## GIS REGISTRY INFORMATION

**SITE NAME:** Former Mobil Service Station 05-MWQ

**BRRTS #:** 03-68-002855 | **FID # (if appropriate): 268281420**

**COMMERCE # (if appropriate):** 53186-7474-00

**CLOSURE DATE:** 04/20/2004

**STREET ADDRESS:** 300 W. Sunset Drive

**CITY:** Waukesha

**SOURCE PROPERTY GPS COORDINATES** (meters in WTM91 projection): X= 664091 Y= 281062

**CONTAMINATED MEDIA:** Groundwater [x] Soil [ ] Both [ ]

**OFF-SOURCE GW CONTAMINATION >ES:** [ ] Yes [x] No

**IF YES, STREET ADDRESS 1:**

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

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

**IF YES, STREET ADDRESS 1:**

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

**CONTAMINATION IN RIGHT OF WAY:** [ ] Yes [x] No

**DOCUMENTS NEEDED:**

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

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

WISCONSIN
DEPT. OF NATURAL RESOURCES

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

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

April 20, 2004

Mr. Jeff Johnson
ExxonMobil Refinery and Supply Company
P.O. Box 874
Joliet, IL 60434

FID# 268281420
BRRTS# 03-68-002855

Subject: Final Case Closure for the Former Mobil Service Station 05-MWQ, 300 W. Sunset Drive, Waukesha

Dear Mr. Johnson:

On November 30, 1999, you were notified that conditional closure was granted to this case. On November 1, 2003, the Department received correspondence indicating that you had complied with the conditions of closure. These conditions were the abandonment of monitoring wells and the placement of a groundwater use restriction on the property. Due to changes in closure criteria that occurred between the date of the conditional closure and the receipt of the documents indicating that those conditions had been met, the Department was unable to grant final closure. Your consultant was notified by the Department that a groundwater GIS registry and fee would now be required to close the site. On March 23, 2004, the GIS packet and fee were received by the Department. 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. Information that was submitted with your closure request application will be included on the registry. To review the sites on the GIS Registry web page, visit http://gomapout.dnr.state.wi.us/org/at/et/geo/gwur/index.htm If your property is listed on the GIS Registry due to groundwater contamination exceeding ch. NR 140 standards at the time of closure, 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 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line at the web address listed above.

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. If there is equipment purchased with PECFA funds remaining at the site, contact the Commerce PECFA Program to determine the method for salvaging the equipment.

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 (262) 574-2140.

Sincerely,

Brenda H. Boyce

Brenda H. Boyce, P.G.
Hydrogeologist
Bureau for Remediation & Redevelopment

cc: Cynthia Draves - Handex

WISCONSIN
DEPT. OF NATURAL RESOURCES

**State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES**

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Annex
4041 North Richards Street
PO Box 12436
Milwaukee, Wisconsin 53212-0436
Telephone 414-229-0800
FAX 414-229-0810

November 30, 1999

Mr. Michael Holland
Mobil Oil Corporation
Joliet Refinery
P.O. Box 874
Joliet, Illinois 60434

Subject: Request for closure, Mobil Oil Service Station 05-MWQ, 300 West Sunset Drive, Waukesha, Wisconsin. BRR-LUST FID#268281420

Dear Mr. Holland:

We have reviewed the referenced case file for closure. Based on the information provided, we concur with your environmental consultant's recommendation of case closure and require no further action at this site conditional upon the following:

1. Placement of a groundwater use restriction on the title of the property, and submittal of documentation that the groundwater use restriction has been placed on the title of the deed.
2. Abandonment of the groundwater monitoring wells at the site in accordance with NR 141 and submittal of the abandonment forms to the Department.

Once the department receives the abandonment forms and documentation that the groundwater use restriction has been placed on the deed, this case will be tracked as closed on the department's tracking system. As always, the department reserves the right to require additional investigation and/or remediation if it is shown that contamination from this site is a threat to the environment, public welfare and/or health. If you have any questions about this letter, please call me at 414-263-8589.

Sincerely,

Gina Keenan
Hydrogeologist

cc: Handex
SER case file

DOCUMENT NO.

1908620

STATE BAR OF WISCONSIN FORM 3 - 1982
QUIT CLAIM DEED

THIS SPACE RESERVED FOR RECORDING DATA

REGISTER'S OFFICE
WAUKESHA COUNTY, WIS } SS

93 NOV 29 PM 1:20

REEL 1834 IMAGE 1116

REGISTER OF DEEDS

1908620

RETURN TO Hunter & SOMMERS
P.O.Box 1136
Waukesha WI 53187

Mobil Oil Corporation, a New York corporation

quit-claims to Paul Colburn and Carol Colburn, husband and wife, as survivorship marital property

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

Tax Parcel No.: 1336 946

Rel 10-

All that part of the West One Half of the South East One Quarter of Section No. 10, Township No. 6 North, Range No. 19 East, in the City of Waukesha, Waukesha County, Wisconsin, described as follows: Commencing at a point on the south line of the said quarter section distant North 88 degrees 25 minutes East 1117.00 feet from the south quarter section corner of the said section; thence North 205.00 feet; thence North 88 degrees 25 minutes East 155 feet more or less to the West line of Grand Avenue; thence South along the West line of Grand Avenue 205 feet to section line and thence South 88 degrees 25 minutes West 155 feet more or less to the place of beginning; excluding that portion of land in Quit Claim Deed between Mobil Oil Corporation and the City of Waukesha, a municipal corporation, recorded as document no. 1193547; Reel 511, Image 086, dated October 8, 1982, containing 7,750 square feet.

TRANSFER
$ 460 00
FEE

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

Dated as of this 29th day of October, 19 93.

arcw 10/5/93

MOBIL OIL CORPORATION

(SEAL)

*

(SEAL)

*

By: (SEAL)

Name: J.D. HANLEY

Title: ASSISTANT TREASURER

(SEAL)

* G.G. GARNEY SR. ASST. SECRETARY

AUTHENTICATION

Signature(s)

authenticated this ___ day of _____, 19 ___

*

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

THIS INSTRUMENT WAS DRAFTED BY

Hugh J. O'Halloran

of Foley & Lardner - Milwaukee

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

ACKNOWLEDGMENT

STATE OF ~~WISCONSIN~~ VIRGINIA )
) ss.
Fairfax County. )

Personally came before me this 11th day of OCTOBER, 19 93 the above named J.D. HANLEY, the ASSISTANT TREASURER of MOBIL OIL CORPORATION

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

*

Notary Public Walter Wojcik, VA County, ~~Wis.~~ Fairfax

My Commission is permanent. (If not, state expiration date: _____, 19____.)

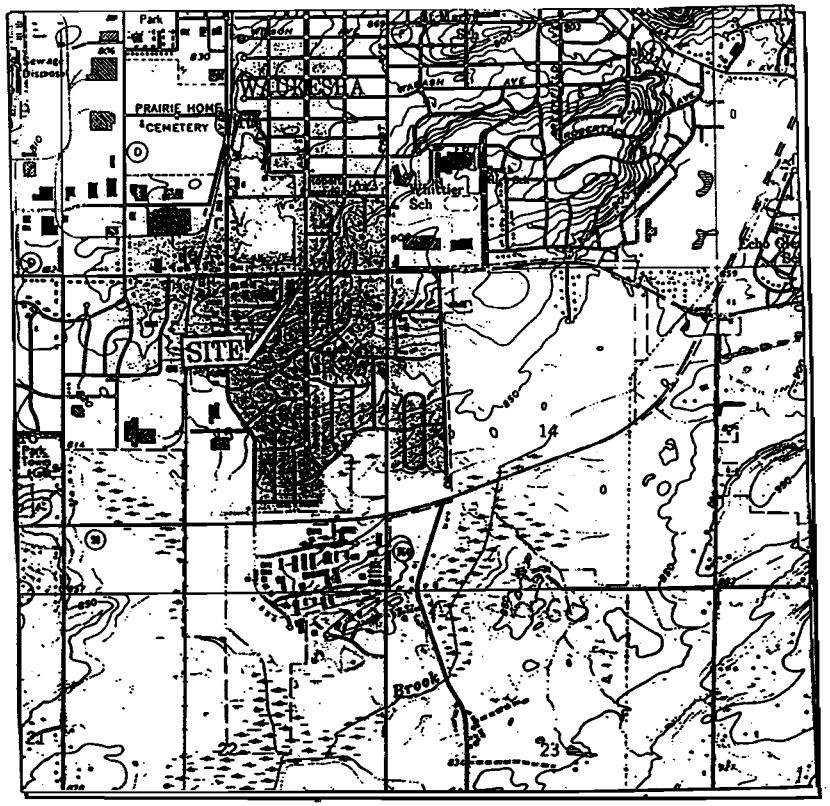
WALTER WOJCIK
Commission Expires Sept. 30, 1994
Notary Public, Commonwealth of Virginia

QUIT CLAIM DEED

STATE BAR OF WISCONSIN
FORM No. 3 - 1982

Colburn's Auto Service (Mobil 05-MWQ)
WTM Coordinates: 664091, 281062

| NO. | REVISIONS | DATE | BY | CHKD |
|---|---|---|---|---|
| | | | | |




SCALE 1:24000

1 ½ 0 1 MILE

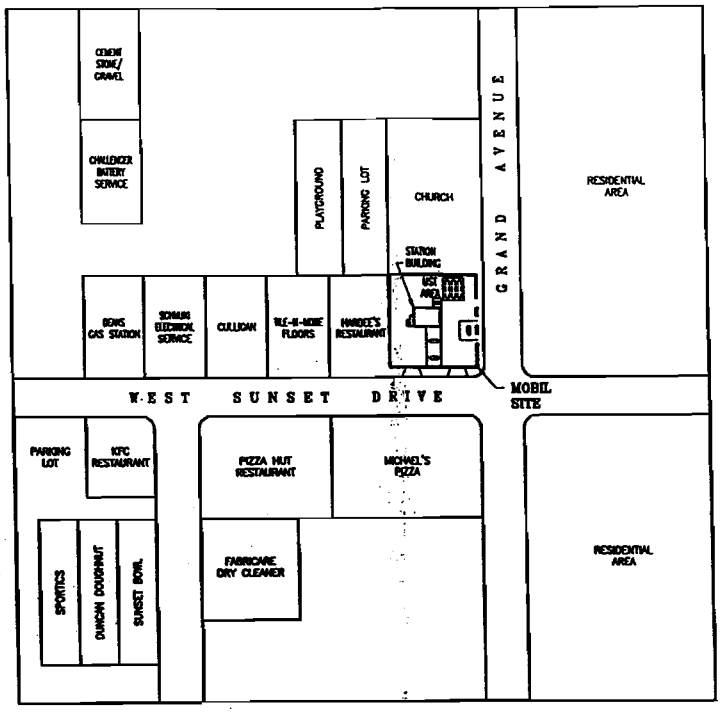
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

MUSKEGO QUADRANGLE
WAUKESHA, WAUKESHA COUNTY, WISCONSIN
7.5 MINUTE SERIES (TOPOGRAPHIC)

QUADRANGLE LOCATION

N




SCHEMATIC OF SURROUNDING AREA
NOT TO SCALE

Handex OF WISCONSIN
16940 VICTOR ROAD
NEW BERLIN, WI 53151
(414) 641-9011

# MOBIL OIL CORPORATION

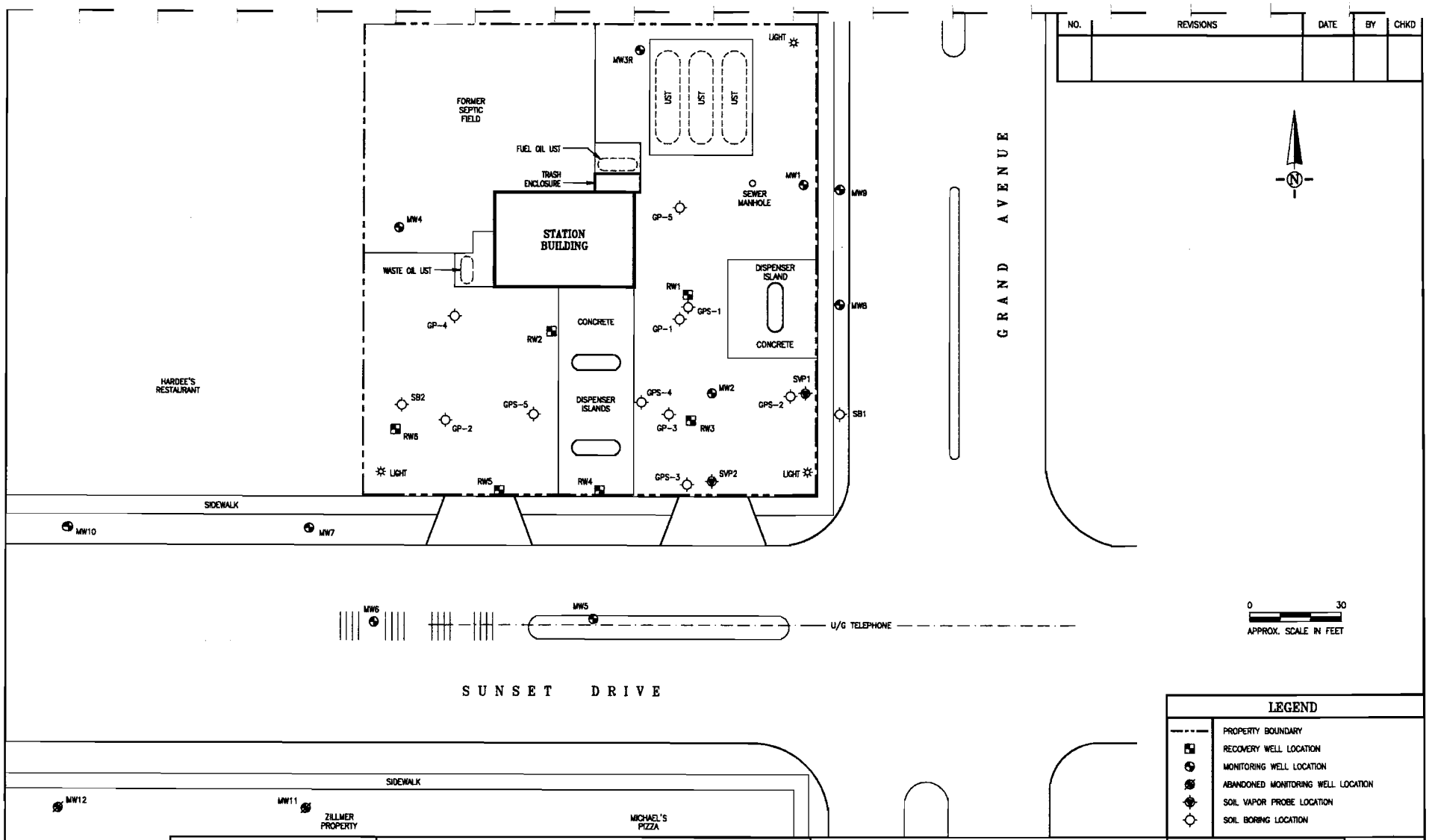
Marketing & Refining Division – U.S.
Marketing Operations Department
Environmental Engineering Group
Fairfax, Virginia 22037

SITE LOCATION MAP
MOBIL SERVICE STATION # 05-MWQ
300 WEST SUNSET DRIVE
WAUKESHA, WAUKESHA COUNTY, WISCONSIN

| | |
|---|---|
| DRAWN BY: | M. SMITH |
| CHECKED BY: | – |
| SCALE: | AS NOTED |
| DATE: | 11/22/98 |
| DRAWING FILE: | 116891 |

FIGURE 1

081SL2




| NO. | REVISIONS | DATE | BY | CHKD |
|---|---|---|---|---|
| | | | | |

## LEGEND

| | |
|---|---|
| — · — | PROPERTY BOUNDARY |
| ■ | RECOVERY WELL LOCATION |
| ● | MONITORING WELL LOCATION |
| ● | ABANDONED MONITORING WELL LOCATION |
| ◆ | SOIL VAPOR PROBE LOCATION |
| ○ | SOIL BORING LOCATION |

Handex OF WISCONSIN
16940 VICTOR ROAD
NEW BERLIN, WI 53151
(262) 641-9011

# MOBIL OIL CORPORATION

Marketing & Refining Division – U.S.
Marketing Operations Department
Environmental Engineering Group
Fairfax, Virginia 22037

**SITE MAP**
MOBIL SERVICE STATION # 05-MWQ
300 WEST SUNSET DRIVE
WAUKESHA, WAUKESHA COUNTY, WISCONSIN

| | |
|---|---|
| DRAWN BY: | M. SMITH |
| CHECKED BY: | – |
| SCALE: | 1" = 30' |
| DATE: | 2/16/01 |
| DRAWING FILE: | 116891 |

FIGURE 2

801SM1A

# GROUNDWATER LABORATORY ANALYTICAL RESULTS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| Well Number | Sample Date | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | Total TMB (µg/L) |
|---|---|---|---|---|---|---|---|
| MW-1 | 05/12/1992 | **75** | *460* | **1,100** | *1,280* | *55* | *444* |
| | 07/14/1992 | **84** | *330* | **740** | 900 | <0.16 | *420* |
| | 07/26/1993 | **139** | **2,060** | **3,500** | *4,411* | <0.16 | **972** |
| | 05/03/1995 | **5.30** | 110 | *560* | 253 | <0.16 | 80.8 |
| | 08/11/1995 | **5.60** | 19 | *360* | 156 | <0.16 | 9.60 |
| | 11/01/1995 | 0.30 | 1.40 | *140* | 4.0 | <0.16 | <8.29 |
| | 02/15/1996 | <0.13 | <0.20 | 22.00 | 1.50 | <0.16 | <1.69 |
| | 05/15/1996 | **57** | <0.20 | <0.22 | 12.00 | <0.16 | <12.29 |
| | 08/06/1996 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 11/21/1996 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/25/1997 | <0.13 | <0.20 | 0.40 | <0.23 | <0.16 | <0.51 |
| | 05/28/1997 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/03/1997 | *0.50* | <0.20 | 13 | <0.23 | <0.16 | <0.51 |
| | 11/20/1997 | *0.80* | 0.20 | 29 | <0.90 | <0.20 | <0.99 |
| | 02/19/1998 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 2/19/98 Dup | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 04/23/1998 | *2.30* | 8.80 | *180* | 93.70 | <0.20 | <21.30 |
| | 02/03/1999 | <0.13 | <0.20 | 0.78 | <0.23 | <0.16 | <0.51 |
| | 04/12/1999 | 0.14 | <0.20 | 6.0 | 1.30 | 3.80 | 1.09 |
| | 10/16/2000 | <1.3 | 17 | *1,100* | 160 | <1.6 | *233.4* |
| MW-2 | 05/12/1992 | **890** | **12,000** | **5,200** | **14,300** | **280** | **2,208.2** |
| | 07/14/1992 | **1,400** | **7,300** | **3,800** | **11,300** | **120** | **2,540** |
| | 07/26/1993 | **231** | **2,900** | **1,700** | *4,940* | <0.16 | **3,190** |
| | 05/03/1995 | **350** | **2,900** | **2,600** | *5,800* | <0.16 | **1,498** |
| | 08/11/1995 | **300** | **2,300** | **4,300** | **11,000** | <0.16 | **3,726** |
| | 11/01/1995 | **90** | *370* | **2,100** | *2,630* | <0.16 | **1,540** |
| | 02/15/1996 | **24** | 99 | **573** | 547 | 4.30 | *298* |
| | 05/15/1996 | **22** | *430* | **893** | *1,108* | <0.16 | *326* |
| | 08/06/1996 | **20** | **1,160** | **1,450** | *2,107* | <0.16 | *466* |
| | 11/21/1996 | **18** | 178 | **1,120** | 699 | <0.16 | *348* |
| | 02/25/1997 | *0.80* | 1.40 | *190* | 72.40 | <0.16 | 88 |
| | 05/28/1997 | **55** | **1,600** | **2,500** | *5,800* | <0.16 | **1,303** |
| | 09/03/1997 | **63** | 140 | **2,900** | *3,220* | <0.16 | **1,240** |
| | 9/3/97 Dup | **71** | *200* | **2,700** | *4,800* | <0.16 | **1,297** |
| | 11/20/1997 | **42** | 74 | **2,400** | *1,280* | <4.0 | **600** |
| | 02/19/1998 | **12** | 69 | **1,000** | 980c | *13* | *450* |
| | 04/23/1998 | <10 | 180 | **1,100** | *4,200* | <10 | **624** |
| | 02/03/1999 | **35** | 22 | *280* | 310 | 9.70 | 81.80 |
| | 04/12/1999 | **75** | 85 | *400* | 710 | <1.6 | *155.40* |
| | 10/16/2000 | **180** | 23 | *150* | 160 | <3.2 | *105.80* |
| **NR 140 Standards** | | | | | | | |
| | **ES** | **5.0** | **1,000** | **700** | **10,000** | **60** | **480** |
| | *PAL* | *0.5* | *200* | *140* | *1,000* | *12* | *96* |

**Notes:**
**µg/L = micrograms per liter.**
**PAL = Preventive Action Limit, Chapter NR 140.10, Wisconsin Administrative Code.**
**ES = Enforcement Standard, Chapter 140.10, Wisconsin administrative Code.**
**MTBE = Methyl tert butyl ether.**
**TMB = Total Trimethylbenzene**
**c = Standard outside of control limits**
**---- sample not analyzed**

# GROUNDWATER LABORATORY ANALYTICAL RESULTS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| Well Number | Sample Date | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | Total TMB (µg/L) |
|---|---|---|---|---|---|---|---|
| MW-3 | 05/12/1992 | **16** | 3.80 | <0.22 | <0.23 | 11.0 | *121.60* |
| | 07/14/1992 | *2.40* | <0.20 | <0.22 | <0.23 | 6.50 | <0.51 |
| | 07/26/1993 | <0.13 | <0.20 | <0.22 | <0.23 | 11.7 | <0.51 |
| MW-3R | 04/23/1998 | <0.20 | <0.20 | <0.30 | <0.90 | 0.30 | <0.59 |
| | 04/12/1999 | **11.0** | 0.37 | <0.22 | 0.94 | <3.5 | <0.51 |
| MW-4 | 05/12/1992 | <0.13 | 9.70 | 2.0 | 6.30 | 10.0 | <3.0 |
| | 07/14/1992 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 07/26/1993 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/03/1995 | <0.13 | <0.20 | <0.22 | <0.23 | *32.00* | <0.51 |
| | 05/15/1996 | <0.13 | <0.20 | <0.22 | <0.23 | *35.00* | <0.51 |
| | 05/28/1997 | <0.13 | <0.20 | <0.22 | <0.23 | 2.00 | <0.51 |
| | 04/23/1998 | <0.20 | <0.20 | <0.30 | <0.90 | 3.20 | <0.60 |
| | 09/02/1998 | *1.70* | <0.20 | <0.22 | 1.60 | 10.00 | <0.51 |
| | 04/12/1999 | *0.87* | <0.20 | <0.22 | <0.23 | *30.00* | <0.51 |
| | 4/12/99 Dup | *0.90* | <0.20 | <0.22 | <0.23 | *33.00* | <0.51 |
| | 10/16/2000 | <0.13 | <0.20 | <0.22 | <0.23 | 0.47 | <0.51 |
| MW-5 | 07/26/1993 | **21.60** | 3.00 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/03/1995 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 11/01/1995 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/15/1996 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/28/1997 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/03/1997 | <0.13 | <0.20 | 0.40 | <0.23 | <0.16 | <0.59 |
| | 11/20/1997 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 02/19/1998 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 04/23/1998 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 09/02/1998 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/03/1999 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/12/1999 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 10/16/2000 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| **NR 140 Standards** | | | | | | | |
| | **ES** | **5.0** | **1,000** | **700** | **10,000** | **60** | **480** |
| | *PAL* | *0.5* | *200* | *140* | *1,000* | *12* | *96* |

**Notes:**
**µg/L = micrograms per liter.**
**PAL = Preventive Action Limit, Chapter NR 140.10, Wisconsin Administrative Code.**
**ES = Enforcement Standard, Chapter 140.10, Wisconsin administrative Code.**
**MTBE = Methyl tert butyl ether.**
**TMB = Total Trimethylbenzene**
**c = Standard outside of control limits**
**---- sample not analyzed**

# GROUNDWATER LABORATORY ANALYTICAL RESULTS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| Well Number | Sample Date | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | Total TMB (µg/L) |
|---|---|---|---|---|---|---|---|
| MW-6 | 07/26/1993 | **2,770** | **1,070** | *670* | 749 | *59.30* | 44.0 |
| | 05/03/1995 | **3,800** | <0.20 | **840** | 240 | *43* | <0.51 |
| | 08/11/1995 | **2,000** | <0.20 | *540* | <0.23 | **61** | <13.22 |
| | 11/01/1995 | **820** | <0.20 | *210* | 76 | *19* | <0.51 |
| | 02/15/1996 | **85** | 0.40 | 33 | 0.90 | *16* | <0.99 |
| | 05/15/1996 | **8.30** | <0.20 | 4.80 | <0.23 | 3.40 | <0.29 |
| | 08/06/1996 | *4.20* | <0.20 | 0.50 | <0.23 | 2.60 | <0.51 |
| | 11/21/1996 | *1.20* | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/25/1997 | <0.13 | <0.20 | <0.22 | <0.23 | 0.40 | <0.51 |
| | 2/25/97 Dup | <0.13 | <0.20 | <0.22 | <0.23 | 1.10 | <0.51 |
| | 05/28/1997 | <0.13 | <0.20 | <0.22 | <0.23 | 2.30 | <0.51 |
| | 09/03/1997 | *0.70* | 0.20 | 0.50 | 0.30 | 4.60 | <0.49 |
| | 11/20/1997 | <0.20 | <0.20 | 0.70 | <0.90 | 4.00 | <0.90 |
| | 02/19/1998 | *1.40* | <0.20 | <0.30 | <0.90 | 7.90 | <0.60 |
| | 04/23/1998 | **52** | <0.20 | <0.30 | <0.90 | 6.20 | <0.60 |
| | 09/02/1998 | **17** | <0.20 | 0.41 | 0.41 | 10.0 | <0.51 |
| | 02/03/1999 | **10** | 0.29 | 0.69 | 0.46 | 11.0 | 0.54 |
| | 04/12/1999 | **360** | 2.50 | 77 | 1.30 | *21.0* | 1.60 |
| | 08/10/1999 | <0.33 | 5.70 | *240* | 54 | <5.7 | 6.01 |
| | 10/29/1999 | 0.47 | 1.70 | 63 | 7.20 | <0.25 | 8.24 |
| | 10/16/2000 | <0.13 | <0.20 | <0.22 | <0.23 | 3.20 | <0.51 |
| MW-7 | 07/26/1993 | **3,380** | 19.10 | *281* | 83.90 | *55.40* | <0.51 |
| | 7/26/93 Dup | **3,560** | 5.70 | *311* | 36.50 | *30.60* | <0.51 |
| | 05/03/1995 | **1,000** | 11 | 120 | 1.90 | <0.16 | <12.29 |
| | 5/3/95 Dup | **750** | 17 | *160* | <0.23 | 3.40 | <19.29 |
| | 11/01/1995 | **1,500** | <0.20 | *340* | 71.0 | *12* | <31.29 |
| | 11/1/95 Dup | **1,500** | 6.00 | *290* | 41.0 | *13* | <24.29 |
| | 05/15/1996 | **77** | <0.20 | 38 | 0.30 | 8.60 | <1.49 |
| | 08/06/1996 | *4.50* | <0.20 | *163* | <0.23 | 3.10 | <0.51 |
| | 8/6/96 Dup | *4.90* | <0.20 | 14 | <0.23 | 3.40 | <0.51 |
| | 11/21/1996 | *1.50* | <0.20 | 2.30 | <0.23 | 0.80 | <0.51 |
| | 11/21/96 Dup | <0.13 | <0.20 | 0.50 | <0.23 | <0.16 | <0.51 |
| | 02/25/1997 | *2.90* | <0.20 | 1.80 | <0.23 | 4.60 | <0.51 |
| | 05/28/1997 | <0.13 | <0.20 | 0.20 | <0.23 | 2.10 | <0.51 |
| | 09/03/1997 | *1.90* | <0.20 | 6.30 | <0.23 | *37* | <1.09 |
| | 11/20/1997 | **30** | <0.20 | 1.80 | <0.90 | *43* | <0.70 |
| | 11/20/97 Dup | **17** | <0.20 | 1.20 | <0.90 | *45* | <0.60 |
| | 01/05/1998 | **30** | <0.20 | 0.50 | <0.90 | *13* | <0.60 |
| | 02/19/1998 | **51** | <0.20 | 3.60 | <0.90 | 5 | <0.60 |
| | 04/23/1998 | **12** | <0.20 | 0.80 | <0.90 | 5.20 | <0.60 |
| | 4/23/98 Dup | **14** | <0.20 | 1.00 | <0.90 | 4.80 | <0.60 |
| | 09/02/1998 | <0.13 | <0.20 | <0.22 | <0.23 | 6.70 | <0.51 |
| | 02/03/1999 | **23** | <0.20 | 0.48 | <0.23 | 2.70 | <0.51 |
| | 04/12/1999 | **73** | <0.20 | 2.00 | 0.60 | 11 | 0.82 |
| | 08/10/1999 | <0.13 | <0.20 | <0.22 | <0.23 | 7.10 | <0.51 |
| | 10/29/1999 | <0.10 | <0.10 | <0.25 | <0.25 | *20* | <0.20 |
| | 10/16/2000 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 10/16/2000 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| **NR 140 Standards** | **ES** | **5.0** | **1,000** | **700** | **10,000** | **60** | **480** |
| | *PAL* | *0.5* | *200* | *140* | *1,000* | *12* | *96* |

**Notes:** **µg/L = micrograms per liter.**
**PAL = Preventive Action Limit, Chapter NR 140.10, Wisconsin Administrative Code.**
**ES = Enforcement Standard, Chapter 140.10, Wisconsin administrative Code.**
**MTBE = Methyl tert butyl ether.**
**TMB = Total Trimethylbenzene**
**c = Standard outside of control limits**
**---- sample not analyzed**

# GROUNDWATER LABORATORY ANALYTICAL RESULTS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| Well Number | Sample Date | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | Total TMB (µg/L) |
|---|---|---|---|---|---|---|---|
| MW-8 | 07/26/1993 | *1.20* | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/03/1995 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/15/1996 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/28/1997 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/23/1998 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 09/02/1998 | <0.13 | <0.16 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/03/1999 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/12/1999 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 10/16/2000 | <0.13 | <0.23 | <0.22 | <0.23 | <0.16 | <0.51 |
| MW-9 | 07/26/1993 | *2.60* | 1.10 | *205* | 39.80 | <0.16 | <2.59 |
| | 05/03/1995 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/15/1996 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/28/1997 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/23/1998 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 04/12/1999 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 10/16/2000 | <0.13 | <0.20 | <0.22 | <0.23 | 0.53 | <0.51 |
| MW-10 | 08/03/1995 | <0.13 | <0.20 | <0.22 | <0.23 | **71** | <0.51 |
| | 11/01/1995 | <0.13 | <0.20 | <0.22 | <0.23 | *25* | <0.51 |
| | 02/15/1996 | <0.13 | <0.20 | <0.22 | <0.23 | 8.40 | <0.51 |
| | 05/15/1996 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/28/1996 | <0.13 | <0.20 | <0.22 | <0.23 | 5.10 | <0.51 |
| | 04/12/1999 | <0.13 | <0.20 | <0.22 | <0.23 | *13* | <0.51 |
| | 10/16/2000 | <0.13 | <0.20 | <0.22 | <0.23 | 7.20 | <0.51 |
| MW-11 | 05/28/1997 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 06/30/1997 | Well abandoned | | | | | |
| MW-12 | 05/28/1997 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 06/30/1997 | Well abandoned | | | | | |
| SVP-1 | 05/04/1995 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/15/1996 | <0.13 | <0.20 | <0.22 | <0.23 | 1.00 | <0.51 |
| | 05/28/1997 | 0.20 | <0.20 | <0.22 | 0.40 | 1.60 | <0.51 |
| SVP-2 | 05/04/1995 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/15/1996 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 05/28/1997 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| **NR 140 Standards** | | | | | | | |
| | **ES** | **5.0** | **1,000** | **700** | **10,000** | **60** | **480** |
| | *PAL* | *0.5* | *200* | *140* | *1,000* | *12* | *96* |

**Notes:** **µg/L = micrograms per liter.**
**PAL = Preventive Action Limit, Chapter NR 140.10, Wisconsin Administrative Code.**
**ES = Enforcement Standard, Chapter 140.10, Wisconsin administrative Code.**
**MTBE = Methyl tert butyl ether.**
**TMB = Total Trimethylbenzene**
**c = Standard outside of control limits**
**---- sample not analyzed**

# GROUNDWATER LABORATORY ANALYTICAL RESULTS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| Well Number | Sample Date | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | Total TMB (µg/L) |
|---|---|---|---|---|---|---|---|
| RW-1 | 08/11/1995 | **250** | *960* | *160* | *1,050* | <0.16 | **1,546** |
| | 11/01/1995 | **2,000** | **6,800** | **1,800** | *6,200* | <0.16 | **1,990** |
| | 02/15/1996 | **2,980** | **8,750** | **1,220** | *7,770* | **939** | **2,072** |
| | 05/15/1996 | **296** | **1,490** | *626* | *2,122* | **229** | **527** |
| | 11/21/1996 | **1,070** | *345* | <0.22 | *3,330* | *59* | **1,303** |
| | 05/27/1997 | **1,000** | *290* | *280* | *1,850* | *25* | **1,260** |
| | 09/03/1997 | **40** | *450* | *350* | *2,800* | <5 | **1,550** |
| | 11/20/1997 | **23** | *200* | *150* | *2,560* | 1.20 | **1,640** |
| | 02/19/1998 | **10** | 180 | *330* | *2,620* | <10 | **2,040** |
| | 04/23/1998 | *4* | 87 | *220* | *1,600* | <2.0 | **1,650** |
| | 02/03/1999 | **6.50** | 13 | 56 | 390 | 2.40 | **1,110** |
| | 04/29/1999 | Recovery Well Abandoned | | | | | |
| RW-2 | 08/11/1995 | **6,500** | **5,500** | **1,200** | *4,100* | **200** | **730** |
| | 11/01/1995 | **2,500** | **7,300** | **1,400** | *6,100* | <0.16 | **1,180** |
| | 02/15/1996 | **498** | **9,240** | **2,040** | **10,880** | *47* | **2,896** |
| | 05/15/1996 | **2,790** | **7,540** | **1,530** | *6,730* | **691** | **1,422** |
| | 11/21/1996 | **2,160** | **5,870** | *596* | *5,630* | **163** | **1,418** |
| | 05/27/1997 | **1,700** | **2,300** | *630* | *3,000* | **250** | **750** |
| | 09/03/1997 | **440** | *520* | *420* | *1,300* | **150** | **520** |
| | 11/20/1997 | **470** | *280* | *420* | *1,270* | **190** | **520** |
| | 02/19/1998 | **550** | *330* | *400* | 820 | **300** | *370* |
| | 04/23/1998 | **360** | 54 | *270* | 510 | **200** | *313* |
| | 02/03/1999 | **190** | 12 | *160* | 230 | **290** | *166* |
| | 08/10/1999 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 10/29/1999 | <0.10 | <0.10 | <0.25 | <0.25 | <0.25 | <0.20 |
| | 04/29/1999 | Recovery Well Abandoned | | | | | |
| RW-3 | 08/11/1995 | **210** | **1,800** | **830** | *4,600* | <0.16 | **1,250** |
| | 11/01/1995 | **330** | **2,400** | **1,100** | *5,600* | <0.16 | **1,480** |
| | 02/15/1996 | **25** | 10 | 33 | 906 | <0.16 | **715** |
| | 05/15/1996 | **15** | 20 | 5 | 340 | <0.16 | *119* |
| | 11/21/1996 | **69** | 38 | 46 | 253 | 4 | *124* |
| | 05/27/1997 | **1,000** | 60 | **4,200** | *2,320* | *40* | **3,770** |
| | 09/03/1997 | <0.20 | 1.50 | 5.40 | 13.80 | <0.20 | 11.20 |
| | 11/20/1997 | *0.60* | 1.50 | 25 | 23.80 | <0.20 | 25.30 |
| | 04/23/1998 | <0.30 | <0.20 | 0.60 | <0.90 | <0.20 | <1.0 |
| | 02/03/1999 | 0.29 | <0.20 | 4.90 | 1.90 | <0.16 | 5.49 |
| | 04/29/1999 | Recovery Well Abandoned | | | | | |
| **NR 140 Standards** | | | | | | | |
| | **ES** | **5.0** | **1,000** | **700** | **10,000** | **60** | **480** |
| | *PAL* | *0.5* | *200* | *140* | *1,000* | *12* | *96* |

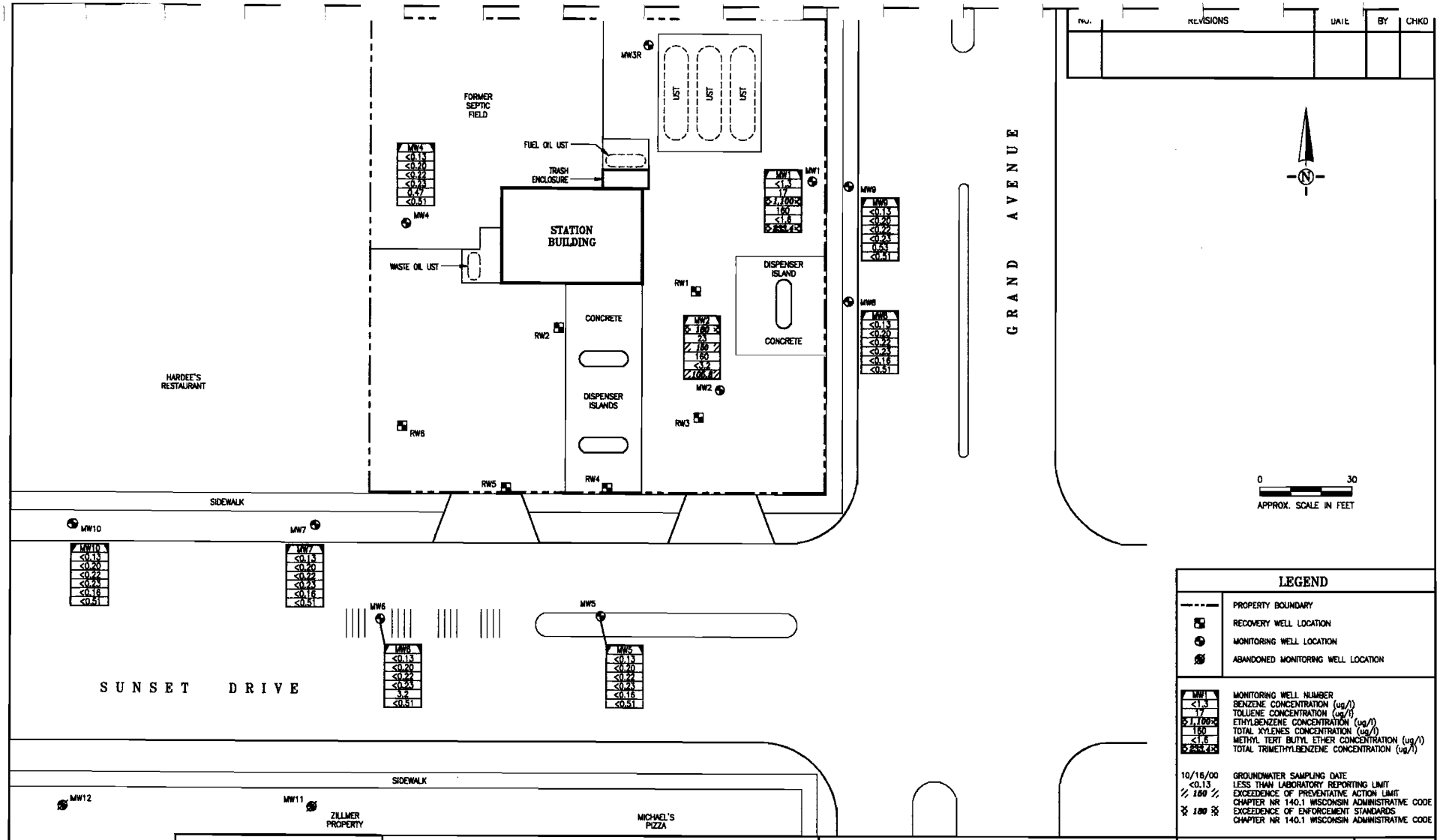
**Notes:** **µg/L = micrograms per liter.**
**PAL = Preventive Action Limit, Chapter NR 140.10, Wisconsin Administrative Code.**
**ES = Enforcement Standard, Chapter 140.10, Wisconsin administrative Code.**
**MTBE = Methyl tert butyl ether.**
**TMB = Total Trimethylbenzene**
**c = Standard outside of control limits**
**---- sample not analyzed**

# GROUNDWATER LABORATORY ANALYTICAL RESULTS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| Well Number | Sample Date | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | Total TMB (µg/L) |
|---|---|---|---|---|---|---|---|
| RW-4 | 08/11/1995 | **700** | **1,800** | *460* | *2,790* | <0.16 | **1,070** |
| | 11/01/1995 | **3,000** | **8,800** | **1,600** | *7,000* | <0.16 | **1,790** |
| | 05/15/1996 | **1,540** | **1,020** | 66 | *2,127* | <0.16 | *447* |
| | 11/21/1996 | **782** | *748* | 100 | *2,920* | 11.00 | **1,126** |
| | 05/27/1997 | **950** | *260* | 30 | 560 | <10 | *335* |
| | 09/03/1997 | **14** | 10 | 13 | 121 | <0.20 | *122* |
| | 11/20/1997 | **13** | 6 | 6.80 | 253 | <0.20 | *203* |
| | 02/19/1998 | *2.10* | 2.10 | 2.30 | 88 | <0.20 | 90 |
| | 04/23/1998 | <0.20 | <0.20 | 0.30 | <2.0 | <0.20 | <0.60 |
| | 09/02/1998 | **19** | 4.80 | 21 | 72 | <0.66 | 58.40 |
| | 02/03/1999 | **39** | 7.90 | 70 | 350 | 4.90 | *167* |
| | 04/29/1999 | Recovery Well Abandoned | | | | | |
| RW-5 | 08/11/1995 | **2,600** | **3,800** | **1,100** | *6,500* | <0.16 | **2,040** |
| | 11/01/1995 | **7,500** | **34,000** | **4,500** | **19,100** | <0.16 | **4,560** |
| | 05/15/1996 | **91** | 23 | <0.22 | *1,747* | **87** | **653** |
| | 11/21/1996 | **2,220** | **2,050** | *353* | *4,360* | **81** | **1,646** |
| | 05/27/1997 | **450** | *210* | *170* | *1,240* | *12* | **720** |
| | 09/03/1997 | **78** | 86 | 92 | 870 | 3 | **570** |
| | 11/20/1997 | **340** | 16 | 6 | 840 | <4.0 | **560** |
| | 02/19/1998 | **30** | 13 | 4 | 460 | <1.0 | *340* |
| | 04/23/1998 | **14** | 5.80 | 2.90 | 270 | <0.20 | *270* |
| | 09/02/1998 | **16** | 5.10 | 8.20 | 250 | <0.32 | *157* |
| | 02/03/1999 | **48** | 8.50 | 7.90 | 600 | <2.5 | *361* |
| | 2/3/99 (Dup) | **52** | 9.30 | 11.0 | 580 | 4.70 | *417* |
| | 08/10/1999 | <0.73 | <0.20 | <0.22 | <0.23 | *58* | <0.51 |
| | 8/10/99 (Dup) | *0.87* | <0.20 | <0.22 | <0.23 | **74** | <0.51 |
| | 10/29/1999 | 0.19 | <0.10 | <0.25 | <0.25 | **80** | <0.20 |
| | 10/29/1999 Dup | 0.11 | <0.10 | <0.25 | <0.25 | **64** | <0.20 |
| RW-6 | 11/01/1995 | **600** | **23,000** | **1,700** | *9,400* | <0.16 | **1,810** |
| | 05/15/1996 | **404** | *366* | 39 | *2,071* | **92** | **649** |
| | 11/21/1996 | **391** | *366* | 80 | *1,162* | *12* | **531** |
| | 05/27/1997 | **130** | <1.0 | 100 | <4.0 | **340** | <5.5 |
| | 04/23/1998 | **2,000** | **1,300** | *280* | 800 | *15* | <115 |
| | 02/03/1999 | **6,300** | **1,500** | **950** | *2,500* | 6.80 | *426* |
| | 08/10/1999 | **790** | 40 | *480* | 550 | <4.0 | *123* |
| | 10/29/1999 | **540** | 26 | *340* | 100 | <5.0 | *140* |
| **NR 140 Standards** | | | | | | | |
| | **ES** | **5.0** | **1,000** | **700** | **10,000** | **60** | **480** |
| | *PAL* | *0.5* | *200* | *140* | *1,000* | *12* | *96* |

**Notes:**
**µg/L = micrograms per liter.**
**PAL = Preventive Action Limit, Chapter NR 140.10, Wisconsin Administrative Code.**
**ES = Enforcement Standard, Chapter 140.10, Wisconsin administrative Code.**
**MTBE = Methyl tert butyl ether.**
**TMB = Total Trimethylbenzene**
**c = Standard outside of control limits**
**---- sample not analyzed**




| NO. | REVISIONS | DATE | BY | CHKD |
|---|---|---|---|---|
| | | | | |

## LEGEND

| | |
|---|---|
| — — — | PROPERTY BOUNDARY |
| | RECOVERY WELL LOCATION |
| | MONITORING WELL LOCATION |
| | ABANDONED MONITORING WELL LOCATION |
| MW1 | MONITORING WELL NUMBER |
| <1.3 | BENZENE CONCENTRATION (ug/l) |
| 17 | TOLUENE CONCENTRATION (ug/l) |
| 5,700 | ETHYLBENZENE CONCENTRATION (ug/l) |
| 160 | TOTAL XYLENES CONCENTRATION (ug/l) |
| <1.6 | METHYL TERT BUTYL ETHER CONCENTRATION (ug/l) |
| 5,554.4 | TOTAL TRIMETHYLBENZENE CONCENTRATION (ug/l) |
| 10/16/00 | GROUNDWATER SAMPLING DATE |
| <0.13 | LESS THAN LABORATORY REPORTING LIMIT |
| // 160 // | EXCEEDENCE OF PREVENTATIVE ACTION LIMIT CHAPTER NR 140.1 WISCONSIN ADMINISTRATIVE CODE |
| ※ 160 ※ | EXCEEDENCE OF ENFORCEMENT STANDARDS CHAPTER NR 140.1 WISCONSIN ADMINISTRATIVE CODE |


Handex OF WISCONSIN
16940 VICTOR ROAD
NEW BERLIN, WI 53151
(262) 641-9011


# MOBIL OIL CORPORATION

Marketing & Refining Division – U.S.
Marketing Operations Department
Environmental Engineering Group
Fairfax, Virginia 22037

## GROUNDWATER ANALYTICAL RESULTS MAP (10/16/00)

MOBIL SERVICE STATION # 05-MWQ
300 WEST SUNSET DRIVE
WAUKESHA, WAUKESHA COUNTY, WISCONSIN

| | |
|---|---|
| DRAWN BY: | M. SMITH |
| CHECKED BY: | – |
| SCALE: | 1" = 30' |
| DATE: | 2/16/01 |
| DRAWING FILE: | 116891 |

FIGURE 3

8910A3

## GROUNDWATER ELEVATIONS AND NATURAL ATTENTUATION PARAMETERS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| WELL NUMBER | DATE | TOC ELEVATIONS | DEPTH TO GROUNDWATER | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMPERATURE (°F) | pH | DISSOLVED OXYGEN (mg/l) | RED/OX POTENTIAL (Mv) | NITRATE* (mg/L) | SULFATE* (mg/L) | DISSOLVED MANGANESE* (mg/L) | TOTAL ALKALINITY* (mg/L) | DISSOLVED IRON* (mg/L) | TOTAL IRON* (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 05/03/1995 | 75.29 | 9.84 | 65.45 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 10.64 | 64.65 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/11/1995 | | 10.7 | 64.59 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 10.38 | 64.91 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 10.2 | 65.09 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 10.58 | 64.71 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 10.92 | 64.37 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 10.89 | 64.40 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 11.10 | 64.19 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/02/1996 | | 11.52 | 63.77 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/19/1996 | | 11.12 | 64.17 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/02/1996 | | 10.95 | 64.33 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/15/1996 | | 10.80 | 64.49 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/01/1996 | | 10.48 | 64.81 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/06/1996 | | 10.70 | 64.59 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 11.20 | 64.09 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 11.20 | 64.09 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 11.24 | 64.05 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 10.99 | 64.30 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 11.89 | 63.40 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 10.74 | 64.55 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 11.03 | 64.26 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 11.98 | 63.31 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 11.05 | 64.24 | ---- | 11.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 10.36 | 64.93 | ---- | 10.6 | 5.00 | 8.30 | 115 | ND | 68.60 | ---- | 4554 | ---- | ND |
| | 09/03/1997 | | 10.14 | 65.15 | 3,295 | 19.0 | 7.03 | 8.30 | ---- | 1.03 | 46.50 | 566.0 | 497 | <0.01 | 4.50 |
| | 11/20/1997 | | 11.02 | 64.27 | 3,700 | 13.5 | 7.03 | 1.30 | 34 | 0.75 | 48.10 | 559.0 | 503 | <0.010 | 1.50 |
| | 02/19/1998 | | 9.88 | 65.41 | 3,545 | 10.0 | 6.72 | 0.50 | 110 | 2.25 | 54.50 | 456.0 | ---- | <0.020 | 0.60 |
| | 04/23/1998 | | 9.54 | 65.75 | 3,000 | 13.0 | 7.00 | 7.00 | ---- | 0.45 | 43.00 | 545.0 | ---- | <0.020 | 1.00 |
| | 02/03/1999 | | 10.47 | 64.82 | 3,520 | 9.1 | 6.75 | 0.28 | 150 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/12/1999 | | 10.20 | 65.09 | 1,720 | 13.4 | 6.75 | 0.43 | 206 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/16/2000 | | 10.07 | 65.22 | 1,290 | 17.4 | 7.18 | 0.40 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW-2 | 05/03/1995 | 74.64 | 9.70 | 64.94 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/03/1995 | | 12.12 | 62.52 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 11.12 | 63.62 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/11/1995 | | 11.34 | 63.30 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 11.50 | 63.14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 10.91 | 63.73 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 11.12 | 63.52 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 12.10 | 62.54 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 12.10 | 62.54 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 11.64 | 63.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/02/1996 | | 13.00 | 61.64 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/19/1996 | | 12.54 | 62.10 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/02/1996 | | 13.20 | 61.44 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/15/1996 | | 13.02 | 61.62 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/01/1996 | | 11.42 | 63.22 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/06/1996 | | 13.18 | 61.46 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 12.56 | 62.08 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 12.70 | 61.94 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 12.56 | 62.08 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 13.25 | 61.39 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 12.78 | 61.86 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 11.28 | 63.36 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 13.12 | 61.52 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 12.85 | 61.79 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 13.00 | 61.64 | ---- | 9.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 10.60 | 64.04 | 2,400 | 12.2 | 5.00 | 7.60 | 107 | 8.16 | 29.60 | ---- | 582 | 107.00 | 12.10 |
| | 09/03/1997 | | 10.27 | 64.37 | 2,955 | 17.5 | 6.80 | ---- | ---- | 3.44 | 58.30 | 401.00 | 524 | 12.80 | 10.00 |
| | 11/20/1997 | | 11.42 | 63.22 | 3,845 | 14.0 | 7.01 | 0.40 | -80 | 0.76 | 4.60 | 159.00 | 494 | 16.10 | >10 |
| | 02/19/1998 | | 9.62 | 65.02 | 3,455 | 10.0 | 6.75 | 0.40 | 40 | 019e | 14.70 | 201.00 | ---- | 15.90 | >10 |
| | 04/23/1998 | | 9.16 | 65.48 | 3,145 | 13.5 | 7.02 | 7.00 | ---- | 119.00 | 110.00 | 606.00 | ---- | 2.72 | 3.50 |
| | 09/02/1998 | | 10.38 | 64.26 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/03/1999 | | 10.55 | 64.09 | 5,180 | 9.0 | 6.41 | 0.20 | 54 | 6.80 | 71.00 | 690.00 | 500 | 4.30 | 4.70 |
| | 04/12/1999 | | 10.15 | 64.49 | 3,540 | 10.7 | 6.71 | 0.25 | 271 | 78.00 | 86.0 | 0.71 | 520 | 0.42 | 1.2 |
| | 10/16/2000 | | 10.44 | 64.20 | 741 | 17.2 | 6.90 | 0.15 | ---- | --- | --- | --- | --- | --- | --- |

**NOTES:**

1) Water elevation recorded in feet.
2) Water levels adjusted for free product in wells using a deslty or 0.75 g/cm$^3$ for gasoline.
3) ---- not analyzed.
4) pH measured with a Beckman pH meter field calibrated to a pH of 4.00 and 7.00. The meter was also used to measure temperature.
5) Dissolved oxygen was measured with an OxyGuard In-Situ Dissolved Oxygen Meter field calibrated to air saturated water and corrected for temperature and barametric pressure
6) Conductivity was measured with YSI Conductivity Meter field calibrated to 1,000 and 10,000 uohms/cm and corrected for temperature.
7) Oxidation/Reduction potential was measured with a Beckman Red/Ox Meter field calibrated to+/- 10mV with quinohydrone dissolved in a pH of 4.00 and 7.00 buffer solutions.

## GROUNDWATER ELEVATIONS AND NATURAL ATTENTUATION PARAMETERS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| WELL NUMBER | DATE | TOC ELEVATIONS | DEPTH TO GROUNDWATER | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMPERATURE (°F) | pH | DISSOLVED OXYGEN (mg/l) | RED/OX POTENTIAL (Mv) | NITRATE* (mg/L) | SULFATE* (mg/L) | DISSOLVED MANGANESE* (mg/L) | TOTAL ALKALINITY* (mg/L) | DISSOLVED IRON* (mg/L) | TOTAL IRON* (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3R | 02/19/1998 | 74.56 | 8.04 | 66.52 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/23/1998 | | 7.61 | 66.95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/03/1999 | Well not gauged or sampled because it was inaccessible | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/12/1999 | | 8.49 | 66.07 | 2550.00 | 10.80 | 6.43 | 0.27 | -27.00 | --- | --- | --- | --- | --- | --- |
| | 10/16/2000 | Well not gauged or sampled because it was dry | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-4 | 05/03/1995 | 73.26 | 9.10 | 64.16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/08/1995 | | 10.04 | 63.22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/11/1995 | | 9.51 | 63.75 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/20/1995 | | 10.20 | 63.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/26/1995 | | 10.10 | 63.16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/06/1995 | | 10.20 | 63.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/18/1995 | | 10.52 | 62.74 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/15/1996 | | 11.92 | 61.34 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/02/1996 | | 11.58 | 61.68 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/19/1996 | | 10.74 | 62.52 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/02/1996 | | 10.28 | 62.98 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/15/1996 | | 9.92 | 63.34 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/01/1996 | | 9.60 | 63.66 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/06/1996 | | 9.25 | 64.01 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/04/1996 | | 10.80 | 62.46 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/22/1996 | | 10.28 | 62.98 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 11/21/1996 | | 10.25 | 63.01 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 01/09/1997 | | 10.32 | 62.94 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/25/1997 | | 10.75 | 62.51 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 03/12/1997 | | 10.80 | 62.46 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/04/1997 | | 11.00 | 62.26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/17/1997 | | 10.70 | 62.56 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/27/1997 | | 9.99 | 63.27 | 500 | 14.2 | 5.00 | 5.50 | 152 | 8.15 | 37.60 | --- | 337 | --- | ND |
| | 09/03/1997 | | 9.31 | 63.95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 11/20/1997 | | 11.11 | 62.15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/19/1998 | | 8.74 | 64.52 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/23/1998 | | 8.14 | 65.12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/02/1998 | | 9.34 | 63.92 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/03/1999 | Well not gauged or sampled because it was inaccessible | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/12/1999 | | 9.06 | 64.20 | 1220 | 10.6 | 6.64 | 0.23 | 145 | --- | --- | --- | --- | --- | --- |
| | 10/16/2000 | | 9.56 | 63.70 | 935 | 15.5 | 6.85 | 2.34 | --- | --- | --- | --- | --- | --- | --- |
| MW-5 | 05/03/1995 | 74.27 | 11.1 | 63.17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/03/1995 | | 12.28 | 61.99 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/08/1995 | | 11.82 | 62.45 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/11/1995 | | 12.1 | 62.17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/20/1995 | | 11.82 | 62.45 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/26/1995 | | 12.89 | 61.38 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/06/1995 | | 12.42 | 61.85 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/18/1995 | | 12.36 | 61.91 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/15/1996 | | 11.02 | 63.25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/02/1996 | | 12.30 | 61.97 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/19/1996 | | 12.11 | 62.16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/02/1996 | | 12.15 | 62.12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/15/1996 | | 12.19 | 62.08 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/01/1996 | | 11.89 | 62.38 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/06/1996 | | 12.27 | 62.00 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/04/1996 | | 12.20 | 62.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/22/1996 | | 12.20 | 62.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 11/21/1996 | | 12.28 | 61.99 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 01/09/1997 | | 12.22 | 62.05 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/07/1997 | | 11.90 | 62.37 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/25/1997 | | 11.61 | 62.66 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 03/12/1997 | | 12.10 | 62.17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/04/1997 | | 12.02 | 62.25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/17/1997 | | 12.30 | 61.97 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/27/1997 | | 11.80 | 62.47 | 1,000 | 10.4 | 5.00 | 2.30 | 121 | 4.14 | 64.10 | --- | 364 | --- | ND |
| | 09/03/1997 | | 11.64 | 62.63 | 7,865 | 19.5 | 7.08 | --- | --- | 8.32 | 112.00 | 302.00 | 322 | 0.02 | 0.40 |
| | 11/20/1997 | | 12.08 | 62.19 | 9,210 | 13.0 | 7.06 | 2.30 | 2 | 7.11 | 266.00 | 110.00 | 338 | <0.010 | 0.40 |
| | 02/19/1998 | | 11.35 | 62.92 | 6,480 | 10.5 | 6.70 | 1.70 | 106 | --- | --- | --- | --- | --- | --- |
| | 04/23/1998 | | 11.21 | 63.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/02/1998 | | 11.69 | 62.58 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/03/1999 | | 11.67 | 62.60 | 11,060 | 8.80 | 6.71 | 1.34 | 94 | --- | --- | --- | --- | --- | --- |
| | 04/12/1999 | | 11.58 | 62.69 | 3280 | 11.2 | 7.16 | 0.85 | 240 | --- | --- | --- | --- | --- | --- |
| | 10/16/2000 | | 11.72 | 62.55 | 1075 | 17.4 | 6.45 | 1.34 | --- | --- | --- | --- | --- | --- | --- |

**NOTES:**

1) Water elevation recorded in feet.
2) Water levels adjusted for free product in wells using a dealty or 0.75 g/cm$^3$ for gasoline.
3) --- not analyzed.
4) pH measured with a Beckman pH meter field calibrated to a pH of 4.00 and 7.00. The meter was also used to measure temperature.
5) Dissolved oxygen was measured with an OxyGuard In-Situ Dissolved Oxygen Meter field calibrated to air saturated water and corrected for temperature and barametric pressure
6) Conductivity was measured with YSI Conductivity Meter field calibrated to 1,000 and 10,000 uohms/cm and corrected for temperature.
7) Oxidation/Reduction potential was measured with a Beckman Red/Ox Meter field calibrated to+/- 10mV with quinohydrone dissolved in a pH of 4.00 and 7.00 buffer solutions.

## GROUNDWATER ELEVATIONS AND NATURAL ATTENTUATION PARAMETERS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| WELL NUMBER | DATE | TOC ELEVATIONS | DEPTH TO GROUNDWATER | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMPERATURE (°F) | pH | DISSOLVED OXYGEN (mg/l) | RED/OX POTENTIAL (Mv) | NITRATE* (mg/L) | SULFATE* (mg/L) | DISSOLVED MANGANESE* (mg/L) | TOTAL ALKALINITY* (mg/L) | DISSOLVED IRON* (mg/L) | TOTAL IRON* (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-6 | 05/03/1995 | 72.93 | 9.84 | 63.09 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 10.70 | 62.23 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/11/1995 | | 10.46 | 62.47 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 11.00 | 61.93 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 10.74 | 62.19 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 10.74 | 62.19 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 11.50 | 61.43 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 11.50 | 61.43 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 11.10 | 61.83 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/02/1996 | | 10.50 | 62.43 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/02/1996 | | 11.30 | 61.63 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/15/1996 | | 11.26 | 61.67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/01/1996 | | 10.72 | 62.21 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/06/1996 | | 11.16 | 61.77 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 11.26 | 61.67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 11.16 | 61.77 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 11.50 | 61.43 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 11.35 | 61.58 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 11.80 | 61.13 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 10.25 | 62.68 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 11.25 | 61.68 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 11.92 | 61.01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 10.42 | 62.51 | ---- | 8.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 10.90 | 62.03 | 1,500 | 12.4 | 5.00 | 17.40 | 101 | 0.22 | 34.50 | ---- | 285 | ---- | 0.22 |
| | 09/03/1997 | | 10.47 | 62.46 | 6,045 | 18.0 | 6.97 | ---- | ---- | 4.73 | 32.30 | 354.00 | 239 | 0.98 | 4.50 |
| | 11/20/1997 | | 11.18 | 61.75 | 7,690 | 14.0 | 7.04 | 0.40 | 21 | 4.50 | 34.80 | 376.00 | 284 | 0.72 | 2.00 |
| | 02/19/1998 | | 10.04 | 62.89 | 7,185 | 10.4 | 6.76 | 0.70 | 106 | 6.24 | 41.00 | 191.00 | ---- | 0.48 | 2.00 |
| | 04/23/1998 | | 9.93 | 63.00 | 7,435 | 14.0 | 7.07 | 4.00 | ---- | 5.65 | 41.40 | 214.00 | ---- | 0.48 | 0.80 |
| | 09/02/1998 | | 10.60 | 62.33 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/03/1999 | | 10.57 | 62.36 | 6,800 | 8.4 | 7.45 | 0.31 | 93 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/12/1999 | | 10.34 | 62.59 | 4,560 | 11.2 | 6.88 | 0.57 | 231 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/10/1999 | | 10.16 | 62.77 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/16/2000 | | 10.65 | 62.28 | 1,054 | 16.4 | 6.60 | 1.16 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW-7 | 05/03/1995 | 72.95 | 9.70 | 63.25 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/03/1995 | | 11.02 | 61.93 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 10.58 | 62.37 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/15/1995 | | 10.50 | 62.45 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 10.36 | 62.59 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 13.10 | 59.85 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 10.44 | 62.51 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 11.08 | 61.87 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 11.01 | 61.94 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/19/1996 | | 11.20 | 61.75 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 10.94 | 62.01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/02/1996 | | 11.34 | 61.61 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/19/1996 | | 10.90 | 62.05 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/02/1996 | | 10.70 | 62.25 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/15/1996 | | 10.80 | 62.15 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/01/1996 | | 10.12 | 62.83 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/06/1996 | | 10.42 | 62.53 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 10.90 | 62.05 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 10.72 | 62.23 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 11.26 | 61.69 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 11.75 | 61.20 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 10.01 | 62.94 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 10.30 | 62.65 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 11.80 | 61.15 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 11.00 | 61.95 | ---- | 8.8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 10.40 | 62.55 | 1,500 | 10.7 | 6.00 | 9.50 | 121 | 14.90 | 189.00 | ---- | 359 | ---- | 0.12 |
| | 09/03/1997 | | 9.91 | 63.04 | 1,805 | 16.0 | 7.08 | ---- | ---- | 1.00 | 245.00 | 48.30 | 276 | 0.12 | 2.50 |
| | 11/20/1997 | | 11.08 | 61.87 | 1,925 | 14.0 | 7.08 | 2.70 | 17 | 1.49 | 128.00 | 134.00 | 429 | 1.51 | 3.00 |
| | 02/19/1998 | | 9.23 | 63.72 | 2,250 | 9.0 | 6.89 | 8.80 | 113 | 0.37e | 189.00 | 60.40 | ---- | <0.020 | 2.50 |
| | 04/23/1998 | | 9.00 | 63.95 | 2,000 | 12.5 | 7.14 | 8.30 | ---- | 0.76 | 110.00 | 24.60 | ---- | <0.020 | 1.50 |
| | 09/02/1998 | | 9.99 | 62.96 | 1,199 | 18.9 | 6.29 | 7.29 | 530 | 5.10 | 48.00 | 0.01 | 250 | <0.019 | 2.40 |
| | 02/03/1999 | | 9.80 | 63.15 | 1,870 | 8.5 | 6.80 | 7.60 | 126 | 0.6 | 94.00 | 0.071 | 560 | 0.18 | 1.10 |
| | 04/12/1999 | | 9.66 | 63.29 | 2,080 | 10.9 | 6.80 | 6.36 | 182 | 1.2 | 87.00 | <0.093 | 470 | 0.12 | 3.50 |
| | 04/12/1999 | | 10.70 | 62.25 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/16/2000 | | 10.02 | 62.93 | 1,058 | 16.8 | 7.01 | 2.39 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

**NOTES:**

1) Water elevation recorded in feet.
2) Water levels adjusted for free product in wells using a desity or 0.75 g/cm$^3$ for gasoline.
3) ---- not analyzed.
4) pH measured with a Beckman pH meter field calibrated to a pH of 4.00 and 7.00. The meter was also used to measure temperature.
5) Dissolved oxygen was measured with an OxyGuard In-Situ Dissolved Oxygen Meter field calibrated to air saturated water and corrected for temperature and barometric pressure
6) Conductivity was measured with YSI Conductivity Meter field calibrated to 1,000 and 10,000 uohms/cm and corrected for temperature.
7) Oxidation/Reduction potential was measured with a Beckman Red/Ox Meter field calibrated to+/- 10mV with quinohydrone dissolved in a pH of 4.00 and 7.00 buffer solutions.

## GROUNDWATER ELEVATIONS AND NATURAL ATTENTUATION PARAMETERS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| WELL NUMBER | DATE | TOC ELEVATIONS | DEPTH TO GROUNDWATER | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMPERATURE (°F) | pH | DISSOLVED OXYGEN (mg/l) | RED/OX POTENTIAL (Mv) | NITRATE* (mg/L) | SULFATE* (mg/L) | DISSOLVED MANGANESE* (mg/L) | TOTAL ALKALINITY* (mg/L) | DISSOLVED IRON* (mg/L) | TOTAL IRON* (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-8 | 05/03/1995 | 75.31 | 10.10 | 65.21 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 11.40 | 63.91 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 10.20 | 65.11 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 11.10 | 64.21 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 11.21 | 64.10 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 11.78 | 63.53 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 11.74 | 63.57 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/19/1996 | | 10.24 | 65.07 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 11.58 | 63.73 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/02/1996 | | 12.02 | 63.29 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/19/1996 | | 11.90 | 63.41 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/02/1996 | | 11.85 | 63.46 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/15/1996 | | 11.70 | 63.61 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/01/1996 | | 11.14 | 64.17 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/06/1996 | | 11.83 | 63.48 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 12.00 | 63.31 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 12.00 | 63.31 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 12.00 | 63.31 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 11.90 | 63.41 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 12.50 | 62.81 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 11.41 | 63.90 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 11.92 | 63.39 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 12.24 | 63.07 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 11.90 | 63.41 | ---- | 8.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 10.80 | 64.51 | 3,990 | 10.2 | 5.00 | 9.90 | 105 | 7.32 | 80.00 | 6.00 | 337 | ---- | ND |
| | 09/03/1997 | | 10.65 | 64.66 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/20/1997 | | 11.62 | 63.69 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/19/1998 | | 9.86 | 65.45 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/23/1998 | | 9.80 | 65.51 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/02/1998 | | 10.77 | 64.54 | 3,497 | 17.85 | 6.23 | 6.54 | 5.26 | 14.00 | 98.00 | 0.02 | 380 | <0.019 | 3.40 |
| | 02/03/1999 | | 10.81 | 64.50 | 6,780 | 8.6 | 5.71 | 5.63 | 136 | 7.60 | 87.00 | 0.026 | 410 | 0.037 | 0.93 |
| | 04/12/1999 | | 10.57 | 64.74 | 2,760 | 10.6 | 6.87 | 3.91 | 275 | 4.50 | 96.00 | <0.0086 | 510 | <0.024 | 3.40 |
| | 10/16/2000 | | 10.66 | 64.65 | 1,396 | 16.9 | 7.10 | 2.24 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW-9 | 05/03/1995 | 75.22 | 10.16 | 65.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 10.9 | 64.32 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/11/1995 | | 10.94 | 64.28 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 10.7 | 64.52 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 10.74 | 64.48 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 10.8 | 64.42 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 11.15 | 64.07 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 11.04 | 64.18 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/19/1996 | | 10.44 | 64.78 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/02/1996 | | 11.42 | 63.80 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/19/1996 | | 10.30 | 64.92 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/02/1996 | | 11.10 | 64.12 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/15/1996 | | 10.95 | 64.27 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/01/1996 | | 10.70 | 64.52 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/06/1996 | | 10.97 | 64.25 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 10.34 | 64.88 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 11.34 | 63.88 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 11.40 | 63.82 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 11.20 | 64.02 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 11.82 | 63.40 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 10.92 | 64.30 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 10.99 | 64.23 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 11.56 | 63.66 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 11.20 | 64.02 | ---- | 10.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 10.56 | 64.66 | 10,000 | 10.5 | 5.00 | 2.50 | 113 | 7.04 | 56.90 | ---- | 420 | ---- | ND |
| | 09/03/1997 | | 10.46 | 64.76 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/20/1997 | | 11.13 | 64.09 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/19/1998 | | 10.10 | 65.12 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/23/1998 | | 9.99 | 65.23 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/02/1998 | | 10.51 | 64.71 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/03/1999 | | 10.68 | 64.54 | ---- | ---- | ---- | 0.36 | 153 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/12/1999 | | 10.48 | 64.74 | 3480 | 11.2 | 6.95 | 0.64 | 249 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/16/2000 | | 10.32 | 64.90 | 1896 | 16.7 | 7.12 | 0.97 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

**NOTES:**

1) Water elevation recorded in feet.
2) Water levels adjusted for free product in wells using a dealty or 0.75 g/cm$^3$ for gasoline.
3) ---- not analyzed.
4) pH measured with a Beckman pH meter field calibrated to a pH of 4.00 and 7.00. The meter was also used to measure temperature.
5) Dissolved oxygen was measured with an OxyGuard In-Situ Dissolved Oxygen Meter field calibrated to air saturated water and corrected for temperature and barometric pressure
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7) Oxidation/Reduction potential was measured with a Beckman Red/Ox Meter field calibrated to+/- 10mV with quinohydrone dissolved in a pH of 4.00 and 7.00 buffer solutions.

## GROUNDWATER ELEVATIONS AND NATURAL ATTENTUATION PARAMETERS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| WELL NUMBER | DATE | TOC ELEVATIONS | DEPTH TO GROUNDWATER | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMPERATURE (°F) | pH | DISSOLVED OXYGEN (mg/l) | RED/OX POTENTIAL (Mv) | NITRATE* (mg/L) | SULFATE* (mg/L) | DISSOLVED MANGANESE* (mg/L) | TOTAL ALKALINITY* (mg/L) | DISSOLVED IRON* (mg/L) | TOTAL IRON* (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-10 | 08/03/1995 | | 11.50 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/15/1995 | | 11.18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/11/1995 | | 10.70 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/20/1995 | | 10.96 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/26/1995 | | 10.98 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/06/1995 | | 11.22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/18/1995 | | 11.28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/15/1996 | | 11.34 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/02/1996 | | 11.72 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/19/1996 | | 11.30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/02/1996 | | 11.02 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/15/1996 | | 10.88 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/01/1996 | | 10.60 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/06/1996 | | 10.45 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/04/1996 | | 11.36 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/22/1996 | | 11.12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 11/21/1996 | | 11.80 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 01/09/1997 | | 11.10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/25/1997 | | 10.67 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 03/12/1997 | | 11.10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/04/1997 | | 11.80 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/17/1997 | | 11.20 | --- | 9 | 9.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/27/1997 | | 11.10 | --- | 3,300 | 11.0 | 6.00 | 6.60 | 122 | 8.61 | 108.00 | --- | 222 | --- | ND |
| | 09/02/1998 | | 10.72 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/03/1999 | Well not gauged or sampled because it was inaccessible | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/12/1999 | | 10.61 | --- | 1560 | 11.1 | 7.07 | 7.95 | 223 | 51.00 | 52.00 | <0.0086 | 230 | <0.024 | 2.80 |
| | 10/16/2000 | | 10.69 | --- | 923 | 16.8 | 7.14 | 1.98 | --- | --- | --- | --- | --- | --- | --- |
| MW-11 | 10/22/1996 | | 10.00 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/25/1997 | | 9.25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 03/12/1997 | | 9.80 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/17/1997 | | 8.20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/27/1997 | | 10.30 | --- | 2,100 | 9.7 | 5.00 | 5.60 | 106 | 2.91 | 16.80 | --- | 428 | 107.00 | 0.01 |
| | 06/30/1997 | Well Abandoned | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-12 | 10/22/1996 | | 10.76 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/25/1997 | | 10.44 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 03/12/1997 | | 10.76 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/17/1997 | | 10.80 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/27/1997 | | 10.90 | --- | 1,000 | 10.0 | 5.00 | 7.70 | 106 | 1.21 | 17.70 | --- | 373 | 107.00 | 107.00 |
| | 06/30/1997 | Well Abandoned | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RW-1 | 05/03/1995 | 73.93 | 8.66 | 65.27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/08/1995 | | 9.70 | 64.23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 08/11/1995 | | 9.85 | 64.09 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/11/1995 | | 10.09 | 63.85 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/20/1995 | | 9.79 | 64.15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/26/1995 | | 9.76 | 64.18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/06/1995 | | 9.99 | 63.95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/18/1995 | | 10.11 | 63.82 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/15/1996 | | 10.50 | 63.43 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/04/1996 | | 15.82 | 58.11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 10/22/1996 | | 12.10 | 61.83 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 11/21/1996 | | 12.08 | 61.85 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 01/09/1997 | | 12.82 | 61.11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/07/1997 | | 15.75 | 58.18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/25/1997 | | 7.72 | 66.21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 03/06/1997 | | 15.90 | 58.03 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 03/12/1997 | | 15.40 | 58.53 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/04/1997 | | 16.70 | 57.23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/17/1997 | | 11.70 | 62.23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 05/27/1997 | | 13.20 | 60.73 | --- | --- | --- | --- | --- | 0.37 | 49.40 | --- | 292 | --- | 9.74 |
| | 09/03/1997 | | 9.11 | 64.82 | 2,120 | 17.0 | 7.35 | --- | --- | <0.14 | <1 | 54.9 | 196 | 1.62 | 9.50 |
| | 11/20/1997 | | 10.41 | 63.52 | 1,580 | 13.0 | 9.34 | --- | --- | <0.14 | 3.90 | 16.0 | 134 | 0.07 | 9.50 |
| | 02/19/1998 | | 8.68 | 65.25 | 3,915 | 10.5 | 7.22 | --- | --- | <0.14 | 16.10 | 234.0 | <119 | 2.48 | 9.00 |
| | 04/23/1998 | | 7.99 | 65.94 | 3,565 | 14.0 | 8.74 | --- | --- | <0.14 | 9.10 | 88.9 | <223 | 0.21 | 4.50 |
| | 09/02/1998 | | 9.10 | 64.83 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/03/1999 | | 9.43 | 64.50 | 2,880 | 9.40 | 7.41 | 0.24 | -9 | --- | --- | --- | --- | --- | --- |

**NOTES:**

1) Water elevation recorded in feet.
2) Water levels adjusted for free product in wells using a desity or 0.75 g/cm$^3$ for gasoline.
3) --- not analyzed.
4) pH measured with a Beckman pH meter field calibrated to a pH of 4.00 and 7.00. The meter was also used to measure temperature.
5) Dissolved oxygen was measured with an OxyGuard In-Situ Dissolved Oxygen Meter field calibrated to air saturated water and corrected for temperature and barametric pressure
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## GROUNDWATER ELEVATIONS AND NATURAL ATTENTUATION PARAMETERS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| WELL NUMBER | DATE | TOC ELEVATIONS | DEPTH TO GROUNDWATER | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMPERATURE (°F) | pH | DISSOLVED OXYGEN (mg/l) | RED/OX POTENTIAL (Mv) | NITRATE* (mg/L) | SULFATE* (mg/L) | DISSOLVED MANGANESE* (mg/L) | TOTAL ALKALINITY* (mg/L) | DISSOLVED IRON* (mg/L) | TOTAL IRON* (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-2 | 05/03/1995 | 74.25 | 9.50 | 64.75 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 10.60 | 63.65 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/11/1995 | | 12.20 | 62.05 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 11.57 | 62.69 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 10.70 | 63.55 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 11.05 | 63.22 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 12.99 | 61.27 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 12.21 | 62.05 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 11.40 | 62.85 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 13.10 | 61.15 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 12.70 | 61.55 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 12.75 | 61.50 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 13.82 | 60.43 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 13.10 | 61.15 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 9.11 | 65.14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/08/1997 | | 13.00 | 61.25 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 12.94 | 61.31 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 13.12 | 61.13 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 11.05 | 63.20 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 13.20 | 61.05 | ---- | ---- | ---- | ---- | ---- | ND | ND | ---- | 206 | ---- | 15.10 |
| | 09/03/1997 | | 9.90 | 64.35 | 1,930 | 17.0 | 7.01 | ---- | ---- | <0.14 | <1 | 168.0 | 98 | 9.80 | 10.00 |
| | 11/20/1997 | | 11.45 | 62.80 | 2,000 | 13.0 | 7.46 | ---- | ---- | <0.14 | <1 | 144.0 | 48 | 6.12 | 10.00 |
| | 02/19/1998 | | 9.50 | 64.75 | 2,185 | 10.5 | 7.31 | ---- | ---- | <0.14 | <1 | 260.0 | <119 | 9.33 | 10.00 |
| | 04/23/1998 | | 8.70 | 65.55 | 2,300 | 12.5 | 7.67 | ---- | ---- | <0.14 | <1 | 266.0 | <223 | 10.10 | 10.00 |
| | 09/02/1998 | | 9.86 | 64.39 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/03/1999 | | 10.17 | 64.08 | 2,750 | 10.0 | 6.78 | 0.15 | -9 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/10/1999 | | 10.41 | 63.84 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| RW-3 | 05/03/1995 | 74.25 | 8.88 | 64.89 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 10.12 | 63.65 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/11/1995 | | 10.10 | 63.67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/01/1995 | | 11.70 | 62.07 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 10.11 | 63.67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 10.18 | 63.60 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 10.58 | 63.19 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 11.20 | 62.58 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 10.60 | 63.17 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 16.84 | 56.93 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 16.24 | 57.53 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 16.20 | 57.57 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 16.81 | 56.96 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 16.80 | 56.97 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 8.26 | 65.51 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/08/1997 | | 10.20 | 63.57 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 16.90 | 56.87 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 17.25 | 56.52 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 12.30 | 61.47 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 17.00 | 56.77 | ---- | ---- | ---- | ---- | ---- | ND | 29.80 | ---- | 321 | ---- | 6.81 |
| | 09/03/1997 | | 9.34 | 64.43 | 525 | 18.0 | 7.82 | ---- | ---- | <0.14 | 6.20 | 51.5 | 149 | 0.15 | 10.00 |
| | 11/20/1997 | | 10.54 | 63.23 | 1,180 | 14.0 | 8.15 | ---- | ---- | <0.14 | <1 | 100.0 | 159 | 0.21 | 10.00 |
| | 02/19/1998 | | 8.62 | 65.15 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/23/1998 | | 8.15 | 65.62 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/02/1998 | | 9.38 | 64.87 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/03/1999 | | 9.21 | 65.04 | 3,910 | 10.60 | 6.96 | 0.30 | -9 | ---- | ---- | ---- | ---- | ---- | ---- |

**NOTES:**

1) Water elevation recorded in feet.
2) Water levels adjusted for free product in wells using a dealty or 0.75 g/cm$^3$ for gasoline.
3) ---- not analyzed.
4) pH measured with a Beckman pH meter field calibrated to a pH of 4.00 and 7.00. The meter was also used to measure temperature.
5) Dissolved oxygen was measured with an OxyGuard In-Situ Dissolved Oxygen Meter field calibrated to air saturated water and corrected for temperature and barametric pressure
6) Conductivity was measured with YSI Conductivity Meter field calibrated to 1,000 and 10,000 uohms/cm and corrected for temperature.
7) Oxidation/Reduction potential was measured with a Beckman Red/Ox Meter field calibrated to+/- 10mV with quinohydrone dissolved in a pH of 4.00 and 7.00 buffer solutions.

## GROUNDWATER ELEVATIONS AND NATURAL ATTENTUATION PARAMETERS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| WELL NUMBER | DATE | TOC ELEVATIONS | DEPTH TO GROUNDWATER | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMPERATURE (°F) | pH | DISSOLVED OXYGEN (mg/l) | RED/OX POTENTIAL (Mv) | NITRATE* (mg/L) | SULFATE* (mg/L) | DISSOLVED MANGANESE* (mg/L) | TOTAL ALKALINITY* (mg/L) | DISSOLVED IRON* (mg/L) | TOTAL IRON* (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-4 | 05/03/1995 | 73.25 | 8.95 | 64.45 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/03/1995 | | 19.18 | 54.07 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 10.32 | 63.16 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 8/8/95 Dup | | 18.95 | 54.41 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/11/1995 | | 10.50 | 62.94 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/15/1995 | | 11.65 | 61.88 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 18.00 | 55.63 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 10.02 | 63.24 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 16.92 | 56.33 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 19.19 | 54.92 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 19.22 | 54.93 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 10.30 | 62.97 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 17.30 | 55.95 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 12.60 | 60.65 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 12.58 | 60.67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 17.20 | 56.05 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 13.15 | 60.10 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 8.77 | 64.48 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/08/1997 | | 17.40 | 55.85 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 14.80 | 58.45 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 17.30 | 55.95 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 11.80 | 61.45 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 17.20 | 56.05 | ---- | ---- | ---- | ---- | ---- | 0.16 | 6.50 | ---- | 614 | ---- | 84.30 |
| | 09/03/1997 | | 9.42 | 63.83 | 3,430 | 18.0 | 8.19 | ---- | ---- | 7.47 | 148.00 | 145.0 | 180 | 1.01 | 7.50 |
| | 11/20/1997 | | 10.62 | 62.63 | 3,165 | 14.5 | 7.71 | ---- | ---- | <0.14 | 60.10 | 343.0 | 138 | 5.25 | 7.50 |
| | 02/19/1998 | | 8.60 | 64.65 | 2,455 | 10.0 | 7.56 | ---- | ---- | 4.81 | 149.00 | 194.0 | ---- | 2.08 | 7.00 |
| | 04/23/1998 | | 8.22 | 65.03 | 2,600 | 13.0 | 7.94 | ---- | ---- | 2.79 | 102.00 | 79.4 | ---- | <0.020 | 10.00 |
| | 09/02/1998 | | 9.42 | 63.83 | 1,706 | 18.7 | 6.65 | 2.83 | 529 | 1.20 | 67.00 | 0.15 | 430 | 0.71 | 12.00 |
| | 02/03/1999 | | 9.30 | 63.95 | 3,210 | 9.7 | 7.05 | 0.20 | 16 | 5.00 | 78.00 | 0.14 | 490 | 1.50 | 3.70 |
| RW-5 | 05/03/1995 | 73.23 | 9.00 | 64.34 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/03/1995 | | 19.30 | 53.93 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 8/8/95 Dup | | 10.25 | 63.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/11/1995 | | 18.44 | 55.11 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/15/1995 | | 11.35 | 61.99 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 18.40 | 55.21 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 19.00 | 54.38 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 9.60 | 63.71 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 10.00 | 63.24 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 19.02 | 54.32 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 19.07 | 54.51 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 10.44 | 62.80 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 17.78 | 55.45 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 16.48 | 56.75 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 16.48 | 56.75 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 17.76 | 55.47 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 17.75 | 55.48 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 7.66 | 65.57 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/08/1997 | | 17.80 | 55.43 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 15.50 | 57.73 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 17.90 | 55.33 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 11.40 | 61.83 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 12.90 | 60.33 | ---- | ---- | ---- | ---- | ---- | ND | 10.60 | ---- | 232 | ---- | 6.41 |
| | 09/03/1997 | | 9.47 | 63.76 | 3,155 | 17.5 | 7.91 | ---- | ---- | 59.70 | 95.10 | 194.0 | 142 | 1.10 | 4.00 |
| | 11/20/1997 | | 10.67 | 62.56 | 3,165 | 14.5 | 9.30 | ---- | ---- | 9.35 | 123.00 | 52.0 | 157 | 0.02 | 4.00 |
| | 02/19/1998 | | 8.62 | 64.61 | 2,855 | 10.0 | 8.69 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/23/1998 | | 8.30 | 64.93 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/02/1998 | | 9.53 | 63.70 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/03/1999 | | 9.49 | 63.74 | 3,160 | 10.00 | 7.28 | 0.14 | -9 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/10/1999 | | 9.38 | 63.85 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

**NOTES:**

1) Water elevation recorded in feet.
2) Water levels adjusted for free product in wells using a deslty or 0.75 g/cm$^3$ for gasoline.
3) — not analyzed.
4) pH measured with a Beckman pH meter field calibrated to a pH of 4.00 and 7.00. The meter was also used to measure temperature.
5) Dissolved oxygen was measured with an OxyGuard In-Situ Dissolved Oxygen Meter field calibrated to air saturated water and corrected for temperature and barametric pressure
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## GROUNDWATER ELEVATIONS AND NATURAL ATTENTUATION PARAMETERS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| WELL NUMBER | DATE | TOC ELEVATIONS | DEPTH TO GROUNDWATER | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMPERATURE (°F) | pH | DISSOLVED OXYGEN (mg/l) | RED/OX POTENTIAL (Mv) | NITRATE* (mg/L) | SULFATE* (mg/L) | DISSOLVED MANGANESE* (mg/L) | TOTAL ALKALINITY* (mg/L) | DISSOLVED IRON* (mg/L) | TOTAL IRON* (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-6 | 05/03/1995 | 73.35 | 9.55 | 63.80 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/03/1995 | | 11.20 | 62.15 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/08/1995 | | 10.64 | 62.71 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 10.69 | 62.67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 10.56 | 62.80 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 10.56 | 62.80 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 11.12 | 62.25 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 10.98 | 62.38 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 9.86 | 63.49 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/03/1997 | | 9.86 | 63.49 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/19/1998 | | 9.16 | 64.19 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/23/1998 | | 8.74 | 64.61 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/02/1998 | | 10.94 | 62.41 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/03/1999 | | 9.87 | 63.48 | 4,060 | 10.00 | 6.71 | 0.19 | 12 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/10/1999 | | 11.7 | 61.65 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SVP-1 | 05/03/1995 | 75.14 | 10.08 | 65.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/15/1995 | | 11.90 | 63.24 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 11.66 | 63.48 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 11.30 | 63.84 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 11.44 | 63.70 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 12.30 | 62.84 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 12.21 | 62.93 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 11.80 | 63.34 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/02/1996 | | 12.30 | 62.84 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/19/1996 | | 12.25 | 62.89 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/02/1996 | | 12.38 | 62.76 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/15/1996 | | 12.34 | 62.80 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/06/1996 | | 12.50 | 62.64 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 12.30 | 62.84 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 12.42 | 62.72 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 12.42 | 62.72 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 12.40 | 62.74 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 13.02 | 62.12 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 11.47 | 63.67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 12.10 | 63.04 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 12.68 | 62.46 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 12.40 | 62.74 | ---- | 8.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 10.99 | 64.15 | 1,800 | ---- | 5.00 | 12.80 | 74 | 33.90 | 46.20 | ---- | 594 | 107.00 | 107.00 |
| | 09/03/1997 | | 10.74 | 64.40 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/20/1997 | | 11.72 | 63.42 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/19/1998 | | 9.71 | 65.43 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/23/1998 | | 9.75 | 65.39 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

**NOTES:**

1) Water elevation recorded in feet.
2) Water levels adjusted for free product in wells using a deslty or 0.75 g/cm$^3$ for gasoline.
3) ---- not analyzed.
4) pH measured with a Beckman pH meter field calibrated to a pH of 4.00 and 7.00. The meter was also used to measure temperature.
5) Dissolved oxygen was measured with an OxyGuard In-Situ Dissolved Oxygen Meter field calibrated to air saturated water and corrected for temperature and barametric pressure
6) Conductivity was measured with YSI Conductivity Meter field calibrated to 1,000 and 10,000 uohms/cm and corrected for temperature.
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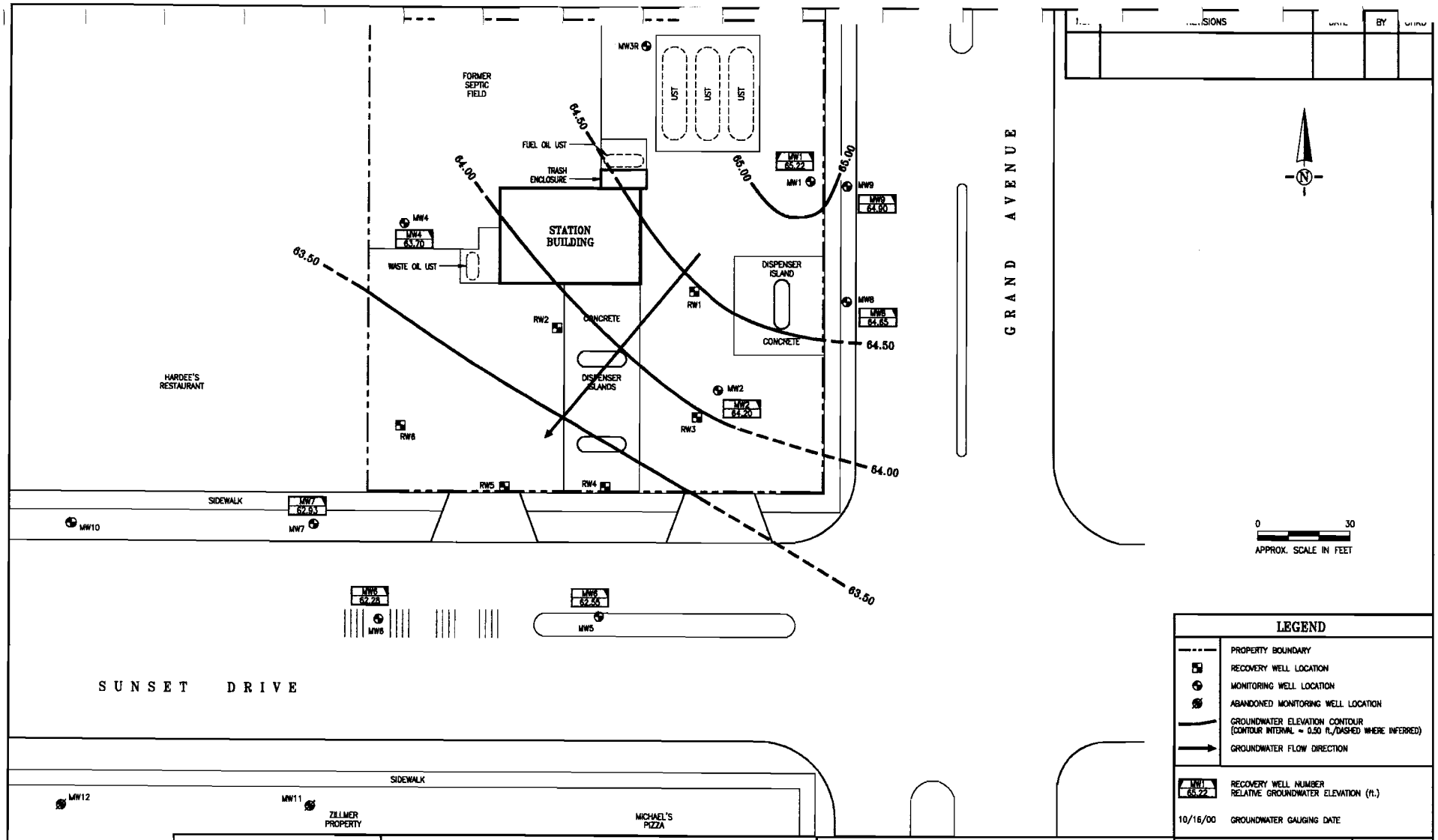
## GROUNDWATER ELEVATIONS AND NATURAL ATTENTUATION PARAMETERS

**Mobil Service Station 05-MWQ**
**Waukesha, Wisconsin**

| WELL NUMBER | DATE | TOC ELEVATIONS | DEPTH TO GROUNDWATER | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMPERATURE (°F) | pH | DISSOLVED OXYGEN (mg/l) | RED/OX POTENTIAL (Mv) | NITRATE* (mg/L) | SULFATE* (mg/L) | DISSOLVED MANGANESE* (mg/L) | TOTAL ALKALINITY* (mg/L) | DISSOLVED IRON* (mg/L) | TOTAL IRON* (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVP-2 | 05/03/1995 | 74.64 | 10.02 | 64.62 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/11/1995 | | 12.00 | 62.64 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/20/1995 | | 12.00 | 62.64 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/1995 | | 11.48 | 63.16 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/1995 | | 12.60 | 62.04 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/18/1995 | | 12.51 | 62.13 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/15/1996 | | 10.76 | 63.88 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/02/1996 | | 12.40 | 62.24 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/19/1996 | | 12.20 | 62.44 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/02/1996 | | 12.20 | 62.44 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/15/1996 | | 12.40 | 62.24 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/01/1996 | | 11.40 | 63.24 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 08/06/1996 | | 12.51 | 62.13 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/04/1996 | | 12.24 | 62.40 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/22/1996 | | 12.24 | 62.40 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/21/1996 | | 12.20 | 62.44 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 01/09/1997 | | 12.29 | 62.35 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/07/1997 | | 12.90 | 61.74 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/25/1997 | | 11.05 | 63.59 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 03/12/1997 | | 12.02 | 62.62 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/04/1997 | | 12.46 | 62.18 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/17/1997 | | 12.02 | 62.62 | ---- | 15.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 05/27/1997 | | 10.95 | 63.69 | 2,800 | ---- | 5.00 | 12.60 | 127 | 14.90 | 52.80 | ---- | 425 | 107.00 | 107.00 |
| | 09/03/1997 | | 10.65 | 63.99 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/20/1997 | | 11.62 | 63.02 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/19/1998 | | 9.72 | 64.92 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/23/1998 | | 9.65 | 64.99 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

NOTES:

1) Water elevation recorded in feet.
2) Water levels adjusted for free product in wells using a desity or 0.75 g/cm$^3$ for gasoline.
3) ---- not analyzed.
4) pH measured with a Beckman pH meter field calibrated to a pH of 4.00 and 7.00. The meter was also used to measure temperature.
5) Dissolved oxygen was measured with an OxyGuard In-Situ Dissolved Oxygen Meter field calibrated to air saturated water and corrected for temperature and barametric pressure
6) Conductivity was measured with YSI Conductivity Meter field calibrated to 1,000 and 10,000 uohms/cm and corrected for temperature.
7) Oxidation/Reduction potential was measured with a Beckman Red/Ox Meter field calibrated to+/- 10mV with quinohydrone dissolved in a pH of 4.00 and 7.00 buffer solutions.




| REVISIONS | DATE | BY | CHKD |
|---|---|---|---|
| | | | |

## LEGEND

| | |
|---|---|
| — — — | PROPERTY BOUNDARY |
| ■ | RECOVERY WELL LOCATION |
| ⊕ | MONITORING WELL LOCATION |
| ⊗ | ABANDONED MONITORING WELL LOCATION |
| ——— | GROUNDWATER ELEVATION CONTOUR (CONTOUR INTERVAL = 0.50 ft./DASHED WHERE INFERRED) |
| ——→ | GROUNDWATER FLOW DIRECTION |
| MW1 / 65.22 | RECOVERY WELL NUMBER / RELATIVE GROUNDWATER ELEVATION (ft.) |
| 10/16/00 | GROUNDWATER GAUGING DATE |

Handex OF WISCONSIN
16940 VICTOR ROAD
NEW BERLIN, WI 53151
(262) 641-9011

# MOBIL OIL CORPORATION

Marketing & Refining Division – U.S.
Marketing Operations Department
Environmental Engineering Group
Fairfax, Virginia 22037

## GROUNDWATER CONTOUR MAP (10/16/00)

MOBIL SERVICE STATION # 05-MWQ
300 WEST SUNSET DRIVE
WAUKESHA, WAUKESHA COUNTY, WISCONSIN

| | |
|---|---|
| DRAWN BY: | M. SMITH |
| CHECKED BY: | – |
| SCALE: | 1" = 30' |
| DATE: | 2/16/01 |
| DRAWING FILE: | 116891 |

FIGURE 4

8910E8

HANDEX®
Practical Environmental Solutions

February 23, 2004

Mr. Jeffery Johnson
ExxonMobil Refining and Supply Company
Joliet Refinery, Administration Building Room 260
I-55 and Arsenal Road
Channahon, Illinois 60410

**RE: Legal Property Description**
Mobil 05-MWQ
300 West Sunset Drive
Waukesha, Wisconsin
Commerce #53186-7474-00
BRRTS #: 03-68-002855

Dear Mr. Johnson:

The *GIS Registry Package Requirements* include a statement by the responsible party verifying that the legal description included for properties (including off-site) being added to the GIS registry are complete and accurate. The purpose of this document is to comply with that requirement.

By signing as indicated, you assert that, to the best of your knowledge, the legal description describes the above-referenced site:

**"All that part of the West One Half of the South East One Quarter of Section Number 10, Township Number 6 North, Range Number 19 East, in the City of Waukesha, Waukesha County, Wisconsin, described as follows: Commencing at a point on the south line of the said quarter section distant North 88 degrees 25 minutes East 1117.00 feet from the south quarter section corner of the said section; thence North 205.00 feet; thence North 88 degrees 25 minutes East 155 feet more or less to the West Line of Grand Avenue; thence South along the West line of Grand Avenue 205 feet to section line and thence South 88 degrees 25 minutes West 155 feet more or less to the place of beginning; excluding that portion of land in Quit Claim Deed between Mobil Oil Corporation and the City of Waukesha, a municipal corporation, recorded as document number 1193547; Reel 511, Image 086, dated October 8, 1982, containing 7,750 square feet."**

**Name:** **Jeffery Johnson**

**Title:** **Territory Manager**

**Representing:** **ExxonMobil Refining and Supply Company**

**Signature:** Cynthia M Sears **Date:** 2/23/04
ON BEHALF OF EXXONMOBIL

16940 W. Victor Road, New Berlin, WI. • (262) 641-9011 • Fax (262) 641-9987

**ExxonMobil**
**Refining and Supply Company**
Downstream - Safety, Health & Environment
Environmental Remediation

**Certified Mail #: 7002 2410 0004 2293 2525**

March 18, 2004

ExxonMobil
*Refining & Supply*

Mr. and Mrs. Paul Colburn
Colburn Citgo Services
300 West Sunset Drive
Waukesha, Wisconsin 53189

**RE: GIS Registry**
Mobil Service Station 05-MWQ
300 West Sunset Drive
Waukesha, Wisconsin

Dear Mr. and Mrs. Colburn:

On behalf of ExxonMobil Refinery and Supply Company (ExxonMobil), I am writing to notify you of recent revisions to the NR 700 rule series of the Wisconsin Administrative Code (WAC). Changes to the WAC became effective November 1, 2001 requiring certain properties to be listed on a geographic information system (GIS) Registry maintained by the Wisconsin Department of Natural Resources (WDNR). This recent rule change allows for closure of environmental remediation sites where natural attenuation is being used to complete groundwater cleanup without requiring groundwater use restrictions to be recorded with the property deed.

Groundwater at the property at 300 West Sunset Drive, Waukesha, Wisconsin (the Property) has been tested by ExxonMobil's consultants on a frequent basis, and has exhibited levels of benzene above the state groundwater enforcement standards found in chapter NR 140 of the WAC. However, the environmental consultants who have investigated this property have informed me that the area of dissolved-phase petroleum impacts to groundwater is stable or receding and will naturally degrade over time. Allowing natural attenuation to complete the cleanup at this site will meet the requirements for case closure that are found in chapter NR 726, WAC, and my consultant has determined that the WDNR has accepted natural attenuation as the final remedy for this site and granted case closure on November 30, 1999. Closure means that the WDNR will not be requiring any further investigation or cleanup action to be taken, other than the reliance on natural attenuation. Included as an attachment to this letter is a copy of the WDNR's fact sheet describing the use of natural attenuation as a final remedy (Publication #RR-671).

As the owner of the Property, you may contact the WDNR to provide any technical information that indicates closure should not be granted for this site. If you would like to submit any information relevant to this closure request to the WDNR, you should mail that information to: Ms. Brenda Boyce, Hydrogeologist, Bureau of Remediation and Redevelopment, WDNR Waukesha Service Center, 407 Pilot Court, Suite 100, Waukesha, Wisconsin 53188.

As of November 2001, all environmental remediation sites granted case closure require properties within the area where groundwater quality exceeds NR 140 groundwater enforcement standards to be listed on the WDNR's GIS Registry of Closed Remediation Sites. The information on the GIS Registry includes maps showing the location of properties in Wisconsin where groundwater quality above chapter NR 140 standards was found at the time that the case was closed. This GIS Registry will be available to the general public on the WDNR's internal web site. I have enclosed with this

letter the legal description of the property. Please review this legal description and notify me within the next 30 days if the legal description is incorrect.

The GIS registry will be used by the WDNR to make sure wells are properly installed in Wisconsin. Should you or any subsequent property owner wish to construct or reconstruct a well, special well construction standards may be necessary to protect the well from groundwater above NR 140 enforcement standards. Any well driller who proposes to construct a well on the Property in the future will first need to call the Digger's Hotline (1-800-242-8511) if the Property is located outside of the service area of a municipally owned water system. If the Property is located within the designated service area of a municipally owned water system, the driller will need to contact the Drinking Water program within the WDNR. Either way, the WDNR will then contact the well driller to advise if there is a need for special well construction standards.

It is my understanding that you purchased the Property from Mobil during October 1993. Neither you nor any subsequent owner of the Property will be held responsible for investigation or cleanup of impacts to groundwater caused by activities that occurred at the property prior to 1993, as long as you and any subsequent owners comply with the requirement 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 1-800-367-6076 to obtain a copy of the WDNR's publication #RR-589, *Fact Sheet 10: Guidance for Dealing with Properties Affected by Off-Site Contamination.* There are no costs to you for the closure or for the GIS Registry.

You may obtain a copy of the closure letter 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. A copy of the closure letter will be included as part of the site file on the GIS Registry of Closed Remediation Sites.

Should you have any questions regarding this correspondence, please do not hesitate to contact me at (815) 521-7369, or you may contact Ms. Brenda Boyce of the Wisconsin Department of Natural Resources at (262)-574-2140.

Sincerely,

Cynthia Draves for

Jeffrey A. Johnson
Territory Manager
ExxonMobil Oil Corporation

Attachments:
1. WDNR Factsheet (Publication #RR-671)
2. Legal Description of the Property

cc: Cynthia Draves, Handex of Wisconsin
Brenda Boyce, Wisconsin Department of Natural Resources (w/GIS packet)