<0.50	1.9	1.7	<0.50	821.42	1.71				
	01/08/03	<0.40	<0.50	<0.50	<0.60	<0.50	1.5	1.7	<0.50	821.25	1.66				
	04/09/03	<0.40	<0.50	<0.50	<0.60	<0.50	2.7	1.5	<0.50	521.16	1.54				
	07/11/03	<0.40	<0.50	<0.50	<0.60	<0.50	2.2	1.2	<0.50	820.83	2.51				
	07/15/03	SVE System Started													
	10/13/03	<0.40	<0.50	<0.50	<0.60	<0.50	1.2	0.88		820.32					
	02/05/04	<0.40	<0.50	<0.50	<0.60	<0.50	1.5	0.96	<0.50	820.41	2.49				
	04/22/04	<0.40	<0.50	<0.50	<0.60	<0.50	<0.90	0.8	<0.50	820.67	1.69				
		Length of Well Screen: 15					Top of Well Screen: 828.30			Top of Casing: 873.35					
MW6	05/14/96	110	<1.9	15	7.5	6	6.6	5.4	<3.8	823.76					
	01/21/97	329	<2.0	63	11.5	<7	3.9	<2.0	<8.0	823.33	1.60	35.80	113.0	15.1	
	01/18/99	380	0.4	17	29	8.6	4.4	3	3	822.57		33.00	120.0		
	02/23/99	SVE System Started													
	06/23/99	170	<3.2	9.8	<6.2	3.5	<3.3	<5.3	8.8	822.92					
	11/01/99	180	0.30	17	5.9	0.50	4.0	0.80	1.2	823.05	1.36	11.8	128	0.0	
	02/29/00	47	0.64	26	8.3	1.8	6.2	<2.2	2.1	822.96		11.0	131		
	05/16/00	3.5	<0.1	0.77	0.79	<0.30	<0.40	<1.1	<0.70	822.09					
	01/08/01	39	2.3	33	14.9	1.34	<0.40	<1.1	<0.7	822.85					
	04/25/01	2.2	<0.10	1.5	<0.20	<0.30	<0.40	<1.1	<0.70	822.66	2.77				
	07/11/01	29	0.43	20	6.4	<0.3	<0.4	<1.1	<7.0	823.10	1.16				
	10/17/01	<0.1	<0.10	<0.10	<0.20	<0.30	<0.40	<1.1	<0.10	822.41	4.81				
	01/17/02	3.6	<0.10	5.4	1.72	<0.30	<0.40	<1.1	<0.70	822.67	3.39				
	04/17/02	1.2	<0.10	1.1	0.28	<0.3	<0.4	<1.1	<0.7	822.35	1.70				
	04/19/02	SVE System Shut Off													
	07/18/02	2.4	<0.10	1.8	1.34	<0.50	<0.90	<0.50	<0.50	822.48	2.67				
	10/15/02	0.43	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	<0.50	822.72	3.40				
	01/08/03	11	<0.50	11	6.2	<0.50	<0.90	<0.50	<0.50	822.08	2.49				
	04/09/03	1.4	<0.50	2.2	2.29	0.50	<0.90	<0.50	<0.50	821.96	3.84				
	07/11/03	<0.40	<0.50	<0.50	<0.60	0.50	<0.90	<0.50	<0.50	821.61	2.93				
	07/15/03	SVE System Started													
	10/13/03	7.2	<0.40	5.5	1.43	<0.30		<0.30		820.95	3.91				
	02/05/04	38	0.73	6.9	12.7	0.86	<0.90	<0.50	<0.50	821.38	2.69				
	04/22/04	100	1.6	40	24	1.71	<0.90	<0.50	<0.50	821.53	2.11				
	05/14/04	SVE System Shut Off													
	07/16/04	32	0.84	14	6.8	1.21		<0.21	<0.50	822.61	4.17				
	10/27/04	<0.26	<0.50	<0.30	<0.40	<0.50		<0.21		822.48					
	04/05/05	<0.40	<0.40	<0.40	<0.40	<0.40		<0.40		822.44	1.5				
	07/07/05	<0.40	<0.40	<0.40	<0.80	<0.40		<0.40		821.64	1.92				
	10/12/05	<0.40	<0.40	<0.40	<0.80	<0.40		<0.40		821.2	0.73				

All concentrations are in ug/L except where otherwise noted  
blank = not analyzed  
TMB = trimethylbenzene  
MTBE = methylterbutyl ether  
Italic values exceed the WAC NR 140 PAL  
Values in BOLD exceed the WAC NR 140 ES  
ES = WAC NR 140 enforcement standard concentration  
PAL = WAC NR 140 preventive action level concentration

This table only includes compounds which are monitored quarterly at this site  
For a complete list of compounds detected, see site investigation reports  
Free product detected in well MW-4 in fall of 1996  
Free product detected in well MW-3 on February 23, 1999  
Underlined groundwater elevations indicate a downward vertical gradient  
measured at piezometer nest.  
DO = dissolved oxygen  
Sampling at MW-9, MW-10 and P-10 suspended after November 1, 1999

**TABLE 5**  
**Groundwater Monitoring Results**  
**City of Baraboo Garage, Baraboo**

SAMPLING DATE	Ethyl				Total TMB	1,2-DCA	MTBE	Naphthalene	GW Elev (ft msl)	DO (mg/L)	Nitrates (mg/L)	Sulfates (mg/L)	Iron (mg/L)	
	Benzene	Benzene	Toluene	Xylenes										
NR 140 ES	5	700	1000	10000	480	5	60	40	(ft msl)					
NR 140 PAL	0.5	140	200	1000	96	0.5	12	8						
		Length of Well Screen: 15				Top of Well Screen: 828.9			Top of Casing: 912.94					
MW7	05/14/96	490	210	800	870	116	<2.4	<1.5	52	822.50				
	01/21/97	645	344	1540	1469	305	<10	<10	114	822.08	6.60	2.73	40.0	
	01/18/99	260	250	890	960	196	<21	<16	180	821.33		4.90	86.0	
	02/23/99	SVE System Started												
	11/01/99	100	62	500	440	67	<5.0	<5.0	32	819.92	2.36	6.77	45.0	
	02/29/00	<0.1	<0.1	<0.1	0.25	<0.30	<0.40	<1.1	<0.7	821.57		10.70	33.6	
	05/16/00	300	250	1600	1460	380	<40	<110	130	820.22				
	08/21/00	300	320	1500	1520	246	<20	<55	88	821.35				
	01/08/01	77	79	570	640	139	<10	<28	32	821.27				
	04/25/01	130	130	800	1090	253	<0.40	<1.1	96	821.71	3.23			
	07/11/01	140	210	670	1020	230	<20	<55	110	821.43	4.48			
	10/17/01	160	250	840	1070	198	<8.0	<22	74	821.32	4.81			
	01/17/02	170	260	1400	1370	223	<20	<55	<35	821.12	4.86			
	04/17/02	150	240	880	1110	191	<0.4	<1.1	100	821.23	5.95			
	04/19/02	SVE System Shut Off												
	07/18/02	130	240	920	1170	223	<0.90	<0.50	82	821.23	5.96			
	10/15/02	110	200	1000	1070	178	<0.90	<0.50	110	821.10	6.02			
	01/08/03	87	230	810	1050	209	<23	<13	93	820.92	5.88			
	04/09/03	110	230	820	1090	193	<0.90	<13	82	820.83	6.57			
	07/11/03	130	340	710	1250	248	<18	<10	110	820.49	6.12			
	07/15/03	SVE System Started												
	10/13/03	85	270	280	800	177		6.3	74	819.95	7.14			
	02/05/04	110	330	420	1070	288	<0.90	<5.0	130	820.07	6.50			
	04/22/04	30	130	37	282	77	<0.9	<5.0	32	820.25	4.17			
	05/14/04	SVE System Shut Off												
	10/27/04	28	160	260	544	123		3.6		821.21				
	01/19/05	5.4	33	71	115	22.2		<0.21		820.91	3.23			
	04/05/05	76	550	550	1580	387		15		821.29	1.58			
	07/07/05	38	290	480	910	205		<4.0	88	820.47	1.63			
	10/12/05	72	490	690	1300	356		<8.0	130	820.06	0.71			
		Length of Well Screen: 15				Top of Well Screen: 826.5			Top of Casing: 886.44					
MW8	05/14/96	760	180	200	548	97	4.4	4	47	821.86				
	01/21/97	1600	590	640	1510	169	<10	<10	270	821.45	9.20	5.61	14.8	
	01/18/99	77	69	1.4	15	5	<0.26	1.9	6.7	821.79		0.14	23.0	
	02/23/99	SVE System Started												
	06/23/99	<0.24	<0.26	<0.24	<0.50	<0.27	<0.27	<0.42	<0.25	821.04	1.00			
	11/01/99	6.2	22	2.2	14	5.4	<0.40	<0.40	28	820.85	1.26	1.17	11.0	
	02/29/00	<0.1	<0.1	<0.1	<0.2	<0.30	<0.40	<1.1	<0.7	820.99		1.56	7.5	
	05/16/00	7.5	12	3.1	10.23	5.6	<0.40	<1.1	11	820.41				
	08/21/00	4.5	19	2.8	39.2	15.9	<0.40	<1.1	27	820.73				
	01/08/01	<0.1	<0.1	<0.1	<0.2	<0.3	<0.4	<1.1	2.1	820.66				
	04/25/01	<0.10	<0.10	<0.10	<0.20	2.5	<0.40	<1.1	5.3	821.16	3.46			
	07/11/01	<0.10	<0.10	<0.10	<0.20	1.53	<0.40	<1.1	2.6	820.18	5.70			
	10/17/01	<0.10	<0.10	<0.10	<0.20	<0.30	<0.40	<1.1	<0.70	820.17	3.48			
	01/17/02	<0.10	<0.10	<0.10	<0.20	<0.30	<0.40	<1.1	<0.70	820.92	4.77			
	04/17/02	<0.1	<0.1	<0.1	<0.2	<0.3	<0.4	5.3	<0.7	820.12	3.81			
	04/19/02	SVE System Shut Off												
	07/18/02	<0.40	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	<0.50	819.98	3.58			
	10/15/02	<0.40	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	<0.50	819.90	4.59			
	01/08/03	<0.40	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	<0.50	819.72	2.94			
	04/09/03	<0.40	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	<0.50	819.63	2.85			
	07/11/03	<0.40	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	<0.50	819.31	4.18			
	07/15/03	SVE System Started												
	10/13/03	<0.30	<0.40	<0.40	<0.70	<0.30		<0.30		818.81	3.85			
	02/05/04	<0.30	<0.40	<0.40	<0.70	<0.30	<0.90	<0.30	<0.50	818.87	6.34			
	04/22/04	<0.40	<0.50	<0.50	<0.60	<0.50	<0.90	<0.50	<0.50	819.11	3.89			
	05/14/04	SVE System Shut Off												
	07/16/04	<0.40	<0.50	<0.30	<0.60	<0.50	<0.90	<0.50	<0.50	820.87	5.82			
	10/27/04	<0.26	<0.50	<0.30	<0.40	<0.50		<0.21		820.58				
	01/19/05	<0.26	<0.50	<0.30	<0.80	<0.60		<0.21		820.31	4.20			
	04/05/05	<0.40	<0.40	<0.40	<0.80	<0.40		<0.40		819.63	1.39			
	07/07/05	<0.40	<0.40	<0.40	<0.80	<0.40		<0.40		819.86	1.36			
	10/12/05	0.83	<0.40	0.84	1.4	<0.40		<0.40		819.59	0.81			

All concentrations are in ug/L except where otherwise noted  
blank = not analyzed  
TMB = trimethylbenzene  
MTBE = methyltertbutyl ether  
Italic values exceed the WAC NR 140 PAL  
Values in BOLD exceed the WAC NR 140 ES  
ES = WAC NR 140 enforcement standard concentration  
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This table only includes compounds which are monitored quarterly at this site  
For a complete list of compounds detected, see site investigation reports  
Free product detected in well MW-4 in fall of 1996  
Free product detected in well MW-3 on February 23, 1999  
Underlined groundwater elevations indicate a downward vertical gradient measured at piezometer nest.  
DO = dissolved oxygen  
Sampling at MW-9, MW-10 and P-10 suspended after November 1, 1999

**TABLE 5**  
**Groundwater Monitoring Results**  
**City of Baraboo Garage, Baraboo**

SAMPLING DATE	Ethyl				Total	1,2-	Naphthalene	GW Elev (ft msl)	DO (mg/L)	Nitrates (mg/L)	Sulfates (mg/L)	Iron (mg/L)			
	Benzene	Benzene	Toluene	Xylenes	TMB	DCA							MTBE		
NR 140 ES	5	700	1000	10000	480	5	60	40							
NR 140 PAL	0.5	140	200	1000	96	0.5	12	8							
MW9	Length of Well Screen: 15				Top of Well Screen: 820.80				Top of Casing: 828.79						
	01/21/97	<0.2	<0.2	<0.2	<0.4	<0.7	<0.2	<0.2	<0.8	819.97	4.8	0.53	12.0	17.5	
	01/18/99	0.24	<0.21	<0.22	<0.44	<0.22	<0.26	<0.2	<0.19	819.36		0.80	14.0		
	02/23/99	SVE System Started													
	06/23/99	<0.24	<0.24	<0.24	<0.24	<0.50	<0.27	<0.27	<0.42	<0.25	819.57	2.2			
	11/01/99	<0.30	<0.20	<0.20	<0.50	<0.30	<0.20	<0.20	<1.1	819.45	2.4	0.40	10.7	0.0	
02/29/00	<0.1	<0.1	<0.1	<0.2	<0.30	<0.40	<1.1	<0.7	819.68		0.80	19.7			
MW10	Length of Well Screen: 10				Top of Well Screen: 824.90				Top of Casing: 829.88						
	01/21/97	<0.2	<0.2	<0.2	<0.4	<0.7	<0.2	<0.2	<0.8	821.3	3.8	0.52	40.0	382.0	
	01/18/99	<0.22	<0.21	<0.22	<0.44	<0.22	<0.26	<0.2	<0.19	820.97		0.34	51.0		
	02/23/99	SVE System Started													
	06/23/99	<0.24	<0.26	<0.24	<0.50	<0.27	<0.24	<0.42		821.06	1.4				
	11/01/99	<0.30	<0.20	<0.20	<0.20	<0.30	<0.20	<0.20		820.87					
P10	Length of Well Screen: 5				Top of Well Screen: 797.80				Top of Casing: 829.78						
	01/21/97	<0.2	<0.2	<0.2	<0.4	<0.7	<0.2	<0.2	<0.8	821.46	6.4	4.67	38.0	1.2	
	01/18/99	<0.22	<0.21	<0.22	<0.44	<0.22	<0.26	<0.2	<0.19	820.99		4.80	41.0		
	02/23/99	SVE System Started													
	06/23/99	<0.24	<0.26	<0.27	<0.26	<0.27	<0.27	<0.42		821.22	1.6				
	11/01/99	<0.30	<0.20	<0.20	<0.30	<0.30	<0.20	<0.7	<1.1	821.07	4.2	3.97	40.9	0.0	

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Italic values exceed the WAC NR 140 PAL  
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ES = WAC NR 140 enforcement standard concentration  
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**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**BARABOO CITY GARAGE**  
**BARABOO, WISCONSIN**

SAMPLE DEPTH (FT)	11/30/94 11/30/94 12/01/94 12/01/94 07/95										
	B1 8.5-10.5	B2 8.5-10.5	B3 11-13	B4 6-8	B6 38.5-40.5	B6 51-53	B7 10-12	B8 10-12	B9 23-25	B9 38-40	DNR 720 GRCLs
GRO	<b>1380</b>	<b>20800</b>	<b>5040</b>	<b>2570</b>			nd	nd	<b>585</b>	<b>108</b>	100
DRO			<b>690</b>	<b>1250</b>	nd	nd	nd	nd	<b>445</b>	8.97	100
VOC											
MTBE	nd	nd	68.7	nd	nd	nd	nd	nd	0.527	nd	
Benzene	<b>0.8</b>	<b>222</b>	<b>125</b>	<b>34.7</b>	nd	nd	<b>0.0287</b>	nd	<b>4.87</b>	<b>1.66</b>	0.0055
Toluene	<b>13.6</b>	<b>1050</b>	<b>533</b>	<b>177</b>	nd	nd	nd	nd	<b>41.1</b>	<b>8.17</b>	1.5
Ethylbenzene	<b>8.8</b>	<b>408</b>	<b>96.6</b>	<b>63.2</b>	nd	nd	nd	nd	<b>17.4</b>	<b>2.99</b>	2.9
m- & p-xylene	<b>57.2</b>	<b>1520</b>	<b>343</b>	<b>230</b>	nd	0.0042	nd	nd	<b>70.7</b>	<b>12.1</b>	4.1
o-Xylene	<b>29.2</b>	<b>613</b>	<b>133</b>	<b>93.6</b>	nd	nd	nd	nd	<b>23.6</b>	<b>3.88</b>	4.1
1,3,5-TMB	24.9	311	64.1	40.7	nd	nd	nd	nd	14.7	2.11	
1,2,4-TMB	64.2	829	172	110	nd	nd	nd	nd	39.9	6.16	
PAH											
Acenaphthene											
Flourene											
1-Methyl Naphthalene											
2-Methyl Naphthalene											
Naphthalene											
Pheneanthrene											
PCB											
Cadmium											
Lead	5.4	16.4	28.8	12.9			nd	4.4	8.9	nd	

**NOTES:**

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

Units are in mg/Kg

nd = not detected above method detection limit

MTBE = methyl tert-butyl ether

TMB = Trimethylbenzene

Bold indicates concentrations above the NR 720 generic residual contaminant levels (GRCLs).

PAH = Polyaromatic Hydrocarbons

PCB = Polychlorinated biphenols

**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**BARABOO CITY GARAGE**  
**BARABOO, WISCONSIN**

07/95

SAMPLE DEPTH (FT)	B9 53-55	B10 19-21	B10 39-41	B10 54-56	B12 25-26.5	B12 35-37	B12 45-47	B12 55-57	SB1 13.5-15.5	SB1 23.5-25.5	DNR 720 GRCLs
GRO	<b>604</b>	nd	nd	nd	<1.0	<1.0	1.4	<1.0			100
DRO	<b>922</b>	nd	nd	10.5			<1.5	<1.6	<b>804</b>	nd	100
VOC											
MTBE	nd	nd	nd	nd	<0.025	<0.025	<0.025	<0.025	0.0221	0.0133	
Benzene	<b>8.06</b>	<b>0.549</b>	<b>0.376</b>	<b>0.0259</b>	<0.025	<0.025	<b>0.13</b>	<0.025	<b>0.0172</b>	nd	0.0055
Toluene	<b>92.1</b>	0.0208	0.538	0.0588	<0.025	<0.025	<0.025	<0.025	0.0861	nd	1.5
Ethylbenzene	<b>34.4</b>	0.0672	0.092	0.0259	<0.025	<0.025	<0.025	<0.025	0.454	nd	2.9
m- & p-xylene	<b>135</b>	0.0244	0.25	0.0776	<0.025	<0.025	<0.025	<0.025	0.131	nd	4.1
o-Xylene	<b>44.1</b>	nd	0.09	0.027	<0.025	<0.025	<0.025	<0.025	0.452	nd	4.1
1,3,5-TMB	23.6	nd	0.0239	0.0235	<0.025	<0.025	<0.025	<0.025	0.499	nd	
1,2,4-TMB	63.6	0.0257	0.0533	0.0541	<0.025	<0.025	<0.025	<0.025	1.21	nd	
PAH											
Acenaphthene									0.438	nd	
Flourene									2.19	nd	
1-Methyl Naphthalene									9.58	nd	
2-Methyl Naphthalene									8.38	nd	
Naphthalene									5.11	nd	
Pheneanthrene									5.25	nd	
PCB											
Cadmium											
Lead	nd	12.3	nd	nd							

**NOTES:**

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

Units are in mg/Kg

nd = not detected above method detection limit

MTBE = methyl tert-butyl ether

TMB = Trimethylbenzene

Bold indicates concentrations above the NR 720 generic residual contaminant levels (GRCLS).

PAH = Polyaromatic Hydrocarbons

PCB = Polychlorinated biphenols

**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**BARABOO CITY GARAGE**  
**BARABOO, WISCONSIN**

SAMPLE DEPTH (FT)	11/29/94	11/30/94	11/29/94	11/29/94	06/27/95				05/27/95	07/95	DNR 720 GRCLs
	SB1 31-33	SB1 36-38	SB2 13.5-15.5	SB2 21-23	SB3 13.5-15.5	SB4 8.5-10.5	SB5 18.5-20.5	SB5 43.5-45.5	SB5 56-57.5	SB6 18.5-20.5	
GRO					nd	nd	nd	nd	44.9	nd	100
DRO	nd	7.39	nd	nd	nd	nd	nd	nd	91.6	nd	100
VOC											
MTBE	0.0157	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Benzene	nd	nd	nd	nd	nd	nd	nd	<b>0.0632</b>	<b>0.286</b>	nd	0.0055
Toluene	nd	nd	nd	nd	nd	nd	nd	nd	0.577	nd	1.5
Ethylbenzene	nd	nd	nd	nd	nd	nd	nd	nd	0.688	nd	2.9
m- & p-xylene	nd	nd	nd	nd	nd	nd	nd	nd	1.85	nd	4.1
o-Xylene	nd	nd	nd	nd	nd	nd	nd	nd	0.483	nd	4.1
1,3,5-TMB	nd	nd	nd	nd	nd	nd	nd	nd	0.922	nd	
1,2,4-TMB	nd	0.0075	nd	nd	nd	nd	nd	nd	2.13	nd	
PAH											
Acenaphthene	nd	nd	nd	nd							
Flourene	nd	0.0271	nd	nd							
1-Methyl Naphthalene	nd	0.0374	nd	nd							
2-Methyl Naphthalene	nd	0.0872	nd	nd							
Naphthalene	nd	0.0271	nd	nd							
Pheneanthrene	nd	nd	nd	nd							
PCB			nd	nd							
Cadmium			0.4	0.4							
Lead		3.9	6.8	7.7	nd	nd	nd	nd	nd		

**NOTES:**

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

Units are in mg/Kg

nd = not detected above method detection limit

MTBE = methyl tert-butyl ether

TMB = Trimethylbenzene

Bold indicates concentrations above the NR 720 generic residual contaminant levels (GRCLS).

PAH = Polyaromatic Hydrocarbons

PCB = Polychlorinated biphenols

**TABLE 1**  
**Former Gasoline and Diesel Tank Beds**  
**Excavation Soil Samples**  
**City of Baraboo Garage**  
**Baraboo, Wisconsin**

Sample Depth (ft)	East Wall 11'	South Wall 11'	NE Corner 10'	Bottom 13'	West Wall 11'	North Wall 11'	NR 720 GRCLs
GRO	<1.3	1.8	<b>9500</b>	<b>3800</b>	<b>1100</b>	<b>9700</b>	100
DRO	<1.4	3	<b>3000</b>	<b>2300</b>	<b>1400</b>		100
PVOCs							
MTBE	0.03	0.5	41	67	16	31	
Benzene	<0.025	<0.025	<b>130</b>	<b>100</b>	<b>23</b>	<b>110</b>	0.0055
Toluene	<0.025	0.06	<b>1600</b>	<b>650</b>	<b>150</b>	<b>940</b>	1.5
Ethylbenzene	<0.025	0.028	<b>290</b>	<b>120</b>	<b>38</b>	<b>420</b>	2.9
m- & p-xylene	<0.025	0.071	<b>1200</b>	<b>340</b>	<b>130</b>	<b>1300</b>	4.1
o-Xylene	<0.025	0.039	<b>460</b>	<b>120</b>	<b>48</b>	<b>560</b>	4.1
1,3,5-TMB	<0.025	0.041	260	84	28	310	
1,2,4-TMB	<0.025	0.099	650	200	72	800	

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

Units are in mg/Kg

PVOCs = Petroleum Volatile Organic Compounds

MTBE = methyl tert-butyl ether

TMB = Trimethylbenzene

**Bold indicates concentrations above the NR 720 generic residual contaminant levels (GRCLS).**

**TABLE 2**  
**Excavation Soil Sample Results**  
**Former Fuel Oil Tank Bed**  
**City of Baraboo Garage**  
**Baraboo, Wisconsin**

Sample Depth (ft)	West Wall 16'	Bottom 18'	South Wall 16'	North Wall 16'	East Wall 15'	NR 720 GRCLS
DRO	<b>2200</b>	<b>3400</b>	<1.4	<b>240</b>	<1.4	100
PVOCs						
MTBE	<0.25	<0.25	<0.025	<0.25	<0.025	
Benzene	<0.25	<0.25	<0.025	<0.25	<0.025	0.0055
Toluene	<0.25	<0.25	<0.025	<0.25	<0.025	1.5
Ethylbenzene	1.1	0.69	<0.025	<0.25	<0.025	2.9
m- & p-xylene	<0.25	0.79	<0.025	<0.25	<0.025	4.1
o-Xylene	0.71	0.93	<0.025	<0.25	<0.025	4.1
1,3,5-TMB	1.8	2.4	<0.025	0.47	<0.025	
1,2,4-TMB	2.6	6.8	<0.025	1.2	<0.025	

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

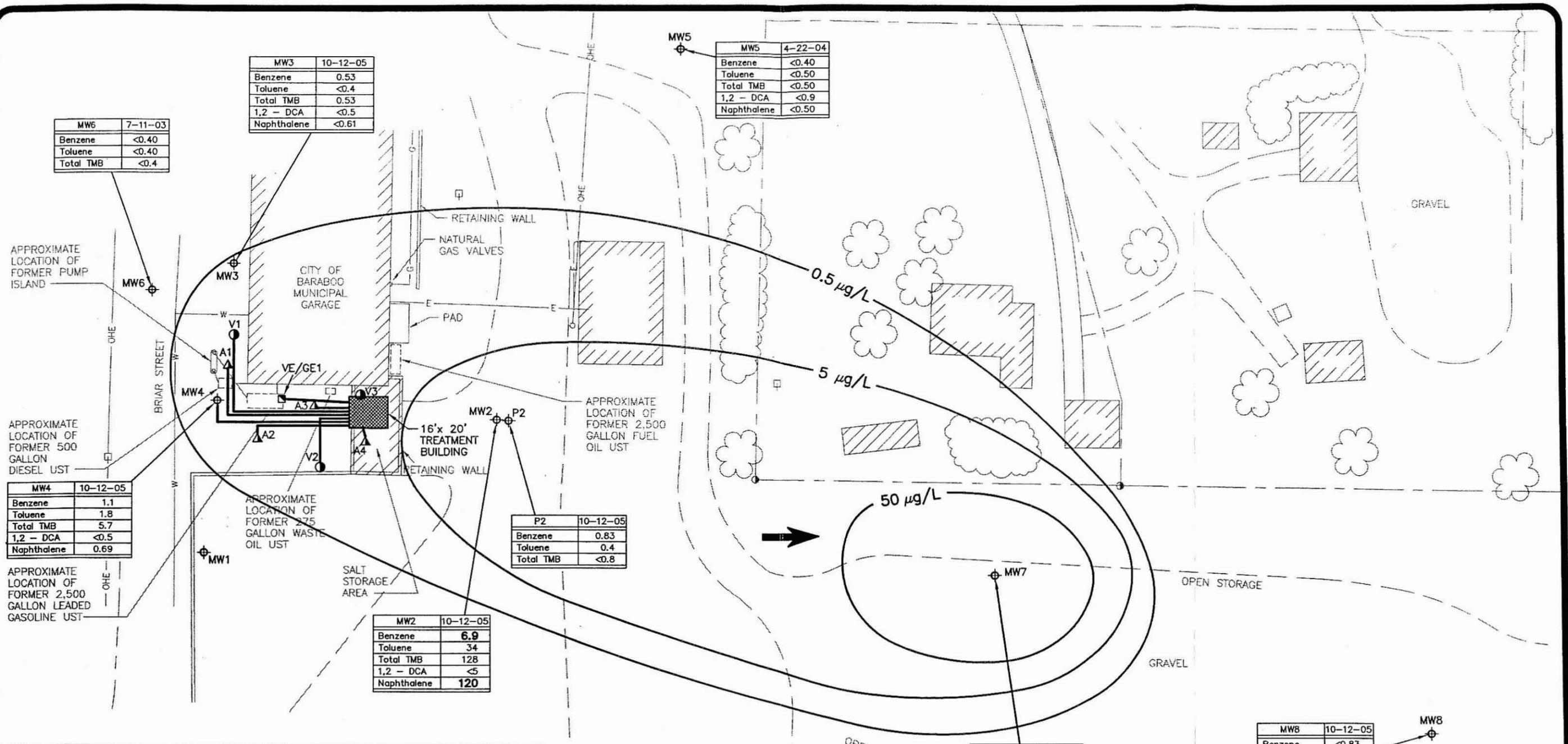
Units are in mg/Kg

PVOCs = Petroleum Volatile Organic Compounds

MTBE = methyl tert-butyl ether

TMB = Trimethylbenzene

Bold indicates concentrations above the NR 720 generic residual contaminant levels (GRCLS)



MW6	7-11-03
Benzene	<0.40
Toluene	<0.40
Total TMB	<0.4

MW3	10-12-05
Benzene	0.53
Toluene	<0.4
Total TMB	0.53
1,2 - DCA	<0.5
Naphthalene	<0.61

MW5	4-22-04
Benzene	<0.40
Toluene	<0.50
Total TMB	<0.50
1,2 - DCA	<0.9
Naphthalene	<0.50

MW4	10-12-05
Benzene	1.1
Toluene	1.8
Total TMB	5.7
1,2 - DCA	<0.5
Naphthalene	0.69

P2	10-12-05
Benzene	0.83
Toluene	0.4
Total TMB	<0.8

MW2	10-12-05
Benzene	6.9
Toluene	34
Total TMB	128
1,2 - DCA	<5
Naphthalene	120

MW7	10-12-05
Benzene	72
Toluene	690
Total TMB	356
Naphthalene	130

MW8	10-12-05
Benzene	<0.83
Toluene	<0.84
Total TMB	<0.4

	ES	PAL
Benzene	5	0.5
Toluene	700	140
Total TMB	480	96
1,2 - DCA	5	0.5
Naphthalene	40	8

**LEGEND**

- ⊕ MONITORING WELL LOCATION
- ➔ APPARENT GROUNDWATER FLOW DIRECTION
- 5 µg/L — POST-REMEDIATION BENZENE ISOCONCENTRATION CONTOUR (OCTOBER 12, 2005)
- ▣ VE/GE WELL (1)
- SVE WELL (3)
- ▲ AIR SPARGING WELL (4)

**NOTES:**

1. NOT ALL WELLS ARE SAMPLED QUARTERLY.
2. ALL GROUNDWATER MONITORING RESULTS IN µg/L.
3. SEE GROUNDWATER MONITORING RESULTS TABLE FOR EXPLANATION OF TERMINOLOGY USED.
4. BOLD NUMBERS INDICATE CONCENTRATIONS ABOVE NR 140 ENFORCEMENT STANDARDS.
5. GROUNDWATER ELEVATION AT WELL MW3 CORRECTED FOR FREE PRODUCT.

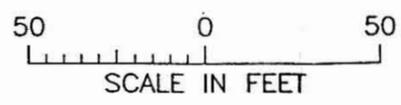


FIGURE 11  
**POST-REMEDIATION  
 ISOCONCENTRATION CONTOURS  
 AUGUST 10, 2005**  
 BARABOO CITY GARAGE UST SITE  
 BARABOO, WISCONSIN

**MSA** TRANSPORTATION MUNICIPAL REMEDIATION  
 DEVELOPMENT ENVIRONMENTAL  
 1230 South Boulevard, Baraboo, WI 53913  
 608-356-2771 1-800-362-4505 Fax: 608-356-2770

DRAWN BY RHM DATE 1-6-06 SHEET \_\_\_\_\_ of \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ SCALE AS NOTED FILE NO. 359403BL

PLOT 1-10-06

**TABLE 6**  
**Free Product Measurements, MW-3 and MW-4**  
**Baraboo City Garage, Baraboo**

Date of Measurement	MW-3			MW-4		
	Depth to Water	Depth to Product	Thickness	Depth to Water	Depth to Product	Thickness
23-Feb-99	52.09	51.62	0.47	51.75	51.28	0.47
25-Feb-99	52.14	51.64	0.50	51.76	51.39	0.37
05-Mar-99	52.04	51.56	0.48	51.41	0.00	0.00
11-Mar-99	52.29	51.61	0.68	51.49	0.00	0.00
19-Mar-99	52.15	51.64	0.51	51.45	0.00	0.00
14-May-99	51.51	0.00	0.00	51.27	0.00	0.00
23-Jun-99	51.53	0.00	0.00	51.23	0.00	0.00
31-Jul-99	51.46	0.00	0.00	51.10	0.00	0.00
20-Aug-99	51.39	0.00	0.00	59.22	0.00	0.00
17-Sep-99	51.55	0.00	0.00	50.73	0.00	0.00
01-Nov-99	51.40	0.00*	0.00	50.47	0.00*	0.00
31-Dec-99	51.53	0.00*	0.00	51.23	0.00	0.00
31-Jan-00	51.72	0.00	0.00	50.90	0.00	0.00
29-Feb-00	51.37	0.00	0.00	50.71	0.00	0.00
24-Mar-00	52.56	0.00	0.00	51.11	0.00	0.00
16-May-00	52.37	0.00	0.00			
30-Jun-00	51.43	0.00	0.00	51.32	0.00	0.00
31-Jul-00	51.58	0.00	0.00	51.41	0.00	0.00
21-Aug-00	51.69	0.00	0.00	51.49	0.00	0.00
24-Aug-00	51.72	0.00	0.00	51.58	0.00	0.00
15-Sep-00	51.93	0.00	0.00	51.84	0.00	0.00
17-Oct-00	52.21	0.00	0.00	51.62	0.00	0.00
29-Nov-00	51.83	0.00	0.00			
08-Jan-01	51.85	0.00	0.00	51.06	0.00	0.00
12-Jan-01	51.82	0.00	0.00	51.18	0.00	0.00
07-Mar-01	51.81	0.00	0.00	50.91	0.00	0.00
25-Apr-01	51.83	0.00	0.00	51.31	0.00	0.00
14-May-01	51.16	0.00	0.00	50.50	0.00	0.00
19-Jun-01	51.35	0.00	0.00	50.97	0.00	0.00
11-Jul-01	51.63	0.00	0.00	50.75	0.00	0.00
15-Aug-01	52.18	0.00	0.00	51.71	0.00	0.00
13-Sep-01	51.93	0.00	0.00	51.53	0.00	0.00
17-Oct-01	52.13	0.00	0.00	51.55	0.00	0.00
19-Nov-01	51.81	0.00	0.00	51.33	0.00	0.00
19-Dec-01	51.79	0.00	0.00	51.27	0.00	0.00
16-Jan-02	51.85	0.00	0.00	51.33	0.00	0.00
17-Jan-02	51.90	0.00	0.00	51.31	0.00	0.00
13-Feb-02	51.90	0.00	0.00	51.31	0.00	0.00
14-Mar-02	51.59	0.00	0.00	50.94	0.00	0.00
17-Apr-02	52.19	0.00	0.00	51.61	0.00	0.00

**Note:**

Blank - data not obtained

\* Sheen detected on water surface

No product detected after May 1999 in MW-3 or MW-4. System operated from 2/23/99 to 4/17/02.

System shut down April 17, 2002 due to lack of product.

System restarted on July 15, 2003 due to product in MW-3 and MW-4.

**TABLE 6**  
**Free Product Measurements, MW-3 and MW-4**  
**Baraboo City Garage, Baraboo**

Date of Measurement	MW-3			MW-4		
	Depth to Water	Depth to Product	Thickness	Depth to Water	Depth to Product	Thickness
19-Apr-02	52.03	--	--	51.53	--	--
15-May-02	51.51	--	--	51.19	--	--
12-Jun-02	51.71	--	--	51.38	--	--
18-Jul-02				52.04	--	--
13-Aug-02	52.17	--	--	51.83	--	--
23-Sep-02	52.24	--	--	51.93	--	--
15-Oct-02	52.16			51.86		
05-Nov-02	52.24	--	--	51.91	--	--
09-Dec-02	52.34	--	--	52.04	--	--
08-Jan-03	52.38	--	--	52.05	--	--
07-Feb-03	52.13	--	--	52.47	--	--
17-Mar-03	52.48	--	--	52.17	--	--
09-Apr-03	52.48	--	--	52.21	--	--
09-May-03	52.49	--	--	52.21	--	--
11-Jun-03	52.71	--	--	52.44	52.41	0.03
11-Jul-03	53.19	52.80	0.39	52.28	52.15	0.13
15-Jul-03	52.99	53.48	0.49	52.07	52.11	0.04
23-Jul-03	52.74	--	--	52.07	--	--
30-Jul-03	53.17	--	--	52.26	--	--
12-Aug-03	52.95	--	--	52.34	--	--
08-Sep-03	53.34	--	--	52.68	--	--
13-Oct-03	53.51	--	--	53.09	--	--
26-Nov-03	52.79	--	--	52.21	--	--
19-Dec-03	53.06	--	--	52.41	--	--
23-Jan-04	53.05	--	--	52.32	52.34	0.02
05-Feb-04	53.07	--	--	52.38	--	--
18-Feb-04	53.11	--	--	52.51	--	--
24-Mar-04	52.71	--	--	52.04	--	--
22-Apr-04	52.90	--	--	52.11	--	--
14-May-04	52.64	--	--	52.01	--	--
16-Jul-04	51.94	--	--	51.61	--	--
27-Oct-04	52.08	--	--	51.79	--	--

## Note:

Blank - data not obtained

\* Sheen detected on water surface

No product detected after May 1999 in MW-3 or MW-4. System operated from 2/23/99 to 4/17/02.

System shut down April 17, 2002 due to lack of product.

System restarted on July 15, 2003 due to product in MW-3 and MW-4.

System turned off May 14, 2004

**TABLE 1**  
**Groundwater Elevations**  
**City of Baraboo Garage, Baraboo**

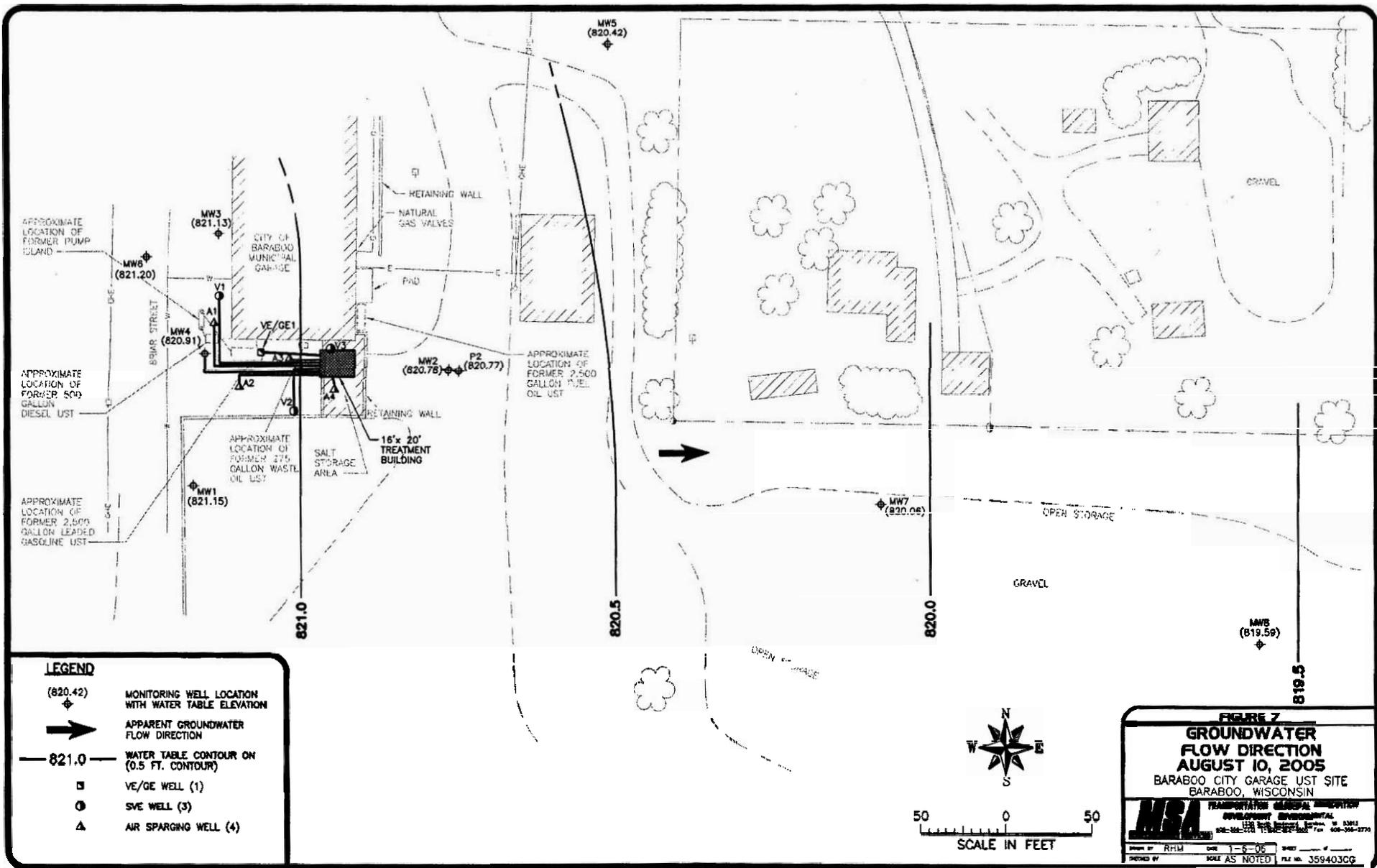
Date	MW1		MW2		P2		MW3		MW4		MW5		MW6		MW7		MW8		MW9		MW10		P10	
	T.O.C.= 880.41		T.O.C.= 883.92		T.O.C.= 884.37		T.O.C.= 874.41		T.O.C.= 873.89		T.O.C.= 885.43		T.O.C.= 873.35		T.O.C.= 912.94		T.O.C.= 880.91		T.O.C.= 828.79		T.O.C.= 829.88		T.O.C.= 829.78	
	Depth	Elev																						
06/01/95	56.38	824.03	60.28	823.64					50.36	824.05	49.86	824.03												
07/20/95	56.81	823.60	60.74	823.18					50.79	823.62	50.28	823.61												
05/14/96	56.72	823.69	60.62	823.30	61.11	823.26	50.73	823.68	50.72	823.17	62.56	822.87	49.59	823.76	87.40	822.50	84.30	821.86						
01/20/97	57.18	823.23	61.11	822.81	61.51	822.86	51.18	823.23	--		62.95	822.48	50.02	823.33	87.82	822.08	84.71	821.45	8.82	819.97	8.58	821.30	8.32	821.46
12/02/97	57.42	822.99	61.28	822.64	61.77	822.60	50.59	823.82	--		63.16	822.27	50.26	823.09	88.1	821.80	86.81	819.35	9.06	819.73	8.89	820.99	8.59	821.19
01/27/98	57.88	822.53	61.81	822.11	62.42	821.95	51.9	822.51	--		63.68	821.75	50.87	822.48	88.54	821.36	85.36	820.80	9.41	819.38	9.05	820.83	8.89	820.89
01/18/99	57.86	822.55	61.79	822.13	62.23	822.14	52.26	822.15	--		63.75	821.68	50.78	822.57	88.57	821.33	84.37	821.79	9.43	819.36	8.91	820.97	8.79	820.99
02/23/99							--		--															
06/23/99	57.54	822.87	61.45	822.47	61.96	822.41	51.53	822.88	51.23	822.66	63.46	821.97	50.43	822.92			85.12	821.04	9.22	819.57	8.82	821.06	8.56	821.22
11/01/99	57.65	822.76					51.40	823.01	50.47	823.42	63.60	821.83	50.30	823.05	93.02	819.92	85.31	820.85	9.34	819.45	9.01	820.87	8.71	821.07
01/31/00	57.83	822.58					51.72	822.69	50.90	822.99														
02/19/00	57.64	822.77	61.57	822.35	62.16	822.21	51.37	823.04	50.71	823.18	63.51	821.92	50.39	822.96	91.37	821.57	85.17	820.99	9.11	819.68	7.62	822.26	8.60	821.18
03/24/00	58.16	822.25	61.99	821.93			52.56	821.85	51.11	822.78														
05/16/00	58.25	822.16	62.15	821.77	62.71	821.66	52.37	822.04			64.12	821.31	51.26	822.09	92.72	820.22	85.75	820.41	9.73	819.06	9.21	820.67	9.17	820.61
06/30/00	57.57	822.84					51.43	822.98	51.32	822.57														
08/21/00			61.74	822.18	62.30	822.07	51.69	822.72	51.49	822.40	63.68	821.75			91.59	821.35	85.43	820.73						
08/24/00	57.84	822.57	61.77	822.15			51.72	822.69	51.58	822.31														
09/15/00	57.96	822.45	61.88	822.04			51.93	822.48	51.84	822.05														
10/17/00	58.29	822.12	62.09	821.83			52.21	822.20	51.62	822.27														
11/29/00	57.97	822.44	61.95	821.97			51.83	822.58																
01/08/01	57.98	822.43	61.92	822.00	62.42	821.95	51.85	822.56	51.06	822.83	63.81	821.62	50.50	822.85	91.67	821.27	78.88	820.66	9.54	819.25	9.03	820.85	8.89	820.89
02/07/01	57.85	822.56	61.77	822.15			51.82	822.59	51.18	822.71														
03/07/01	57.93	822.48	61.81	822.11			51.81	822.60	50.91	822.98														
04/25/01	57.83	822.58	61.61	822.31	61.98	822.39	51.83	822.58	51.31	822.58	63.38	822.05	50.69	822.66	91.23	821.71	78.38	821.16	9.01	819.78	8.18	821.70	8.39	821.39
05/14/01	57.22	823.19	61.14	822.78			51.16	823.25	50.50	823.39														
07/11/01	57.71	822.70	61.68	822.24	62.27	822.10	51.63	822.78	50.75	823.14	63.66	821.77	50.25	823.10	91.51	821.43	66.26	814.65	9.46	819.33	9.33	820.55	8.77	821.01
08/15/01	58.28	822.13	62.18	821.74			52.18	822.23	51.71	822.18														
09/13/01	57.98	822.43	61.81	822.11			51.93	822.48	51.53	822.36														
10/17/01	58.11	822.30	61.91	822.01	62.28	822.09	52.13	822.28	51.55	822.34	63.75	821.68	50.94	822.41	91.62	821.32	66.27	814.64	9.41	819.38	8.91	820.97	8.72	821.06
11/19/01	57.89	822.52	61.85	822.07			51.81	822.60	51.33	822.56														
12/19/01	57.85	822.56	61.81	822.11			51.79	822.62	51.27	822.62														
01/17/02	57.98	822.43	62.02	821.90	62.63	821.74	51.90	822.51	51.31	822.58	63.94	821.49	50.68	822.67	91.82	821.12	66.52	814.39						
02/13/02	58.02	822.39	61.94	821.98			51.90	822.51	51.31	822.58														
03/14/02	57.66	822.75	61.60	822.32			51.59	822.82	50.94	822.95														

TOC = top of casing  
 Elevations are in feet above mean sea level (MSL)  
 Free product detected in well MW4 in fall of 1996  
 Free product detected in well MW3 on February 23, 1999  
 Blank - data not obtained; -- free product  
 Dam on Baraboo River removed in December 1997  
 Shut system down on 4/19/02; restart 7/15/03; shut down 5/14/04

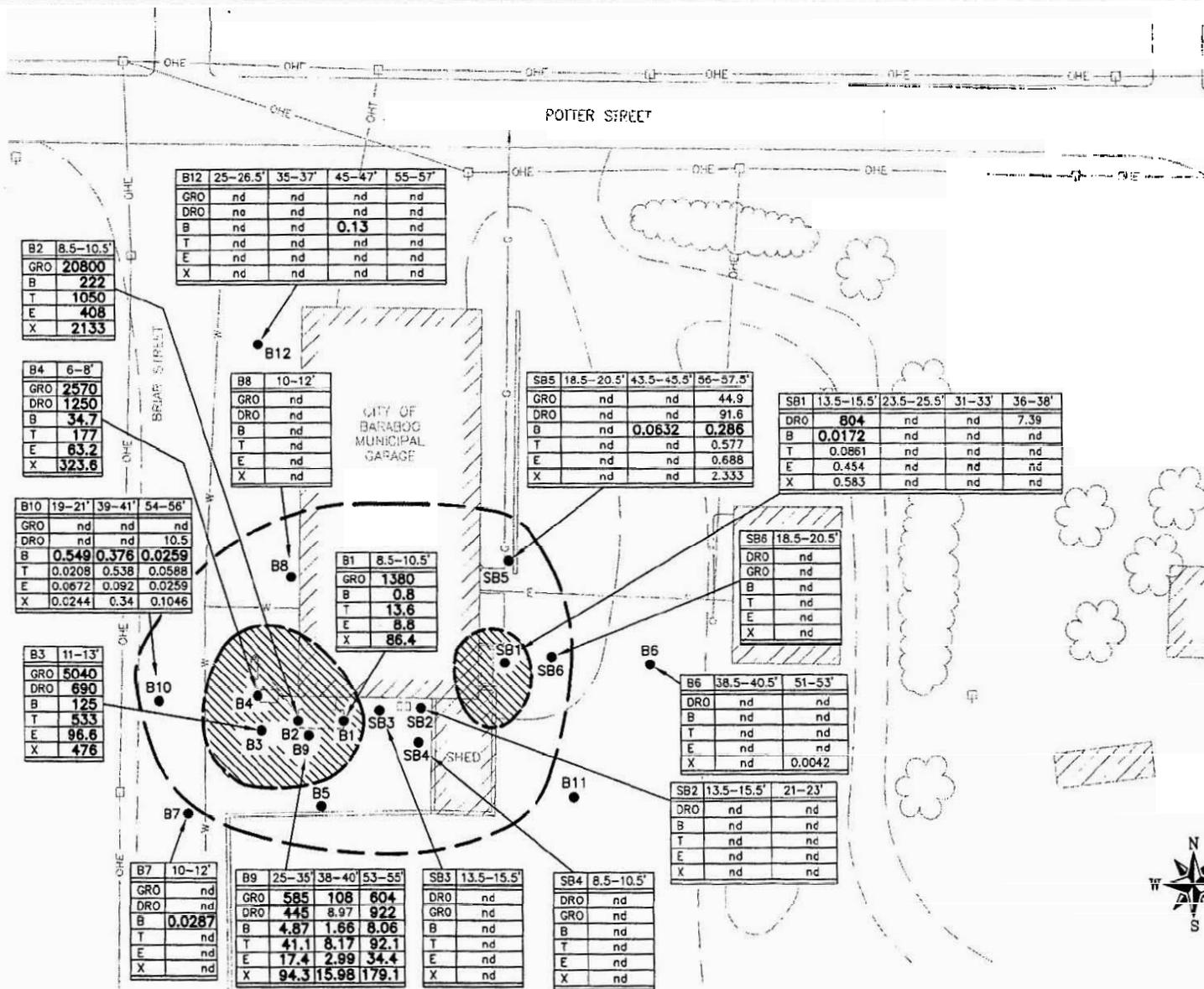
**TABLE 1  
Groundwater Elevations  
City of Baraboo Garage, Baraboo**

Date	MW1		MW2		P2		MW3		MW4		MW5		MW6		MW7		MW8		MW9		MW10		P10		
	T.O.C.= 880.41		T.O.C.= 883.92		T.O.C.= 884.37		T.O.C.= 874.41		T.O.C.= 873.89		T.O.C.= 885.43		T.O.C.= 873.35		T.O.C.= 912.94		T.O.C.= 880.91		T.O.C.= 828.79		T.O.C.= 829.88		T.O.C.= 829.78		
	Depth	Elev	Depth																						
04/17/02	58.26	822.15	61.96	821.96	62.38	821.99	52.19	822.22	51.61	822.28	63.78	821.65	51.00	822.35	91.71	821.23	66.32	820.12	9.42	819.37	8.16	821.72	8.86	820.92	
04/19/02	58.07	822.34	61.88	822.04			52.03	822.38	51.53	822.36															
05/15/02							51.51	822.90	51.19	822.70															
06/12/02							51.71	822.70	51.38	822.51															
07/18/02	57.94	822.47					52.04	822.37	51.71	822.18	63.88	821.55	50.87	822.48	91.71	821.23	66.46	819.98	9.67	819.12	9.61	820.27	9.01	820.77	
10/15/02	58.11	822.30	62.08	821.84	62.54	821.83	52.16	822.25	51.86	822.03	64.01	821.42	51.03	822.32	91.84	821.10	66.54	819.90	9.72	819.07	9.45	820.43	9.07	820.71	
01/08/03	58.28	822.13	62.29	821.63	62.92	821.45	52.38	822.03	52.05	821.84	64.18	821.25	51.27	822.08	92.02	820.92	66.72	819.72	9.90	818.89	9.57	820.31	9.28	820.50	
04/09/03	58.46	821.95	62.41	821.51	62.88	821.49	52.48	821.93	52.21	821.68	64.27	821.16	51.39	821.96	92.11	820.83	66.81	819.63	9.91	818.88	9.43	820.45	9.38	820.40	
07/11/03	58.82	821.59	62.74	821.18	63.21	821.16	53.19	821.22	52.28	821.61	64.60	820.83	51.74	821.61	92.45	820.49	67.13	819.31	10.14	818.65	7.26	822.62	9.71	820.07	
10/13/03	59.54	820.87	63.31	820.61	63.71	820.66	53.51	820.90	53.09	820.80	65.11	820.32	52.40	820.95	92.99	819.95	67.63	818.81	10.71	818.08	10.10	819.78	10.25	819.53	
02/05/04	59.18	821.23					53.07	821.34	52.38	821.51	65.02	820.41	51.97	821.38	92.87	820.07	67.57	818.87	10.64	818.15	10.03	819.85	10.21	819.57	
04/22/04	58.96	821.45					52.90	821.51	52.11	821.78	64.76	820.67	51.82	821.53	92.69	820.25	67.33	819.11	10.32	818.47	9.30	820.58	9.96	819.82	
07/16/04	57.84	822.57	61.78	822.14	62.23	822.14	51.91	822.50	51.61	822.28	63.68	821.75	50.74	822.61	91.5	821.44	60.04	820.87	9.37	819.42	8.22	821.66	8.83	820.95	
10/27/04	58.04	822.37	61.97	821.95	62.40	821.97	52.08	822.33	51.79	822.10	63.88	821.55	50.87	822.48	91.73	821.21	60.33	820.58	9.61	819.18	9.19	820.69	8.98	820.80	
01/19/05	58.32	822.09	62.25	821.67	62.66	821.71	52.34	822.07	52.05	821.84					92.03	820.91	60.60	820.31	9.85	818.94	9.19	820.69	9.25	820.53	
04/05/05	58.02	822.39	61.92	822.00	62.39	821.98	52.07	822.34	51.75	822.14	63.81	821.62	50.91	822.44	91.65	821.29	61.28	819.63	9.49	819.30	8.34	821.54	8.98	820.80	
07/07/05	58.81	821.60	62.71	821.21	63.21	821.16	52.86	821.55	52.57	821.32	64.61	820.82	51.71	821.64	92.47	820.47	61.05	819.86	10.32	818.47	9.88	820.00	9.81	819.97	
10/12/05	59.26	821.15	63.14	820.78	63.60	820.77	53.28	821.13	52.98	820.91	65.01	820.42	52.15	821.20	92.88	820.06	61.32	819.59	10.61	818.18	10.38	819.50	10.17	819.61	

TOC = top of casing  
 Elevations are in feet above mean sea level (MSL)  
 Free product detected in well MW4 in fall of 1996  
 Free product detected in well MW3 on February 23, 1999  
 Blank - data not obtained; -- free product  
 Dam on Baraboo River removed in December 1997  
 Shut system down on 4/19/02; restart 7/15/03; shut down 5/14/04  
 MW8 TOC was adjusted after the April 2004 sample round.



PLOT 1-B-06



**LEGEND**

● SOIL BORING LOCATION



ESTIMATED EXTENT OF SOIL CONTAMINATION ABOVE NR 720 GENERIC RESIDUAL CONTAMINANT LEVELS (GRCL) LESS THAN 20 FT. BELOW GROUND SURFACE



ESTIMATED EXTENT OF SOIL CONTAMINATION ABOVE NR 720 GENERIC RESIDUAL CONTAMINANT LEVELS (GRCL) GREATER THAN 20 FT. BELOW GROUND SURFACE

	GRCL (mg/Kg)
GRO = Gasoline Range Organics	100
DRO = Diesel Range Organics	100
B = Benzene	0.0055
T = Toluene	1.5
E = Ethylbenzene	2.9
X = Total Xylene	4.1
nd = Not Detected above laboratory MDL	
na = Not Analyzed	

CONCENTRATIONS IN mg/Kg

BOLD NUMBERS INDICATE CONCENTRATIONS ABOVE GRCLs

NOTE:  
FOR ADDITIONAL NOTES AND LEGEND REFER TO FIGURE 2

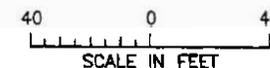


FIGURE 8  
PRE-REMEDIATION  
DISTRIBUTION OF  
SOIL CONTAMINATION  
BARABOO CITY GARAGE UST SITE  
BARABOO, WISCONSIN

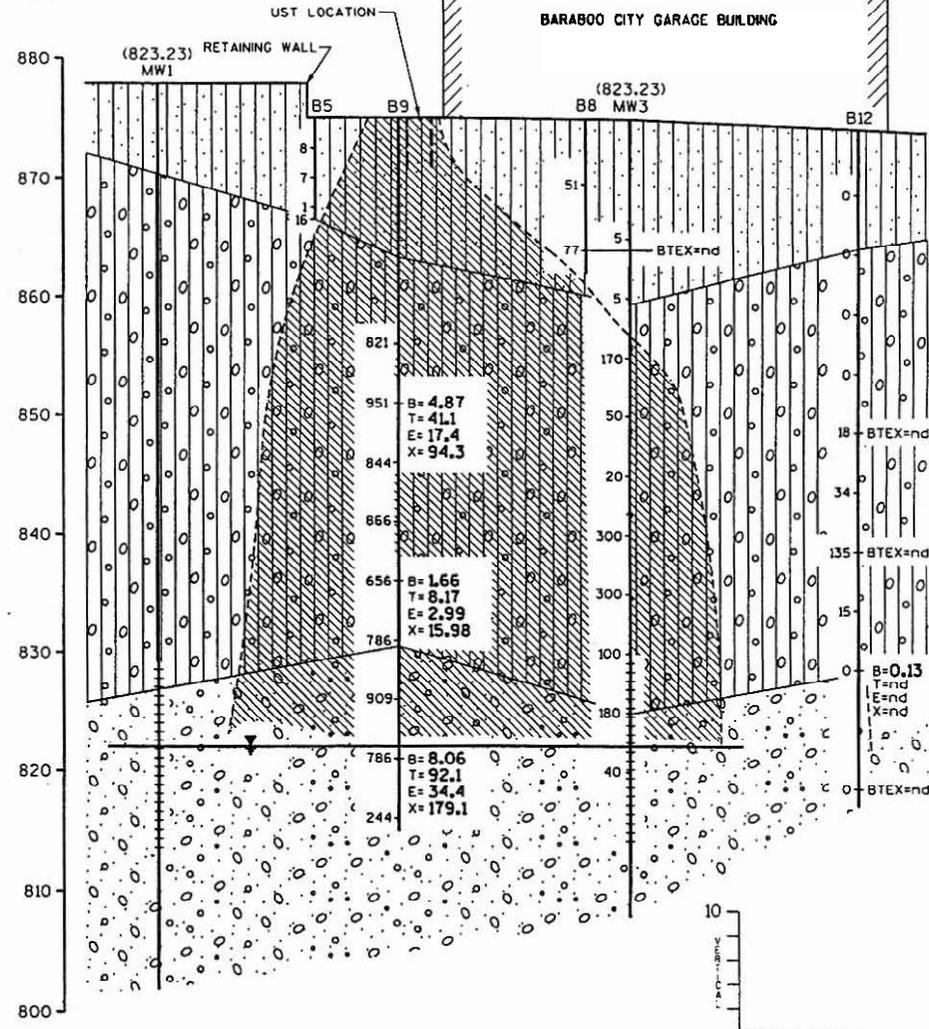
**MSA**  
TRANSPORTATION MUNICIPAL ORGANIZATION  
DEVELOPMENT ENVIRONMENTAL

1330 South Boulevard, Baraboo, WI 53003  
608-388-2777 1-800-382-6888 Fax 608-388-2776

DRAWN BY RHM DATE 1-B-06 SHEET 4  
CHECKED BY SOLE FILE NO. 359403BH

A  
SOUTH

A'  
NORTH



ELEVATION  
ABOVE MEAN  
SEA LEVEL  
(FEET)

HORIZONTAL  
SCALE IN FEET

ELEVATION  
ABOVE MEAN  
SEA LEVEL  
(FEET)

**LEGEND**

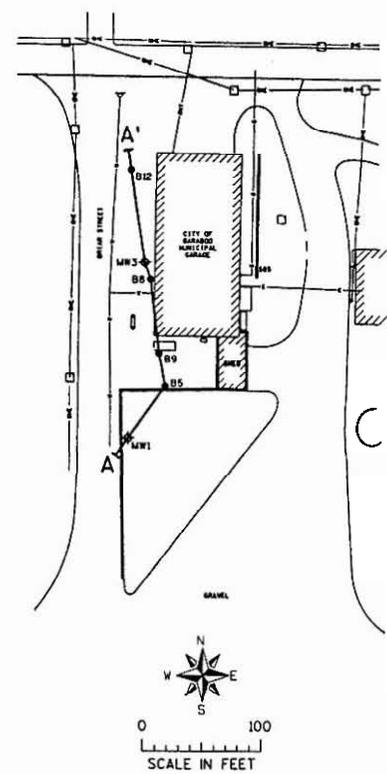
- BROWN STRATIFIED SAND, SILT, AND CLAY
- GLACIAL TILL - BROWN SILTY FINE TO MEDIUM SAND, WITH TRACE TO LITTLE GRAVEL, TRACE TO NUMEROUS COBBLE AND BOULDERS
- BROWN WELL GRADED STRATIFIED GRAVELLY SAND, TRACE TO LITTLE SILT

- WATER TABLE ON JANUARY 20, 1997
- ESTIMATED VERTICAL EXTENT OF SOIL CONTAMINATION ABOVE NR 720 GRCLs

(823.23) - GW ELEVATION  
MW1 - WELL OR BORING I.

- OVM READING OF SOIL SAMPLE
- 821 B = Benzene
  - T = Toluene
  - E = Ethylbenzene
  - X = Total Xylene
  - nd = not detected

- NOTES:**
1. INFORMATION BETWEEN SOIL BORINGS IS INTERPRETED BASED UPON AVAILABLE DATA. ACTUAL CONDITIONS BETWEEN SOIL BORINGS ARE UNKNOWN.
  2. GROUNDWATER ELEVATIONS WERE MEASURED ON JANUARY 20, 1997.
  3. FOR THE PURPOSE OF ILLUSTRATING SUBSURFACE CONDITIONS ON THE CROSS SECTIONS, SOME OF THE BORING LOGS HAVE BEEN SIMPLIFIED. FOR A DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT INDIVIDUAL BORINGS REFER TO SOIL BORING LOGS.
  4. PVOC RESULTS IN mg/Kg.
  5. BOLD NUMBERS INDICATE CONCENTRATIONS ABOVE NR 720 GENERIC RESIDUAL CONTAMINANT LEVELS.



LOCATION OF  
GEOLOGIC CROSS-SECTION A - A'

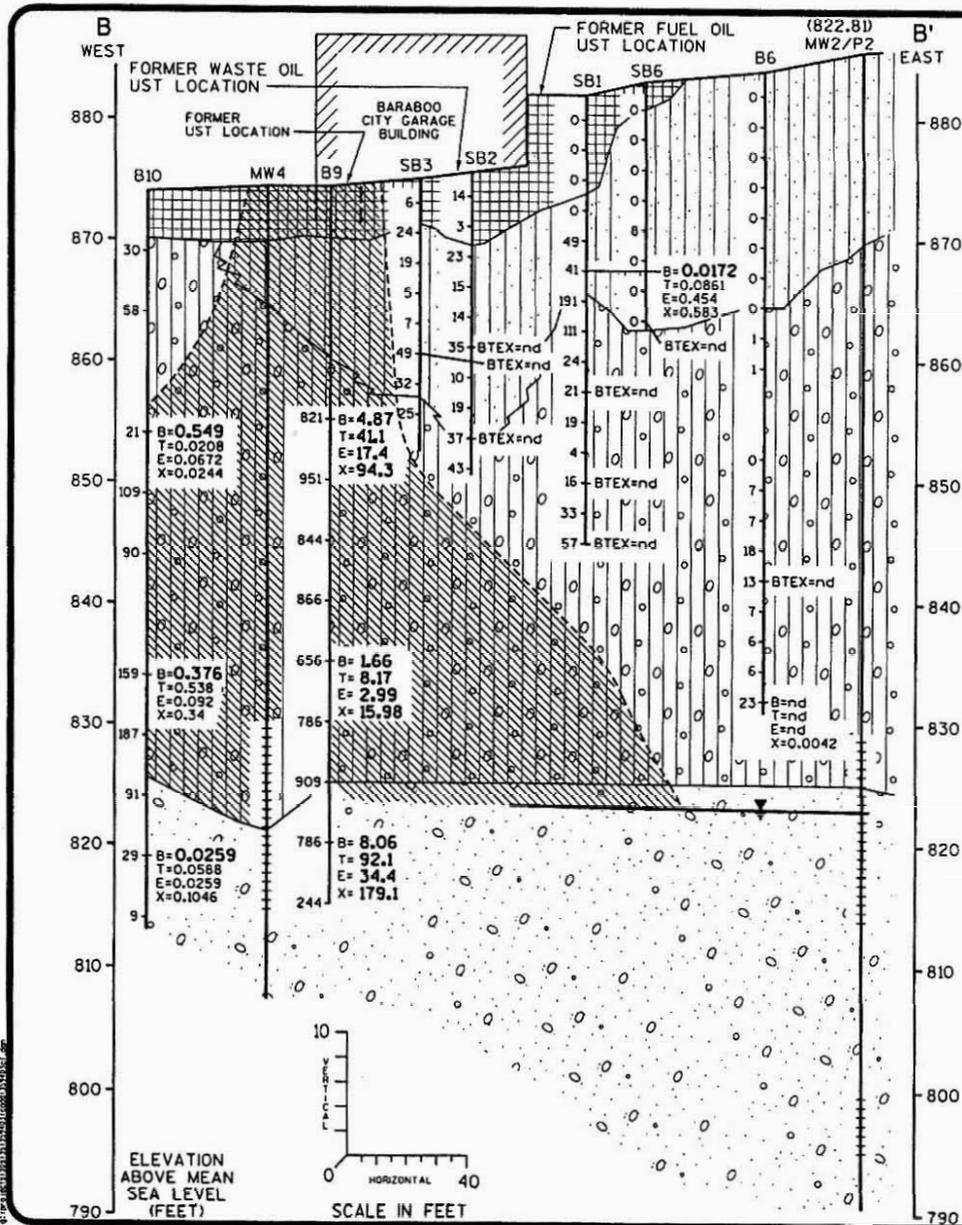
FIGURE 5

VERTICAL EXTENT OF  
SOIL CONTAMINATION  
CROSS SECTION A-A'  
BARABOO CITY GARAGE UST SITE  
BARABOO, WISCONSIN

**MSA**

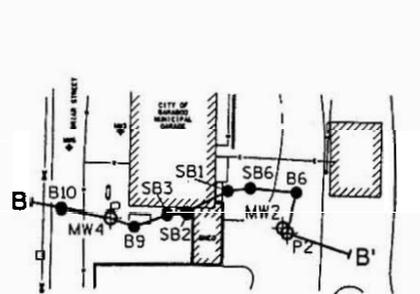
TRANSPORTATION • MUNICIPAL  
ENGINEERING • ENVIRONMENTAL  
1128 South Industrial Parkway, St. Joseph, MO 64506  
816.234.7771 • 816.234.7772 • Fax: 816.234.7770

DRAWN BY: RHM DATE: 1-10-06 SHEET: 47 OF 47  
CHECKED BY: SCALE: AS NOTED FILE NO.: 359403CE



**NOTES:**

1. INFORMATION BETWEEN SOIL BORINGS IS INTERPRETED BASED UPON AVAILABLE DATA. ACTUAL CONDITIONS BETWEEN SOIL BORINGS ARE UNKNOWN.
2. GROUNDWATER ELEVATIONS WERE MEASURED ON JANUARY 20, 1997.
3. FOR THE PURPOSE OF ILLUSTRATING SUBSOIL CONDITIONS ON THE CROSS SECTIONS, SOME OF THE BORING LOGS HAVE BEEN SIMPLIFIED. FOR A DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT INDIVIDUAL BORINGS REFER TO SOIL BORING LOGS.
4. PVOC RESULTS IN  $\mu\text{g}/\text{kg}$ .
5. BOLD NUMBERS INDICATE CONCENTRATIONS ABOVE NR 720 GENERIC RESIDUAL CONTAMINANT LEVELS.



**LOCATION OF GEOLOGIC CROSS-SECTION B - B'**

**FIGURE 6**

**VERTICAL EXTENT OF SOIL CONTAMINATION CROSS SECTION B-B'**

BARABOO CITY GARAGE UST SITE  
BARABOO, WISCONSIN

**MSA**  
MUNICIPALITY SERVICES ASSOCIATION

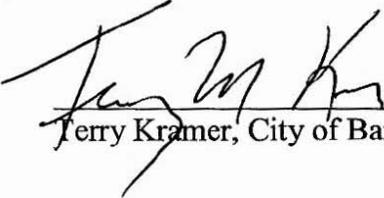
Drawn by: RHM DATE: 1-10-06 SHEET: 1 of 1  
CHECKED BY: NAME AS NOTED SCALE: AS NOTED 359403CF

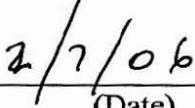
**RESPONSIBLE PARTY AFFIRMATION OF PROPERTY DESCRIPTIONS  
BARABOO CITY GARAGE UST SITE  
407 BRIAR STREET, BARABOO, WI**

The following affirmation by the responsible party is required by Wisconsin Administrative Code, ch. NR 726.05 paragraph (3)(b)4.f.

I hereby affirm the following:

1. I believe that legal descriptions for all of the properties within or partially within the contaminated site's boundaries that have soil contamination exceeding generic residual contaminant levels as determined under ss. NR 720.09, 720.11 and 720.19, and groundwater contamination exceeding the enforcement standards as determined under ss. NR 140 at the time that case closure was requested, other than public street or highway rights-of-way or railroad rights-of-way, have been submitted to the agency with administrative authority for the site, either as an attachment to the site investigation report or as part of the groundwater GIS registry attachment to the case close out report.

  
\_\_\_\_\_  
Terry Kramer, City of Baraboo

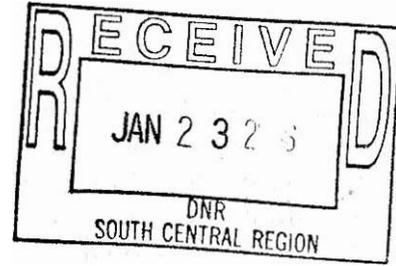
  
\_\_\_\_\_  
(Date)



**PROFESSIONAL SERVICES**  
TRANSPORTATION • MUNICIPAL  
DEVELOPMENT • ENVIRONMENTAL

January 20, 2006

Charles and Karen Rachaj  
626 Potter Street  
Baraboo, WI 53913



Re: Notification of Groundwater Contamination  
Baraboo City Garage, 407 Briar Street, Baraboo

Dear Mr. and Mrs. Rachaj:

Groundwater contamination that appears to have originated on the Baraboo City Garage property located at 407 Briar Street, Baraboo has migrated onto your property at 626 Potter Street. The levels of benzene and naphthalene contamination in the groundwater on your property are above the state groundwater enforcement standards found in chapter NR 140, Wisconsin Administrative Code. However, MSA Professional Services, Inc. has investigated this contamination and determined that the groundwater contaminant plume is stable or receding and will naturally degrade over time. MSA Professional Services, Inc. further believes that allowing natural attenuation to complete the cleanup at this site will meet the requirements for case closure that are found in chapter NR 726, Wisconsin Administrative Code. Therefore, the owner of the property, the City of Baraboo will be requesting that the Department of Natural Resources accept natural attenuation as the final remedy for this site and grant case closure. Closure means that the Department will not be requiring any further investigation or cleanup action to be taken, other than the reliance on natural attenuation.

Since the source of the groundwater contamination is not on your property, neither you nor any subsequent owner of your property will be held responsible for investigation or cleanup of this groundwater contamination, as long as you and any subsequent owners comply with the requirements of section 292.13, Wisconsin Statutes, including allowing access to your property for environmental investigation or cleanup if access is required. For further information on the requirements of section 292.13, Wisconsin Statutes, you may call 800-367-6076 for calls originating in Wisconsin, or 608-264-6020 if you are calling from out of state or within the Madison area, to obtain a copy of the Department of Natural Resources' publication #RR-589, Fact Sheet 10: Guidance for Dealing with Properties Affected by Off-Site Contamination.

The Department of Natural Resources will not review the closure request for at least 30 days after the date of this letter. As an affected property owner, you have a right to contact the Department to provide any technical information that you may have that indicates that closure should not be granted for this site. If you would like to submit any information to the Department of Natural Resources that is relevant to this closure request, you should mail that information to: Hank Kuehling, Wisconsin Department of Natural Resources, 3911 Fish Hatchery Rd, Fitchburg, WI 53711.

**Offices in Illinois, Iowa, Minnesota, and Wisconsin**

1230 SOUTH BOULEVARD • BARABOO, WI 53913-2791  
608-356-2771 • 1-800-362-4505  
FAX: 608-356-2770 • [www.msa-ps.com](http://www.msa-ps.com)

Mr. and Mrs. Rachaj  
January 20, 2006

If this case is closed, all properties within the site boundaries where groundwater contamination exceeds chapter NR 140 groundwater enforcement standards will be listed on the Department of Natural Resources' geographic information system (GIS) Registry of Closed Remediation Sites. The information on the GIS Registry includes maps showing the location of properties in Wisconsin where groundwater contamination above chapter NR 140 enforcement standards was found at the time that the case was closed. This GIS Registry will be available to the general public on the Department of Natural Resources' internet web site. A map showing the property boundaries in the area and the most recent extent of groundwater contamination is attached for your review, along with a complete legal description of your property. Please review the enclosed legal description of your property and notify me within the next 30 days if the legal description is incorrect.

Should you or any subsequent property owner wish to construct or reconstruct a well on your property, special well construction standards may be necessary to protect the well from the residual groundwater contamination. Any well driller who proposes to construct a well on your property in the future will first need to call the Diggers Hotline (800-242-8511) if your property is located outside of the service area of a municipally owned water system, or contact the Drinking Water program within the Department of Natural Resources if your property is located within the designated service area of a municipally owned water system, to determine if there is a need for special well construction standards.

Once the Department makes a decision on this closure request, it will be documented in a letter. If the Department grants closure, you may obtain a copy of this letter by requesting a copy from the owner, the City of Baraboo, by writing to the agency address given above or by accessing the DNR GIS Registry of Closed Remediation Sites on the Internet at [www.dnr.state.wi.us/org/at/et/geo/gwur](http://www.dnr.state.wi.us/org/at/et/geo/gwur). A copy of the closure letter is included as part of the site file on the GIS Registry of Closed Remediation Sites.

If you need more information, you may contact me at 800-362-4505 or you may contact, Hank Kuehling, at the Wisconsin Department of Natural Resources (608-275-3286).

Sincerely,

MSA Professional Services, Inc.



Kenneth S. Gradall  
Hydrogeologist

KSG:tjr

cc: Terry Kramer, City of Baraboo  
Hank Kuehling, WDNR  
Richard Lyster, MSA



January 16, 2006

Mr. Chuck Bongard, City Engineer  
City of Baraboo  
135 4<sup>th</sup> Street  
Baraboo, WI 53913

Re: Notification of Soil Contamination  
Baraboo City Garage, 407 Briar Street, Baraboo

Dear Mr. Bongard:

Soil contamination that appears to have originated on the Baraboo City Garage property located at 407 Briar Street, Baraboo has migrated into the adjacent City of Baraboo right-of-way (ROW). The concentrations of benzene in the soil in the ROW exceeded the generic residual soil concentrations (GRCLs) found in chapter NR 720, Wisconsin Administrative Code. Soil contamination was detected within the ROW at boring B10 starting at approximately 19 ft below the ground surface (bgs), and extended to approximately 56 ft bgs. The approximate extent of the soil contamination is shown on the attached figure (Figure 8). There is currently no evidence of groundwater contamination within the Briar St. ROW.

MSA Professional Services, Inc. believes natural attenuation will complete the cleanup at this site to meet the requirements for case closure that are found in chapter NR 726, Wisconsin Administrative Code. The owner of the 407 Briar Street property, the City of Baraboo, will be requesting the Department of Natural Resources accept natural attenuation as the final remedy for this site and grant case closure. Closure means that the Department will not be requiring any further investigation or cleanup action to be taken, other than the reliance on natural attenuation.

This notification was a condition of site closure required by the WDNR in NR 726.05(2)(b)4. The WDNR BRRTs number for the site is 03-57-001666. Please contact me if you have any questions concerning this notification. You may also contact Mr. Hank Kuehling, at the Wisconsin Department of Natural Resources (1-608-275-3286) with any questions you have concerning this notification.

Sincerely,

MSA Professional Services, Inc.

Kenneth S. Gradall  
Hydrogeologist  
KSG:tjr

cc: Terry Kramer, City of Baraboo  
Hank Kuehling, WDNR  
Richard Lyster, MSA

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*Offices in Illinois, Iowa, Minnesota, and Wisconsin*

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608-356-2771 • 1-800-362-4505  
FAX: 608-356-2770 • www.msa-ps.com

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