

**GIS REGISTRY INFORMATION**

**SITE NAME:** Chicago and NW RR Mitchell Yard

**BRRTS #:** 02-41-000966 **FID # (if appropriate):** 241711140

**COMMERCE # (if appropriate):** \_\_\_\_\_

**CLOSURE DATE:** 10/01/2007

**STREET ADDRESS:** 2581 S 35th Street

**CITY:** Milwaukee

**SOURCE PROPERTY GPS COORDINATES** (meters in WTM91 projection): X= 686320 Y= 282636

**CONTAMINATED MEDIA:** Groundwater  Soil  Both

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

**IF YES, STREET ADDRESS 1:** \_\_\_\_\_

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

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

**IF YES, STREET ADDRESS 1:** \_\_\_\_\_

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

**CONTAMINATION IN RIGHT OF WAY:**  Yes  No

**DOCUMENTS NEEDED:**

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



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Matthew J. Frank, Secretary  
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters  
2300 N. Dr. Martin Luther King, Jr. Drive  
Milwaukee, Wisconsin 53212-3128  
FAX 414-263-8606  
Telephone 414-263-8500  
TTY Access via relay - 711

October 1, 2007

In Reply, Refer to: FID# 241711140  
BRRTS# 02-41-000966  
BRR/ERP

Mr. Edwin H Honig  
Union Pacific Corporation  
1400 Douglas Street  
STOP 1030  
Omaha, NE 68179

SUBJECT: Final Case Closure for the Chicago and NW RR - Mitchell Yard Site, 2581 S 35<sup>th</sup> Street, Milwaukee, WI.

Dear Mr. Honig:

On September 28, 2007, the Wisconsin Department of Natural Resources (WDNR) reviewed your request for closure of the case described above. The WDNR reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. On May 7, 2003, you were notified that the WDNR had granted conditional closure to this case.

The requirement for closure had originally been that a notice be recorded on the deed of the property because one or more groundwater monitoring wells were not able to be properly abandoned. Recently there was a change to the rules and now this situation does not require a deed notice, but rather listing of the site on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. On July 24, 2007, the WDNR received correspondence indicating that you have complied with the requirements of closure.

Based on the correspondence and data provided, it appears that your case meets the requirements of ch. NR 726, Wisconsin Administrative Code. The WDNR considers this case closed and no further investigation or remediation is required at this time.

Please be aware that this case may be reopened pursuant to s. NR 726.09, Wisconsin Administrative 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.

On July 24, 2007 your consultant, Clarence Bieze of Delta Consultants, notified the WDNR that monitoring wells MW-2, MW-5, SP-2 and SP-3 located on the subject property could not be properly abandoned because they had been lost due to being paved over, covered or removed during site development activities. Your consultant has made a reasonable effort to locate the lost wells to determine whether they were properly abandoned but has been unsuccessful in those efforts. You need to understand that in the future you may be held liable for any problems associated with monitoring wells MW-2, MW-5, SP-2 and SP-3 if they create a conduit for contaminants to enter groundwater. If in the future the lost groundwater monitoring wells are

found, the then current owner of the subject property will be required to notify the WDNR and to properly abandon the wells in compliance with the requirements in ch. NR 141, Wis. Adm. Code, and to submit the required documentation of that abandonment to the WDNR.

Because these lost monitoring wells were not properly abandoned, your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites, as discussed in the next paragraph.

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 GIS Registry. To review the sites on the GIS Registry web page, visit <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. If your property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior WDNR approval in accordance with s. NR 812.09(4)(w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line <http://www.dnr.state.wi.us/org/water/dwg/3300254.pdf> or at the web address listed above for the GIS Registry.

We appreciate your efforts to restore the environment at this site. If you have any questions or concerns regarding this letter, please contact me at (414) 263- 8541.








Sincerely,



Andrew F Boettcher  
Hydrogeologist – RR/SER

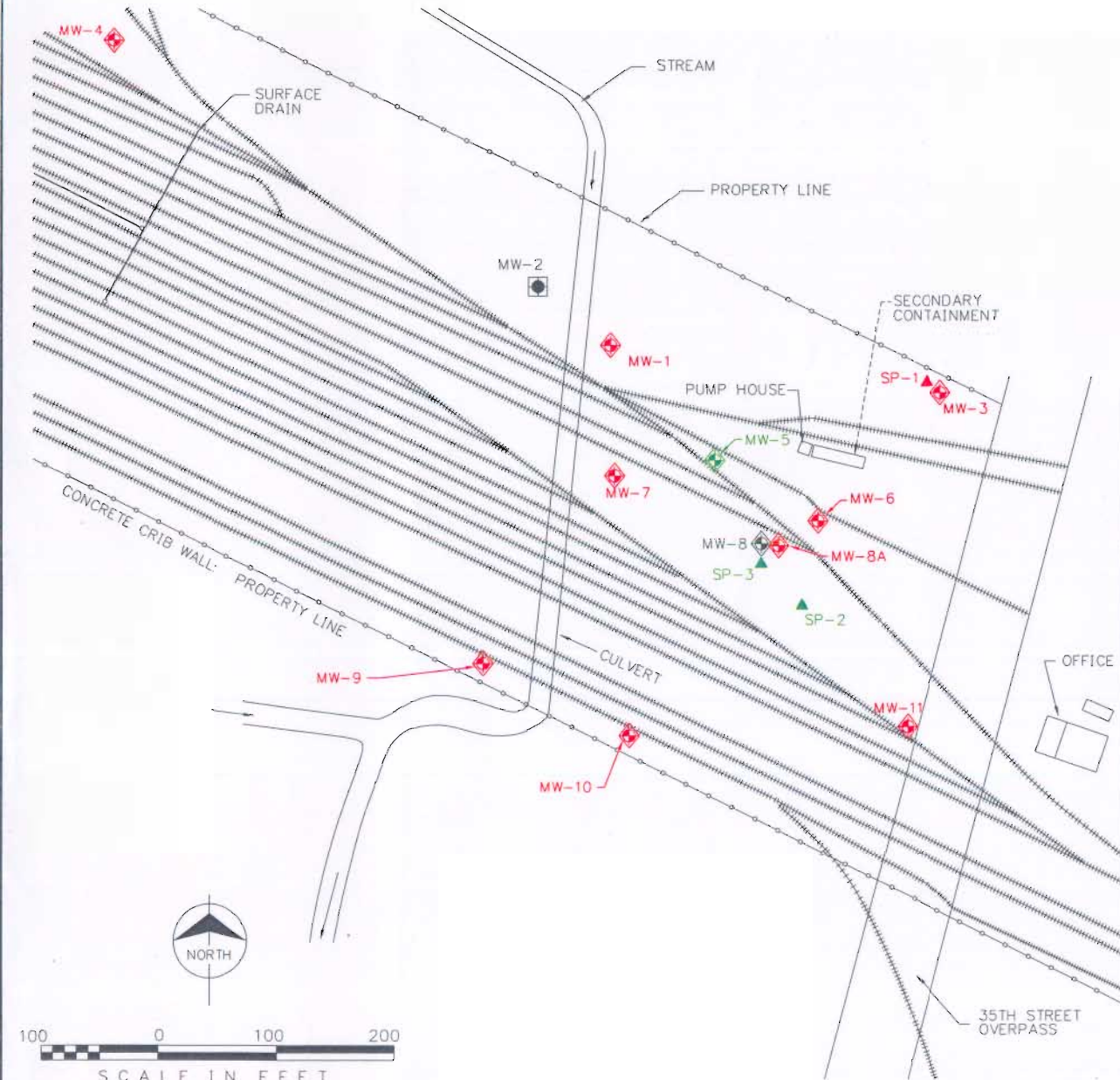
CC: Clarence Bieze, Delta Consultants, 5910 Rice Creek Pkwy, Ste 100, St. Paul, MN 55126

LEGEND

-  UNION PACIFIC RAIL LINES
-  MONITORING WELL ABANDONED 8/26/03
-  SOIL VAPOR PROBE LOCATION ABANDONED 8/26/03
-  PREVIOUSLY ABANDONED MONITORING WELL IN 1999
-  MONITORING WELL DESTROYED OR BURIED UNDER RUBBLE, HAS NOT BEEN FOUND SINCE 1996.
-  SOIL VAPOR PROBE LOCATION DESTROYED
-  MONITORING WELL DESTROYED

Lost monitoring wells:

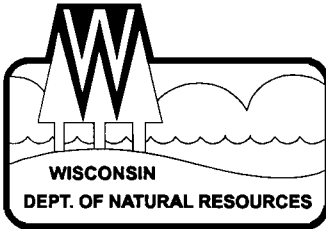
MW-2, MW-5,  
SP-2 and SP-3



PABST STREET



Figure 1  
ABANDONED MONITORING WELLS  
UNION PACIFIC RAILROAD  
MITCHELL YARD  
MILWAUKEE, WISCONSIN



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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

Southeast Region  
Milwaukee Service Center  
2300 N. Dr. ML King Drive, PO Box 12436  
Milwaukee, Wisconsin 53212-0436  
Telephone 414-263-8500  
FAX 414-263-8716  
TDD 414-263-8713

Mr. Ed Honig  
Union Pacific Railyard  
1416 Dodge Street, Room 930  
Omaho, Nebraska 68179

Subject: Conditional Case Closure With NR 140 Exemption  
Union Pacific-Mitchell Railyard, 2581 South 35<sup>th</sup> Street, Milwaukee,  
Wisconsin. WDNR FID#241711140.

Dear Mr. Honig:

We have reviewed the report entitled "No Further Action Request Letter", which is dated March 14, 2003, and was prepared and submitted on your behalf by your environmental consultant, Burns & McDonnell. Based on our review of this report, it has been determined that the petroleum contamination on the site related to the release from the former diesel fuel above ground storage tank appears to have been investigated and remediated to the extent practicable under site conditions. Your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code and will be closed if the following conditions are satisfied:

### **MONITORING WELL ABANDONMENT**

The monitoring wells at the site must be properly abandoned in compliance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment must be submitted to Victoria Stovall on Form 3300-5B found at [www.dnr.state.wi.us/org/water/dgw/gw/](http://www.dnr.state.wi.us/org/water/dgw/gw/) or provided by the Department of Natural Resources.

### **WASTE AND SOIL PILE REMOVAL**

Any remaining waste and/or soil piles generated as part of site investigation or remediation activities must be removed from the site and disposed of or treated in accordance with Department of Natural Resources' rules. Please send a letter advising me that any remaining waste and/or soil piles have been removed once that work is completed.

### **NOTICE OF RESIDUAL SOIL CONTAMINATION**

To close this site, the Department requires a deed notice be signed and recorded to give notice of the remaining soil contamination associated with the site. Residual soil contamination remains at vicinity of the former aboveground storage tank unit as indicated in the information submitted to the Department of Natural Resources. If soil in this location (or these locations) is excavated in the future, the property owner at that time will be required to sample and analyze the excavated soil in order to determine whether the contamination still remains. The owner will also have to properly store, treat, or dispose of any excavated materials, based upon the results of that characterization, and take special precautions during excavation activities to prevent a direct contact threat to humans. The purpose of the notice is to notify all future owners that excavation of the contaminated soil may pose an inhalation or other direct contact hazard at the time of excavation.

You will need to submit a draft deed notice to me before the document is signed and recorded. You may find a model deed notice enclosed for your use or visit our web site at [www.dnr.state.wi.us/org/rr](http://www.dnr.state.wi.us/org/rr). To assist us in our review of the deed notice, you should submit a copy of the property deed to me along with the draft document. After Department of Natural Resources has reviewed the document for completeness, you should sign it if you own the property, or have the appropriate property owner sign it, and have it recorded at the Milwaukee County Register of Deeds Office. Then submit a copy of the recorded document, with the recording information stamped on it, to me. Please be aware that if a deed notice is recorded for the wrong property because of an inaccurate legal description that you have provided, you will be responsible for recording corrected documents at the Register of Deeds Office to correct the problem.

When the above conditions have been satisfied, please submit a letter to let me know that applicable conditions have been met, and your case will be closed.

Recent groundwater monitoring data at this site indicates exceedances of the NR 140 preventive action limit (PAL) for benzene at monitoring well, MW-8A, but compliance with the NR 140 enforcement standard. The Department may grant an exemption to a PAL for a substance of public health concern, other than nitrate, pursuant to s. NR 140.28(2)(b), Wis. Adm. Code, if all of the following criteria are met:

1. The measured or anticipated increase in the concentration of the substance will be minimized to the extent technically and economically feasible.
2. Compliance with the PAL is either not technically or economically feasible.
3. The enforcement standard for the substance will not be attained or exceeded at the point of standards application.
4. Any existing or projected increase in the concentration of the substance above the background concentration does not present a threat to public health or welfare.

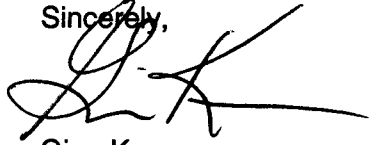
Based on the information you provided, the Department believes that the above criteria have been or will be met because remedial actions have taken place at this site. Therefore, pursuant to s. NR 140.28(2)(b), Wis. Adm. Code, an exemption to the PAL is granted for benzene at monitoring well, MW-8A. This letter serves as your exemption.

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

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

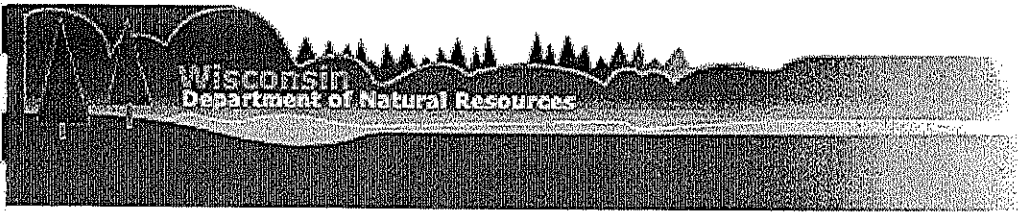
We appreciate your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at (414) 263-8589.

Sincerely,

A handwritten signature in black ink, appearing to be 'GK', written over the word 'Sincerely,'.

Gina Keenan  
Hydrogeologist  
Bureau for Remediation & Redevelopment

cc: SER case file  
Burns & McDonnell



**BRRTS on the Web Activity Details  
for CHICAGO & NW RR MITCHELL YARD**

*Printed Tue, 12 Jun 2007 08:55:50 CDT*

Activity No: 02-41-000966  
 Activity Name: CHICAGO & NW RR MITCHELL YARD  
 Type: ERP  
 Status: CONDITIONALLY CLOSED  
 Jurisdiction: DNR-RR  
 Start Date: 05/12/1994  
 End Date: 00/00/0000  
 Last Action: 01/16/2007  
 Location: MITCHELL YARD CHICAGO & NW RR  
 FID: 241711140  
 Address: 2581 S 35TH ST  
 Municipality: MILWAUKEE  
 County: MILWAUKEE  
 WI Region: SOUTHEAST  
 Commerce No: 53215999942  
 EPA ID: NONE  
 Risk: UNKNOWN  
 Plot Size: UNKNOWN  
 Comments:  
 EPA NPL?: No  
 Commerce Tracked?: Yes  
 PECFA Eligible?: Yes  
 AST?: Yes  
 Drycleaner?: No  
 Co-Contamination?: No  
 Geo-Located?:  
 PLSS: SE 1/4 of the NW 1/4 of Sec 12, T06N, R21E

Parcel ID #

493-9971-5

WTM Location

- Near well locations  
 686320, 282636

Date	Name	Actions	Comment
05/12/1994	Notification		-
11/20/1996	Remedial Design End - State Lead		-
11/20/1996	Remedial Construction Start - State Lead		-
01/22/1997	Remedial Design Start - State Lead		-
11/17/1997	Status Report Received		-
01/15/1998	Remedial Action Options Report received		-



## GEOGRAPHIC POSITION OF PROPERTY

WTM coordinates for the parcel are:

**686320, 282636**

This Indenture, Made the thirty first day of July

in the year of Our Lord One Thousand Eight Hundred and Eighty- between Alexander Mitchell and Martha Mitchell his wife of the County of Milwaukee and State of Wisconsin parties of the first part, and the **MILWAUKEE AND MADISON RAILWAY COMPANY**, a Corporation duly created and existing under and by virtue of the laws of the State of Wisconsin, party of the second part,

Witnesseth. That the said party of the first part, for and in consideration of Three thousand Three hundred and Five (\$3305-00) Dollars, paid by the said party to the second part, the receipt whereof is hereby acknowledged, has Granted, Bargained, Sold, Remised, Released, Alienated and Confirmed, and by these presents do Grant, Bargain, Sell, Remise, Release, Alien and Confirm unto the said party of the second part, and to its Successors and Assigns forever, all that certain Tract, Piece or Parcel of LAND, situate, lying and being in the County of Milwaukee and State of Wisconsin, and described as follows, to-wit: A strip, belt, or piece of land Twenty feet wide, extending across the following described Tract of Land, viz: This north West quarter of Section Twelve (12) in Township Six (6) North of Range Twenty One (21) East, through the Center line of which said strip, belt, or piece of land the Center line of the Railroad of said Company has been installed and located so as to leave one-half in width on each side of said Center line, and the said party of the second part do covenant and agree to and with the said party of the first part their heirs, Executors, Administrators and assigns that it will construct and maintain on said premises a suitable and convenient farm crossing of said Rail Road for the use of the occupants of said quarter section. And that before entering said premises for the purpose of constructing the grade of said Rail Road, it will erect good and lawful fences on both sides of said Rail Road across said quarter section. This grant and conveyance is made subject to all the rights of the tenant in possession so as to leave one-half in width, on each side of said center line.



Together with all and singular, the Hereditaments, Appurtenances thereunto belonging, or in any wise appertaining; and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; and all the estate, right, title, interest, claim or demand whatsoever, of the said party of the first part, either in Law or Equity of, in and to the above bargained premises, with the Hereditaments and Appurtenances.

To Have and to Hold The said Premises, as above described, with the Appurtenances, unto the said party of the second part, and to its Successors and Assigns forever. And the said party of the first part do hereby release all damages to his other lands by reason of constructing and operating and maintaining a railroad on said strip.

And the said Alexander Mitchell for himself his Heirs, Executors, Administrators and Assigns, does Covenant, Grant, Bargain and Agree to and with the said party of the second part, and its Successors and Assigns, that at the time of the ensembling and delivery of these Presents he is well seized of the premises above described, as of good, sure, perfect, absolute and indefeasible Estate of Inheritance in the Law, in fee simple, and that the same are free and clear of all incumbrances whatever, and that the above bargained Premises, in the quiet and peaceful possession of the said party of the second part, its Successors and Assigns, against the said party of the first part and their Heirs, and against all and every person or persons lawfully claiming or to claim the whole or any part thereof, he shall and will FOREVER WARRANT AND DEFEND. Except as against the rights of our tenant

In Witness Whereof, The said party of the first part have hereunto set their hands and seals the day and year first above written.

Signed, Sealed and Delivered in Presence of John Chapman and John Austin

Alex Mitchell   
By D. Ferguson His atty in fact  
Martha Mitchell   
By D. Ferguson Her atty in fact

STATE OF WISCONSIN, }  
County of Milwaukee } ss.

Be it Remembered, That on the thirty first day of July A. D. 1880, personally came before me the above named David Ferguson once known to be the Attorney in fact of Alexander Mitchell and Martha Mitchell his wife and to me known to be the person who executed the above DEED, and acknowledged the same to be the free act and deed, for the uses and purposes therein mentioned, of the said Alexander Mitchell and Martha Mitchell

John Austin Notary Public  
State of Wisconsin

30143

H.C.B.

WARRANTY DEED.

FROM

Oliver Mitchell & W

TO

MILWAUKEE & MADISON RY. CO.

CONVEYS *NW 1/4 Sec 12*

*T6 R 31*

RECEIVED FOR RECORD

This *23<sup>d</sup>* day of *Sept* 188*8*.

at *2 1/2* o'clock, *Just* recorded in

Book of Deeds, Vol. *166*

on Page *2624263*.

*Donald Weiskopf*

*Register*

*Wm. C. Co., Wis.*

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, Harriet D. Mitchell, as trustee under the last will of John L. Mitchell, deceased, of Greenfield, Milwaukee County, Wisconsin, the owner, as trustee, of the northwest quarter of Section 12 in said Town of Greenfield, upon a portion of which the Chicago & Northwestern Railway Company maintains a portion of the Madison Division of its railroad, so-called, and on which it maintains a culvert over the head waters of the north branch of the Kinnickinnic River, does hereby, in consideration of one (\$1.) dollar to her paid by the said Chicago & Northwestern Railway Company, and in consideration of its rebuilding and enlarging said culvert ~~to cause the same to be adequate to allow the flood waters of the stream over which the same is to pass through without damming the same up to the injury of the adjoining lands,~~ release and discharge the said Chicago & Northwestern Railway Company, and its successors, from any and all claims, damages and causes of action existing or claimed to exist by reason of said lands owned by her, as trustee, or any part thereof, having at any time prior to the date hereof been overflowed by flood waters being dammed up by reason of said culvert as it now exists and has heretofore existed being inadequate to carry the same through without hinderance.

*Struck out  
before delivery  
by J. H. Clow  
att'y for  
Mitchell  
and B.*

IN TESTIMONY WHEREOF, the said Harriet D. Mitchell, as trustee under the last will of John L. Mitchell, deceased, has hereunto set her hand and seal at Meadowmere, in the Town of Greenfield, Milwaukee County, Wisconsin, *October 8, 1907.*

In presence of:

Harriet Mitchell

Harriet D. Mitchell (Seal)  
as trustee under the last will  
of John L. Mitchell, deceased.

# Know all Men by these Presents,

THAT John Brimmer of Greenfield  
Wisconsin

party of the first part in consideration of the sum of Two Hundred and  
Eighty (280) Dollars, to him duly paid, do hereby remise, release and quit-claim unto  
The Milwaukee and Madison  
Railway Company

party of the second part, and to its Successors heirs and assigns, the following described real estate, situated in the  
county of Milwaukee, state of Wisconsin, to wit:

A strip of land one hundred (100)  
feet wide from the east side to  
the west side of the North West Quarter  
of Section Twelve (12) Town Six (6)  
Range (21) which strip has for its  
center line the center line of the rail  
road of the party of the second part as  
stated out and located across said  
Quarter Section

To Have and to Hold the same, together with all and singular the appurtenances and privileges thereunto belonging, or  
in anywise thereunto appertaining, and all the estate, right, title, interest and claim whatsoever of the said part... of the first  
part, either in law or equity, either in possession or expectancy, to the only proper use, benefit and behoof of the said  
party of the second part, its Successors heirs and assign forever.

In Witness Whereof, the party of the first part was hereunto set his hand and seal  
this 1st day of September, in the year of our Lord one thousand, eight  
hundred and eighty (1880)

IN PRESENCE OF  
Saml W Dixon } John Brimmer [SEAL]  
Dr. Woodford } [SEAL]

State of Wisconsin,  
Milwaukee COUNTY, } ss.

Be it Remembered, that on the first day of October, A. D. 18 80,  
personally came before me the above named grantor John Brimmer  
to me known to be the person who executed the foregoing instru-  
ment, and acknowledged the same to be his free act and deed, for the uses and purposes therein mentioned.

Saml W Dixon  
Notary Public  
Milwaukee County  
Wisconsin

SEC. 12 TOWN, 6N., R. 21E.

PART OF SECTION N.W. 1/4

Milwaukee COUNTY, Wis.

FROM John Brimer

Q.C.D. dated Sept. 1880

W.D. A. Mitchell and w.f. dated July 31, 1880

Parcel 12 Map 1C  
Wis. 26

Also -

Release - Henry G. Comstock and James T. Comstock

Release Harriet D. Mitchell, Trustee.

Account rebuilding and enlarging culvert  
under Tracks.

# C. & N. W. RY.

Custodian No. 1949 ORDINANCE

State WISCONSIN

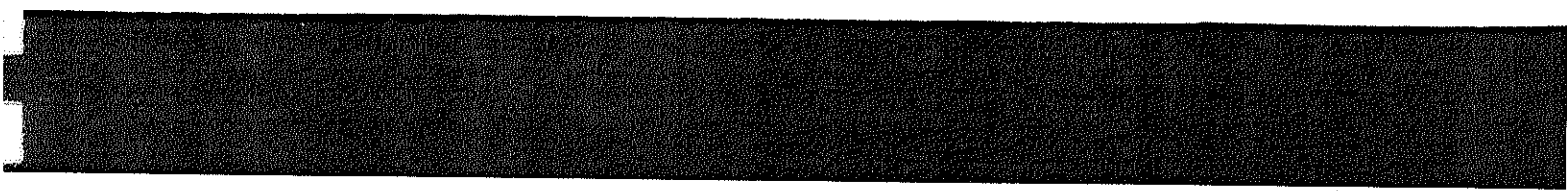
County MILWAUKEE

Val. Sec. \_\_\_\_\_ V-26

Map No. \_\_\_\_\_ 1C

Pcl. No. \_\_\_\_\_ 13

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



# This Indenture,

MADE this Twentyeth day of June in the year

of our Lord One Thousand <sup>Now</sup> Eight Hundred and Ninety One. BETWEEN John L. Mitchell and  
Garrist D. Mitchell, his wife  
of the City of Milwaukee in the County of Milwaukee and State of Wisconsin  
part of the first part, and the Chicago and North Western Railway  
Company party of the second part,

Witnesseth, That the said part of the first part, for and in consideration of the sum of Thirty Five Thousand  
Six Hundred and Seventy Five Dollars, in hand paid by the said party of the  
second part, the receipt whereof is hereby acknowledged, and the said party of the second part forever released and discharged therefrom, have  
granted, bargained, sold, remised, released, conveyed, aliened and confirmed, and by these presents do grant, bargain, sell, remise, release,  
convey, alien and confirm, unto the said party of the second part, and to its successors and assigns forever, all the following described lot,  
piece, or parcel of land situated in the County of Milwaukee and State of Wisconsin and known and  
described as follows, to wit:

Certain piece of land containing Sixteen and four tenths (16.4) acres located  
wholly in the North West quarter of Section Twelve (12) of Township N. Six (6)  
North of Range N. twenty one (21) East bounded and described as follows  
to wit:

On its Southernly side by the Northernly boundary line of the right of way of  
the main line of the Madison Division, so-called, of the party heretofore of the  
second part, as such right of way is now located as west side North West  
quarter of said Section Twelve: On its Westernly side by the Easternly  
boundary line of a strip, belt or piece of land conveyed by the party heretofore  
of the first part to Marvin Dougherty by Deeds dated the 20<sup>th</sup> day of June A.D.  
1901. On its Northernly side by a line drawn parallel with and Three  
Hundred and (300) feet distant Northernly from said Northernly boundary  
line of said right of way of the main line of the Madison Division  
about named and On its Easternly side by a line running North and  
South and so located that said piece of land will contain Sixteen  
and four tenths (16.4) acres.

Together with all and singular the hereditaments and appurtenances thereunto belonging or in anywise appertaining, and the reversion and  
reversions, remainder and remainders, rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, of  
the said part of the first part, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances: TO  
HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the said party of the second part, its  
successors and assigns, forever.



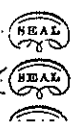
And the Said John L. Mitchell one of the  
part of the first part, for himself heirs, executors and administrators, does covenant, grant, bargain and agree, to and  
with the said party of the second part, its successors and assigns, that at the time of the ensembling and delivery of these presents,  
he is well seized of the premises above conveyed, as of a good, sure, perfect, absolute and indefeasible estate of  
inheritance in law, in fee simple, and has good right, full power, and lawful authority to grant, bargain, sell and convey the same in manner and  
form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments and encumbrances,  
of what kind or nature soever; and the above bargained premises, in the quiet and peaceable possession of the said party of the second part,  
its successors and assigns, against all and every other person or persons lawfully claiming or to claim the whole or any part thereof, the said  
party of the first part shall and will WARRANT AND FOREVER DEFEND.

And the Said part of the first part hereby expressly waive and release any and all right of homestead in the premises hereinbefore  
described, and any and all benefits, privileges, advantages and exemptions, under or by virtue of the Statutes of the State of  
Wisconsin in reference to homesteads, and all damages to the lands of said part of the first part which have been or may  
hereafter be caused by reason of the construction, <sup>proper and lawful</sup> maintenance and operation of a railroad on said granted premises, or by reason of any lawful  
use whatsoever of said granted premises by said party of the second part, its successors or assigns.

In Witness Whereof, The said part of the first part, have hereunto set their hands and seal the day and year first  
above written.

Signed, Sealed and Delivered in Presence of  
John K. Fish  
Henry D. Drotter

John L. Mitchell  
by Wm. L. Gay his attorney  
J. L. Gay





STATE OF Wisconsin  
COUNTY OF Milwaukee

SS. Henry J. Droppers Notary Public

and for said County in the State aforesaid, Do Hereby Certify, that Alfred L. Loamy personally known to me to be the attorney in fact for John D. Mitchell and Francis D. Mitchell who are the grantors and the parties to the foregoing instrument and

personally known to me to be the identical person described in, and whose name is subscribed to the foregoing instrument as grantor, and who executed the same, appeared before me this day in person and acknowledged to me that he signed, sealed and delivered said instrument as, and that the same is, his free and voluntary act and deed, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

Given under my hand and Notarial seal, this twentieth day of June, A. D. 1901.

Henry J. Droppers  
Notary Public  
Mil. Co., Wis.

STATE OF \_\_\_\_\_  
COUNTY \_\_\_\_\_

SS. \_\_\_\_\_

and for said County in the State aforesaid, Do Hereby Certify, that \_\_\_\_\_ and \_\_\_\_\_ to me personally known to be the identical persons whose names are subscribed to the foregoing instrument as President and Secretary respectively of \_\_\_\_\_

\_\_\_\_\_ Company, the corporation described in and that executed said instrument as grantor, appeared before me this day in person, and who, being by me duly sworn, did severally acknowledge and say, that they are respectively the President and Secretary of said \_\_\_\_\_ Company, that the seal affixed to the foregoing instrument is the corporate seal of said Corporation, that they signed, sealed and delivered the same in behalf of said Corporation for the purposes therein specified, by authority of its Board of Directors as and that said instrument is, the free act and deed of said Corporation.

Given under my hand and \_\_\_\_\_ seal, this \_\_\_\_\_ day of \_\_\_\_\_, A. D. 18 \_\_\_\_\_.

*Make  
of  
Book 2*  
129997 *Dring  
a.c.p.*

### Warranty Deed.

John Mitchell

Chicago & North Western  
Railway Company

State of \_\_\_\_\_ }  
COUNTY \_\_\_\_\_ } ss. No. \_\_\_\_\_

This Instrument was filed for Record in the \_\_\_\_\_ office of \_\_\_\_\_ County aforesaid, on the \_\_\_\_\_ day of \_\_\_\_\_, A. D. 189\_\_\_\_, at \_\_\_\_\_ o'clock \_\_\_\_\_ M., and recorded in Book \_\_\_\_\_ of \_\_\_\_\_ on page \_\_\_\_\_.

REGISTER'S OFFICE, }  
Milwaukee County, Wis. } ss.

Received for record JUNE 25<sup>th</sup> 1901  
at 2<sup>30</sup> o'clock P. M., and recorded in  
Vol. 229 of Deeds pages 593-594  
595  
C. H. Overo  
Register of Deeds

FILE NUMBER 49-1351-a

AN ORDINANCE

For the annexation of all that part of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21) east, in the Town of Greenfield, County of Milwaukee, State of Wisconsin, to the City of Milwaukee.

Whereas, A petition has been made and presented in writing signed by the owners of at least three-quarters (¾) of the taxable real estate within the limits of the territory proposed to be annexed, there being no qualified electors within said territory lying and being adjacent to the City of Milwaukee, described as follows, to-wit:

"All that part of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21) east, in the Town of Greenfield, County of Milwaukee, State of Wisconsin, bounded and described as follows, to-wit:

"Commencing at a point in the present limits line of the City of Milwaukee, said point being in the North line of the Mitchell Yards of the Chicago & Northwestern Railroad, One Hundred Fifty-five (155) feet West of the East line of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21) east, measured at right angles; running thence northwesterly along the northerly line of the Mitchell Yards of the Chicago & Northwestern Railroad to a point Five Hundred (500) feet east of the west line of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21) East, measured at right angles; thence South on a line Five Hundred (500) feet East of, and parallel to the West line of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) North, Range numbered Twenty-one (21) East, to a point in the South line of the R.O.W. of the Chicago & Northwestern Railroad; thence southeasterly along the southerly line of said Railroad R.O.W. to a point Six Hundred Fifty-six and Forty Hundredths (656.40) feet west of the east line of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21) east, measured along a line parallel with the south line of the Chicago & Northwestern Railroad R.O.W.; thence north No Degrees, Eighteen Minutes (0°18') east, Forty-three and Seventy-seven Hundredths (43.77) feet to a point; thence southeasterly along the southerly line of the Chicago & Northwestern Railroad R.O.W. to a point in the present limits line of the City of Milwaukee; thence north and following along the present limits line of the City of Milwaukee to the point of commencement."

asking that said territory be annexed to the City of Milwaukee; therefore,

The Mayor and Common Council of the City of Milwaukee do ordain as follows:

Section 1. The territory described as follows, to-wit:

"All that part of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21), east, in the Town of Greenfield, County of Milwaukee, State of Wisconsin, bounded and described as follows, to-wit:

"Commencing at a point in the present limits line of the City of Milwaukee, said point being

in the north line of the Mitchell Yards of the Chicago & Northwestern Railroad; One Hundred Fifty-five (155) feet west of the east line of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21) east, measured at right angles; running thence northwesterly along the northerly line of the Mitchell Yards of the Chicago & Northwestern Railroad to a point Five Hundred (500) feet east of the west line of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21) east, measured at right angles; thence south on a line Five Hundred (500) feet east of and parallel to the west line of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21) east, to a point in the south line of the R.O.W. of the Chicago & Northwestern Railroad; thence southeasterly along the southerly line of said Railroad R.O.W. to a point Six Hundred Fifty-six and Forty Hundredths (656.40) feet west of the east line of the North West One-quarter (N.W. ¼) of Section numbered Twelve (12), Township numbered Six (6) north, Range numbered Twenty-one (21) east, measured along a line parallel with the line of the Chicago & Northwestern Railroad R.O.W.; thence north No Degrees, Eighteen Minutes (0°18') east, Forty-three and Seventy-seven Hundredths (43.77) feet to a point; thence southeasterly along the southerly line of the Chicago & Northwestern Railroad R.O.W. to a point in the present limits line of the City of Milwaukee; thence north and following along the present limits line of the City of Milwaukee to the point of commencement."

The same hereby is, annexed to the City of Milwaukee.

After the annexation provided for hereinafter, the territory described in Section 1 of this Ordinance shall be exempt from further taxation and shall be subject to taxation and assessment, if any, as part of the City of Milwaukee for any and all purposes provided by law.

All of said territory described in Section 1 of this Ordinance be and hereby is made part of the fourth Ward of the City of Milwaukee as defined by the redistricting Ordinance No. 10, adopted under File Number 45898 of the Common Council of the City of Milwaukee on December 1, 1975, and shall be subject to the laws, regulations and ordinances governing said Ward and said City. The fourth Ward is hereby extended to include the territory herein annexed to it.

KNOW ALL MEN BY THESE PRESENTS that WHEREAS, by indenture of lease dated September 29th, 1892, John L. Mitchell leased, demised and let unto Leander Comstock, Henry G. Comstock, James T. Comstock and Frank C. Pierson, twenty-seven acres of land located in the northwest quarter of section twelve (12), township six (6), range twenty-one (21) east, to hold for the term of five years from the first day of January, 1893, the said lessees yielding and paying therefor the annual rent of four hundred fifty-nine dollars (\$459); and

WHEREAS, on the 22nd day of January, 1898, said lease was extended for three years, or until the first day of January, 1901, at the same rental and upon the same terms and conditions as those recited in said lease, and on the 13th day of February, 1901, said lease was extended for two years or until the first day of January, 1903, at the same rental and upon the same terms and conditions as those recited in said lease; and

WHEREAS, by indenture of lease dated the 9th day of February, 1895, said John L. Mitchell leased, demised and let unto the said Leander Comstock, Henry G. Comstock, James T. Comstock and Frank C.

twelve (12), in township number six (6) north, of range number twenty one (21) east, which lies between the north line of said northwest quarter and the main line of the Madison Division so-called of the Chicago & North-Western Railway Company. Said center line as located and staked out intersects the north line of said northwest quarter of said section twelve (12) at a point three hundred thirty-seven (337) feet east of the northwest corner of said section, and extends thence south in a straight line five hundred eighty-two (582) feet to a point, and thence on an eight degree curve to the left until it intersects the northerly line of the right of way of the Madison Division so-called of the Chicago & North-Western Railway Company; said piece of land containing one and  $73/100$  (1.73) acres.

2. A certain other piece of land containing sixteen and four-tenths (16.4) acres, located in the said northwest quarter of said section twelve (12), and bounded as follows: On its southerly side by the north line of the right of way of the main line of the Madison Division so-called of the Chicago & North-Western Railway Company; on its westerly side by the easterly boundary line of the strip of land last above described; on its northerly side by a line drawn

twelve (12), in township number six (6) north, of range number twenty one (21) east, which lies between the north line of said northwest quarter and the main line of the Madison Division so-called of the Chicago & North-Western Railway Company. Said center line as located and staked out intersects the north line of said northwest quarter of said section twelve (12) at a point three hundred thirty-seven (337) feet east of the northwest corner of said section, and extends thence south in a straight line five hundred eighty-two (582) feet to a point, and thence on an eight degree curve to the left until it intersects the northerly line of the right of way of the Madison Division so-called of the Chicago & North-Western Railway Company; said piece of land containing one and  $73/100$  (1.73) acres.

2. A certain other piece of land containing sixteen and four-tenths (16.4) acres, located in the said northwest quarter of said section twelve (12), and bounded as follows: On its southerly side by the north line of the right of way of the main line of the Madison Division so-called of the Chicago & North-Western Railway Company; on its westerly side by the easterly boundary line of the strip of land last above described; on its northerly side by a line drawn parallel with and three hundred (300) feet distant northerly from the said north line of the right of way of the main line of the Madison Division so-called of the Chicago & North-Western Railway Company, and on its easterly side by a line running north and south and so located that said piece of land will contain sixteen and  $4/10$  (16.4) acres; this last piece of land being that which said Mitchell intends to convey to said Chicago & North-Western Railway Company.

And said parties, for said considerations, do further forever release and discharge the said John L. Mitchell from all claims, demands and damages of every name and description for or based upon

Mitchell Yard - Field Reconnaissance  
 January 4, 2006  
 Field Person: Jim Kasdorf (Delta- Milwaukee)  
 Delta Project # UPR8113-1; PECFA

	MW-2	MW-5	SP-2	SP-3
<b>Date:</b>	1/4/2006	1/4/2006	1/4/2006	1/4/2006
<b>Time:</b>	10:10 AM	11:00 AM	11:27 AM	11:36 AM
<b>WGS84</b>				
Degrees N	42.99857° N	42.99823° N	42.99794° N	42.99795° N
Degrees W	087.96012° W	087.95953° W	087.95930° W	087.95946° W
Feet (El.)	N/A	N/A	N/A	N/A
<b>NAD83 UTM</b>				
E	16421740 E	16421787 E	16421805 E	16421792 E
N	4761102 N	4761064 N	4761032 N	4761031 N
<b>Physical Features</b>				
ID No. 1	90' South of North Fence line	98' West of MW-6, Perpendicular to Track	60' 6" Northeast to Switch 13 - NE Corner	83' Northeast to Switch 13 - NW Corner
Description	The only closest access point to N . Fence was East of Culvert.			
ID No. 2	38' West of Culvert Centerline	54' west of NW Corner of Switch 14	69' 8" Northwest to Switch 14 - NE Corner	52' North to Switch 14 @ NW Corner
Description	Open culvert estimated mid-stream			
ID No. 3	20' NW of NE Corner of Switch 16	66' 2" West-SW of SW corner of Secondary Containment	68' 8" Southwest to Switch 8 @ NE Corner	40' SW to Switch 8 @ NE Corner
Description				
ID No. 4	69.8' of NE Corner of Switch 17	24.6 East of Switch 15	34' Southeast to Switch 7 @ NE Corner	60' Southeast to Switch 7 @ NW Corner
Description		6' 6" North of Closest Rail to the South		

GPS Elevations Deemed Inaccurate and Not Recognized



MW-2

MW-5

Pump House

MW-8 (est.)

SP-3

SP-2



Image © 2007 DigitalGlobe  
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52005 Google

## PARCEL IDENTIFICATION NUMBER

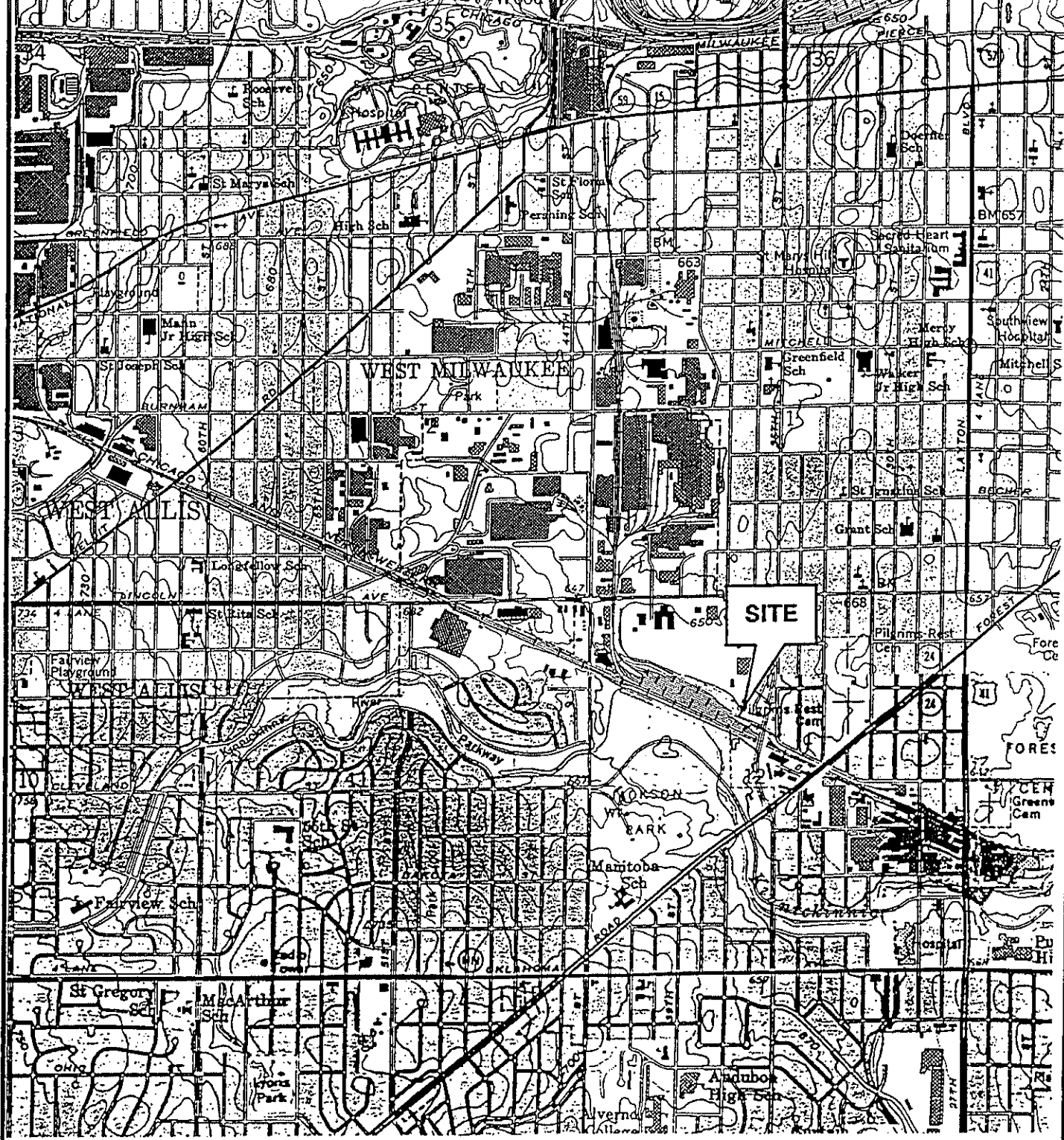
### Parcel Identification Number:

493-9971-5

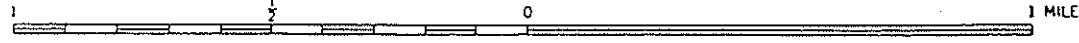
### Legal Description:

That part of the Northwest One-Quarter of Section 12, Town 6 North, Range 21 East, in the town of Greenfield, County of Milwaukee, State of Wisconsin and described as follows: Commencing at a point where the southwesterly line of the Right of Way of The Chicago & North Western Railway intersects the west line of said one-quarter Section, thence south sixty five degrees (65°) Forty-four Minutes (44') East along the southwesterly line of the said Right of Way, Two thousand two hundred eighteen and six one-hundredths (2216.06) feet to a point which is six hundred (600) feet South Eighty-eight degrees (88°) Forty minutes (40') Forty-eight seconds (48") West of the east line of said one-quarter Section, thence south no degrees (0°) Eighteen minutes (18') West on a line which is parallel to the east line of said one-quarter Section, Forty-three and seventy-seven one-hundredths (43.77) feet to a point, thence North Sixty-five degrees (65°) Forty-four minutes (44') west on a line which is parallel to the southwesterly line of said Right of Way, Two Thousand, Two hundred seventeen and eighty-one one hundredths (2217.81) feet to the west line of the said one-quarter Section, thence North along the West line of said one-quarter Section Forty-three and eight-eight one-hundredths (43.88) feet to the place of the beginning, containing Two and three hundred sixty-seven ten thousandth (2.0367) Acres of land.



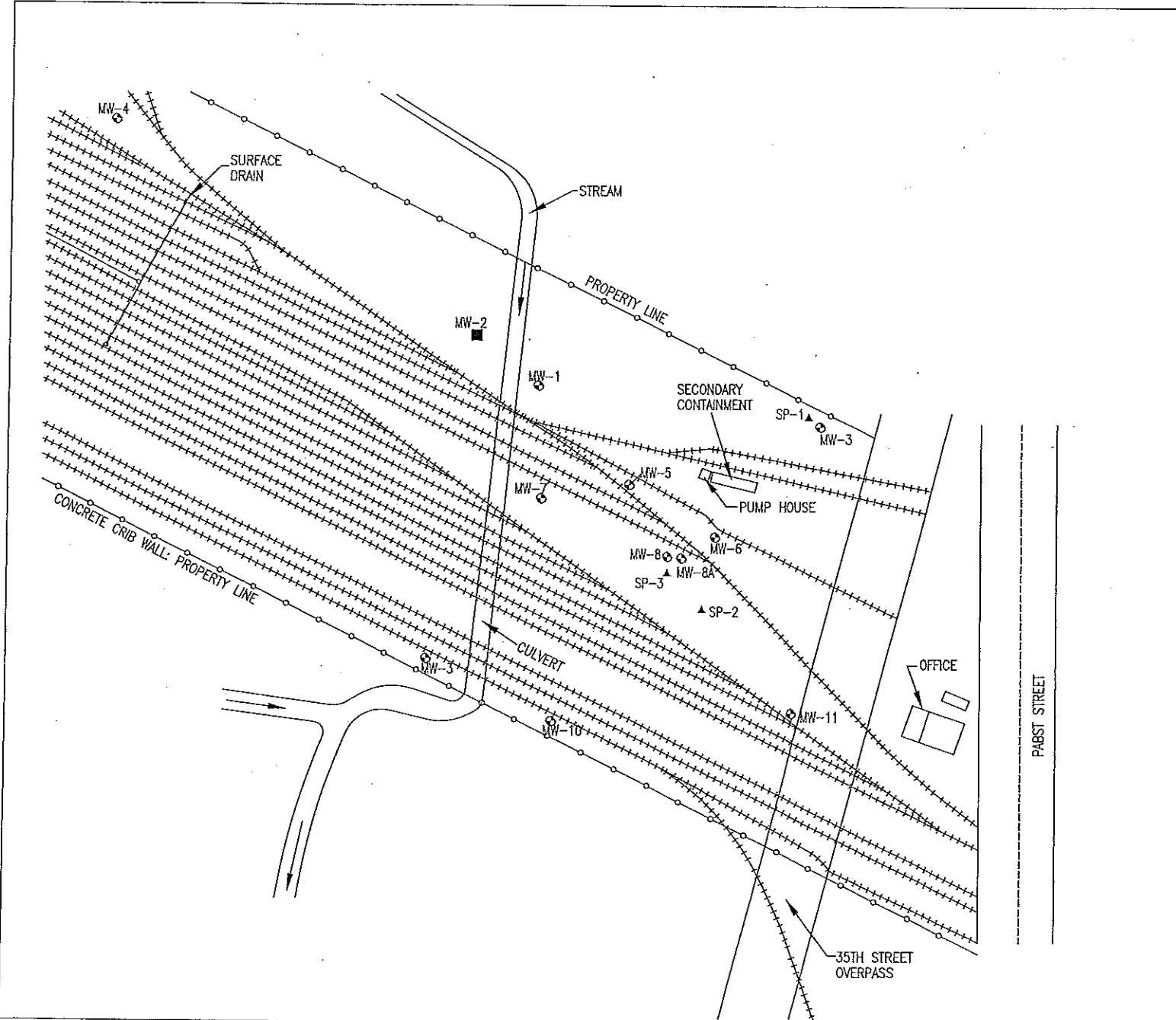


SCALE 1:24 000



**Burns  
&  
McDonnell  
Waste  
Consultants  
Inc.**

Figure 1  
SITE VICINITY MAP  
UNION PACIFIC  
MITCHELL YARD  
MILWAUKEE, WI



**LEGEND**

- +++++ UNION PACIFIC RAIL LINES
- o-o- PROPERTY LINE
- MW-3 MONITORING WELL ABANDONED 8/26/03
- ▲ SP-1 SOIL VAPOR PROBE LOCATION ABANDONED 8/26/03
- MW-8 PREVIOUSLY ABANDONED MONITORING WELL IN 1996
- MW-2 MONITORING WELL DESTROYED OR BURIED UNDER PAVEMENT HAS NOT BEEN FOUND SINCE 1996
- ▲ SP-2 SOIL VAPOR PROBE LOCATION DESTROYED
- MW-5 MONITORING WELL DESTROYED



DRAWING BASED ON BURNS & WOODS ABANDONED MONITORING WELLS

**FIGURE 1  
ABANDONED MONITORING WELLS**

UNION PACIFIC RAILROAD  
MITCHELL YARD  
MILWAUKEE, WISCONSIN

PROJECT NO. UPR8-113	PREPARED BY DR	DRAWN BY DR
DATE 11/14/06	REVIEWED BY CB	FILE NAME UPR8113





• MW-2

MW-5

Pump House

• MW-8 (est.)

SP-3

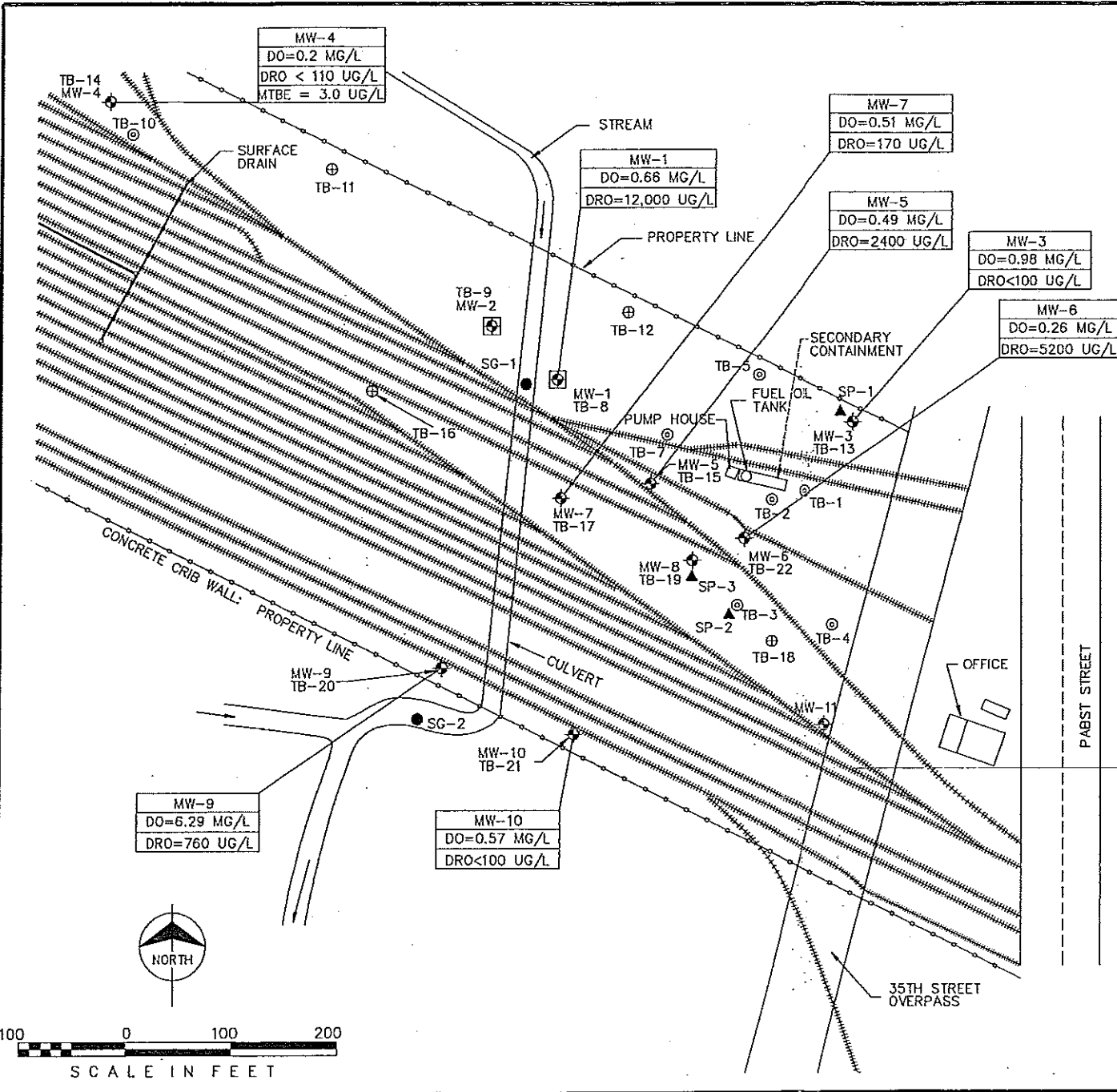
• SP-2



Image © 2007 DigitalGlobe  
© 2007 Navteq  
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© 2007 Google

DRAWING NAME: KAREN \C:\UNION PACIFIC\MITCHELL YARD\DRAWINGS\FG4



**LEGEND**

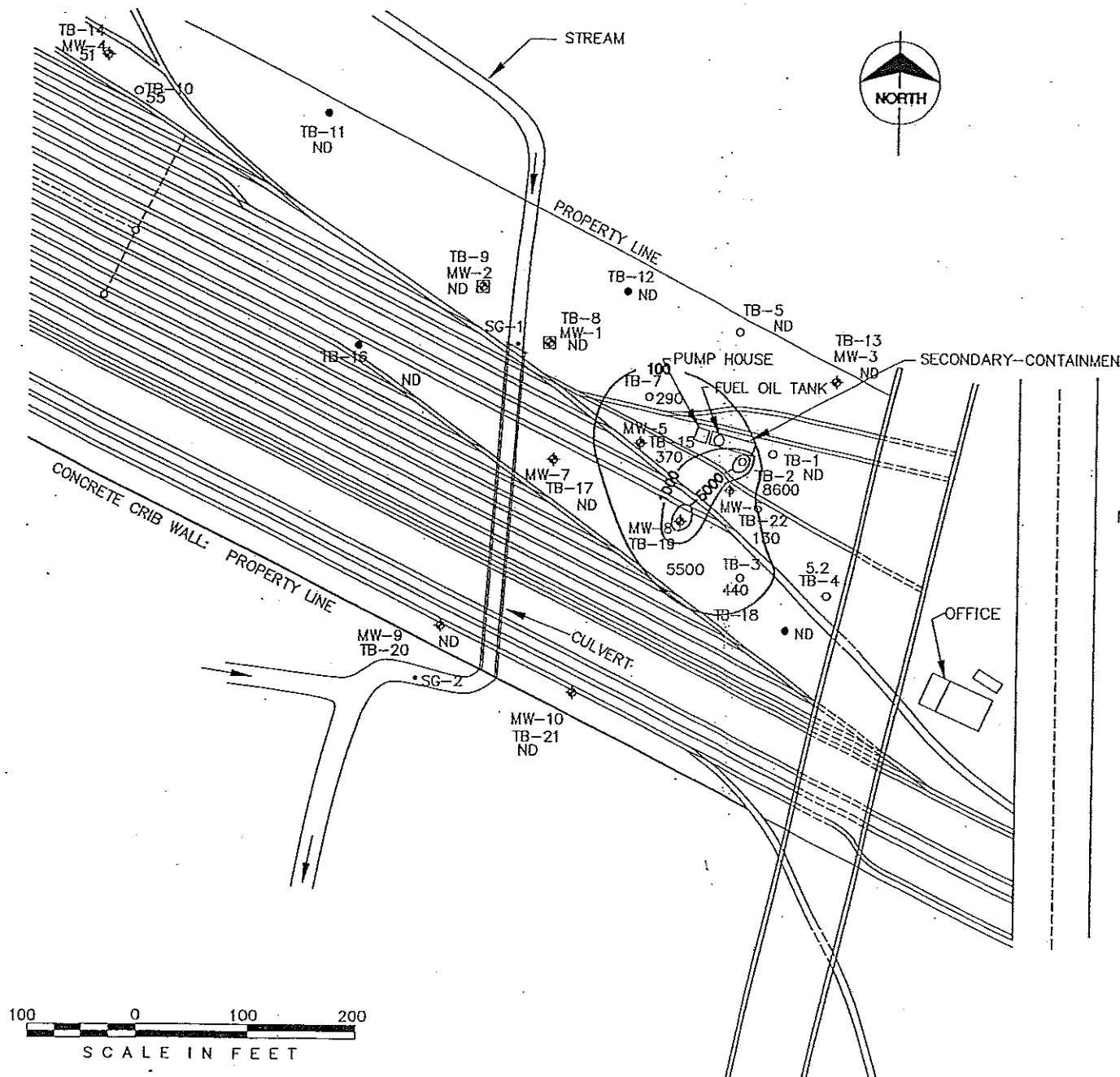
- ==== UNION PACIFIC RAIL LINES
- ⊕ BMCD MONITORING WELL
- MW-5 EXISTING MONITORING WELL
- ⊕ MW-1
- ⊕ TB-12 BMCD TEST BORING
- ⊕ TB-10 PREVIOUS TEST BORING
- SG-2 STREAM GAUGE
- ▲ SP-1 SOIL VAPOR PROBE LOCATION

**NOTES**

- 1) MONITORING WELLS MW-1 AND MW-2 AND PREVIOUS SOIL BORINGS TB-1 THROUGH TB-7 AND TB-10 WERE INSTALLED BY DAHL ASSOCIATES IN MAY 1994. SOIL BORING LOCATIONS ARE APPROXIMATE.
- 2) MONITORING WELLS MW-3 THROUGH MW-10 AND SOIL BORINGS TB-11, TB-12, TB-16, AND TB-18 WERE INSTALLED BY BMCD IN JANUARY 1996.
- 3) MONITORING WELL MW-2 COULD NOT BE LOCATED DURING THE BMCD SITE INVESTIGATION.
- 4) MONITORING WELL MW-11 WAS INSTALLED BY BMCD IN MAY 1997
- 5) DO = DISSOLVED OXYGEN
- 6) DRO = DIESEL RANGE ORGANICS
- 7) MTBE = METHYL TERTIARY BUTYL ETHER
- 8) MG/L = MILLIGRAMS PER LITER
- 9) UG/L = MICROGRAMS PER LITER



**DO CONCENTRATION IN  
GROUNDWATER 10/99  
UNION PACIFIC RAILROAD  
MITCHELL YARD  
MILWAUKEE, WISCONSIN**



**LEGEND**

- == UNION PACIFIC RAILROAD LINES
- TB-14 ND ◆ BMWCI MONITORING WELL  
DRO CONC. IN MILLIGRAMS PER KILOGRAM
- TB-9 ND □ EXISTING MONITORING WELL  
DRO CONC. IN MILLIGRAMS PER KILOGRAM
- TB-14 5f ◆ BMWCI TEST BORING  
DRO CONC. IN MILLIGRAMS PER KILOGRAM
- TB-7 290 ○ PREVIOUS TEST BORING  
DRO CONC. IN MILLIGRAMS PER KILOGRAM
- STREAM GAUGE
- ~ DRO ISOCONCENTRATION LINE  
(100-1000-5000 mg/L)
- ND NOT DETECTED

- NOTES: 1) MONITORING WELLS MW-1 AND MW-2 AND PREVIOUS SOIL BORINGS TB-1 THROUGH TB-7 AND TB-10 WERE INSTALLED BY DAHL ASSOCIATES IN MAY 1994. SOIL BORING LOCATIONS ARE APPROXIMATE.
- 2) MONITORING WELLS MW-3 THROUGH MW-10 AND SOIL BORINGS TB-11, TB-12, TB-16, AND TB-18 WERE INSTALLED BY BMWCI IN JANUARY 1996.
- 3) MONITORING WELL MW-2 COULD NOT BE LOCATED DURING THE BMWCI SITE INVESTIGATION



**Figure 2-1**  
DRO CONCENTRATIONS  
IN SOIL  
UNION PACIFIC RAILROAD  
MITCHELL YARD  
MILWAUKEE, WISCONSIN

KUPNITZ/CRAWFORD/STEELE

**Table 4**  
**Groundwater Sample Analytical Results**  
**Union Pacific Railroad**  
**Mitchell Yard Site**  
**Milwaukee, Wisconsin**

Sample Location:	WDNR	MW-1	MW-1	MW-1	MW-1	MW-A	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
Sample Date:	PAL	05/10/1994	01/16/1996	02/15/1996	07/30/1996	07/30/1996	11/14/1996	02/17/1997	05/22/1997	06/09/1998	10/22/1999	
Analyte	Unit	Invest.	Invest.	Invest.	Invest.	Dupl.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.
<b>PVOCs</b>												
Benzene	µg/L	0.5	1.2	<1.0	<2.0	<2.0	<2.0	<2.0	1.2 J	<2.0	<1.0	<1.0
Ethyl Benzene	µg/L	140	<1	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Methyl Tertiary Butyl Ether	µg/L	12	--	<1.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1.0	<1.0
Toluene	µg/L	68.6	<1	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	96	--	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	96	--	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
m,p-Xylene	µg/L	124	<1	<1.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<1.0	<1.0
o-Xylene	µg/L	124	1.4	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
<b>PAHs</b>												
Acenaphthalene	µg/L	*	<0.88	13	<10.0	<50.0	<50.0	<10.0	4.97	<1.00	<2.2	<2.1
Acenaphthene	µg/L	*	4.5	<5.0	<18.0	<90.0	<90.0	<18.0	<1.80	<1.80	4.3	<2.1
Anthracene	µg/L	600	<0.064	5.6	<6.60	<33.0	<33.0	<6.60	0.178 J	0.84	<2.2	<2.1
Benzo(a)anthracene	µg/L	*	<0.024	<0.30	<0.13	<0.65	<0.65	<0.13	0.020	0.455	<2.2	<2.1
Benzo(b)fluoranthene	µg/L	0.02	<0.0198	<0.14	<0.18	<0.90	<0.90	<0.18	0.012 J	<0.018	<2.2	<2.1
Benzo(k)fluoranthene	µg/L	*	<0.0168	<0.01	<0.17	<0.85	<0.85	<0.17	<0.017	<0.017	<2.2	<2.1
Benzo(g,h,i,j)perylene	µg/L	*	<0.064	<0.19	<0.76	<3.80	<3.80	<0.76	<0.076	<0.076	<2.2	<2.1
Benzo(a)pyrene	µg/L	0.02	<0.028	<0.10	<0.10	<0.560	<0.560	<0.112	<0.0112	<0.0112	<2.2	<2.1
Chrysene	µg/L	0.02	<0.16	<2.0	<1.5	<7.5	<7.5	<1.5	0.05 J	<0.16	<2.2	<2.1
Dibenzo(a,h)anthracene	µg/L	*	<0.028	<0.10	<0.30	<1.50	<1.50	<0.30	<0.030	<0.030	<2.2	<2.1
Fluoranthene	µg/L	80	<0.3	<0.30	<2.10	<10.5	<10.5	<2.10	0.110 J	1.08	<2.2	<2.1
Fluorene	µg/L	80	<0.124	3.5	4.89	<10.5	<10.5	3.22	1.96	3.79	4.9	<2.1
Indeno(1,2,3-cd)pyrene	µg/L	*	<0.0116	<0.14	<0.43	<2.5	<2.5	<0.43	<0.043	<0.043	<2.2	<2.1
1-Methylnaphthalene	µg/L	*	<0.48	<5.0	<0.10	15.9	11.9	1.55	0.586	3.88	--	--
2-Methylnaphthalene	µg/L	*	39	<5.0	<0.20	<1.00	<1.00	<0.20	0.599	5.16	<5.4	<5.3
Naphthalene	µg/L	8	4.4	2.5	<0.1	<9.50	<9.50	<1.90	0.0230 J	<0.190	<5.4	<5.3
Phenanthrene	µg/L	*	7.9	<12	<6.4	<32.0	<32.0	<6.40	0.702	<0.640	<2.2	<2.1
Pyrene	µg/L	50	<0.16	0.68	<2.7	<13.5	<13.5	<2.70	0.094 J	<0.270	<2.2	<2.1
WI DRO	µg/L	*	14000	4500	3230D	4540	5700	4040	4870 D	3270 D	920	12000

**NOTES:**

- (1) Monitoring wells MW-2 and MW-8 were not sampled for groundwater analyses during 1997, 1998 and 1999.
- (2) WDNR PAL = Wisconsin Department of Natural Resources Protective Action Limit
- (3) \* No PAL available for this analyte.
- (4) µg/L = Micrograms per liter
- (5) D = Indicates all compounds in an analysis at a secondary dilution.
- (6) J = The compound/analyte was positively identified; the associated numerical value is the approximate concentration of the compound /analyte in the sample.
- (7) -- Indicates the analysis was not performed.

**Table 4 (Continued)**  
**Groundwater Sample Analytical Results**  
**Union Pacific Railroad**  
**Mitchell Yard Site**  
**Milwaukee, Wisconsin**

Sample Location:	MW-3	MW-B	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
Sample Date:	01/15/1996	01/15/1996	02/15/1996	07/30/1996	11/14/1996	02/17/1997	05/22/1997	06/09/1998	10/22/1999	
Analyte	Unit	Invest.	Dupl.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	
<b>PVOCs</b>										
Benzene	µg/L	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Ethyl Benzene	µg/L	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Methyl Tertiary Butyl Ether	µg/L	<1.0	<1.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1.0	<1.0
Toluene	µg/L	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
m,p-Xylene	µg/L	<1.0	<1.0	<4.0	<4.0	<4.0	<4.0	<4.0	<1.0	<1.0
o-Xylene	µg/L	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
<b>PAHs</b>										
Acenaphthalene	µg/L	<1.1	<1.1	<10.9	<1.00	<1.00	<1.00	<1.00	<2.1	<2.2
Acenaphthene	µg/L	<5.0	<5.0	<19.6	<1.80	<1.80	<1.80	<1.80	<2.1	<2.2
Anthracene	µg/L	<4.0	<4.0	<7.19	<0.660	<0.660	0.011 J	<0.660	<2.1	<2.2
Benzo(a)anthracene	µg/L	<0.30	<0.30	<0.14	<0.013	<0.013	<0.013	<0.013	<2.1	<2.2
Benzo(b)fluoranthene	µg/L	<0.14	<0.14	<0.20	<0.018	<0.018	0.012 J	<0.018	<2.1	<2.2
Benzo(k)Fluoranthene	µg/L	<0.01	<0.01	<0.19	<0.017	<0.017	<0.017	<0.017	<2.1	<2.2
Benzo(g,h,i)perylene	µg/L	<0.19	<0.19	<0.83	<0.076	<0.076	<0.076	<0.076	<2.1	<2.2
Benzo(a)pyrene	µg/L	<0.10	<0.10	<0.01	<0.0112	<0.0112	<0.0112	<0.0112	<2.1	<2.2
Chrysene	µg/L	<2.0	<2.0	<1.6	<0.15	<0.15	0.01 J	<0.15	<2.1	<2.2
Dibenzo(a,h)anthracene	µg/L	<0.10	<0.10	<0.33	<0.030	0.032	<0.030	<0.030	<2.1	<2.2
Fluoranthene	µg/L	<0.30	<0.30	<2.29	<0.210	<0.210	0.027 J	<0.210	<2.1	<2.2
Fluorene	µg/L	<0.10	<0.10	<2.29	<0.210	<0.210	0.074 J	<0.210	<2.1	<2.2
Indeno(1,2,3-cd)pyrene	µg/L	<0.14	<0.14	<0.47	<0.043	<0.043	<0.043	<0.043	<2.1	<2.2
1-Methylnaphthalene	µg/L	<5.0	<5.0	<0.11	0.011	<0.030	<0.030	<0.011	-	-
2-Methylnaphthalene	µg/L	<5.0	<5.0	<0.22	<0.020	<0.020	<0.020	<0.020	<5.3	<5.4
Naphthalene	µg/L	<1.3	<1.3	<0.1	<0.190	<0.190	<0.190	<0.190	<5.3	<5.4
Phenanthrene	µg/L	<12	<12	<6.98	<0.640	<0.640	0.026 J	<0.640	<2.1	<2.2
Pyrene	µg/L	<0.40	<0.40	<2.94	<0.270	<0.270	0.039 J	<0.270	<2.1	<2.2
WI DRO	µg/L	<100	<100	313	597	116	854 D	137	<100	<100

**NOTES:**

- (1) µg/L = Micrograms per liter
- (2) D = Indicates all compounds in an analysis at a secondary dilution.
- (3) J = The compound/analyte was positively identified; the associated numerical value is the approximate concentration of the compound /analyte in the sample.
- (4) - Indicates the analysis was not performed.

**Table 4 (Continued)**  
**Groundwater Sample Analytical Results**  
**Union Pacific Railroad**  
**Mitchell Yard Site**  
**Milwaukee, Wisconsin**

Sample Location:	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample Date:	01/15/1996	02/15/1996	07/30/1996	11/14/1996	02/17/1997	05/22/1997	06/09/1998	10/22/1999	
Analyte	Unit	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.
<b>PVOCs</b>									
Benzene	µg/L	<1.0	<2.0	Not	<2.0	<2.0	<2.0	<1.0	<1.0
Ethyl Benzene	µg/L	<1.0	<2.0	Sampled	<2.0	<2.0	<2.0	<1.0	<1.0
Methyl Tertiary Butyl Ether	µg/L	<1.0	<10.0		<10.0	<10.0	<10.0	<1.0	3.0
Toluene	µg/L	<1.0	<2.0	Sheen	<2.0	<2.0	<2.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<2.0	on	<2.0	<2.0	<2.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<2.0	Purge	<2.0	<2.0	<2.0	<1.0	<1.0
m,p-Xylene	µg/L	<1.0	<4.0	Water	<4.0	<4.0	<4.0	<1.0	<1.0
o-Xylene	µg/L	<1.0	<2.0		<2.0	<2.0	1.1	<1.0	<1.0
<b>PAHs</b>									
Acenaphthalene	µg/L	<1.1	<36.0		<1.00	<1.00	<1.00	<2.1	<2.1
Acenaphthene	µg/L	<5.0	<20.0	Not	<1.80	<1.80	<1.80	<2.1	<2.1
Anthracene	µg/L	<4.0	<13.2	Sampled	<0.660	0.016 J	<0.660	<2.1	<2.1
Benzo(a)anthracene	µg/L	<0.30	<0.26		0.016	<0.013	0.021	<2.1	<2.1
Benzo(b)fluoranthene	µg/L	<0.14	<0.36	Sheen	<0.018	0.011 J	<0.018	<2.1	<2.1
Benzo(k)fluoranthene	µg/L	<0.01	<0.34	on	<0.017	<0.017	<0.017	<2.1	<2.1
Benzo(g,h,i)perylene	µg/L	<0.19	<1.52	Purge	<0.076	<0.076	<0.076	<2.1	<2.1
Benzo(a)pyrene	µg/L	<0.10	<0.02	Water	<0.0112	<0.0112	<0.0112	<2.1	<2.1
Chrysene	µg/L	<2.0	<3.0		<0.15	0.04 J	<0.15	<2.1	<2.1
Dibenzo(a,h)anthracene	µg/L	<0.10	<0.60		<0.030	<0.030	<0.030	<2.1	<2.1
Fluoranthene	µg/L	<0.30	<4.20		<0.210	0.026 J	<0.210	<2.1	<2.1
Fluorene	µg/L	<0.10	<4.20		<0.210	0.074 J	<0.210	<2.1	<2.1
Indeno(1,2,3-cd)pyrene	µg/L	<0.14	<0.86		<0.043	<0.043	<0.043	<2.1	<2.1
1-Methylnaphthalene	µg/L	<5.0	<0.20		<0.010	<0.030	0.024	-	-
2-Methylnaphthalene	µg/L	<5.0	<0.40		<0.020	<0.020	0.028	<5.3	<5.3
Naphthalene	µg/L	<1.3	<0.2		<0.190	<0.190	<0.190	<5.3	<5.3
Phenanthrene	µg/L	<12	<12.8		<0.640	0.105 J	<0.640	<2.1	<2.1
Pyrene	µg/L	<0.40	<5.40		<0.270	0.012 J	<0.270	<2.1	<2.1
WI DRO	µg/L	12000	678		690	1170 D	797 D	<100	<110

**NOTES:**

- (1) µg/L = Micrograms per liter
- (2) D = Indicates all compounds in an analysis at a secondary dilution.
- (3) J = The compound/analyte was positively identified; the associated numerical value is the approximate concentration of the compound/analyte in the sample.
- (4) - Indicates the analysis was not performed.



**Table 4 (Continued)**  
**Groundwater Sample Analytical Results**  
**Union Pacific Railroad**  
**Mitchell Yard Site**  
**Milwaukee, Wisconsin**

Sample Location:	MW-5	MW-5	MW-A	MW-5	MW-5	MW-A	MW-5	MW-5	MW-5	MW-5
Sample Date:	01/16/1996	02/15/1996	02/15/1996	07/30/1996	11/14/1996	11/14/1996	02/17/1997	05/22/1997	06/09/1998	10/22/1999
Analyte	Unit	Invest.	Invest.	Dupl.	Invest.	Invest.	Dupl. of MW-5	Invest.	Invest.	Invest.
<b>PVOCs</b>										
Benzene	µg/L	<1.0	<2.0	<2.0	Not	<2.0	<2.0	<2.0	<2.0	<1.0
Ethyl Benzene	µg/L	<1.0	<2.0	<2.0	Sampled	<2.0	<2.0	<2.0	<2.0	<1.0
Methyl Tertiary Butyl Ether	µg/L	<1.0	<10.0	<10.0		<10.0	<10.0	<10.0	<10.0	<1.0
Toluene	µg/L	<1.0	<2.0	<2.0	Sheen	<2.0	<2.0	<2.0	<2.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<2.0	<2.0	on	<2.0	<2.0	<2.0	<2.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<2.0	<2.0	Purge	<2.0	<2.0	<2.0	<2.0	<1.0
m,p-Xylene	µg/L	<1.0	<4.0	<4.0	Water	<4.0	<4.0	<4.0	<4.0	<1.0
o-Xylene	µg/L	<1.0	<2.0	<2.0		<2.0	<2.0	<2.0	1.2	<1.0
<b>PAHs</b>										
Acenaphthalene	µg/L	<1.1	<18.0	<19.6		<1.00	<1.00	<1.00	<1.00	<2.1
Acenaphthene	µg/L	<5.0	<10.0	<10.9	Not	<1.80	<1.80	<1.80	<1.80	<2.1
Anthracene	µg/L	<4.0	<6.60	<7.19	Sampled	<0.660	<0.660	0.127 J	<0.660	<2.1
Benzo(a)anthracene	µg/L	<0.30	<0.13	<0.14		0.020	<0.013	0.015	<0.013	<2.1
Benzo(b)fluoranthene	µg/L	<0.14	<0.18	<0.20	Sheen	<0.018	<0.018	0.011 J	<0.018	<2.1
Benzo(k)Fluoranthene	µg/L	<0.01	<0.17	<0.19	on	<0.017	<0.017	<0.017	<0.017	<2.1
Benzo(g,h,i)perylene	µg/L	<0.19	<0.76	<0.83	Purge	<0.076	<0.076	<0.076	<0.076	<2.1
Benzo(a)pyrene	µg/L	<0.10	<0.01	<0.01	Water	<0.0112	<0.0112	<0.0112	<0.0112	<2.1
Chrysene	µg/L	<2.0	<1.5	<1.6		<0.15	<0.15	0.05 J	<0.15	<2.1
Dibenzo(a,h)anthracene	µg/L	<0.10	<0.30	<0.33		<0.030	<0.030	<0.030	<0.030	<2.1
Fluoranthene	µg/L	<0.30	<2.10	<2.29		<0.210	<0.210	0.026 J	<0.210	<2.1
Fluorene	µg/L	0.20	<2.10	<2.29		<0.210	<0.210	0.076 J	<0.210	<2.1
Indeno(1,2,3-cd)pyrene	µg/L	<0.14	<0.43	<0.47		<0.043	<0.043	<0.043	<0.043	<2.1
1-Methylnaphthalene	µg/L	<5.0	<0.10	<0.11		0.036	<0.030	<0.030	<0.030	--
2-Methylnaphthalene	µg/L	<5.0	<0.20	<0.22		0.043	0.024	<0.020	0.023	<5.3
Naphthalene	µg/L	<1.3	<0.1	<0.10		<0.190	<0.190	<0.190	<0.190	<5.3
Phenanthrene	µg/L	<12	<6.40	<6.98		<0.640	<0.640	0.047 J	<0.640	<2.1
Pyrene	µg/L	<0.40	<2.7	<2.94		<0.270	<0.270	0.022 J	<0.270	<2.1
WI DRO	µg/L	1100	2410D	2680D		1720	1540	2930 D	1750 D	<100
										2400

**NOTES:**

- (1) µg/L = Micrograms per liter
- (2) D = Indicates all compounds in an analysis at a secondary dilution.
- (3) J = The compound/analyte was positively identified; the associated numerical value is the approximate concentration of the compound/analyte in the sample.
- (4) -- Indicates the analysis was not performed.

**Table 4 (Continued)**  
**Groundwater Sample Analytical Results**  
**Union Pacific Railroad**  
**Mitchell Yard Site**  
**Milwaukee, Wisconsin**

Sample Location:	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-A
Sample Date:	01/16/1996	02/15/1996	07/30/1996	11/14/1996	02/17/1997	05/22/1997	06/09/1998	10/22/1999	10/22/1999	
	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Dupl. of MW-6
Analyte	Unit									
<b>PVOCs</b>										
Benzene	µg/L	<1.0	<2.0	Not	Not	<2.0	<2.0	<1.0	<1.0	<1.0
Ethyl Benzene	µg/L	<1.0	<2.0	Sampled	Sampled	<2.0	<2.0	<1.0	<1.0	<1.0
Methyl Tertiary Butyl Ether	µg/L	<1.0	<10.0			<10.0	<10.0	<1.0	<1.0	<1.0
Toluene	µg/L	<1.0	<2.0	Sheen	Sheen	<2.0	<2.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	3.8	<2.0	on	on	<2.0	<2.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<2.0	Purge	Purge	<2.0	<2.0	<1.0	<1.0	<1.0
m,p-Xylene	µg/L	<1.0	<4.0	Water	Water	<4.0	<4.0	<1.0	<1.0	<1.0
o-Xylene	µg/L	<1.0	<2.0			<2.0	<2.0	<1.0	<1.0	<1.0
<b>PAHs</b>										
Acenaphthalene	µg/L	<1.1	<20.5			0.14 J	2.1	<2.1	<2.0	<2.2
Acenaphthene	µg/L	<5.0	<11.4	Not	Not	0.384 J	<1.80	5.3	<2.0	<2.2
Anthracene	µg/L	<4.0	<7.52	Sampled	Sampled	0.291 J	1.01	<2.1	<2.0	<2.2
Benzo(a)anthracene	µg/L	<0.30	4.04			0.063	0.555	<2.1	<2.0	<2.2
Benzo(b)fluoranthene	µg/L	<0.14	<0.21	Sheen	Sheen	0.021	<0.018	<2.1	<2.0	<2.2
Benzo(k)Fluoranthene	µg/L	0.07	<0.19	on	on	0.005 J	<0.017	<2.1	<2.0	<2.2
Benzo(g,h,i)perylene	µg/L	<0.19	<0.87	Purge	Purge	<0.076	<0.076	<2.1	<2.0	<2.2
Benzo(a)pyrene	µg/L	0.18	<0.01	Water	Water	0.0044 J	<0.0112	<2.1	<2.0	<2.2
Chrysene	µg/L	<2.0	<1.7			0.11 J	0.24	<2.1	<2.0	<2.2
Dibenzo(a,h)anthracene	µg/L	<0.10	<0.34			<0.030	0.044	<2.1	<2.0	<2.2
Fluoranthene	µg/L	1.9	7.00			0.317	2.47	<2.1	<2.0	<2.2
Fluorene	µg/L	7.5	6.87			1.06	3.69	5.6	<2.0	<2.2
Indeno(1,2,3-cd)pyrene	µg/L	<0.14	<0.49			<0.043	<0.043	<2.1	<2.0	<2.2
1-Methylnaphthalene	µg/L	43	<0.11			<0.030	5.12	-	-	-
2-Methylnaphthalene	µg/L	6.9	<0.23			<0.020	2.39	<5.3	<5.0	<5.4
Naphthalene	µg/L	<1.3	<0.1			<0.190	2.68	<5.3	<5.0	<5.4
Phenanthrene	µg/L	30	<7.30			0.406 J	2.34	<2.1	<2.0	<2.2
Pyrene	µg/L	7.0	15.0			0.219 J	0.453	<2.1	<2.0	<2.2
WI DRO	µg/L	8500	11000D			2060 D	3420 D	3300	5200	5200

**NOTES:**

- (1) µg/L = Micrograms per liter
- (2) D = Indicates all compounds in an analysis at a secondary dilution.
- (3) J = The compound/analyte was positively identified; the associated numerical value is the approximate concentration of the compound /analyte in the sample.
- (4) - indicates the analysis was not performed.

**Table 4 (Continued)**  
**Groundwater Sample Analytical Results**  
**Union Pacific Railroad**  
**Mitchell Yard Site**  
**Milwaukee, Wisconsin**

Sample Location:		MW-7	MW-7	MW-7	MW-7	MW-7	MW-A	MW-7	MW-7	MW-7
Sample Date:		01/15/1996	02/15/1996	07/30/1996	11/14/1996	02/17/1997	02/17/1997	05/22/1997	06/09/1998	10/22/1999
		Invest.	Invest.	Invest.	Invest.	Invest.	Dupl. of MW-7	Invest.	Invest.	Invest.
Analyte	Unit									
<b>PVOCs</b>										
Benzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Ethyl Benzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Methyl Tertiary Butyl Ether	µg/L	<1.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1.0	<1.0
Toluene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
m,p-Xylene	µg/L	<1.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<1.0	<1.0
o-Xylene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
<b>PAHs</b>										
Acenaphthalene	µg/L	<1.1	<18.0	<1.00	<1.00	<1.00	<1.00	<1.00	<2.1	<2.0
Acenaphthene	µg/L	<5.0	<10.0	<1.80	<1.80	<1.80	<1.80	<1.80	<2.1	<2.0
Anthracene	µg/L	<4.0	<6.60	<0.660	<0.660	0.026 J	0.033 J	<0.660	<2.1	<2.0
Benzo(a)anthracene	µg/L	0.7	<0.13	0.168	0.064	0.112	0.168	0.154	<2.1	<2.0
Benzo(b)fluoranthene	µg/L	0.26	<0.18	0.247	0.09	0.197	0.205	0.250	<2.1	<2.0
Benzo(k)fluoranthene	µg/L	0.42	<0.17	0.093	0.035	0.082	0.088	<0.017	<2.1	<2.0
Benzo(g,h,i)perylene	µg/L	1.2	<0.76	0.182	<0.076	0.134	0.133	0.245	<2.1	<2.0
Benzo(a)pyrene	µg/L	0.79	<0.10	0.172	0.079	0.086	0.0840	0.195	<2.1	<2.0
Chrysene	µg/L	<2.0	<1.5	0.17	<0.15	0.12 J	0.17	0.17	<2.1	<2.0
Dibenzo(a,h)anthracene	µg/L	<0.10	<0.30	0.316	<0.030	0.058	0.052	<0.030	<2.1	<2.0
Fluoranthene	µg/L	1.1	<2.10	0.222	<0.210	0.022 J	0.344	0.306	<2.1	<2.0
Fluorene	µg/L	<0.10	<2.10	<0.210	<0.210	0.075 J	0.082 J	<0.210	<2.1	<2.0
Indeno(1,2,3-cd)pyrene	µg/L	0.4	<0.43	0.197	0.102	0.133	0.151	0.168	<2.1	<2.0
1-Methylnaphthalene	µg/L	<5.0	<0.10	0.016	<0.010	<0.030	<0.030	0.106	-	-
2-Methylnaphthalene	µg/L	<5.0	<0.20	<0.020	<0.020	<0.020	<0.020	0.235	<5.3	<5.0
Naphthalene	µg/L	<1.3	<0.1	<0.190	<0.190	0.0170 J	0.0190 J	0.354	<5.3	<5.0
Phenanthrene	µg/L	<12	<6.40	<0.640	<0.640	0.108 J	0.177 J	<0.640	<2.1	<2.0
Pyrene	µg/L	1.3	<2.70	<0.270	<0.270	0.199 J	0.296	<0.270	<2.1	<2.0
WI DRO	µg/L	<100	161	754	317	535	508	287	<100	170

**NOTES:**

- (1) µg/L = Micrograms per liter
- (2) J = The compound/analyte was positively identified; the associated numerical value is the approximate concentration of the compound/analyte in the sample.
- (3) - Indicates the analysis was not performed.

**Table 4 (Continued)**  
**Groundwater Sample Analytical Results**  
**Union Pacific Railroad**  
**Mitchell Yard Site**  
**Milwaukee, Wisconsin**

Sample Location:	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9
Sample Date:	01/15/1996	02/15/1996	07/30/1996	11/14/1996	02/17/1997	05/22/1997	06/16/1998	10/22/1999	
Analyte	Unit	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.
<b>PVOCs</b>									
Benzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Ethyl Benzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Methyl Tertiary Butyl Ether	µg/L	<1.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1.0	<1.0
Toluene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
m,p-Xylene	µg/L	<1.0	<4.0	<4.0	<4.0	<4.0	<4.0	<1.0	<1.0
o-Xylene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
<b>PAHs</b>									
Acenaphthalene	µg/L	<1.1	<59.9	<1.00	<1.00	Not Sampled  Insufficient Groundwater Recharge	<1.00	<2.1	<2.8
Acenaphthene	µg/L	<5.0	<33.3	<1.80	<1.80		<1.80	<2.1	<2.8
Anthracene	µg/L	<4.0	<22.0	<0.660	<0.660		<0.660	<2.1	<2.8
Benzo(a)anthracene	µg/L	<0.30	<0.43	0.057	<0.013		<0.013	<2.1	<2.8
Benzo(b)fluoranthene	µg/L	<0.14	<0.60	0.056	<0.018		<0.018	<2.1	<2.8
Benzo(k)fluoranthene	µg/L	0.11	<0.57	<0.017	<0.017		<0.017	<2.1	<2.8
Benzo(g,h,i)perylene	µg/L	<0.19	<2.53	<0.076	<0.076		<0.076	<2.1	<2.8
Benzo(a)pyrene	µg/L	<0.10	<0.33	<0.0112	<0.0112		<0.0112	<2.1	<2.8
Chrysene	µg/L	<2.0	<5.0	<0.15	<0.15		<0.15	<2.1	<2.8
Dibenzo(a,h)anthracene	µg/L	<0.10	<1.00	<0.030	<0.030		<0.030	<2.1	<2.8
Fluoranthene	µg/L	<0.30	<6.99	<0.210	<0.210	<0.210	<2.1	<2.8	
Fluorene	µg/L	<0.10	<6.99	<0.210	<0.210	<0.210	<2.1	<2.8	
Indeno(1,2,3-cd)pyrene	µg/L	<0.14	<1.43	<0.043	<0.043	<0.043	<2.1	<2.8	
1-Methylnaphthalene	µg/L	<5.0	<0.33	0.021	<0.030	<0.030	-	-	
2-Methylnaphthalene	µg/L	<5.0	<0.67	0.031	0.03	0.035	<5.3	<6.9	
Naphthalene	µg/L	<1.3	<0.3	<0.190	<0.190	<0.190	<5.3	<6.9	
Phenanthrene	µg/L	<12	<21.3	<0.640	<0.640	<0.640	<2.1	<2.8	
Pyrene	µg/L	<0.40	<8.99	<0.270	<0.270	<0.270	<2.1	<2.8	
WI DRO	µg/L	<100	161J	789	395		526	<100	760

**NOTES:**

- (1) µg/L = Micrograms per liter
- (2) J = The compound/analyte was positively identified; the associated numerical value is the approximate concentration of the compound /analyte in the sample.
- (3) - indicates the analysis was not performed.

**Table 4 (Continued)**  
**Groundwater Sample Analytical Results**  
**Union Pacific Railroad**  
**Mitchell Yard Site**  
**Milwaukee, Wisconsin**

Sample Location:		MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10
Sample Date:		01/15/1996	02/15/1996	07/30/1996	11/14/1996	02/17/1997	05/22/1997	06/09/1998	10/22/1999
Analyte	Unit	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.	Invest.
<b>PVOCs</b>									
Benzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Ethyl Benzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Methyl Tertiary Butyl Ether	µg/L	<1.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1.0	<1.0
Toluene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
m,p-Xylene	µg/L	<1.0	<4.0	<4.0	<4.0	<4.0	<4.0	<1.0	<1.0
o-Xylene	µg/L	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
<b>PAHs</b>									
Acenaphthalene	µg/L	<1.1	<18.0	<1.00	<1.00	<1.00	<1.00	<2.2	<2.1
Acenaphthene	µg/L	<5.0	<10.0	<1.80	<1.80	0.011 J	<1.80	<2.2	<2.1
Anthracene	µg/L	<4.0	<6.60	<0.660	<0.660	0.032 J	<0.660	<2.2	<2.1
Benzo(a)anthracene	µg/L	<0.30	<0.13	<0.013	<0.013	0.010 J	<0.013	<2.2	<2.1
Benzo(b)fluoranthene	µg/L	<0.14	<0.18	<0.018	<0.018	0.013 J	<0.018	<2.2	<2.1
Benzo(k)Fluoranthene	µg/L	<0.01	<0.17	<0.017	<0.017	<0.017	<0.017	<2.2	<2.1
Benzo(g,h,i)perylene	µg/L	<0.19	<0.76	<0.076	<0.076	<0.076	<0.076	<2.2	<2.1
Benzo(a)pyrene	µg/L	<0.10	<0.10	<0.0112	<0.0112	<0.0112	<0.0112	<2.2	<2.1
Chrysene	µg/L	<2.0	<1.5	<0.15	<0.15	0.02 J	<0.15	<2.2	<2.1
Dibenzo(a,h)anthracene	µg/L	<0.10	<0.30	<0.030	<0.030	<0.030	<0.030	<2.2	<2.1
Fluoranthene	µg/L	<0.30	<2.10	<0.210	<0.210	0.034 J	<0.210	<2.2	<2.1
Fluorene	µg/L	<0.10	<2.10	<0.210	<0.210	0.096 J	<0.210	<2.2	<2.1
Indeno(1,2,3-cd)pyrene	µg/L	<0.14	<0.43	<0.043	<0.043	<0.043	<0.043	<2.2	<2.1
1-Methylnaphthalene	µg/L	<5.0	<0.10	0.02	<0.030	<0.030	0.062	--	--
2-Methylnaphthalene	µg/L	<5.0	<0.20	<0.020	0.021	<0.020	0.104	<5.4	<5.3
Naphthalene	µg/L	<1.3	<0.1	<0.190	<0.190	<0.190	0.247	<5.4	<5.3
Phenanthrene	µg/L	<12	<6.40	<0.640	<0.640	0.063 J	<0.640	<2.2	<2.1
Pyrene	µg/L	<0.40	<2.70	<0.270	<0.270	0.021 J	<0.270	<2.2	<2.1
WI DRO	µg/L	<100	95J	774	100	551	106	<100	<100*

**NOTES:**

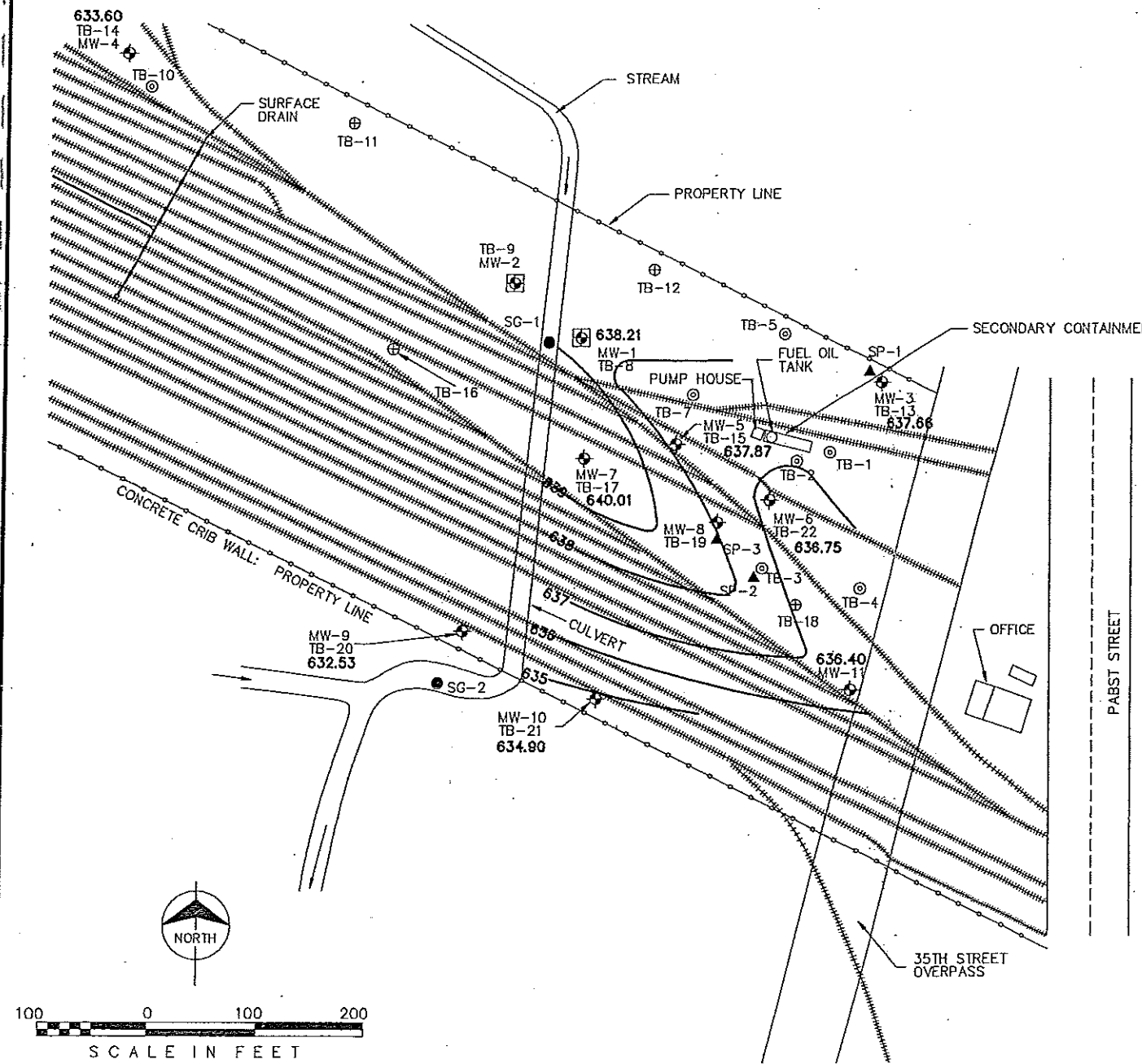
- (1) µg/L = Micrograms per liter
- (2) J = The compound/analyte was positively identified; the associated numerical value is the approximate concentration of the compound /analyte in the sample.
- (3) -- Indicates the analysis was not performed.
- (4) \* Data collected on 11/04/99.

**Table 4 (Continued)**  
**Groundwater Sample Analytical Results**  
**Union Pacific Railroad**  
**Mitchell Yard Site**  
**Milwaukee, Wisconsin**

Sample Location:		MW-11	MW-11	MW-11*
Sample Date:		05/22/1997	06/09/1998	11/04/1999
		Invest.	Invest.	Invest.
Analyte	Unit			
<b>PVOCs</b>				
Benzene	µg/L	<2.0	<1.0	<1.0
Ethyl Benzene	µg/L	<2.0	<1.0	<1.0
Methyl Tertiary Butyl Ether	µg/L	<10.0	<1.0	<1.0
Toluene	µg/L	<2.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	<2.0	<1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	<2.0	<1.0	<1.0
m,p-Xylene	µg/L	<4.0	<1.0	<1.0
o-Xylene	µg/L	<2.0	<1.0	<1.0
<b>PAHs</b>				
Acenaphthalene	µg/L	<1.00	<2.2	<2.1
Acenaphthene	µg/L	<1.80	<2.2	<2.1
Anthracene	µg/L	<0.660	<2.2	<2.1
Benzo(a)anthracene	µg/L	<0.013	<2.2	<2.1
Benzo(b)fluoranthene	µg/L	<0.018	<2.2	<2.1
Benzo(k)Fluoranthene	µg/L	<0.017	<2.2	<2.1
Benzo(g,h,i)perylene	µg/L	<0.076	<2.2	<2.1
Benzo(a)pyrene	µg/L	<0.0112	<2.2	<2.1
Chrysene	µg/L	<0.15	<2.2	<2.1
Dibenzo(a,h)anthracene	µg/L	<0.030	<2.2	<2.1
Fluoranthene	µg/L	<0.210	<2.2	<2.1
Fluorene	µg/L	<0.210	<2.2	<2.1
Indeno(1,2,3-cd)pyrene	µg/L	<0.043	<2.2	<2.1
1-Methylnaphthalene	µg/L	0.116	--	--
2-Methylnaphthalene	µg/L	0.235	<5.4	<5.2
Naphthalene	µg/L	0.285	<5.4	<5.2
Phenanthrene	µg/L	<0.640	<2.2	<2.1
Pyrene	µg/L	<0.270	<2.2	<2.1
WI DRO	µg/L	313	<100	<120J

**NOTES:**

- (1) µg/L = Micrograms per liter
- (2) J = The compound/analyte was positively identified; the associated numerical value is the approximate concentration of the compound /analyte in the sample.
- (3) -- Indicates the analysis was not performed.
- (4) \* Data collected on 11/04/99.



**LEGEND**

- ▬▬▬▬▬▬ UNION PACIFIC RAIL LINES
- ⊕ BMCD MONITORING WELL  
MW-5
- ⊕ EXISTING MONITORING WELL  
MW-1
- ⊕ BMCD TEST BORING  
TB-12
- ⊕ PREVIOUS TEST BORING  
TB-10
- STREAM GAUGE  
SG-2
- ▲ SOIL VAPOR PROBE LOCATION  
SP-1
- 639 GROUNDWATER CONTOUR IN FEET
- 634.90 GROUNDWATER ELEVATION IN FEET

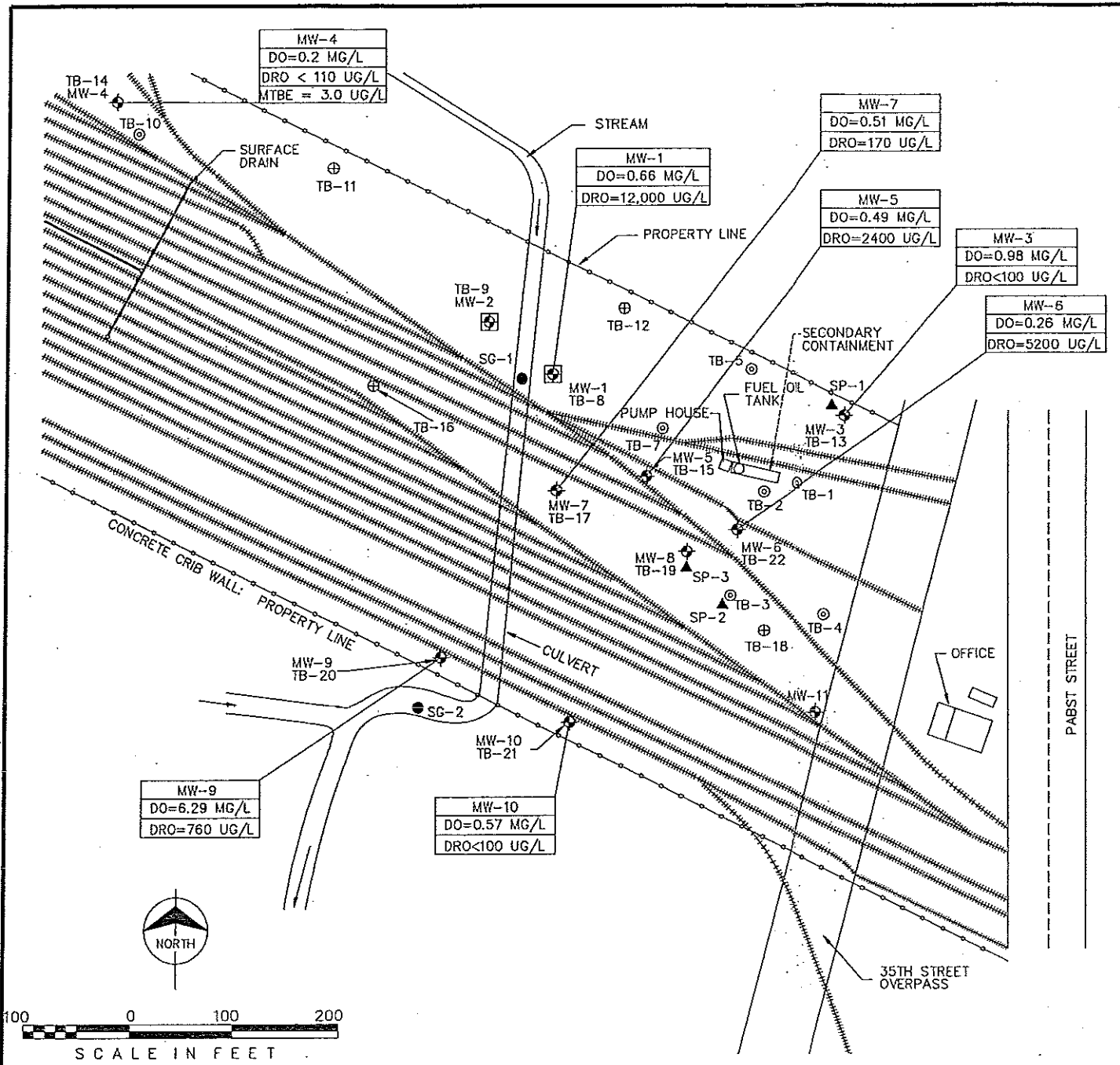
**NOTES**

- 1) MONITORING WELLS MW-1 AND MW-2 AND PREVIOUS SOIL BORINGS TB-1 THROUGH TB-7 AND TB-10 WERE INSTALLED BY DAHL ASSOCIATES IN MAY 1994. SOIL BORING LOCATIONS ARE APPROXIMATE.
- 2) MONITORING WELLS MW-3 THROUGH MW-10 AND SOIL BORINGS TB-11, TB-12, TB-16, AND TB-18 WERE INSTALLED BY BMCD IN JANUARY 1996.
- 3) MONITORING WELL MW-2 COULD NOT BE LOCATED DURING THE BMCD SITE INVESTIGATION.
- 4) MONITORING WELL MW-11 WAS INSTALLED BY BMCD IN MAY 1997.
- 5) BIOSPARCING SYSTEM WAS SHUT DOWN FOR GROUNDWATER ELEVATION MEASUREMENTS ON NOVEMBER 4, 1999.



**GROUNDWATER  
CONTOUR MAP 11/99  
UNION PACIFIC RAILROAD  
MITCHELL YARD  
MILWAUKEE, WISCONSIN**

DRAWING NAME: KAREN/CUNION/PACIFIC/ MITCHELL YARD DRAININGS V.F.C.A.



**LEGEND**

- ===== UNION PACIFIC RAIL LINES
- ◆ MW-5 BMCD MONITORING WELL
- ⊕ MW-1 EXISTING MONITORING WELL
- ⊕ TB-12 BMCD TEST BORING
- ⊙ TB-10 PREVIOUS TEST BORING
- SG-2 STREAM GAUGE
- ▲ SP-1 SOIL VAPOR PROBE LOCATION

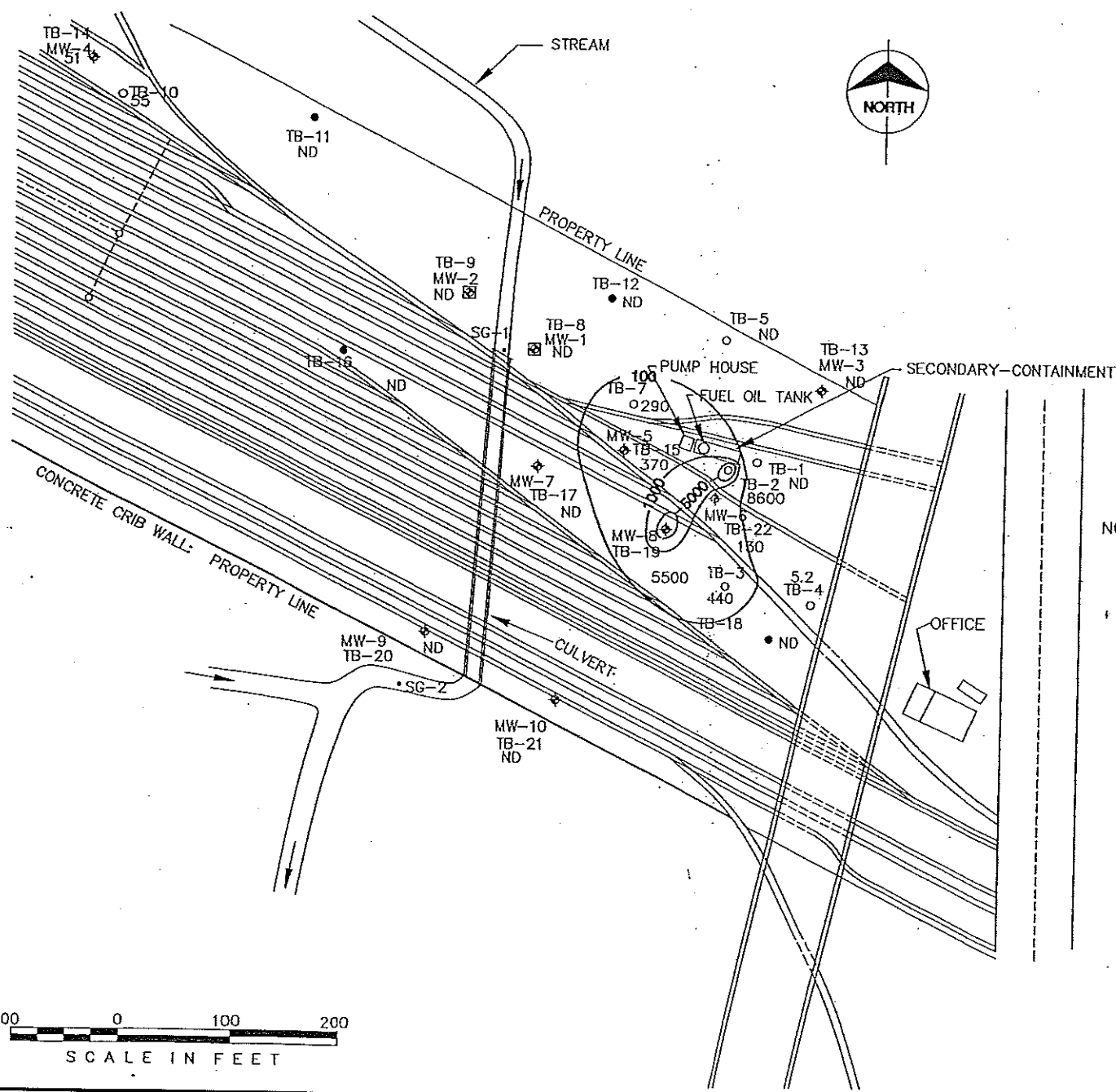
**NOTES**

- 1) MONITORING WELLS MW-1 AND MW-2 AND PREVIOUS SOIL BORINGS TB-1 THROUGH TB-7 AND TB-10 WERE INSTALLED BY DAHL ASSOCIATES IN MAY 1994. SOIL BORING LOCATIONS ARE APPROXIMATE.
- 2) MONITORING WELLS MW-3 THROUGH MW-10 AND SOIL BORINGS TB-11, TB-12, TB-16, AND TB-18 WERE INSTALLED BY BMCD IN JANUARY 1996.
- 3) MONITORING WELL MW-2 COULD NOT BE LOCATED DURING THE BMCD SITE INVESTIGATION.
- 4) MONITORING WELL MW-11 WAS INSTALLED BY BMCD IN MAY 1997
- 5) DO = DISSOLVED OXYGEN
- 6) DRO = DIESEL RANGE ORGANICS
- 7) MTBE = METHYL TERTIARY BUTYL ETHER
- 8) MG/L = MILLIGRAMS PER LITER
- 9) UG/L = MICROGRAMS PER LITER



**DO CONCENTRATION IN GROUNDWATER 10/99 UNION PACIFIC RAILROAD MITCHELL YARD MILWAUKEE, WISCONSIN**





**LEGEND**

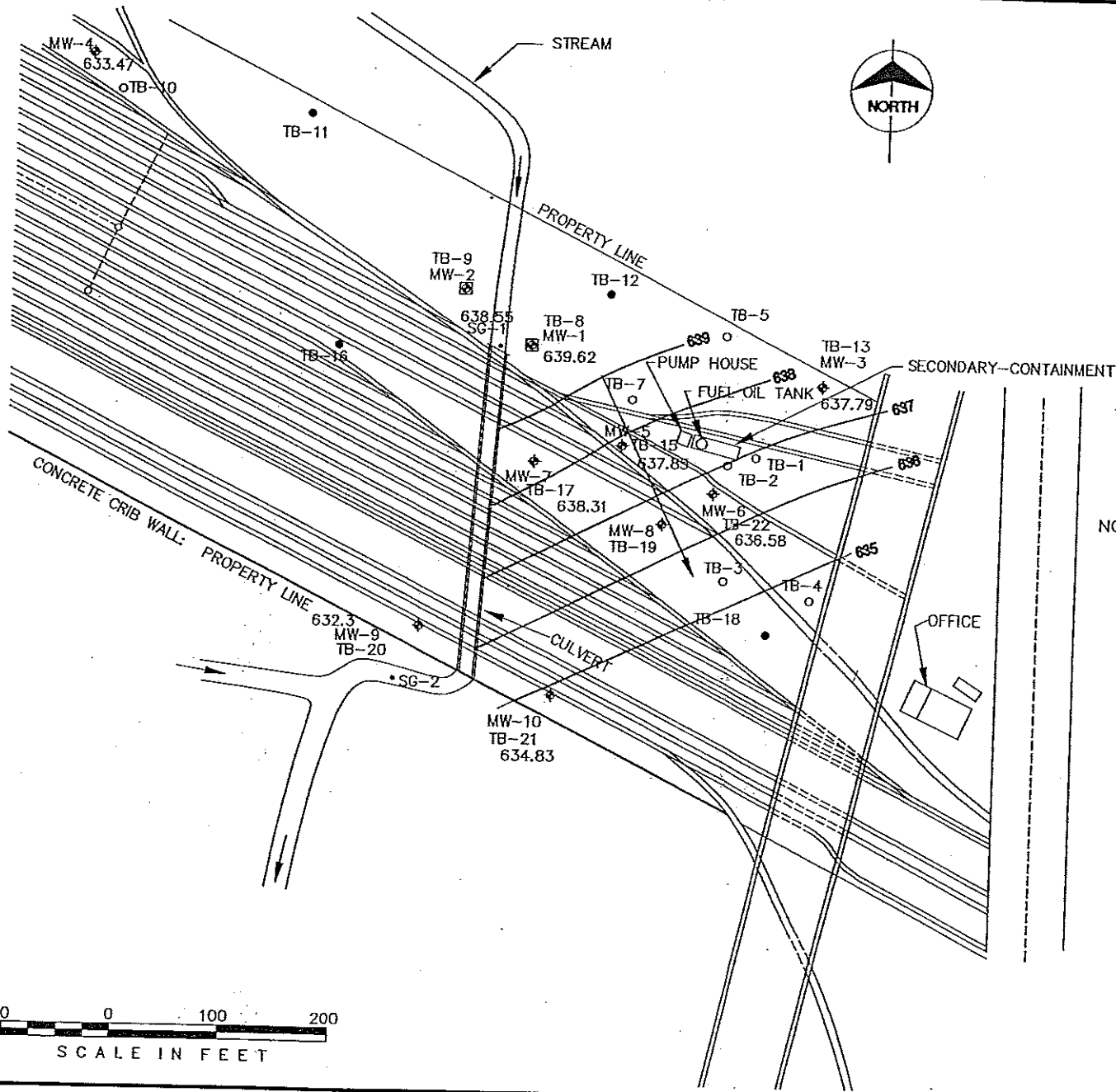
- == UNION PACIFIC RAILROAD LINES
- TB-14 ND ◆ BMWCI MONITORING WELL DRO CONC. IN MILLIGRAMS PER KILOGRAM
- TB-9 ND □ EXISTING MONITORING WELL DRO CONC. IN MILLIGRAMS PER KILOGRAM
- TB-14 51 ◆ BMWCI TEST BORING DRO CONC. IN MILLIGRAMS PER KILOGRAM
- TB-7 290 ○ PREVIOUS TEST BORING DRO CONC. IN MILLIGRAMS PER KILOGRAM
- STREAM GAUGE
- ~ DRO ISOCONCENTRATION LINE (100-1000-5000 mg/L)
- ND NOT DETECTED

- NOTES: 1) MONITORING WELLS MW-1 AND MW-2 AND PREVIOUS SOIL BORINGS TB-1 THROUGH TB-7 AND TB-10 WERE INSTALLED BY DAHL ASSOCIATES IN MAY 1994. SOIL BORING LOCATIONS ARE APPROXIMATE.
- 2) MONITORING WELLS MW-3 THROUGH MW-10 AND SOIL BORINGS TB-11, TB-12, TB-16, AND TB-18 WERE INSTALLED BY BMWCI IN JANUARY 1996.
- 3) MONITORING WELL MW-2 COULD NOT BE LOCATED DURING THE BMWCI SITE INVESTIGATION



**Figure 2-1**  
**DRO CONCENTRATIONS**  
**IN SOIL**  
**UNION PACIFIC RAILROAD**  
**MITCHELL YARD**  
**MILWAUKEE, WISCONSIN**

KUPMITC-WCIDRAWINGSDTTE



**LEGEND**

- == UNION PACIFIC RAILROAD LINES
- MW-3 ◆ 637.79 BMWCI MONITORING WELL AND GROUNDWATER ELEVATION IN FEET
- ⊠ EXISTING MONITORING WELL
- BMWCI TEST BORING
- PREVIOUS TEST BORING
- STREAM GAUGE
- GROUNDWATER CONTOUR LINE IN FEET
- ↘ APPROXIMATE GROUNDWATER FLOW DIRECTION

- NOTES: 1) MONITORING WELLS MW-1 AND MW-2 AND PREVIOUS SOIL BORINGS TB-1 THROUGH TB-7 AND TB-10 WERE INSTALLED BY DAHL ASSOCIATES IN MAY 1994. SOIL BORING LOCATIONS ARE APPROXIMATE.
- 2) MONITORING WELLS MW-3 THROUGH MW-10 AND SOIL BORINGS TB-11, TB-12, TB-16, AND TB-18 WERE INSTALLED BY BMWCI IN JANUARY 1996.
- 3) MONITORING WELL MW-2 COULD NOT BE LOCATED DURING THE BMWCI SITE INVESTIGATION

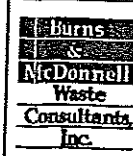
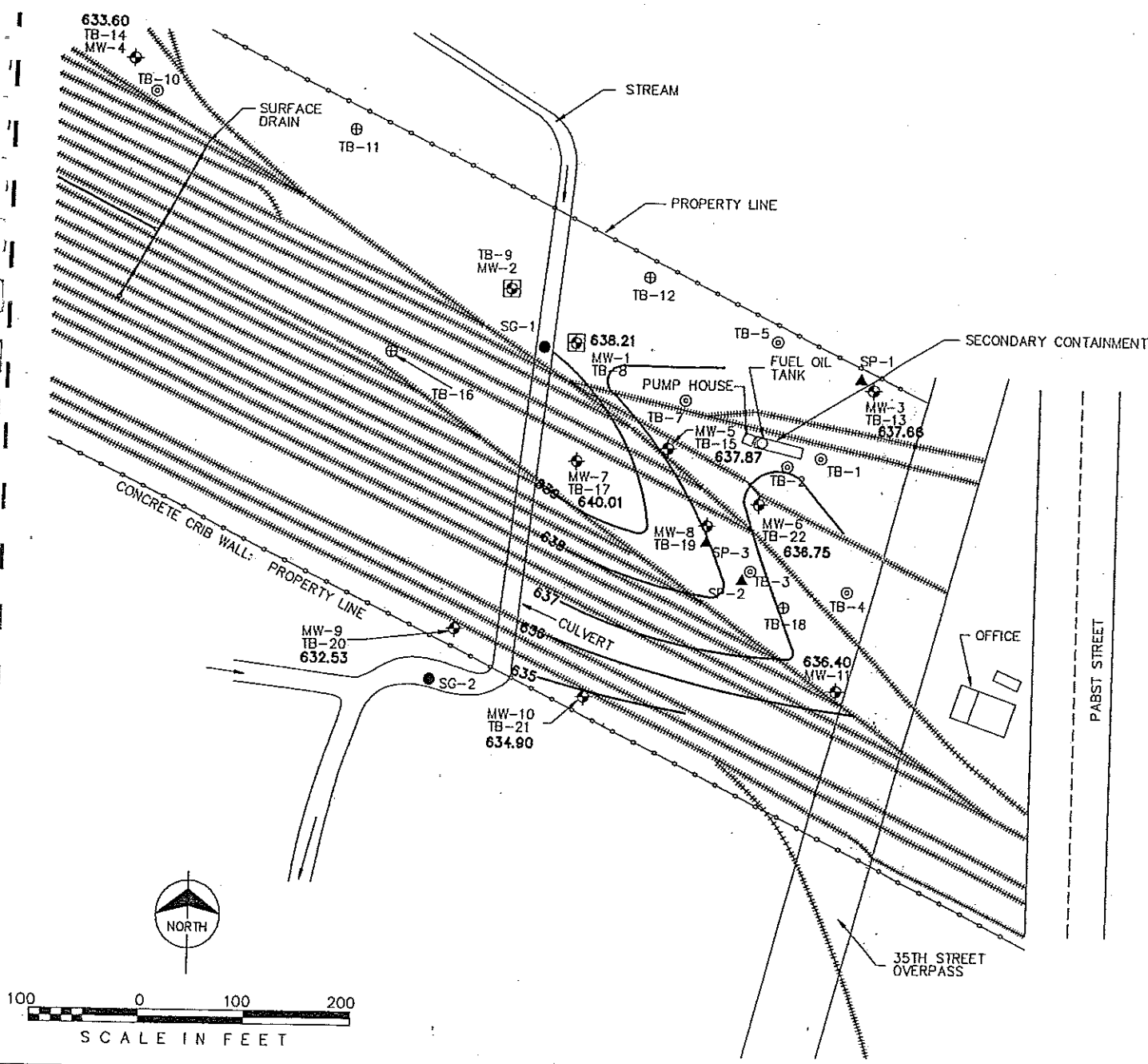


Figure 5  
**GROUNDWATER CONTOUR MAP**  
 FEBRUARY 15, 1996  
 UNION PACIFIC  
 MITCHELL YARD  
 MILWAUKEE, WI

K:\PROJECTS\MILWAUKEE\WASTE\GNDWTR\GNDWTR.DWG 8-13-96




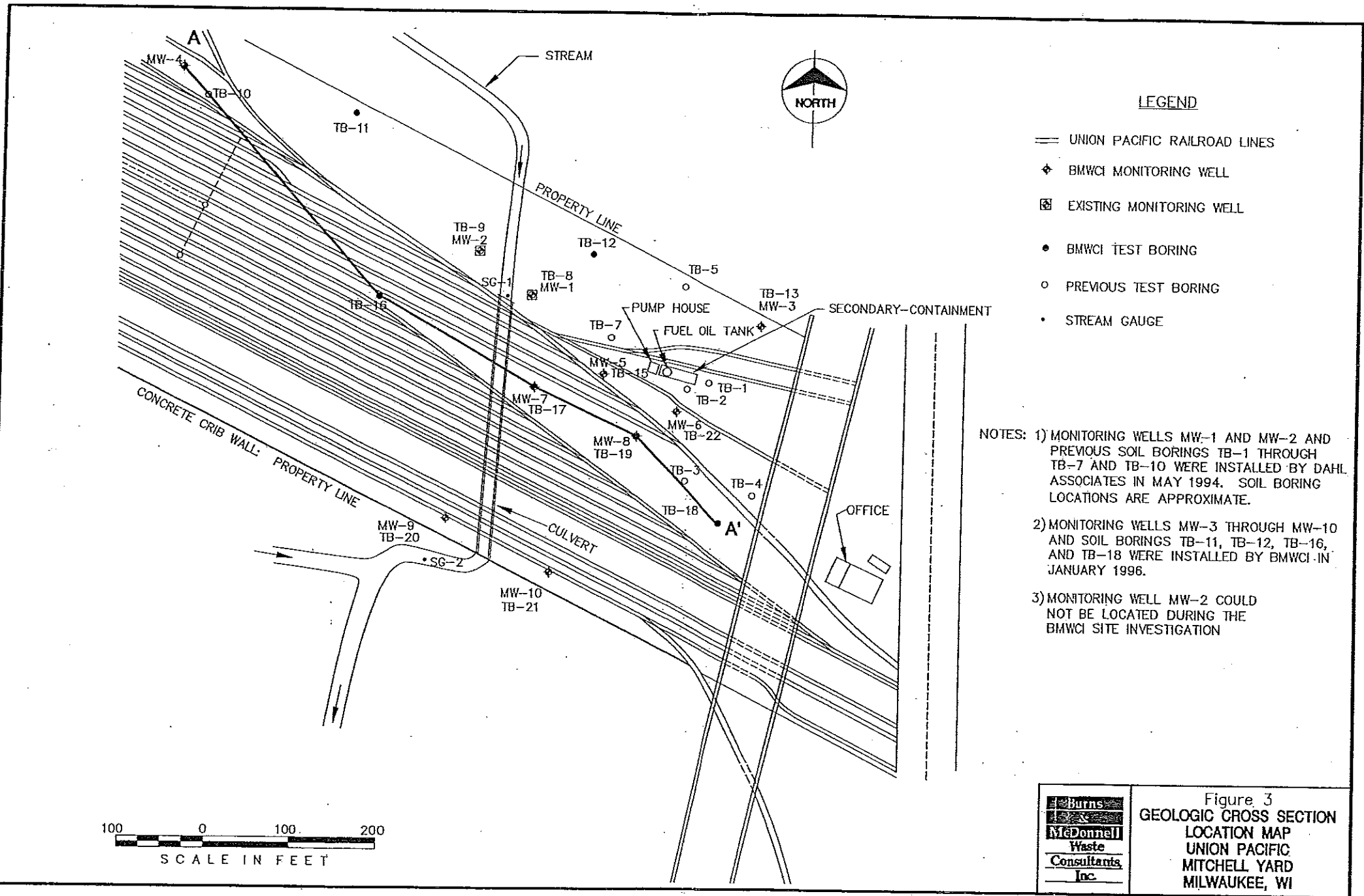
**LEGEND**

- ▬▬▬▬▬▬ UNION PACIFIC RAIL LINES
- ⊕ MW-5 BMCD MONITORING WELL
- ⊕ MW-1 EXISTING MONITORING WELL
- ⊕ TB-12 BMCD TEST BORING
- ⊙ TB-10 PREVIOUS TEST BORING
- SG-2 STREAM GAUGE
- ▲ SP-1 SOIL VAPOR PROBE LOCATION
- 639 GROUNDWATER CONTOUR IN FEET
- 634.90 GROUNDWATER ELEVATION IN FEET

**NOTES**

- 1) MONITORING WELLS MW-1 AND MW-2 AND PREVIOUS SOIL BORINGS TB-1 THROUGH TB-7 AND TB-10 WERE INSTALLED BY DAHL ASSOCIATES IN MAY 1994. SOIL BORING LOCATIONS ARE APPROXIMATE.
- 2) MONITORING WELLS MW-3 THROUGH MW-10 AND SOIL BORINGS TB-11, TB-12, TB-16, AND TB-18 WERE INSTALLED BY BMCD IN JANUARY 1996.
- 3) MONITORING WELL MW-2 COULD NOT BE LOCATED DURING THE BMCD SITE INVESTIGATION.
- 4) MONITORING WELL MW-11 WAS INSTALLED BY BMCD IN MAY 1997.
- 5) BIOSPARING SYSTEM WAS SHUT DOWN FOR GROUNDWATER ELEVATION MEASUREMENTS ON NOVEMBER 4, 1999.

	<p><b>GROUNDWATER CONTOUR MAP 11/89 UNION PACIFIC RAILROAD MITCHELL YARD MILWAUKEE, WISCONSIN</b></p>
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**LEGEND**

- == UNION PACIFIC RAILROAD LINES
- ◆ BMWCI MONITORING WELL
- ⊠ EXISTING MONITORING WELL
- BMWCI TEST BORING
- PREVIOUS TEST BORING
- STREAM GAUGE

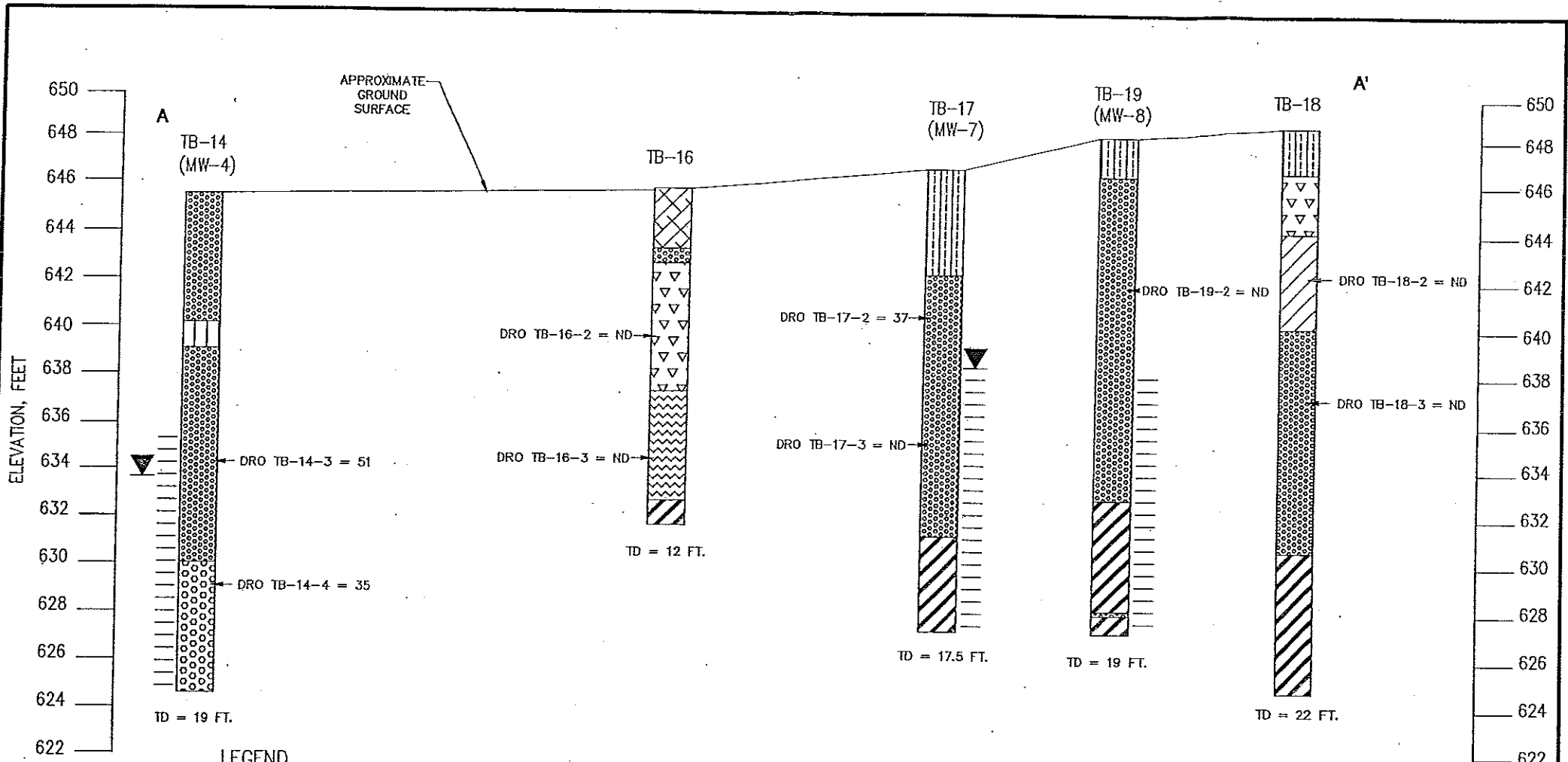
- NOTES: 1) MONITORING WELLS MW-1 AND MW-2 AND PREVIOUS SOIL BORINGS TB-1 THROUGH TB-7 AND TB-10 WERE INSTALLED BY DAHL ASSOCIATES IN MAY 1994. SOIL BORING LOCATIONS ARE APPROXIMATE.
- 2) MONITORING WELLS MW-3 THROUGH MW-10 AND SOIL BORINGS TB-11, TB-12, TB-16, AND TB-18 WERE INSTALLED BY BMWCI IN JANUARY 1996.
- 3) MONITORING WELL MW-2 COULD NOT BE LOCATED DURING THE BMWCI SITE INVESTIGATION



Figure 3  
**GEOLOGIC CROSS SECTION  
 LOCATION MAP  
 UNION PACIFIC  
 MITCHELL YARD  
 MILWAUKEE, WI**

100 0 100 200  
 SCALE IN FEET

AS SHOWN IN THE ATTACHED DRAWING 1-12-96



**LEGEND**

DRO TB-14-3 = 51

- TB TEST BORING
- MW MONITORING WELL
- TD TOTAL DEPTH IN FEET
- SCREENED INTERVAL
- ▼ WATER LEVEL (2-15-96)

DIESEL RANGE ORGANICS (DRO) CONCENTRATION IN MILLIGRAMS PER KILOGRAM

- FINE TO MEDIUM SAND
- CLAYEY SILT
- MEDIUM TO COARSE SAND
- FILL MATERIAL
- SILTY TOPSOIL
- CINDERS
- HUMUS/PEAT
- STIFF CLAY
- SILTY CLAY

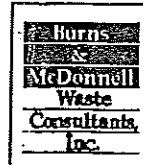
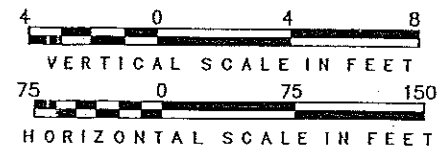


Figure 4  
**GEOLOGIC CROSS SECTION  
 UNION PACIFIC  
 MITCHELL YARD  
 MILWAUKEE, WI**

NOTE: WATER LEVEL IN MONITORING WELL MW-8 WAS NOT MEASURED ON 2-15-96

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June 15, 2007

Mr. Andrew Boettcher  
Remediation and Redevelopment Program  
Wisconsin Department of Natural Resources  
2300 N. Martin Luther King Jr. Drive  
Milwaukee, WI 53212-3128

**Re: Closure of UPRR Mitchell Yard Leaksite; Site ID # 0241000966  
Attestation Statement for Accuracy of Property Legal Descriptions**

Dear Mr. Boettcher:

To the best of my knowledge, the legal descriptions attached to the Checklist of Documents for GIS Registry Checklist are complete and accurately describe the correct (i.e. contaminated) properties.

Sincerely,  
Union Pacific Railroad

A handwritten signature in black ink, appearing to read "Edwin H. Honig".

Edwin H. Honig, P.E.  
Manager Environmental Site Remediation

Cc: Clarence Bieze, Delta Consultants